Health of conflict-affected children in South Sudan

Children's roles, skills and competencies in identifying health threats, proposing solutions and implementing action

Thesis submitted in accordance with the requirements of the University of Liverpool for the degree of Doctor in Philosophy

By

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DECLARATION

The material presented in this thesis is a result of my own work and has not been presented, nor is it currently being presented, either in part or wholly as part of any other degree or another qualification.

ABSTRACT

Background: This research was conducted in 2010, in Akobo County, Jonglei State, South Sudan, a region with a long history of inter-ethnic conflict.
Consideration of children in situations of armed conflict tends to focus on their protection and frequently portrays children as passive victims. Previous research and evaluations of child participatory programming, however, provide powerful testimonies as to the capacities and desire of children to be more involved. The aim of this research was to explore children's health needs from a child perspective and to determine existing and potential opportunities and challenges for children to participate in health decision making.

Methodology: This research uses qualitative and quantitative methods for different but well defined purposes within the same overall research project. Qualitative methods including interviews, focus group discussions, non-participant observations and workshops were used to explore knowledge and perspectives related to children's health needs, children's risk exposure and available means of protection as well as children's roles, skills and capabilities to engage in decision making. Subsequently, a cross sectional mental health survey was conducted to investigate exposure to traumatic events, Post-traumatic Stress Disorder (PTSD), anxiety and depression using the Harvard Trauma Questionnaire (HTQ) and the Hopkins Symptom Checklist (HSCL-25). Positive outcomes were identified using the Post-traumatic Growth Inventory (PTGI). Multivariate linear regression analysis was used to define associations between variables.

Results: One hundred and forty-four children aged 7-18, 88 adult community members and 20 staff of service providers participated in the qualitative study. Psychological distress was identified as the main perceived health threat and as a potential challenge to children's participation. The qualitative findings further illustrate children's suffering, but also the resilience and adaptability of children affected by armed conflict and their capacity and motivation to contribute and take action to improve their everyday life. Adult community members showed a high level of trust and belief in children's strength, ability and willingness to address issues, take risks and make decisions. At the same time, adults voiced great concerns about losing authority and control over their children if children were given more rights. Interviews with service providers showed that half of them had consulted with children at some point during program implementation. A higher degree of children's participation, where children have the initial idea and decide how the project is to be carried out, with adults available but not taking charge, was found to be an issue of concern to child mandated agencies alone.

Three hundred and fifty-three children aged 12-18 participated in the cross-sectional mental health survey. The survey findings showed a high prevalence of experienced traumas and adverse mental health outcomes: 64.5% of the children met symptom criteria for PTSD, 72.2% of the children met symptom criteria for anxiety and 65.4% of the children met symptom criteria for depression. Linear regression analysis showed statistically significant relationships between orphan hood ($p<0.01$), 'material deprivation' ($p<0.001$), 'witnessed general violence' ($p<0.01$), 'witnessed

death, abduction and injury of loved ones' ($p<0.01$) and adverse mental health outcomes. The PTGI demonstrated a high prevalence of positive change (PTG) as a result of the most traumatic event in children in all five categories: 'spiritual change' (73%), 'relating to others' (67%), 'personal strength' (60%), 'appreciation of life' (54%) and 'new possibilities' (52%). Regression analysis showed a significant positive relationship between PTG and post-traumatic stress ($p<0.001$) suggesting that growth and symptom severity may be independent of each other, that is, both growth and psychological distress can co-exist.

Conclusion: The direct impact of armed violence has significantly contributed to extremely high levels of trauma exposure while the long term consequences of conflict such as poverty, the destruction of social networks and family relationships have deprived children of their support system. Our findings indicate that PTG and posttraumatic stress can go hand in hand. According to the theory that PTG results from the struggle with highly challenging life circumstances these findings indicate that the trauma categories associated with post-traumatic growth have threatened children's pre-trauma view in a significant way, thus fostering PTG in the individuals attempt to assimilate the traumatic event into a new, modified world view.

This study further demonstrated that children's participation can provide an important opportunity in conflict settings to address mental health and to re-build or maintain positive relationships among children and between adults and children.

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ACRONYMS

AIDS	Acquired Immune Deficiency Syndrome
APEBA	Alternative Poverty Eradication Bureau for Africa
CRC	UN Convention on the Rights of the Child
CPA	Comprehensive Peace Agreement of 2005
DSM-IV	Diagnostic and Statistical Manual of Mental Disorder-IV Edition
FGDs	Focus Group Discussions
FEWSNET	Famine Early Warning System Network
GAM	Global Acute Malnutrition
GoS	Government of Sudan
GoSS	Government of South Sudan
HIV	Human Immunodeficiency Virus
HTQ	Harvard Trauma Questionnaire
HSCL-25	Hopkins Symptoms Checklist -25
iDMC	Internal Displaced Monitoring Centre
IDPs	Internally Displaced Persons
IMC	International Medical Corps
IMR	Infant Mortality Rate
LRA	Lord's Resistance Army
MCH	Maternal and Child Health
MMR	Maternal Mortality Rate
MoH	Ministry of Health
MSF	Médecins sans Frontières
NGO	Non-Governmental Organisation
PAHO	Pan American Health Organisation
PHCC	Primary Health Care Centre
PHCU	Primary Health Care Unit
PI	Primary Investigator
PRDA	Presbyterian Relief and Development Agency
PTG	Post-Traumatic Growth

PTGI	Post-Traumatic Growth Inventory
PTSD	Post-Traumatic Stress Disorder
RUF	Revolutionary United Front
SAF	Sudan Armed Forces
SAM	Severe Acute Malnutrition
SCI	Sudanese Co-Investigator
SCiSS	Save the Children in South Sudan
SHHS	Sudan Household Health Survey, 2006
SP	Service Providers
SPLA/M	Southern Sudan People's Liberation Army/Movement
SSRRC	South Sudan Relieve and Rehabilitation Commission
TBA	Traditional Birth Attendant
U5MR	Under 5 Mortality Rate
UN-OCHA	UN Office for the Coordination of Humanitarian Affairs
VCT	Voluntary HIV Counselling and Testing
WFP	World Food Program

GLOSSARY

Capacity:	A combination of all the strengths and resources available within a community, society or organisation that can reduce the level of risk (Tedeschi & Calhoun, 2004).
Child:	Any human being below the age of eighteen (UNICEF, 1989).
Child participation:	Children influencing issues affecting them by speaking out or taking action in partnership with adults. The extent to which child participation is possible depends on age and maturity of children but also on the energy behind child participation such as acceptance of children's rights and the level of community development (Lansdown, 2010).
Complex Political Emergency:	An emergency characterised by extensive violence, loss of life, massive population displacement and complete destruction of livelihood and the local economy exceeding local government capacity, requiring an international response beyond the capacity of a single agency (UNOCHA, 2006).
Coping capacity:	The means by which people or organisations use available resources and abilities to mitigate (limit) adverse life circumstances (Tedeschi & Calhoun, 2004).
Gender:	The social construction of sex. Gender as a social construct determines roles and social differences between 'masculinity' and 'femininity' (Richard, 1994).
Internally Displaced Persons:	Persons or groups of persons who have been forced or obliged to flee or to leave their homes or places of habitual residence, in particular as a result of, or in order to avoid the effects of armed conflict situations of generalised violence, violations of human rights or natural or human-made disasters, and who have not crossed internationally recognised State borders (UNHCR, 2010).

Mental and physical ill-health:	The terms refer to different aspects/perspectives of illness. Illness is understood as (1) the individual experience of disease; and (2) the 'lay model' which permits people to give meaning to and express this experience (Boyd, 2000).
Post-traumatic Growth (PTG):	Refers to the experience of positive change that occurs as a result of the struggle with major life crises. PTG is an ongoing process and not a static outcome that goes beyond an ability to resist and not be damaged by highly stressful life circumstances: it involves a movement beyond pre-trauma level (Tedeschi & Calhoun, 2004).
Orphan and half-orphan:	UNICEF and global partners label any child who has lost one or both parents as an orphan. In this research an *orphan* is defined as a child who has lost both parents; a child who has lost one parent is defined as a *half-orphan*. A *maternal orphan* is a child whose mother has died, a *paternal orphan* is a child whose father has died (UNAIDS, 2008).
Protective factors:	Protective factors are associated with positive outcomes in the context of adversities, encompassing attributes of individuals', social relationships and environments (Masten & Gerwitz, 2006).
Protective processes:	Protective processes operating in the family, peer groups, school and community which serve to decrease the likelihood of negative outcomes (Benard, 1995).
Resilience:	Is considered to be the ability to go on with life after hardship and adversity. It is an attainment of desirable social outcomes and emotional adjustment, despite exposure to considerable risk (Tedeschi & Calhoun, 2004). Resilience is not a fixed or immutable trait that is present or absent, but rather a process that develops responsively in the face of adverse challenges (Rutter, 1987).

Risk:	A psychological adversity or event that would be considered a stressor to most people and that may hinder normal functioning (Masten, 1994). Risk factors affecting children's mental health can be conceptualised as personal, social and environmental factors that might adversely affect psychological and emotional development (Masten, 2001).
Service providers:	Refers to all organisations and includes governmental, private, national and international non-governmental organisations and UN organisations present in Akobo.
Trauma:	A vital discrepancy experience between the magnitude of the threat of a situation and the individual capacity to cope, which goes along with feelings of helplessness and defencelessness that may permanently shatter a person's self-perception and world view (Fischer & Riedesser, 1998:79).
Tribe:	A social division of a people who share a common ancestry culture and territory. The word 'tribe' is frequently used among the Nuer and referrers to each of the smaller subgroups of the Nuer ethnic group. For example the Lou Nuer or the Jikany Nuer. Tribes are further divided by Clans (Hutchinson, 1996).
Tribal conflict:	Refers not only to violent conflict between tribes in Southern Sudan. It has become a label that is used for anything from family disputes, to disputes between clans and tribes, to attacks by criminal gangs, militia groups or marauding former soldiers in Southern Sudan (Schomerus, 2010).
Vulnerability:	The conditions determined by physical, social, economic and environmental factors or processes, which increases the susceptibility of children and adults to the impact of physical and emotional injuries (Chambers, 1989).

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AIM AND OBJECTIVES

The aim of this study

To explore children's health needs from a child perspective and to determine existing and potential opportunities and challenges for children to participate in health decision making.

General objective 1:

To assess children's capacity to become key contributors in identifying health threats prioritising them, proposing solutions and implementing action.

General objective 2:

To explore the communities' understanding and perception of children's health needs, their roles, responsibilities and capacity in health decision making.

General objective 3:

To explore health service providers' perception of children's health needs and the capacity of children to participate in health decision making.

General objective 4:

To investigate mental health effects of experienced traumas and the relationships between experienced trauma, post-traumatic growth and mental health outcomes[1].

[1] Preliminary findings showed that children identified psychological distress as the most important health threat. Objective 4 was therefore added at a later stage, during data collection.

STRUCTURE OF THE THESIS

Chapter 1 introduces the thesis and provides an overview of important themes that provide the basis for this study.

Chapter 2 provides an overview of available studies and reports on the subject of child participation with an emphasis on the barriers to child participation and the benefits of child participation for children and their communities. Secondly it provides a review of the available literature on the subject of mental health of conflict affected children in Africa, with a special emphasis on risk and protective factors affecting mental well-being.

Chapter 3 gives a detailed description of the local context and of people's exposure to armed violence in Akobo County. It gives an overview of the social economic and health care system and the geography of the area.

Chapter 4 describes the study methodology**.** It outlines the study design, justification, sampling strategies, method of data collection and analysis, ethical considerations and the reflexivity of the researcher.

Chapter 5 presents the findings from the case study in three sections according to the respondents interviewed: community members, children and service providers.

Chapter 6 presents the findings from the cross sectional, community based mental health survey.

Chapter 7 discusses the key findings of this research and addresses the limitations of this study.

Chapter 8 draws conclusions from this research, and provides recommendations for policy and practice, and for further research.

1. Introduction

The introduction chapter provides an overview of Sudan's long history of violence and how it has affected people's lives, the health sector, the provision of humanitarian aid and the Nuer society. The relevant cultural aspects are explained with a particular focus on the significance of the proliferation of arms and the loss of cattle in Nuer society.

This study was conducted in 2010 among the Lou Nuer in Akobo East County, Jonglei State, South Sudan (Figure 1.1).

At the time of data collection, South Sudan was part of the Republic of Sudan, the largest country in Africa with over 2.5 million km^2. On July 9th 2011 South Sudan became Africa's youngest nation and is now bordered by the Republic of Sudan to the north, Ethiopia to the east, Kenya and Uganda to the southeast, the Democratic Republic of the Congo to the south and the Central African Republic to the southwest.

Figure 1.1: Study location

1.1. Background : Sudan's history dominated by chronic warfare

Before the secession of the south, the Republic of Sudan was not only divided into east and west sides by the river Nile, but also into north and south by the two main cultural and religious roots of its people. The north of Sudan was inhabited primarily by Muslims who considered themselves culturally Arabic. The south of Sudan was peopled primarily by Christians and animists. They considered themselves culturally sub-Saharan. This division was further emphasised by the British policy of ruling the north and the south under separate administrations. From 1924, people from the north were not allowed to go further south than the 10th parallel, while the southerners were not allowed to go further north than the 8th parallel. This increased their isolation from each other and arguably sowed the seeds of conflict in the years to come (Collins & Robert, 2008).

In 1946, the policy of the British Empire changed and the two separate regions, north and south Sudan, were merged into one administrative entity as part of the new British strategy in the Middle East. This measure was taken without consulting the southerners, who feared being dominated by the political power of the north. Tensions increased when, in 1953, the United Kingdom and Egypt agreed to grant independence to Sudan. As Independence Day (1st January 1956) approached, the tensions escalated into conflict as the southerners perceived the northern leaders as backing away from commitments to create a federal government that would grant the south substantial autonomy (El Mahdi, 1965).

Following independence, Sudan suffered 17 years of civil war followed by ethnic, religious, and economic conflicts culminating in the second civil war in 1983 (UNOCHA, 2006). This conflict marked a continuation of the first civil war and was rooted in long-term political, economic and cultural grievances between the south and the Government of Sudan. The signing of the Comprehensive Peace Agreement (CPA) in January 2005 marked the end of the 21 year civil conflict between the Government of Sudan (GOS) and the Southern Sudan People's Liberation Movement/Army (SPLM/A). The CPA also paved the way for the south Sudanese to determine through a referendum whether they wanted to secede.

Sudan's independent history was dominated by chronic warfare, which had a devastating effect on civilians and further divided the country on racial, religious, and regional grounds. In the south, the conflict displaced an estimated four million

southern Sudanese; while half a million people sought refuge abroad (Pantuliano, 2008). The UN estimated that two million people died as a result of fighting, famine and disease.

The lack of investment during war time, particularly in the south meant that generations lost access to basic health services, education and jobs. Sudan's economy has remained severely impaired despite significant support from the international community in the past years.

After the CPA was signed, many returned to their homeland, and it was estimated that by 2009, a total of 2.5 million internally displaced persons (IDPs) and refugees had returned to their homes in Southern Sudan (iDMC, 2010). Despite all efforts, durable solutions and reintegration of returnees proved difficult because Southern Sudan remained one of the poorest areas in the world with very limited access to basic resources and infrastructure. Many receiving communities were just as vulnerable as the returnees and had little capacity to help them rebuild their lives (Pantuliano, 2009).

Food shortages became widespread in many areas in Southern Sudan, even more so after drought and crop failure in 2009. Displacement due to an increase in violence and intensity of inter-ethnic clashes further contributed to the food shortages. Many people who cultivated the land left their villages for urban areas in search of security. At the beginning of 2010 the United Nations World Food Program (WFP) projected that almost half the population in Southern Sudan, about 4 million people, would depend on food aid at some point in 2010 if severe malnutrition was to be avoided (UNOCHA, 2010).

The term 'tribal violence' is widely used in South Sudan. In Jonglei state where this study was conducted an estimated 125,000 people were displaced in 2009 as a result of 'tribal violence' which represented twice as many as in the year 2008 (UNOCHA, 2010).

However, the term 'tribal violence' is far from being a clear cut phenomenon along 'tribal' lines and is further explained in the following section.

1.1.1. Tribal violence and its causes

'Tribal violence', is a powerful term, particularly for those with an interest in rallying groups against each other to strengthen their own support base (Schomerus, 2010). As a result, the interpretation of violence is often misleading with a great deal of uncertainty about who the actual perpetrators are and about the extent to which 'tribal clashes' are politically motivated. The term 'tribal conflict' is probably best described as follows:

> *"Local violence is driven by conflicts between tribes. The tribal label is applied to anything from family disputes, to disputes between clans and tribes, to attacks by criminal gangs, militia groups or marauding former soldiers"* (Schomerus, 2010).

In southern Sudan local violence has increased steadily since the signing of the CPA in 2005 (UNOCHA, 2010). A study conducted in 2010 looking at the 'dynamics of conflict and predicaments of peace in Southern Sudan' argues that both the Government of South Sudan (GoSS) and the international agencies working in southern Sudan failed to achieve what they intended to do in the previous years, thus contributing to the dynamics of violence. The authors concluded that the inability to set up accountable government structures at all levels and reliable service delivery led to intense political contest down to the local level for positions of power and authority. At the same time, the absence of institutions capable of controlling violence and protecting returnees and residents resulted in poor investigation of clashes and often misleading interpretations of violence (Schomerus, 2010).

Despite the impressive achievement of being built from scratch, the new Government failed to reach the great majority of the people. The South Sudanese's expectations of the Government were high, but remained largely unfulfilled. This was seen as an important reason for the resurfacing of war-like behaviour (Schomerus, 2010; Pantuliano, 2009).

The state building approach emphasised the creation of strong institutions and decentralisation, but the very same institutions lacked accountability, particularly at the local level where most violence was perpetrated. Political manipulation of the 'tribal' label thus became possible and created decentralised government structures resembling ethnic fiefdoms in some places (Schomerus, 2010).

A major contributor to violence was the lack of reliable entities to deal with clashes when they occurred. There was confusion in the first place about where authority lied and ultimately who should take charge in dealing with violent conflict. One reason why such a responsibility gap opened was the existence of local indigenous structures that were strengthened without questioning their political accountability in connection with violent conflict (Pantuliano, 2008). At the same time, newly established legal government structures of community based administrations were only half-heartedly implemented, often competing with the old traditional authorities. In the absence of a reliable legal system and without any expectations of facing repercussions, individuals and groups started taking resources for their own personal gain and acted in ways that violated ideas about morals and traditions, or were simply criminal and unconstitutional (Schomerus, 2010).

On a local level, access to land was seen as an important trigger of violent clashes since land ownership was the key to wealth and power. Local borders and administrative boundaries were often not clearly defined or changed over time, leading to an exacerbation of hostilities. Land was often in possession of those people who had stayed at home during the war. In other places the land was occupied by former SPLA soldiers who felt that their struggle to 'liberate the land' was justification enough to own any land they wished. Also IDPs who left their villages because of insecurity or attacks were under pressure to return to their homes as they were soon occupied by others (Pantuliano, 2008).

Another important trigger for violence and revenge killing in South Sudan was cattle raiding. Cattle raiding was not a new phenomenon, but it had become more violent in recent years. Many ethnic groups were cattle-keepers. Cattle were not only a source of livelihood, but also a symbol of prestige and wealth; cattle simply represented life. Such units of wealth in the community were often targeted by other pastoralist tribes and as a result, cattle-raiding had a long tradition in many places in South Sudan. It had become synonymous with what was termed as 'inter-tribal clash'. Often cattle raids were about cattle and land, both of great value to local people (Schomerus, 2010).

Many different opinions existed among the population regarding the root causes of cattle-raiding. Those most often mentioned were: lack of authority, extreme poverty, uneven distribution of wealth, historical intergroup tension, proliferation of

arms (cattle raiders were often better armed than the police or even the army), economic reasons (a successful raid could be worth several thousand dollars), increase in bride-price, but also the lack of future perspective particularly for boys who were often involved in cattle-raids at an early age (Schomerus, 2010).

In 2009 a dramatic change in the nature of violence was observed with a shift away from stealing cattle to targeting people, including women and children. This was demonstrated in the much higher number of deaths compared to wounded people[2]. In addition, clashes that occurred outside the dry season, the traditional 'cattle rustling season', were unlikely to be conducted to steal cattle as it was impossible to return with them through the mud in time before the village that was attacked was able to mobilise to retaliate and recover the stolen cattle.

Furthermore, in some locations armed groups of young men ostensibly raiding for cattle were found to be linked to former militia commanders aligned to the North. It was argued that they were still controlled by the North's military intelligence in order to destabilise the South (Medecin Sans Frontieres, 2009; Schomerus, 2010).

The description of local violence as 'tribal' in nature is in many ways unhelpful and superficial as it conflates symptoms of underlying problems with their causes. Although there are situations in which cattle rustling, competition over pastures, or claims over land are associated with 'tribal groupings', this is not always the case (Schomerus, 2010). The interference of the Government of Sudan (GoS) as a default explanation for the ongoing violence in the south is also debated. On the one hand Khartoum is accused of financing cattle raids as part of a northern strategy to reduce the population of the south and on the other hand local authorities and civilians testify that such reports are mostly anecdotal (Schomerus, 2010).

The newest nation in Africa has inherited some formidable humanitarian challenges and it is unlikely that violence will fade away as long as most citizens feel disconnected from their government, competition for resources continue, legal representation of the people are missing and credible social reconciliation are lacking.

[2] Most serious attacks targeting women and children in Jonglei State in 2009: Pibor in March (killed 450 / wounded 45 /displaced 12,000); Akobo in April (killed 250 / wounded 37 / displaced 15,000). Mareng in August (killed 185 / wounded 18). The figures are based on official estimates from state authorities, confirmed by the UN. Survey data suggest that the number of people killed in Akobo (Nyandit and Mareng attacks) were more than twice the official number.

1.1.2. The impact of violence on health needs and service delivery

From a health perspective, South Sudan is marked by extremely high health needs and extremely limited health service provision (Moszynski, 2008). The health system has virtually collapsed and suffers from a severe shortage of health workers and facilities with only 16% of people accessing health services (Wakabi, 2011). NGOs still provide 86% of these services and pay salaries to 75% of all health staff. Up to the present time, the government lacks the human, financial and technical capacity to take over these services (Wakabi, 2011). Affected populations have increasingly suffered from public health consequences, even more so when they have been displaced from home. A combination of direct violence, displacement, food shortages, destruction of housing and health facilities, severe disruption of outreach activities and damage to water and sanitation facilities led to a rapid increase in malnutrition and communicable diseases such as measles, diarrhoea and pneumonia (SCUK & MEDAIR, 2010). The impact of conflict on health systems is summarised in Figure 1.2.

Figure 1.2: Impact of conflict on health systems

Resource Availability

HEALTH WORKERS
- Injury, killing, abduction displacement.
- Inadequate/disrupted training, supervision.
- Poor morale.

SUPPLIES, EQUIPMENT
- Lack of drugs, maintenance of equipment.
- Inability to maintain cold chain.

SERVICE, INFRASTRUCTURE
- Destruction of clinics and health centres.
- Disrupted referral and communication.

Service Management
- Diversion from development. More centralised urban based, vertical programs.
- Disruption of complex, integrated programs.
- Focus on short term.

Service Organisation
- Reduction of data for decision making.
- Limited management training.
- Reduced ability to monitor funds and resources.

Economic Support
- Diversion of resources to military.
- Reduced revenue
- Increased dependence on aid.

Service Delivery
- Shift from primary to secondary care.
- Urbanisation of provision, decreased activity in periphery.
- Disrupted campaigns, health promotion, disease control, outreach.
- Reduced access and utilisation due to long distance, fear, violence, curfew, landmines, charges
- Increased private provision.

IMPACT OF CONFLICT ON HEALTH SYSTEMS

Source: Lecture on conflict and health, Antony Zwi, February 2001. LSHTM

1.1.3. Guns and the destruction of the Nuer society

The culture of the Nuer in Southern Sudan was first studied by the ethnographer Sir Edward E. Evans-Pritchard in the early 1930's. According to Hutchinson, he produced what was, arguably, the most comprehensive and detailed ethnographic portrait of any people in the whole of the anthropologic literature (Hutchinson, 1996). Fifty years later Sharon Hutchinson, an anthropologist, returned to Nuerland and combined fresh ethnographic evidence and contemporary theoretical perspectives to show what has happened to the Nuer since their 1930s encounter with Evans-Pritchard, and how civil war and violence have affected the Nuer society. The work of Evans-Pritchard and Hutchinson provide an important, authoritative and respected historic perspective and cultural insights that the relevant information presented in this chapter is mainly derived from the literature published by these two anthropologists.

Evans-Pritchard found that violence was not a new phenomenon and that the Nuer had always solved their conflict through fighting long before the colonial times. He described that people were frequently killed in fights and noted that the fighting rather subsided during the colonial era since the Nuer learned to fear government interventions. (Evans-Pritchard, 1940:152).

Hutchinson argued that it was not the amount of fighting as such, but the proliferation of arms that had been the crucial turning point. She demonstrated that 'the gun' had not only challenged traditional beliefs and the social order, but also destroyed the collectiveness of Nuer society. She pointed out that *"the ethics and tactics of warfare were radically different in a world where the powers of guns and of the government increasingly replaced those of divinity as the primary creators and destroyers of the moral and social universe"* (Hutchinson, 1996:51). Hutchinson observed that while everybody agreed that to kill someone with a spear was to accept full responsibility for the death, it was not so in the case of inter-Nuer gun slaying. Bullets were not only liable to be fired unintentionally, but also their trajectories were not always precise and their fatal consequences were not easy to trace in major inter-tribal confrontation.

Evans-Pritchard was the first to describe the complexity and sophistication of the Nuer justice system that existed in pre-colonial times. His observations indicate what social consequences would ensue for the Nuer society if such a framework could not be replaced by a legal system of similar value. The ancient legal system had not

only obliged the slayer to admit freely to his crime, but also to pay compensation according to the gravity of the offence. No slayer would ever attempt to cover up his deed, because of the 'avenging' capability of the blood of the killed person that was believed to pass into the body of the slayer. If the slayer drank or ate anything before the 'embittered' blood was removed through an incision made by the 'leopard-skin-chief', he would soon die of a highly dangerous and contagious form of 'pollution' called *'nueer'*:

> *"As soon as a man slays another; he hastens to the home of a leopard-skin chief to cleanse himself from the blood he has spilt and to seek sanctuary from the retaliation he has incurred. He may neither drink nor eat till the blood of the dead man has been let out of his body, for it is thought to pass into it in some way, and to that end the chief makes one or two vertical incisions on his arm by a downward stroke from the shoulder with a fishing spear […]. As soon as the kinsmen of the dead man know that he has been killed, they seek to avenge his death on the slayer, for vengeance is the most binding obligation on paternal kinship and an epitome of all its obligations.*
>
> *By living with the chief as his guest from the moment his arm has been cut until the final settlement of the blood feud [by the payment of bloodwealth cattle] the slayer has asylum, for the chief is sacred and blood must not be spilled in his homestead….It is essential that a blood feud be settled if the parties to it live in the same neighbourhood, not only for reasons of security but also on the account of the serious danger [of contracting "nueer", in which] both the dead man's kin and the slayer's kin are placed by the homicide. If either side eats or drinks with the other or from vessels which the other side has used, the penalty is death, and it may be brought on kinsmen on either side by a person who belongs to neither party eating or drinking in the home of both. This intolerable state of interdiction can only be ended by sacrifice by a priest when compensation has been paid". (Evans-Pritchard, 1940:293-295).*

Despite the payment of up to fifty blood-cattle and the sacrifices made, close kinsman on either side would not eat together for months, years or even generations. In spite of the sacrifices, such feuds could go on forever. Such an offence could be settled with bloodwealth but it would never be forgiven and had to be paid for with a life. Ideally, every bloodwealth settlement led to the marriage of a wife in the name of the deceased (ghost-wife) who would bear him sons to avenge their father's death with the blood of his enemies. However, there were circumstances where feuds could easily be stopped. It was far more difficult to stop feuds between people of more distant ethnic sections than to stop a feud within a

village or between neighbouring villages. If people had to live in close proximity, the sense of community was much stronger and there were many ties and affinities. People recognised that it was vital for them to get along. A state of feud was therefore seen as incompatible with corporate life and permanent settlements of such conflicts were usually reached between people who depended on each other (Evans-Pritchard, 1940:156-157).

When the civil war began and firearms became widespread, the Nuer started to wonder whether the use of guns in inter-Nuer slaying would have the same spiritual and social consequences. There was a fundamental difference between the force of a spear and the force of a gun. While the power of a spear was seen to be directly connected to the force of the person who hurled it, the force of a gun was seen as completely independent of its bearer since all a person had to do was aim. The deadly force came from the rifle itself and not from its bearer. As a consequence: "*the idea that relations of feud emanated outwards from a mysterious blood bond forged between slayer and slain at the moment of death became increasingly difficult for people to maintain in those areas where gun warfare predominated."* (Hutchinson, 1996:51).

As more and more Nuer were incorporated into the national army and regional police forces, many were forced to kill fellow Nuer in the line of duty. Furthermore, men and women were more and more pressured into accepting that intra-ethnic homicides carried out in the name of the Government were completely devoid of spiritual dangers and long term social consequences. This created profound moral dilemmas. Hutchinson noted that up to then the 'pollution' concept of *'nueer'* had remained remarkably stable (Hutchinson, 1996:107).

As a result of the brutal realities of gun slaying that people experienced through the war, they started to doubt whether the blood curse would be operative in any case or whether this was only true in situations where the assailant and victim had previously known each other. In addition people began to develop an analogy between the mysterious inner force of firearms (and their often unpredicted impact) and lightning. Hutchinson noted*: "these controversial issues cut to the core of contemporary Nuer notions of community, ethnicity, and polity and raised deeper questions about the nature of homicide, the meaning of death, and the role of Divinity in maintaining human morality."* (Hutchinson, 1996:109).

The introduction of guns and the two civil wars highly challenged the Nuer pastoralist society whose livelihood strategies depended on strong relationships and the sense of community.

1.2. Background : pastoralism and cattle loss

The culture of the Nuer has remained interwoven with and *'determined'* by their cattle[3]. Furthermore, the ecologic and climatic conditions of 'Nuerland' clearly favour cattle husbandry over cultivation.

> *"From a European's point of view, Nuerland has no favourable qualities, unless its severity be counted as such, for its endless marshes and wide savannah plains have an austere, monotonous charm. It is throughout hard on man and beast, being for most of the year either parched or swamped. But the Nuer think that they live in the finest country on earth and it must be admitted, for herdsmen their country has many admirable features." (Evans-Pritchard, 1940:51).*

Nuerland, with its few settlements scattered over a territory larger than Rwanda, remains a vast savannah and marshland area covered with tall grasses during the rainy season. Despite the harsh climate, ecologic conditions favour the biannual migration between relatively permanent wet season settlements and the temporary dry season cattle camps (Figure 1.3). Yet, the large herds once owned by Nuer families have been dramatically reduced by decades of civil war and cattle raiding. The volatile security situation and the ferocity of the perpetrated violence have turned the biannual migrations with the remaining herds into highly dangerous undertakings for man and beast.

[3] The word 'determine' is used to emphasise the strong bonds between the people and their herds as an intimate symbiosis of survival. Where cattle depended on human protection and care, people depended on cattle not only for their material contributions but also because cattle were the principal means by which people created and affirmed enduring bonds amongst themselves as well as between themselves and divinity. In sacrificial and exchange contexts, cattle were considered direct extensions of the human person. Evans-Pritchard, E. E. (1940). *The Nuer: A Description of the Models of Livelihood and Political Institions of A Nilotic People,* Oxford: Oxford University Press. Page 17-50.

Figure 1.3: **Cattle on the move: Cattle are being driven back to Nyandit from the dry-season camps at the beginning of the rainy season (Source: Author)**

For a better understanding of the meaning of cattle loss it is important to capture the cultural and spiritual importance of cattle in Nuer society which is best described by Evans-Pritchard. In his book, *The Nuer: A Description of the Modes of Livelihood and Political Institutions of a Nilotic People (1940)*, Evans-Pritchard described in great detail how deeply Nuer culture was shaped by their cattle.

> *"They are always talking about their beasts. I used sometimes to despair that I never discussed anything with the young men but livestock and girls, and even the subject of girls led inevitably to that of cattle. Start on whatever subjects I would, and approach it from whatever angle, we would soon be speaking of cows and oxen, heifers and steers, rams and sheep, he-goats and she-goats, calves and lambs and kids. I have already indicated that this obsession – for such it seems to an outsider – is due not only to the great value of cattle but also that they are links in numerous social relationships. Nuer tend to define all social processes and relationships in term of cattle. Their social idiom is a bovine idiom. Consequently he who lives among Nuer and wishes to understand their social life must first master a vocabulary referring to cattle and to the life of the herds". (Evans-Pritchard, 1940:19).*

The importance of the herds in people's lives and thoughts is still expressed in personal names. Men are often addressed by names referring to colour and size of

a preferred bull. The same accounts for women and children who call one another by a cow or an ox name. Some of the men, women and children receive such a name at birth.

Cattle are still the most cherished possession and have always played a key role in religious ceremonies and rituals. A man was only able to establish contact to the ghosts and spirits through his cattle. Evans-Pritchard concluded: "*If one is able to obtain the history of each cow in a kraal, one obtains at the same time not only an account of all the kinship and affinities of the owners but also of all their mystical connections" (Evans-Pritchard, 1940:18).*

Such descriptions not only provide insights into the extraordinary bonds between cattle and people, at the same time it fosters the belief that the Nuer are somehow above history and beyond change.

When Hutchinson returned to Nuerland almost fifty years later for her ethnographic study, to describe how the people had confronted moral, political and social dilemmas of a changing world determined by civil war and violence, she found a different people. By the 1980s, the Nuer of the 1930s described as a profoundly egalitarian people without chiefs or kings, whose political system was based on kinship and residency affiliation, loosely divided into eleven major territorial groupings[4], were no longer found to be the isolated, independent, cattle-minded warriors as described by Evans-Pritchard. Hutchinson found: *"They (the Nuer) had been drawn from an indigenous society allegedly devoid of institutionalized rulers into a bewildering spiral of local government authorities, district councils, party bureaucracy, regional assemblies and national parliaments – all of which were constantly being reshuffled, reorganised and disbanded"* (Hutchinson, 1996:26).

In the 1980s the daily lives of the vast majority of the Nuer still revolved around their cherished cattle, however, trading activities had started and small market centres had been set up by Nuer merchants throughout the region. Fifty years earlier Evans-Pritchard did not give the Nuer much credit for their trading capabilities, mainly because of their great interest in their herds: "*Nuer have nothing to trade except their cattle and have no inclination to dispose of these: all they greatly desire is more cattle, and, apart from the difficulty that they have nothing to*

[4] The eleven groups were known as the Bul, Leek, western Jikany, Nyupng, Dok, Jagei, Gaawär, Thiäng, Lak, Lou, and eastern Jikany Nuer.

offer in exchange for them, herds are more easily increased by raiding the Dinka" (Evans-Pritchard, 1940:42).

By the time Hutchinson had arrived, young Nuer, in the search for independence and a shortcut to marriage, travelled to bigger cities in the North looking for employment. Money was introduced as a new medium into Nuer culture through trade and employment and many of these young people invested their money into bridewealth cattle. Out of this new money/cattle equation a new type of cattle was created, the 'cattle of money' and it was not unusual for the father of a bride to accept money in place of a bridewealth cow.

Hutchinson further noted that as a result of the seventeen years civil war (1955-1972) the men and women she encountered had become highly politicised people deeply conscious about the vast, untapped oil wealth on their lands. She also found that the topics of conversation had shifted and Nuer men and women did not only discuss cattle but also political issues, regional troop movements, the Jonglei Canal scheme and people's urgent needs for more schools, health centres, roads, veterinary services and the like. Hutchinson described an important shift from the ancient key media of interpersonal bonding such as 'blood', 'cattle' and 'food' to other more powerful media coming from outside their social world, namely 'money', 'guns' and 'education' (Hutchinson, 1996:25).

While some of the sociocultural patterns from 'the old times' have faded or changed, others remained seemingly unaffected. Despite an almost total loss of people's livestock in many places, including Akobo County, men's and also boy's work remained connected with cattle keeping activities even if there were no cattle to be kept. The Nuer culture and social organisation is built around the herds. In the absence of alternative sources to earn money, wealth and prestige continue to be measured by the number and quality of the cattle a man owns.

1.2.1. The ecological cycle in 'Nuerland'

The ecology of Nuerland has always favoured cattle husbandry over cultivation. The climatic conditions together with flooding and the flatness of the area make it impossible to cultivate most African food plants. The Nuer are used to planting different kinds of millet, some maize, beans and gourds. These are the crops and vegetables that grow easily. An important limitation to food production is that the gardens have to be made on higher grounds so that they are less prone to flooding. Such areas are extremely limited in space and number and in addition have to accommodate people and cattle during the rainy season.

Evans-Pritchard reported that even if there was a variety of food available, the quantity was often insufficient and it was not unusual that people were hungry for months, even in years when crops were successful. He noted that the Nuer only planted what they needed and were not used to having any surplus to fall back on in years of scarcity. At the same time, they were used to eating plenty and all food was shared within the community. Even though each household had its own food supply and did its own cooking, men, women and children ate in one another's homes to such an extent that it appeared that the whole community had a joint supply. The mutual assistance generally lasted until there was no food left and the 'hungry month' started for the whole community. Evans-Pritchard noted that the worst possible scenario was when crop failure and rinderpest (a highly contagious and deadly bovine disease) occurred in the same year. He reported that if this happened, the Nuer expected all elderly people to die of starvation, weakness and disease (Evans-Pritchard, 1940: 82).

The complexity of the seasonal activities up to date, including the semi-annual migration and their dependence on climatic and ecologic factors is summarised in Table 1.4.

Table 1.4: Agro-pastoralism, ecological cycle and social activities (Evans-Pritchard, 1940:97)

MAY	JUNE	JULY	AUG	SEPT.	OCT.	NOV.	DEC.	JAN.	FEB.	MARCH	APRIL
RAINS						DROUGHT					
RIVERS RISE						RIVERS FALL					
HORTICULTURE							FISHING				
Preparation of gardens for first millet sowing and for maize			Preparation of gardens for second millet sowing			BUILDING & REPAIR OF CATTLE CAMPS					
			Harvest maize	Harvest first millet crop		Harvest second millet crop BURNING OF THE BUSH					
SCARCITY OF FOOD				PLENTY OF FOOD				HUNTING & GATHERING			
VILLAGES						CATTLE CAMPS					
Older people return to village	Younger people return to village	Weddings, initiations, funerals and other ceremonies					Younger people In early camps	Everyone in main dry season camp			

With little space available elevated enough to allow cultivation in the rainy season, people largely remain dependent on their cattle and the possibility to migrate. Although more people engage in trading activities or have returned well educated from countries of asylum and are now working for the government or international organisations, the great majority of the Nuer remain herdsmen and have no intention of becoming peasants. Cultivation is viewed as an unfortunate necessity that involves hard and unpleasant labour. While it is still considered unforgivable to neglect livestock, there are no strong feelings about inattention to gardens and as a result goats and chickens are often undisturbed visitors of unprotected gardens.

2. Literature review

The first part of this literature review is presented in sections 2.1 to 2.3 and addresses the subject of children's participation with an emphasis on barriers to children's participation and the benefits of children's participation for the children and their communities. The second part is presented in sections 2.4 to 2.8 and reviews the literature on child mental health among conflict affected populations with an emphasis on studies conducted in conflict and post-conflict settings in Africa.

This review informed the research strategy and the research instrument chosen and provides a general background to the main subjects addressed in this study.

2.1. Child participation: search strategy

Three databases relevant to this topic were searched: Medline via PubMed, Web of science, and Google Scholar. The review was completed by a citation search for relevant articles and a search of literature published by the Children's Participation Learning Network, Child to Child Trust, United Nations Children's Fund (UNICEF), Family Health International, and the United Nations Educational, Scientific and Cultural Organization (UNESCO), World Vision, Save the Children, Plan International and War Child.

2.2. Child participation: theory and practice

> *"Child participation must be authentic and meaningful. It must start with children and young people themselves, on their own terms, within their own realities and in pursuit of their own visions, dreams, hopes and concerns. Most of all, authentic and meaningful child participation requires a radical shift in adult thinking and behaviour – from an exclusionary to an inclusionary approach to children and their capabilities" (UNICEF, 2003).*

In the past two decades, there has been an important growth of activities under the heading of children's participation. Social theories which see children as social actors in their own right rather than objects of socialisation and recipients of adult protection have promoted the interest in children's participation (Percy-Smith & Thomas, 2010). The main contributor to this upsurge in children's participation is the influence of the United Nations Convention on the Rights of the Child (CRC) which

encompasses an extensive set of economic, social and cultural rights as well as civil and political rights. Four general principals underpin the Convention: Non-discrimination (Article 2), best interest of the child (Article 3) the right to life, survival and development (Article 6), *and the right for children to have their views heard and given due weight, in all decisions affecting them, according to their maturity* [5] (Article 12) (UNICEF, 1989).

In theory, these principals are considered to be interdependent and consequently there should be no hierarchy in their implementation. On the ground, this is rarely the case and interventions in disaster and conflict settings often fail to consider children as holistically as the convention indicates (Lansdown, 2008; Van Bueren, 1996).

Unlike earlier declarations, the CRC asserts children's rights to have a voice in decision making, as well as rights to freedom of thoughts and expression. Enshrined in Article 12 of the Convention, participation is not only a right in itself but also a means by which other rights should be realised (Percy-Smith & Thomas, 2010). The CRC, adopted in 1989, has been universally ratified except for Somalia and the United States of America and has established the legal imperative for the involvement of children.

The involvement of children and young people has a variety of meanings for different people and can only be understood from the social, cultural and political context in which children's participation occurs. In Western contexts, child participation generally emphasises children's active involvement in decision making and development processes in the public sector. In other parts of the world, where the majority of children live, participation often has a meaning of active contribution to the family and the community (Percy-Smith & Thomas, 2010).

Despite the strong foundation, meaningful child participation faces several challenges, and even more so in places where it is culturally unusual to give children a voice and adults fear that children may become difficult to control if they are given more rights (Lansdown, 2006). In countries where there is no freedom of press, no independent judiciary, no devolution of power from the centre, no political

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[5] **Article 12 of the CRC reads:** 1. State parties shall assure to the child who is capable of forming his or her own views the right to express those views freely in all matters affecting the child, the views of the child being given due weight in accordance with the age and maturity of the child.
2. For this purpose, the child shall in particular be provided the opportunity to be heard in any judicial and administrative proceeding affecting the child, either directly, or through a representative or an appropriate body, in a manner consistent with the procedural rule of national law.

accountability and no history of any form of consultative democracy, it may be difficult to establish mechanisms for meaningful participation of any citizen, and the barriers for children are often much higher (Percy-Smith & Thomas, 2010).

On the other hand, reports from Sri Lanka and other parts of the world demonstrate that in cultures where adults themselves have little opportunity to influence community decisions, young people can become the initiating force for change (Hart, 1992; Hart, 2002b; 2003).

Childhood is not a universal given and varies in its construction and interpretation across different cultures and contexts resulting in an ambiguity and uncertainty about what child participation means. While participation may offer children the possibility of realising a sense of citizenship in the Western world, 'participation' of children in conflict settings may be as much about survival, meeting basic needs and supporting their families as it is about self-realisation and about decision making (Percy-Smith & Thomas, 2010; Feinstein et al., 2010).

In the Save the Children Practice Standards in Children's Participation (2005), children's participation is defined as follows:

- Participation is to have an opportunity to express a view, influencing decision making and achieving change.

- Children's participation is an informal and willing involvement of all children, including the most marginalised and those of different ages and abilities in any matter concerning them directly or indirectly.

- Children's participation is a way of working and an essential principle that cuts across all programmes and takes place in all arenas from homes to government and from local to international levels.

Despite ongoing debates about the meaning of children's participation, there is a general agreement among researchers that children's participation is most meaningful when it is rooted in children's everyday lives (Percy-Smith & Thomas, 2010). Despite such knowledge, Lansdown found a very limited evidence base with respect to children's capacities for informed and rational decision making in their own lives, with research almost exclusively conducted in Western countries, under laboratory conditions, away from children's day to day lives. At the same time she noted an increasing interest and emergence of informal studies, papers and reports

produced by academics and NGO's addressing issues of children's participation in developing countries (Lansdown, 2010).

Lansdown suggests the need of two measurement approaches to evaluate progress and children's active and effective engagement in the decisions that affect them as individuals and as a group. First, to identify key indicators against which to evaluate evidence of a cultural climate in which the right of children to be heard and taken seriously is established. Second, to measure the extent, quality and impact of the actual participation in which children are engaged. Furthermore, children themselves must be involved in any process to evaluate the extent of participation that takes place (Lansdown, 2004a).

The extent of children's engagement can be broadly classified at the three levels summarised in Figure 2.1.

Figure 2.1: The different levels of child participation (Lansdown, 2010)

Consultative participation
Adult led and managed, does not involve sharing or transferring decision-making processes to children themselves. It does recognise children's expertise and perspectives which need to inform adult decision making

Collaborative participation
Shared decision-making with adults. Greater degree of partnership between adults and children with the opportunity for active engagement at any stage of a decision, initiative or project.

Child led participation
Takes place when children are afforded the space and opportunity to identify issues of concern, initiate activities and advocate for themselves. The role of adults in child-led participation is to act as facilitators to enable children to pursue their own objectives through provision of information, advice and support.

Instrumental:

Participation is viewed as a **means towards an end**, which is the delivery of effective projects. More profound social structural impact is not generally envisaged.

Transformative:

Participation is a **means to empower** affected populations to assume greater control over their lives and achieve structural change in society.

The extent to which child participation is possible depends not only on the age, experience and maturity of the child, but also on the energy behind child participation such as acceptance of children's rights and the level of community development. Child participation always implies the creation of structures that empower children within their homes, schools, communities and at national level

(Save the Children UK, 2005). Table 2.2 summarises what children's participation should, and should not involve in practice.

Table 2.2: Structure of child participation (Save the Children UK, 2005)

CHILD PARTICIPATION	
INVOLVES	DOES NOT INVOLVE
o Recognising the value of children's knowledge and contributions.	o Suggesting to children what they should think or say.
o Sharing experience and expertise with children.	o Thinking adults have nothing to learn.
o Learning from children.	o Devaluing adult's experience.
o Finding ways to make it easy for children to make decisions and implementing them.	o Using children to do adult work.
o Helping children and adults to understand their rights and responsibilities.	o Withholding rights for adults and withholding responsibility for children.
o Sharing power with children.	o Handing over all power to children.
o Working towards respect for the rights of younger citizens.	o Keeping things the way they are now.

Studies have demonstrated that children, if appropriately facilitated, can share important insights into their lives and their environment and that such insights can differ substantially from those of adults (Boyden, 2004; Hart, 2003). Thus, adult perspectives, even if they are meant in the best interest of the child, cannot be a substitute for the views of the children themselves (Van Bueren, 1996).

It is believed that public health interventions targeted at children can only be effective in the long term if service providers arrive at a better understanding of children's capacities and the lessons that can be learned from directly engaging and talking to children (Zwi, 2006). In many low income countries, society will change profoundly and by looking at future demographic profiles, it becomes evident that the major force for this change will be today's children (Van Bueren, 1996). It seems therefore crucial to take children seriously and to respect their views and opinions.

Recent debates in public health and social science, stressing the need to hear children's voices and to take them seriously, have captured the attention of a wider audience (Zwi, 2006; Annan et al., 2007). Adolescent health in general has again entered the research agenda (Tylee et al., 2007; Bearinger et al., 2007; Patel et al., 2007; Patton et al., 2012). Engaging children in the research process in order to

capture their perspectives and to minimise adult bias is seen as a precondition if the results are to be meaningful for children (Greig & Taylor, 2006; Delgado, 2006).

2.3. Challenges and barriers to child participation

An important challenge to children's participation presented in publications is to find a balance between 'protection' and 'participation' of children. This is particularly highlighted in studies conducted in social environments characterised by little or no acceptance of children expressing their views. (Pells, 2010; Ray, 2010; Feinstein et al., 2010).

Children can lose as much as they gain if the right to protection is not carefully balanced with their right to participate and to express their views. On the other hand Boyden and Mann (2000) argue that erring too far on the side of protection denies children the right to be heard and inhibits opportunities to develop their capacity for participation, which may increase their risk. Denying policy makers the benefit of children's expertise in matters of children's concerns may result in poor decision making, and thus expose children to further harm (Boyden & Mann, 2000).

The vulnerability of children is largely seen as derived from their lack of power and status with which to exercise their rights and challenge abuses, and not from children's lack of capacity. Power can present an important barrier to meaningful child participation. Martin and Franklin noted that disabled children and young people, particularly those who use methods of communication other than speech, continued to be defined by what they cannot do, rather than by what they can (Martin & Franklin, 2010). Cockburn (2005) concludes that issues of power in the adult-child relationship as well as the structural power of organisations, and their effects on participation, would not receive appropriate attention.

Children are entitled to protection according to their age and vulnerability. Involving children in participation without recognising the associated risks, may expose children to government retributions, exploitation by the media or to punishment, abuse and retaliation by their families and communities (Lansdown, 2010). The obligation of the Convention on the Rights of the child, to ensure that in all action 'the best interest of the child shall be a primary consideration' (Article 3), is often applied to assess how the balance between protection and participation should be judged (Percy-Smith & Thomas, 2010).

Getting the right structure in place for children to participate is often a great challenge. Not every child is a leader or wants to be involved in the same way. An environment has to be created that provides scope for all children to make a contribution in whatever way they feel comfortable according to their own interests and capacities (Percy-Smith, 2006).

The literature emphasises that adults are crucial to children's participation and White and Chouldhury argue that children's participation is rarely autonomous and is unlikely to succeed without adults (White & Choudhury, 2010). Yet, in situations where adults are failing children through abuse, neglect, exploitation, war, poverty, discrimination and prejudice, children cannot rely on adults to act for them, to protect them or to acknowledge their potential to address issues and contribute to social change (Feinstein et al., 2010; Ray, 2010).

Ray (2007) demonstrated in her analysis of Plan International's (a child mandated NGO) child participation programming conducted in settings of conflict and disaster, that children who lived in very poor and difficult circumstances were restricted in their ability to participate in many ways. She found that for them participation was principally concerned with the struggle to access basic human rights. Finding enough food to eat was one of the main preoccupations of children from child headed households in Uganda. Children's ability to participate was further affected by the relationship of power that adults exercised over them. Despite such difficult circumstance in which Plan International implemented their programming, Ray concluded that children's participation emerged not only as a right but as a key strategy in enabling children to transform their relationships with adults, exercise their other rights and become active citizens (Ray & Carter, 2007).

2.4. Benefits of child participation for the children and their communities

Despite the multiple challenges for children's participation, the available literature demonstrates important benefits for the children themselves, their families and communities. Consequently children's participation is now legitimated as 'something that contributes to children's positive development of individual identity, competence and sense of responsibility' (Kjorholt, 2002). Children themselves cite participation across various contexts as helping them to develop a sense of belonging, to build relationships and find new friends, to gain knowledge, skills and experiences, and to build a new sense of their own agency (Kane, 2009; Betancourt

& Khan, 2008; Greene & Hill, 2006). Research further demonstrates that children attribute great importance to be recognised, acknowledged and valued as individuals with opinions and feelings of their own (Taylor, 2006).

Participation is often seen as involvement in change processes and its value measured by the results. However, recent publications demonstrate the importance of the process of child participation as well as the outcome and recognise the importance of relationships, dialogue, interaction and communication, not only among children but also between children and adults (Percy-Smith, 2006). Percy-Smith argues for participation as a 'relational' and 'dialogical' process and stresses the need to pay more attention to the role of adults and the way in which the agenda and values of children and adults are negotiated and the responsibilities are shared. In practice it is less common that children participate alongside adults, instead they tend to participate as a group apart from adults, reinforcing their separation from adults in their communities (Percy-Smith, 2006; Mannion, 2010).

The literature shows a general recognition of the limitations of the theory of participation that involves simply listening to children and looks instead at different forms of dialogue between children, young people and adults. An emphasis on dialogue instead of separation is seen as crucial for a positive impact of children's participation for the children themselves, their families and their communities (Hart & Tyrer, 2006; Kränzle-Nagel & Zartler, 2010; Percy-Smith & Thomas, 2010).

2.5. Mental health; search strategy and selection criteria

Five databases relevant to this topic were systematically searched: Medline via PubMed, Web of science, Scopus, PsycINFO and Google Scholar. The review was completed by a citation search for any relevant article and a search of World Health Organisation (WHO), United Nations Children's Fund (UNICEF), United Nations High Commissioner for Refugees (UNHCR), Inter Agency Standing Committee (IASC), Centre for Global Mental Health, HealthNet TPO, Movement for Global Mental Health, Forced Migration, International Committee of the Red Cross and Médecins sans Frontières Field Research (MSF) online resources. The following search terms were used separately or in combination.

mental* health OR psychiatric* OR psychosocial* health OR risk factor* OR protective factor* OR vulnerability* OR trauma* OR traumatic* OR resilience* OR post-traumatic growth* inventory OR adjustment* OR development*

AND

child* OR adolescent* OR minor* OR youth* OR displaced person* OR internal* displaced OR child soldier*

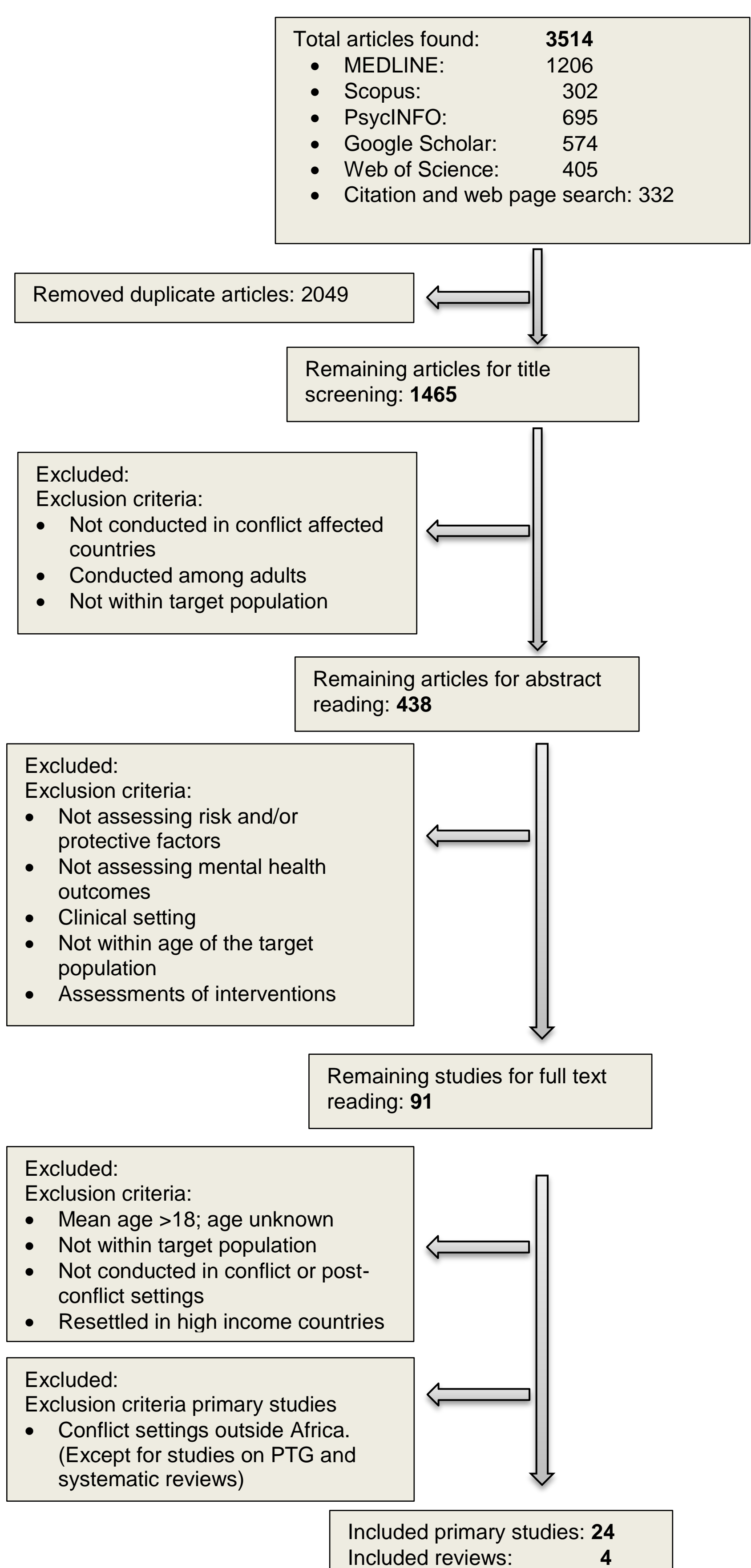
AND

conflict* OR war* OR post conflict* OR disaster OR crisis OR armed conflict* OR displaced setting* OR humanitarian emergency*

The search was limited to studies published in the past 20 years between 1993 and 2013, with special emphasis on children who are residents in conflict zones and those from internally displaced populations in Sub-Saharan Africa. No language limitation was set. Inclusion criteria were the publication date and data about: mental health outcomes, risk and protective factors including post-traumatic growth, conflict and post-conflict settings and the study population. Studies with participants up to and including the age of 18 years were included. Studies with wider age categories were only included if the mean age was 18 years or younger. The search revealed only one study on post-traumatic growth (PTG) in conflict settings in Africa. Therefore, all studies found on PTG conducted in conflict setting are included.

All relevant electronically available articles were downloaded and organised using the EndNote Reference Manager Database. Full text articles were obtained through the electronic Library from the University of Liverpool. The procedure of literature exclusion is shown in Figure 2.3.

Figure 2.3: Flow diagram of the procedure for literature exclusion



2.6. Mental and psychosocial health of children in conflict settings

This section of the literature review is presented in two parts. First a summary of key findings from three systematic reviews on mental health and resilience in children and adolescents affected by conflict worldwide is presented (Attanayake et al., 2009; Reed et al., 2012; Betancourt et al., 2013a). This is followed by a review of primary studies on child mental health conducted among conflict affected children and adolescents in Africa.

2.6.1. Introduction conflict and mental health

Worldwide millions of children and their communities are affected by armed conflict. In the last decade, armed conflicts have killed an estimated two million children, disabled six million, and displaced an estimated twenty million people. An estimated 300,000 children under 18 years of age are recruited into armed forces and are often forced to perpetrate violence (UNICEF, 2010).

Children affected by armed conflict are a highly diverse group because of the range of different experiences associated with conflict, displacement and resettlement stressors. Children’s exposure to organised violence and threats arising from social, cultural and political differences is, however, something they have in common (Ajdukovic & Ajdukovic, 1993; Qouta et al., 2012).

The effects of trauma exposure on child mental health is of particular concern because of their experiences of insecurity and their exposure to socioeconomic adversity and violence at a formative stage of their development (Betancourt & Khan, 2008).

The impact of armed conflict on children’s lives, particularly in sub-Saharan Africa, has been minimally researched. Despite important research gaps, such as the role of culture in shaping distress symptoms and coping mechanisms, empirical evidence suggests that mental disorders and psychosocial problems are substantial public health concerns in humanitarian settings around the world (Silove et al., 2008; Kessler & Wittchen, 2008; Batiji et al., 2006).

While there is an emerging consensus regarding the importance of mental health and psychosocial support in conflict settings, there is a major disagreement on research and practice. In addition to discussions of the appropriate timing of intervention, the debates on whether to prioritise reduction of trauma-related reactions and mental health disorders, protection of wellbeing, or structural stressors

such as insecurity, livelihood and social exclusion in the recovery environment, are ongoing (Inter-Agency Standing Committee, 2007; The Sphere Project, 2011; Mollica et al., 2004a; Weiss et al., 2003).

Past research has revealed that during times of war, children experience multiple traumas that are both, severe and enduring (Kinzie, 2001; Barenbaum et al., 2004; Kane, 2009). Many of these are considered to be life-long risk factors for adverse outcomes. They include: physical ill health and nutritional deficiencies (Zashikhina & Hagloff, 2007), physical and mental ill health of carers, abuse and neglect (Benjet, 2010), severe physical punishment (Bordin et al., 2009), deficiencies in the psychosocial and educational environment (Arun & Chavan, 2009), loss of carers or being orphaned (Ruiz-Casares et al., 2009), being raised in institutions (Erol et al., 2010), exposures to harmful substances or toxins (Roy et al., 2010), armed conflict and war (Harel-Fisch et al., 2010), violence (Panter-Brink et al., 2009) and forced displacement (Mels et al., 2010).

Although there is some evidence for action which has shown a positive impact on mental ill-health in children, it is apparent that interventions that work in one area may not work in another because of cultural and/or contextual differences (Jordans et al., 2011). Schools are often seen as entry points for interventions; this approach however, excludes children who are not enrolled. Also community based interventions that incorporate good child mental health practices have shown positive results. The same is true for programs fostering participation of young people incorporating a right-based focus (Betancourt et al., 2010a). Overall it is demonstrated that the key to a successful intervention lies in the capacity to establish the extent of the problem, and the perceived needs for an intervention within a particular setting (Betancourt & Williams, 2008).

2.7. Mental health outcomes, risk and protective factors: reviews

Attanayake and colleagues (2009) systematically reviewed existing literature to determine the prevalence of mental health disorder among children affected by armed conflict worldwide. The 17 studies analysed included 7,920 children. All studies provided prevalence rated from clinical diagnostic interviews or validated self-report questionnaires based on the Diagnostic and Statistical Manual of Mental Health Disorders (DSM-IV) (American Psychiatric Association, 1994). All identified studies included resident children in conflict zones and internally displaced children.

Four studies were conducted during ongoing conflicts in Bosnia, Palestine, and the Gaza strip. The 13 remaining studies were conducted one month to five years post-conflict. All studies reported on PTSD as the primary outcome, only four studies measured depression and three studies measured anxiety. Attanayake et al. found a wide range of PTSD outcomes from 4.5% - 89% with and overall pooled estimate of 47%. Depression and anxiety outcomes ranged from 15%-53% and from 18%-29% respectively with a pooled estimate of 53% for depression and 27% for anxiety.

Meta-analysis heterogeneity was attributed to study location, duration since event and methods of measurement. Attanayake et al. pointed out that the percentage of children who scored within the clinical range for PTSD was higher in studies conducted among children from middle-Eastern countries, including Iran, Iraq, Palestine, Israel and Kuwait than in studies conducted elsewhere. The time since event was found to be negatively correlated with higher scores for PTSD (worse health). Furthermore it was noted that the studies using the PTSD Reaction Index to measure PTSD produced elevated rates of probable PTSD, suggesting a possible measurement bias.

Reed and colleagues (Reed et al., 2012) undertook a review of the evidence base for individual, family, community and societal risk and protective factors for the mental health outcomes for children and adolescents. Twenty-seven studies, including 5,296 IDP or refugee children from low and middle income countries worldwide were retrieved. A meta-analysis was not done because of the clinical and methodological heterogeneity. Several studies presented in the review grouped mental health outcomes into internalising or emotional problems which included PTSD, depression and anxiety; and in externalising or behavioural problems.

Reed et al. revealed that mental health problems in children and adolescents affected by conflict and displacement did not result from single causes but rather from complex causal chains. Two types of risk and protective factors were identified and described as especially important: mediators and moderators. Mediators were identified as active components in causal pathways such as a child's direct exposure to acts of violence, whereas moderators were found to modify the strength or direction of the relationship between variables, for example age, sex, parental wellbeing, community acceptance, peer relationships.

Social support was found to be associated with lower levels of psychological disturbances during exile. However, the mechanism through which social support was able to mediate or moderate the effect of stressors was not demonstrated. Repatriation from exile was identified as a protective factor. The review determined

the following risk factors: female sex for internalising and emotional problems, except for PTSD; male sex for externalising and behavioural problems; exposure to pre-migration violence; settlement in refugee camps and internal displacement.

Betancourt and colleagues (Betancourt et al., 2013a) reviewed quantitative research on risk exposure, mental health outcomes and psychosocial adjustment among children (age<18 years) associated with armed forces and armed groups (CAAFAG), also referred to as child soldiers. Twenty-one studies were analysed from ten countries, including a total of 3,984 former child soldiers (30% girls). The quality of the retrieved studies was rated according to the Systematic Assessment of Quality in Observational Research (SAQOR) and showed that among the available publication eight studies were of high quality, four were of moderate quality and nine were of low quality. The quality of evidence was found to be limited by unclear methodology, including undefined sampling approaches, lack of validated mental health measures and failure to report missing data (Betancourt et al., 2013a).

Across the 21 studies, the systematic review identified several risk and protective factors associated with psychosocial adjustment and social reintegration among former child soldiers. Abduction, age of conscription, exposure to violence, gender and community stigma was associated with adverse mental health outcomes. On the other hand, family acceptance, social support, education and economic opportunities were associated with improved psychosocial adjustment.

The review further identified a great variation in prevalence rates of psychological distress that was found to be consistent with irregularity in methodology, sampling and instrumentation (Betancourt et al., 2013a).

Three out of five studies with comparison groups included in the review found a higher PTSD prevalence among former child soldiers than the comparison group who had not been conscripted (Kohrt et al., 2008; Okello et al., 2008; MacMullin & Loughry, 2004). By contrast studies from northern Uganda and Sierra Leone found little difference between psychosocial distress levels between former child soldiers and comparison groups (Betancourt et al., 2013b; Blattmann & Annan, 2010). Blattmann and Annan demonstrated that the level of violence exposure was a stronger predictor for psychosocial distress than child soldier status alone.

All reviews noted the paucity of available research addressing mental health of conflict affected children and saw the weak evidence base as a major obstacle to developing sound policies in order to address mental health issues and to promote

resilience and psychosocial adjustment in war affected children and in children associated with armed forces (Betancourt et al., 2013a; Reed et al., 2012; Attanayake et al., 2009). Betancourt and colleagues further stated that the existing evidence base was limited by weak instrumentation and analytic procedures, and found that only six of the reviewed studies used multivariate approaches (Bayer et al., 2007; Derluyn, 2004; Klasen et al., 2010a; Kohrt et al., 2008; Boothby et al., 2006; Betancourt et al., 2010c) while the remaining studies presented descriptive statistics or crude associations. With respect to intervention studies it was pointed out that the lack of randomisation and adequate control or comparison groups would make it difficult to determine whether rates of changes were due to the intervention studies or due to the passage of time (Betancourt et al., 2013a).

Further importance was attributed to ensuring more contextualised research and to consider the interrelatedness of individual, familial, community and societal risk and protective factors. While research on individual factors such as trauma exposure, age and gender was generally addressed the influence of family, community and societal factors on child mental health was found to be largely neglected (Reed et al., 2012; Betancourt et al., 2013a).

The reviews demonstrated that in a conflict setting direct exposure to armed violence received disproportionate attention relative to everyday suffering caused by social and material stressors in the wake of war such as poverty, displacement, stigma, malnutrition, disease, stressful family environments and the loss of social networks (Betancourt et al., 2013a; Reed et al., 2012).

The added value of qualitative research to investigate local symptoms expressions and indicators of impairment was pointed out by Betancourt and colleagues. In particular the use of mixed method studies was stressed in order to apply such context specific qualitative findings to the adaptation of quantitative measurements and improve their cultural appropriateness, local relevance and safety (Betancourt et al., 2013a).

2.8. Mental health of conflict affected children in Africa: primary studies

Nineteen primary studies, using 15 different population samples matched the inclusion criteria for this review. All studies were conducted among resident, IDP and refugee children and included former child soldiers. All studies are summarised in Table 2.4, page 42. The five primary studies on PTG, using three different study populations are presented in the following sections and summarised in Table 2.6, page 57.

2.8.1. Overview and prevalence of psychological distress

The 19 studies reviewed included a total of 6,282 children and adolescents from the Democratic Republic of the Congo, Eritrea, Uganda, Rwanda, Southern Darfur and Sierra Leone. Two thirds of the studies were conducted among former child soldiers.

Participants were selected from schools, care centres, IDP or refugee camps and through radio announcement. Three studies used a longitudinal approach and 16 studies used a cross section design. Research was conducted post conflict or in refugee settings.

The studies reported consistently high rates of psychological distress among conflict affected children. This was the case in studies conducted among former child soldiers and in studies conducted among children who had never been recruited into armed forces. All studies measured post-traumatic stress as a primary outcome, three studies measured depression and one study measured anxiety disorder. The proportion of children who met symptom criteria for PTSD ranged from 35% to 97%; depression symptoms ranged from 36% to 88% (Klasen et al., 2010a; Ovuga et al., 2008; Betancourt, 2011); one study found that 80% of the girls and 28% of the boys reached symptom criteria for anxiety (Betancourt et al., 2011).

Studies using comparison groups of children found higher PTSD rates among full-orphans who lived in child headed households (56%) compared to full orphans who lived in an orphanage (32%) (Schaal & Elbert, 2006). Paardekooper and colleagues (1999) found that, compared to the Ugandan resident children, the South Sudanese refugee children in northern Uganda reported significantly more PTSD like complaints such as nervousness, trouble sleeping and traumatic memories as well as depressive symptoms and behavioural problems. Betancourt reported little difference between psychosocial distress levels of former child soldiers compared to children who had never been conscripted into armed groups in Sierra Leone, and stresses the significance of post conflict stressors on mental health in war affected children suggesting that factors such as poverty, family and community disintegration, stigma, neglect and displacement were more potent predictors for adverse mental health outcomes than past traumatic war experiences (Betancourt et al., 2011; Betancourt et al., 2013b). Klasen underlines the negative impact of community and domestic violence on mental health outcomes in addition to war

trauma (Klasen et al., 2010a). One study conducted in Northern Uganda abandoned inclusion of a 'non-combatant' control group because preliminary findings demonstrated that every child, regardless of whether they were abducted or not abducted by the LRA, suffered from severe war trauma (Ovuga et al., 2008). In contrast, two studies reported significantly higher total scores for PTSD, emotional and behavioural problems among LRA abducted children compared to non-abducted children (Moscardino et al., 2012; McMullen et al., 2012).

2.8.2. Risk and protective factors: individual factors

Trauma exposure

Exposure to traumatic events related to armed violence had the strongest evidence base. All studies assessed war-related trauma but only five studies measured daily stressors in addition to war-related exposure (Mels et al., 2010; Betancourt et al., 2013b; Betancourt et al., 2010c; Paardekooper et al., 1999; Klasen et al., 2010a). Overall, cumulative exposure to violence was generally reported rather than relationships between different type of violence and their effect on mental health outcomes.

Across the retrieved studies, exposure to violence was consistently high for severe beatings and torture, experienced looting and massacres, indiscriminate firing and bomb explosions and witnessing violent deaths, including the death of parents, family members and friends. The highest rates were reported in the studies conducted in Rwanda after the genocide in 1994. In one study 73% of the participants lost brothers or sisters during the genocide in addition to the death of their parents, 41% witnessed the death of their parents, 35% were hiding under dead bodies, 88% were victims of attack or looting, 74% witnessed beating or torturing, 77% witnessed the killing of other people and 88% feared to be killed themselves (Schaal & Elbert, 2006). Extremely high levels of sexual abuse among girls were reported in the studies conducted among former child soldiers in Sierra Leone, Uganda and the DRC ranging from 30% to 57%.

All studies investigating relationships between variables demonstrated a dose-response relationship between the degree of trauma exposure and the degree of psychological distress, except for one study. (Bayer et al., 2007). Bayer found no associations between the number of traumatic experiences and an increase in post-traumatic stress but demonstrated that the more PTSD symptoms children had, the less they were likely to reconcile and the more they demonstrated feelings for

revenge. A higher level of daily hardship was found to be associated with increased internalising and externalising of problems (Betancourt et al., 2010c). Several studies identified particularly 'toxic' traumas. Witnessing the death of a family member or a friend, but also fear of own death was significantly associated with increased psychological distress (Dyregrov et al., 2000; Morgos et al., 2007; Schaal & Elbert, 2006; McMullen et al., 2012). The same was demonstrated for sexual abuse and rape which was found to be a strong predictor for PTSD as well as for depression and anxiety over time. (Betancourt et al., 2010b; Morgos et al., 2007; Betancourt et al., 2011; Moscardino et al., 2012). Being forced to kill or injure other people was found to be a strong predictor for internalising and externalising problems (Betancourt et al., 2010c; Betancourt et al., 2011; Moscardino et al., 2012).

Gender

The great majority of the retrieved studies reported significantly higher symptom scores for psychological problems in girls than in boys. Two studies found that the gender differences were not significant (Bayer et al., 2007; Klasen et al., 2010a). McMullen reported that girls were more likely than boys to suffer from depression and anxiety but found no such relationship for PTSD (McMullen et al., 2012). In Sierra Leone, Betancourt and colleagues demonstrated a significant association between female gender in former child soldiers and lower levels of confidence and prosocial attitude. At the same time differences between community acceptance and gender were noted in the way returning boys and girls were treated by family and community members. Girls were often viewed as 'impure', because of rape and sexual abuse resulting in a lower acceptance of girls compared to the boys. The lower community acceptance and the stigma placed on girls largely explained the gender differences in mental health outcomes over time (Betancourt et al., 2010c).

Whereas girls and boys experienced comparable levels of exposure to extremely violent events, including front line fighting, girls reported far more instances of rape and sexual abuse, and far more limited access to protective resources such as education (Betancourt et al., 2011). Mels and colleagues who investigated conflict affected displaced and resident children in the DRC reported higher symptom scores for internalising problems resulting from exposures to daily stressors, and lower symptom scores for externalising problems resulting from war trauma exposure, in girls than in boys (Mels et al., 2010).

Age

There is a controversy regarding age as a risk factor for post-traumatic stress in the literature. The small amount of evidence available on age and mental health outcomes in conflict affected children conducted in Africa seem to suggest that younger children have better mental health outcomes than older children. Three studies found that older age was significantly related with higher PTSD symptoms and emotional and behavioural problems (Klasen et al., 2010a; Neugebauer et al., 2009; Schaal & Elbert, 2006). Four studies reported no significant differences (Morgos et al., 2007; Derluyn, 2004; Farwell, 2003; Dyregrov et al., 2000), and one study demonstrated more symptoms for psychological distress in younger adolescents than in older ones (Mels et al., 2010).

2.8.3. Risk and protective factors: family factors

Family acceptance, functioning and parental health

Higher levels of family acceptance were found to be associated with better mental health outcomes in the few studies investigating it. Betancourt demonstrated that higher levels of family acceptance were related to lower average levels of psychological distress among former child soldiers (Betancourt et al., 2010c; Betancourt et al., 2010b). Klasen identified domestic and community violence as a significant risk factor for resilience in Ugandan former child soldiers and concluded that the return of children from the often extremely traumatising experiences with rebel forces into a violent and rejecting home may have resulted in an ultimate loss of trust in other people (Klasen et al., 2010b). Derluyn and colleagues (2004) showed that the availability of a parent, particularly the mother, was a protective factor against stress reactions in children exposed to violence and conflict. Also supportive parenting was associated with better mental health outcomes. It was further demonstrated that the death of the mother had more negative consequences for girls than for boys (Derluyn, 2004).

Little is reported about the effect of family functioning or parental health on children and adolescents affected by armed conflict and displacement. Mels and colleagues (2010) reported that domestic violence and family quarrels were more prevalent among internally displaced and returned Congolese adolescents than among non-displaced children. They found that children whose father had died had fewer externalising symptoms than those whose fathers were alive. No study reported the effects of parental psychological wellbeing on child mental health.

Betancourt and colleagues investigated potential relationships among war exposure, post-conflict risk and protective factors, and trajectory groups of children in a longitudinal study conducted over six years using a multinomial logistic regression analysis (Betancourt et al., 2013b). Results from the final model, which included three steps (1st step, demographic variables were included alongside war exposure; 2nd step, post-conflict risk factors were included; 3rd step, post-conflict protective factors were included) showed that the probability for being in the *high-symptom trajectory group* was greater for those children who were older, experienced family abuse and neglect as well as perceived stigma for their role as a former child soldiers, and social disorder within the community compared to the *low-symptom group*. Members of the *deteriorator trajectory group*, which included children whose internalising symptoms worsened over time, had a much greater probability of having a parent die as a result of the war, reported higher levels of family abuse and neglect as well as perceived stigma. They also reported higher levels of daily hardships compared to the *low-symptom group*. Overall, perceived family and community acceptance demonstrated a strong positive effect on improved mental health outcomes over time in the *improver group* (Betancourt et al., 2013b).

Household socioeconomic situation

The few studies investigating poverty and its impact on child mental health found that the worse the household socioeconomic situation, the greater the risks of psychological problems (Mels et al., 2010; Farwell, 2003; Schaal & Elbert, 2006).

Congolese adolescents who were internally displaced reported higher levels of material deprivation, particularly insufficient food and lack of medical care, than their returned or non-displaced peers. The level of socioeconomic deprivation among internally displaced children showed a particularly negative mental health effect on girls (Mels et al., 2010).

A strong relationship between psychological distress and the socioeconomic context was also demonstrated in Eritrean adolescents. Lacking resources to meet monthly living expenses for food, water, clothing and shelter predicted higher total psychological symptom scores, as did exposure to a greater number of trauma events. In addition to general symptoms of anxiety and depression, severe economic stress appeared to intensify symptoms related to earlier losses, this was found to be strongest among boys who had lost their fathers (Farwell, 2003).

A study conducted among orphans in Rwanda demonstrated that the children living in child headed households (CHH) suffered considerably more from PTSD

than their peers living in an orphanage (Schaal & Elbert, 2006). These findings are in agreement with Dyregrov (2000) who documented higher rates of psychological distress among orphans who lived in community setting than among orphans who lived in orphanages.

Schaal and colleagues mentioned a number of factors which may have contributed to these findings: basic needs of food, shelter and medical care are better met in an orphanage than in a child headed household (CHH). Most orphans in CHH lived in the home where their parents had been killed, a situation that could be a daily reminder of the death of their parents and the symptoms associated with these memories may have maintained high PTSD levels. Children with fewer symptoms may be more likely to actively look for support and shelter in orphanages whereas more affected children may be more afraid to leave their home and seek help elsewhere (Schaal & Elbert, 2006).

2.8.4. Risk and protective factors: community factors

Social support and community acceptance

Research on community and societal predictors for mental health outcomes in children affected by armed conflict in Africa is only nascent and remains largely restricted to research conducted among former child soldiers. The longitudinal studies from Sierra Leone demonstrated that higher levels of community acceptance were associated with lower levels of emotional distress among former child soldiers (Betancourt et al., 2010b). Perceived community acceptance was found to be a strong protective factor for internalising problems and increased the odds for children to improve psychologically over time significantly (Betancourt et al., 2013b).

Stigma and daily hardship

Only two of the retrieved studies, both from Sierra Leone, investigated stigma as a risk factor. The longitudinal data of these studies indicated that stigma predicted higher levels of hostility/externalising problems as well as deficits in prosocial behaviours over time. The findings remained significant even after adjusting for war exposure (Betancourt et al., 2010c; Betancourt et al., 2010b).

2.8.5. Risk and protective factors: societal factors

Social and cultural context

The effects of cultural and traditional aspects on child mental health were not investigated in the retrieved primary studies and in the systematic reviews presented. The importance of social cohesion within a society with respect to child mental health was, however, discussed. Morgos and colleagues pointed out that the nature of the war in Southern Darfur, resulting in extensive loss and mass displacement, had severely affected the whole society. They concluded that the fragmentation of the society may not only have compromised traditional coping mechanisms available to children but also the adult's ability to attend to the children's needs (Morgos et al., 2007). Dyregrov et al. (2000) supported this notion and stated that the extremely high level of experienced trauma in Rwanda had affected all levels of the society rendering the traditional coping mechanisms and social support for children less viable and the adult society less receptive for children's needs.

Religious context

Klasen and colleagues used hierarchical multiple logistic regression analysis to test the association of risk and protective factors with post-traumatic status. They identified six significant predictors for post-traumatic resilience. After controlling for all other variables, higher age, domestic and community violence, strong guilt cognitions, and revenge motivations were risk factors for post-traumatic resilience. Higher family socioeconomic status was found to be a protective factor and children's perceived spiritual support showed to be the strongest protective factor and almost doubled the odds of resilience as defined in the study (Klasen et al., 2010b).

Livelihood opportunities and education

Attending school and training programs was considered critical in helping war affected children and adolescents in a small number of studies investigating it. Education provided children with a sense of normality, predictability and safety in their daily life and helped to form relationships with peers and adults outside their home (Betancourt & Khan, 2008; Betancourt et al., 2010c). Ovuga and colleagues found in Uganda that former child soldiers who were able to continue their education after their return scored lower on depression compared with former child soldiers who had no such opportunity (Ovuga et al., 2008). Also Betancourt reported that

returning to and staying in school was associated with higher levels of confidence and prosocial attitude among former child soldiers in a longitudinal study in Sierra Leone (Betancourt et al., 2010c).

Table 2.4: Summary of included primary studies on mental health risk and resilience of conflict affected children

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Betancourt et al., 2010b) Sierra Leone The term 'child-soldier' is used for 'children formerly associated with armed forces and armed groups' (CAAFAG).	Examine the role of stigma (manifest in discrimination as well as lower levels of community and family acceptance) in the relationship between war related experiences and psychosocial adjustment (depression, anxiety, hostility and adaptive behaviours).	Sample obtained from a registry of Interim Care Centres (ICCs) for demobilised former child soldiers. -N=260 former child soldiers affiliated with the Revolutionary United Front (RUF) aged 10-18 at baseline in 2002=T1. -At follow up T2 in 2004, 60% of the initial sample n=156 was re-interviewed (male 89%/female 11%). Average age at T2 was 17.4 years. Measurements: CWTQ with 42 items for children's experiences of war-related events. -Everyday Discrimination Scale for perceived discrimination. -ISSB, instrument to assess psychosocial adjustment for use among child soldiers in Sierra Leone and northern Uganda. -Demographic Inventory: including age of abduction, time spent with RUF, school enrolment at T1and/or T2. -Qualitative instruments for family and community acceptance. Longitudinal (T1 and T2)	**1:** Mean age at the time of abduction, 10 years. Average length of time with RUF 4.7 years. Potentially stigmatising war-related events: Rape was reported by 44% females and 7% males; having killed or injured a loved one or a stranger was reported by 31% of females and 35% males. -Sources of discrimination: being a former child soldier; gender; one's family having more or less money than other families. -Perceived discrimination was correlated with T2 levels of depression, anxiety and hostility. - Regression models for psychosocial outcomes showed that rape was a significant predictor for depression and anxiety over time whereas perpetration of violence such as wounding or killing was marginally significant. Adding protective factors to the model for depression, only family acceptance showed an inverse and marginally significant relationship to depression symptoms. - Higher family acceptance was associated with decreased hostility, while improvements in community acceptance were associated with adaptive attitudes and behaviour. Post conflict experiences of discrimination largely explained the relationship between past involvement in wounding/killing others and subsequent increases in hostility. **2:** Challenging field conditions resulted in early termination of the T2 data collection. Use of self-reports and a lack of information on pre-war mental health conditions. Stigmatising variables such as rape or killing others may be underreported. Small female sample (11%). Sample is not representative of former child soldiers in Sierra Leone.
(Betancourt et al., 2010c) Sierra Leone	Investigate the longitudinal course of internalising and externalising problems and adaptive/prosocial behaviour among Sierra Leone's former child soldiers and whether post-conflict factors contribute to adverse or resilient mental health outcomes.	The same sample population as described above at T1 in 2002 (N=260) and T2 in 2004 (N=147). At time three T3 in 2008, 68.8% of the original sample was re-contacted (N=177). Measures: A mix of standard measures and locally derived measures to assess mental health outcomes developed for use among former child soldiers in Sierra Leone and northern Uganda (OMPA, PTSD-RI, ISSB). -CWTQ to assess exposure to war trauma, and the Post-War Adversity Index to measure daily hardship. -ISSB, to measure social support and the Scale of Community Acceptance. -Perceived discrimination measured with the Everyday Discrimination Scale. -Longitudinal (T1, T2 and T3)	**1**: Long term mental health of former child soldiers was associated with war experiences and post conflict risk factors, which were partly mitigated by post-conflict protective factors. -Increases in externalising problems was associated with perpetrated violence (i.e. killing and/or injuring other people) and post-conflict stigma. -Increased community acceptance was associated with decreases in externalising problems. -High baseline levels of internalising problems were associated with surviving rape. Increases in internalising problems were associated with younger involvement in armed groups as well as social and economic hardship. - Improvements in internalising problems were associated with higher levels of community acceptance and increases in community acceptance. -Decreases in adaptive prosocial behaviours were associated with killing/injuring others during the war and with post-conflict stigma; partially mitigated through school enrolment, social support, increased community acceptance. **2:** Clinical measurements validated for Sierra Leone but clinical cut off points unavailable for mental health outcomes.

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Betancourt et al., 2013b) Sierra Leone	Examine internalising trajectories in war affected youth	Group 1 former child soldiers who received services through Interim Care Centres (ICC) n=264. Group 2 community sample of war affected youth not served by ICC n=137 Group 3 former child soldiers not served by ICC n=127. Children from 5 districts aged 10 to 17 at baseline. Measurements: (Betancourt et al., 2010c) Longitudinal (T1, T2 and T3).	**1:** Four main trajectories were identified. A large majority of youth maintained lower levels of internalising problems (41.4%) or significantly improved over time (47.6%) despite very limited access to care. 4.5% reported severe difficulties six years post-war and 6.4% reported that their symptoms had worsened. - Continued internalising problems were associated with loss of caregivers, family abuse and neglect, and community stigma.
(Betancourt et al., 2011) Sierra Leone	Examine associations between war experiences, mental health, and gender.	Former child soldiers N=273 (29% females). Measurements: HSCL for assessment of anxiety and depression; for hostility, confidence and prosocial attitudes instruments developed for Sierra Leone's child soldiers were used. Cross sectional. Analysis of data collected in 2004 (Betancourt et al., 2010c).	**1:** Boys and girls reported similarly high rates of beatings, injuries, torture and violent deaths, bomb explosions, massacres and indiscriminate firing. - More boys (42%) than girls (28%) were likely to be trained as soldiers. - Significantly higher rates of rape were reported among girls (44% vs. 5% of boys). - More girls than boys scored within the clinical range for anxiety (80% vs. 28% of boys) and depression (72% vs. 55% of boys). In multiple regression analysis, female gender was a significant predictor of lower levels of confidence. Children who perpetrated violence (killing/injuring others) reported greater levels of depression, anxiety and hostility. Surviving rape was associated with greater anxiety and hostility in males. Male former child soldiers who lost caregivers were also more vulnerable for depression than girls. Associations were demonstrated between age, socio economic status, school attendance and losing a parent and higher levels of anxiety and depression symptoms.
(Schaal & Elbert, 2006) Rwanda Study conducted approximately 10 years after the genocide.	Investigate: the nature and magnitude of exposure to traumatic events; the prevalence of PTSD and the relationships between living situation, age, gender, amount and type of trauma and PTSD.	Convenience sampling of adolescent genocide survivors, N=68 full-orphans (33 boys/ 35 girls) -34 youth lived in child headed households (CHH), 34 lived in an orphanage (gender about 50/50 in each sample) -Age 13-23. (Mean age 17.7) divided into younger 13-17 and older 18-23 youth. -Measurements: Interviews about experience during genocide. Demographic questionnaire; Event Scale for trauma exposure and CIDI for post-traumatic stress Cross sectional.	**1:** 73% of the participants lost brothers or sisters during the genocide. 41% witnessed the death of their parents. 35% were hiding under dead bodies. 88% were victims of attack or looting. 74% witnessed beating or torturing. 77%witnessed the killing of other people. 88% feared to be killed themselves. Mean number of traumatic events = 10 of a possible 15 events (range 5-15). - 44% met criteria for PTSD. PTSD rates were higher among orphans living in CHH than among orphans in orphanage (56% vs. 32%). PTSD rates were higher in the 18-23 age group compared to the 13-17 age group (54% vs. 33%). Girls scored significantly higher for PTSD than boys (60% vs. 27%). - PTSD symptoms were most strongly associated with: witnessing the death of parents and fear of own death. Age was positively correlated with number of PTSD symptoms and number of traumatic events. - Two-thirds of the adolescents had never talked to anyone about their problems and experiences during the genocide before and many asked the investigators whether they could return for a second interview. **2:** Findings based on a small not representative sample. Long recall period for PTSD symptoms (within the past year and after the genocide in 1994).

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Dyregrov et al., 2000) Rwanda Data collection about one year after the genocide. National Trauma Survey (NTS)	Assess the nature and magnitude of exposure to traumatic events and severity of psychological reactions among Rwandan children one year after the genocide.	Stratified quota sampling. Children included from 31 'unaccompanied' centres (UCC) and 29 schools. 51% males and 49% females. Measures: Wartime Violence Checklist and IES. Total sample, N=3030 children aged 8-19. 1200 of them completed an incorrect IES version (three categories) so that data are restricted to the1830 children who completed the correct, adapted version of the IES (four categories). N=1830. Cross sectional.	**1:** 70% witnessed the killing of another person. 78%experienced death in their immediate family, of which more than one third witnessed the death of a family member. 16% reported that they had to hide under dead bodies. -79% met symptom criteria for PTSD. -The multivariate analysis showed that the degree of exposure to traumatic events was related to the degree of intrusive memories and thoughts, as well as arousal. Children with a high intrusion and arousal score had lost someone; they were exposed to a high level of violence and felt threatened. -Living in the community was associated with higher intrusion scores than living in unaccompanied centres. **2:** Security risks and lack of basic infrastructure and human resources.
(Neugebauer et al., 2009) Rwanda Data collection about one year after the genocide. Participants from the same sample population as above from the National Trauma Survey (NTS).	Investigate the type and frequency of violence; whether a dose response relationship exists between exposure to violence and traumatic stress reactions; whether post-traumatic stress levels vary in relation to age gender and education in child and adolescent genocide survivors.	Stratified quota sampling. The same study population as in (Dyregrov et al., 2000). Measures: Wartime Violence Checklist to assess trauma exposure. IES to assess Post-traumatic stress. -Children from both IES versions were included and analyses: sample 1 =IES with three categories) and sample 2 = IES with four categories. N=1547 (Sample 1, N =605; sample 2, N=942). Cross sectional.	**1:** 90%witnessed killings and had their life threatened; 35% lost immediate family members; 30% witnessed rape and sexual mutilation; 15% hid under bodies. - Sample 1: 95% reported one or more re-experiencing symptoms (S2=96%); 95% reported three or more avoidance/blunting symptoms (S2 =95%) and 63% reported two or more arousal symptoms (S2=54%). - PTSD rate in Sample1 = 62% (male = 51%/female 73%). PTSD rate in Sample 2 = 54% (male = 46%/female 60%. - In both samples a dose –response relationship between trauma exposure and adverse mental health outcomes. Results on age were inconsistent. No association between years of education and post-traumatic stress. **2:** Schools not selected at random; unknown whether children who resumed schools were representative of Rwandan youth generally. Only genocide violence recorded on the wartime violence Checklist. IES as used in this study relies exclusively on the DSM-IV algorithm for PTSD symptoms. Exclusive focus on PTSD by the NTS.
(Moscardino et al., 2012) Uganda	Evaluate post-traumatic stress symptoms, psychological distress, and emotional and behavioural problems in former Ugandan child soldiers and never abducted children in northern Uganda	Sample size 234 children 52% boys and 48% girls. Random selection from 4 schools in Gulu district. Former child soldiers n=133 Never abducted children n=101 Age 14-18, mean age 16.7. Measurements: qualitative methods to obtain information on culture and the consequences of war with youth and adult key informants. Standardised Questionnaires: IES-R for PTSD; BSI-18 for psychological distress; SDQ for emotional and behavioural difficulties. Cross sectional.	**1:** Symptom criteria for PTSD was met by 93% of the total sample of children; clinical range for psychological distress 87%; emotional and behavioural difficulties 53%. - Former child soldiers experienced significantly more war-related traumatic events than never abducted children. Total scores on measures of PTSD, psychological distress, and emotional and behavioural problems were significantly higher among former child soldiers compared to never abducted children. Girls reported significantly more emotional and behavioural problems than boys. In never abducted children, more mental health difficulties were associated with experienced physical harm, witnessing the killing of other people, and being forced to engage in sexual contact. **2:** Reliance on self-report measures; lack of information on pre-war status of the children.

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Vindevogel et al., 2012) Uganda	Assess the scope and salience of challenges confronting former child soldiers compared to non-recruited young people in war-affected northern Uganda.	Stratified random sample from six schools and nearby villages. N=1008 (54.5% male, 45.5% females). 732 in-schools and 276 out of school participants. 330 children abducted by LRA and 678 not abducted children Age 12-25. (Mean age 17). Measurement: interviews on experienced challenges to inform the questionnaire design. Questionnaire survey. Cross sectional.	**1:** 237 challenges were identified and clustered into 15 categories. Formerly recruited participants mainly identified 'emotional' and 'training and skills' challenges. The significantly higher prevalence of 'emotional challenges' appeared to be related to: the death of parents, abduction by LRA and recalling past events. Compared with non-recruits they identified significantly more 'emotional' and fewer 'social and relational' challenges except for stigmatisation. Non-recruits reported significantly more 'death/loss of life' in general. The significantly higher prevalence of 'social and relational' challenges was explained by: high reporting of troublesome relationships with others, being beaten by others and being lonely/alone.
(Paardekooper et al., 1999) Uganda	Assess psychosocial effects of war exposure and subsequent flight among South Sudanese Children compared to Ugandan children who did not have the same experiences of war and flight.	Sudanese refugee children from refugee camps and settlements in northern Uganda N=316; controls were local Ugandan children from similar background without war exposure N=80. Age 7-12. Children selected through snowball sampling. Measurements: Adapted HTQ, DSI, KidCope, mental health assessment, Social support measure, adapted WHO questionnaire for children (RQC). Cross sectional.	**1:** South Sudanese refugee children reported significantly more traumatic events, more daily stressors, less satisfying social support, less support form extended family and friends than the Ugandan comparison group. At the same time Sudanese children reported using more different coping strategies than Ugandan children. Compared to the Ugandan children the South Sudanese children reported significantly more PTSD like complaints such as nervousness, traumatic memories and trouble sleeping as well as behavioural problems and depressive symptoms. **2:** Questionnaires not validated; For the age group used (7-13 years) questions had to be rephrased or examples were necessary for a better understanding during interviews.
(Klasen et al., 2010a) Uganda	Examine the effect of war and domestic violence on the mental health of former Ugandan child soldiers.	Convenience sampling. N=330 former child soldiers (boys 52%/ girls 48%). Age 11-17 years (mean age 14 years). Children selected from boarding school for severely war traumatised children. However, no specialised psychosocial support was provided at the time of research. Measurements: CWTQ and CSTQ for trauma exposure; MINI KID for PTSD and major depression (MDD); self-developed check-list for community and domestic violence. Cross sectional.	**1:** Prevalence of PTSD was 33%, prevalence for major depression disorder was 36%. Behavioural and emotional problems above clinical cut off was61%. No gender differences were found regarding mental health outcomes. - Boys reported higher scores in cumulative trauma exposure than girl. No significant gender difference was found for sexual violence. - Multiple linear regression analysis showed that traumatic experiences during abduction and community and domestic violence posed significant risk factors for all mental health outcomes. -the study underlines the negative impact of community and domestic violence on mental health outcomes in addition to war trauma. **2:** Convenience sampling. Choice of special needs school for war traumatised children. Sample not representative.

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Klasen et al., 2010b) Uganda	Examine post-traumatic resilience among former Ugandan child soldiers.	Same study population as in (Klasen et al., 2010a). Measurements as above and CD-RISC to assess 'hardiness' and ARS subscale to assess positive future orientation. Cross sectional.	**1:** 27.6% of the children showed post-traumatic resilience. Post-traumatic resilience was defined by the absence of PTSD, MDD and clinically significant behavioural and emotional problems (below cut offs). Older children showed more mental health problems than younger children. - Resilience was associated with lower age, lower exposure to domestic violence, lower guilt cognitions, less motivation to seek revenge, better socioeconomic status and more perceived spiritual support. Gender did not relate to resilience.
(Derluyn, 2004) Uganda	Examine mental health effects of experienced trauma in former Ugandan child soldiers, and to investigate associations between demographic variables, trauma exposure and PTSD scores.	N=301 recruited for interviews through radio announcement. 71 of them (61 boys and 10 girls) were randomly selected to fill in the IES-R scale to assess PTSD. Age 12-18. Cross sectional.	**1:** 77% of the 301 children witnessed the killing of someone during abduction. 39% had to kill another person and 2% of them had to kill a close relative. 27% had to drink their own urine. - The IES-R showed very high rated of PTSD 97% of the 71 children had clinically significant scores. - The death of a parent, especially the mother, led to an important increase in score for avoidance symptoms, with a high increase for girls but almost no change for boys. **2:** Small sample for the IES-R scale. Girls underrepresented. Pre-war status of children before the war not available. Risk of transcultural error when using psychological measures in other cultural contexts.
(McMullen et al., 2012) Uganda	Measure the prevalence and aetiology of psychological distress among war affected children and adolescents in post-conflict northern Uganda.	N= 205 (55% boys and 45% girls). Age 12-19 (mean age 14.4years). Adolescents selected from a boarding primary school in Gulu. 47% of the participants had been abducted, 53% had experienced the war without being abducted by the LRA. Measurements: War Experience Checklist (WEC) and the IES-R for Post-traumatic stress symptoms, APAI for depression/anxiety like symptoms. Cross sectional.	**1:** A large number of boys and girls had seen dead bodies (76%) and had a friend of family member killed (71%). - 57% of the participants were found to have clinically significant levels of post-traumatic stress symptoms. - Both components of trauma exposure measured, the number of types of trauma experienced and whether the adolescent was abducted were significantly associated with psychological distress. - Abducted adolescents were significantly more likely to have high levels of depression and anxiety like symptoms than never abducted adolescents. - Girls were significantly more likely to suffer from anxiety and depression than boys; this was not the case for PTSS. **2:** Daily stressors such as poverty, grief, responsibilities and abuse were not assessed.

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Ovuga et al., 2008) Uganda	Examine the prevalence of PTSD , depression mood and associated risk factors	Convenience sampling of children from a boarding primary rehabilitation school in northern Uganda after the hospitalisation of 12 children with psychotic disorder. N=102 (58 girls and 44 boys). Age 6-18 years. Measurements: WTECL for war experiences; HSCL for depression; HTQ for PTSD symptoms (cut off 2.5). Cross sectional.	**1:** 87% of the children experienced 10 or more war related traumatic events out of 15. These children were more likely to experience depression mood than children with lower scores. 22% had various forms of physical disabilities. 56% of the children had clinically significant levels of PTSD and 88% for depression. Children's return through a rehabilitation centre or through a cleansing ritual did not protect against depression. - 42% of the children reported a family history of severe mental illness; 45% reported a family history of alcohol abuse; 23% reported a family history of suicide attempt and 10% reported a family history of suicide. **2:** Participant selected by school administration. No control group (the initial idea to have a control group was abandoned as every child, abducted or not abducted by the LRA, suffered from severe war trauma).
(Bayer et al., 2007) Uganda and Democratic Republic of the Congo (DRC)	Investigate the association of PTSD symptoms and openness to reconciliation and feelings of revenge in former Ugandan and Congolese child soldiers	N = 169 (141 boys and 28 girls). Children selected from rehabilitation centres (every second child on the list). Age 11-18 (mean age 15.3 years) Measurements: Child Post-traumatic Stress Disorder Reaction Index (CPTSD-RI) to assess PTSD; Acholi Psychosocial Assessment Instrument (APAI). Two separate 8 items questionnaires to assess children's openness to reconciliation and their feelings of revenge. Cross sectional.	**1:** 92% witnessed shootings; 90% witnessed someone being wounded; 54% reported having killed someone; 28% was forced to engage in sexual activities. 35% of the children met symptom criteria for PTSD. Children with more symptoms for PTSD had significantly less openness to reconciliation and more feelings of revenge. Children who were threatened with death or serious harm had a significantly lower openness to reconciliation and more feelings for revenge but no differences in PTSD symptoms. Age, sex, religion, ethnicity, duration of being a child soldier and education did not have a significant effect on the main outcome variables (number of trauma, PTSD symptoms, openness to reconciliation, feelings of revenge). **2:** Small sample not randomly selected (generalisability). Girls underrepresented. Risk of transcultural error, lack of sufficient validity of the scales used; reliance of self-reporting scales.
(Mels et al., 2010) Democratic Republic of the Congo (DRC)	Examine the impact of war induced displacement and related risk factors on the mental health of Congolese adolescents.	Community sample. Adolescents recruited from ten schools in three target areas in Ituri Province, Eastern DRC:N =819 of which n=217 IDP's; n=496 returned former IDP's and n=106 non-displaced peers. Age 13-21 (mean age 15 years). Measurements: IES-R scale; HSCL-37 to assess internalising and externalising problems; Adolescent complex Emergency Exposure and Daily Stressors scales. Cross sectional.	**1:** IDP's were significantly more exposed to traumatic events than returnees, who in turn were more exposed than never displaced children. - IDP's reported highest mean scores for PTSD and internalising symptoms. - Greatest traumatic exposure associated with high symptoms for PTSD. Interaction effects noted for trauma exposure and daily stressors with internalising and externalising symptoms, and cumulative trauma and displacement status with externalising symptoms. - Girls more likely to report internalising symptoms when exposed to high amounts of daily stressors; boys showed more externalising symptoms with cumulative trauma exposure. - Younger adolescents had slightly higher scores for PTSD. **2:** Practical constraints limited generalisability of findings (restriction of sampling frame); reliance of self-reporting scale. Criterion validity (cut offs not validated with clinical diagnosis).

Author, year and country	Objective	Study population Measurements	1: Key findings 2: Limitations
(Morgos et al., 2007) Sudan, Southern Darfur	Assess the psychosocial effects of the long standing, high intensity warfare among displace d children in Southern Darfur.	Quota sampling in three IDP camps. N =331 (43% girls and 57% were boys) Age 6-17 (mean age 12 years). Measurements: Child PTSD-RI; CDI to measure depression; expanded grief inventory. Cross sectional.	**1:** 77% of the children met symptom criteria for PTSD and 38% exhibited clinical symptoms for depression; 20% demonstrated significant levels of grief symptoms. -Increased exposure to war experiences resulted in higher levels of PTSD, depression and grief symptoms. -Strongest predictors of PTSD were: abduction, hiding for protection, rape, being forced to kill or hurt relatives, and seeing someone burned alive. - Strongest predictor for depression were rape, witnessing rape, the death of parents, being forced to fight, and having to hide for protection. **2:** Limited generalisability. Protective factors not assessed (i.e. family and social support; individual problem solving strategies). Main focus on war experience not assessing potential traumatic experiences children face within their IDP camp.
(Farwell, 2003) Eritrea	Examine war trauma experienced by Eritrean youth, their psychological symptoms, and contextual factors related to their psychosocial wellbeing in post war Eritrea.	Phase 1: Participant observation and open ended ethnographic key informant interviews N=60. These informed the design of the semi structured questionnaire, and validation of the measures and interview protocol employed in phase 2: School based sample N=97 (male 55%, female 45%) aged 13-20 years. Sample obtained from register of the government's repatriation program. - Measurements Phase 2: Retrospective accounts of trauma experiences in semi-structured interviews; HTQ. Cross sectional. Qualitative and Quantitative approach.	**1:** Re-experiencing the event through recurrent thoughts or memories or through sudden emotional and physical reactions such as anger or tears was common in response to reminders of traumatic events. Strategies for avoidance if reminded of the event were leaving the premises, talking to friends or listening to music. - Exposure to trauma and economic hardship were significant predictors of psychological distress. - For many youth, grief over the loss of parents and close relatives were not resolved. Refugee status did not predict lower symptom level. - Qualitative data suggest that the intra-psychic post-traumatic stress disorder framework may be too narrow for conceptualising was trauma, which is essentially psychosocial in nature, and deeply contextualised in a community's socioeconomic and political reality of conflict and its aftermath.

CIDI, composite international diagnostic interview (based on DSM-IV criteria); **BSI**, brief symptom inventory; **HTQ**, Harvard trauma questionnaire; **TSCL**, trauma symptoms checklist (adapted Harvard trauma questionnaire); **DSI**, Daily Stressor Inventory; **CDI,** child depression index; **WTEC**, war trauma experience checklist; **CWTQ,** child war trauma questionnaire; **CSTQ**, child soldiers trauma questionnaire; **HSCL**, Hopkins symptom checklist; **ICD-10**, international statistical classification of diseases and related health problems international statistical classification of diseases and related health problems**; IES**, impact of events scale; **IES-R,** impact of events scale-revised; **ARS**, adolescent resilience scale; **APAI**, Acholi Psychosocial Assessment Instrument; BSI, brief symptom inventory; CAPS, clinician administered PTSD scale; **CBI**, child behaviour inventory form; **CD-RISC**, Connor-Davidson resilience scale; **ISSB,** inventory of socially supportive behaviours; **MINI-Kid,** mini international neuropsychiatric inventory; **NUCPAS**, northern Ugandan child and youth psychosocial adjustment scale**; OMPA**, Oxford measure of psychosocial adjustment; **CPTSD-RI**, UCLA child PTSD reaction index revised;

2.9. Post-traumatic growth

This section of the literature review is presented in two parts. First a summary of key findings from a systematic review on post-traumatic growth (PTG) in children and adolescents is presented. This is followed by a review of primary studies conducted among children and adolescents affected by armed conflict.

Research on PTG has been centred on adults and has only very recently included children and adolescents. In 2006, Kilmer published a book chapter on resilience and PTG in children in which he examined two published articles and one unpublished dissertation which represented the only available investigations on PTG in children at the time (Kilmer, 2006). In 2009, Clay and colleagues reviewed the available psychometric instruments used in studies with adolescents and children and found four different instruments being used. All of them were adaptations of adult instruments (Clay et al., 2009).

Only one review was conducted which included 25 studies investigating PTG among children and adolescents affected by disease, natural disasters, death of parents, loss of friends, and terror attacks (Meyerson et al., 2011).

With respect to armed violence, four published primary studies, all conducted in Israel, and one unpublished master's thesis, conducted in Northern Uganda, matched the inclusion criteria for PTG studies in this literature review. The studies conducted in Israel by Levine et al., (2008) and by Laufer, Hamama-Raz, Levine and Solomon in 2009 examined the same sample of 2,999 children and adolescent selected and examined by Laufer and Solomon in 2006. A summary of the included studies is presented in Table 2.6.

That good may come out of tragedy and suffering is ancient. Examples range from Buddhism to Greek tragedy to Friedrich Nietzsche who remarked in his book Götterdämmerung: *"Was mich nicht umbringt, macht mich stärker!"* "What doesn't kill me makes me stronger" (Nietzsche, 1888). The empirical investigation of this concept is, however, recent and has largely focused on adults.

Research on stressful and traumatic events has traditionally focused on the negative impact of traumatic experiences. More recently, some researchers have shifted their focus from negative outcomes to resilience and growth in the face of adversity with the hope of uncovering pathways to positive adjustments and

development along with mechanisms which would result in effective interventions (Clay et al., 2009; Calhoun & Tedeschi, 2006; Joseph, 2006).

Post-traumatic growth defined as 'positive change experienced as a result of the struggle with trauma' (Kilmer, 2006; Tedeschi & Calhoun, 1995) emphasises the transformative quality of responding to highly challenging or traumatic life events. Calhoun and Tedeschi (1995) underscore that positive transformation does not result from the event itself but rather from the struggle in the wake of trauma that results in PTG. Derived from their research with adults, Tedeschi and Calhoun propose the theory that traumatic events serve as seismic challenges to individuals' pre-trauma schema regarding themselves, others, their relationships and the world around them by shattering their assumptive world, forcing a reconfiguration of an individual's beliefs and worldview. The struggle in the wake of trauma in order to accommodate the new trauma related information is viewed as a painful process in itself (Tedeschi & Calhoun, 1995; Tedeschi & Calhoun, 2004; Calhoun & Tedeschi, 1998).

Considerable research has documented a relationship between post-traumatic stress symptoms and PTG (Kilmer & Gil-Rivas, 2010; Salter & Stallard, 2004), a finding that is consistent with the post-traumatic growth model since distress is thought to initiate and/or heighten the process of psychological growth in an attempt to resolve the tension between pre-existing assumption and the new trauma related information (Joseph, 2006).

Although PTG is related to other strength-based concepts such as resilience and coping, it is at the same time distinct. Unlike resilience which relates to effective coping and adaptation in the face of major life crisis and refers to the ability to return to normal pre-trauma levels of functioning (i.e. positive adjustment), PTG is viewed as a movement beyond the pre-trauma level across the five domains described as: changed self-perception, including a greater ability to survive or endure; a different perspective on relationships, including a better understanding of who 'one's real friends' are and whom to trust; a deepening of one's spiritual life; a changed philosophy of life with modified priorities and values, including a better appreciation of the 'small things' and a view for new possibilities (Clay et al., 2009; Joseph, 2006; Tedeschi & Calhoun, 2004).

While developing the post-traumatic growth inventory (PTGI) Tedeschi and Calhoun identified five domains of PTG in a component analysis (Tedeschi &

Calhoun, 1996). The five-component model includes: new possibilities, spiritual change, relating to others, appreciation of life and personal strength. All measurements used to investigate PTG in adults, as well as the newly developed measurements to assess PTG in children and adolescents, parallel those major domains (Clay et al., 2009). PTG in adults is most often measured with the PTGI (Taku et al., 2008; Tedeschi & Calhoun, 1996) and Myerson found that overall 68% of the 25 reviewed studies assessing PTG in children and adolescents used a version of the PTGI (Meyerson et al., 2011).

2.9.1. Measurement of PTG in young people

Clay and colleagues (2009) noted in their review of measurements used to investigate PTG in youth that until recently semi-structured interviewing or parent's reports were mainly used to provide descriptions of PTG in children and adolescents. The need to develop standardised psychometric measurements for children largely resulted in an adaptation of adult instruments. The following psychometric instruments for the assessment of PTG in children and adolescents are described by Clay and colleagues (Clay et al., 2009).

Milam and colleagues (2004) adapted Tedeschi & Callhoun's (1996) Post-traumatic Growth inventory (PTGI) for use with adolescents who had experienced different types of trauma such as the loss of parents or serious illnesses. Items were reworded and modified to produce a shorter, 16 item version (as opposed to the 21 item on the adult PTGI). However, the five domains from the adult self-reporting scale were maintained: 'personal strength', 'relating to others', 'spiritual change', 'new possibilities' and 'appreciation of life'. The scoring of Milam's version not only allowed scoring whether something had not changed or changed for the better but also whether something had changed for the worse. Preliminary data showed good internal consistency reliability.

Ickovics (2006) also adapted the PTGI for adolescents. The 21 items were reworded for children exposed to traumatic experiences such as the loss of a loved one and early/unexpected pregnancy. Ickovics, however, removed the two items measuring 'spiritual change' as they were thought inappropriate for young people. The 19 item modified scales demonstrated good internal consistency reliability.

Cryder modified the PTGI by content and wording but kept the same five domains. This scale was named the Post-traumatic Growth Inventory for Children (PTGI-C) and was used to assess PTG in children experiencing Hurricane Floyd (Cryder et al., 2006). This scale possessed good internal consistency reliability.

Kilmer (2006) modified the PTGI for her study of children diagnosed with cancer. The rewording of the scale was adapted to children as young as eight. This scale has been validated through pilot and full scale studies and showed excellent internal consistency reliability. No difference was found between parents' ratings and children's self-report rating.

The need for a valid, reliable, child focused measure for use in assessing changes and progress of interventions over time and to validate existing research instruments was highlighted in all reviewed studies (Clay et al., 2009).

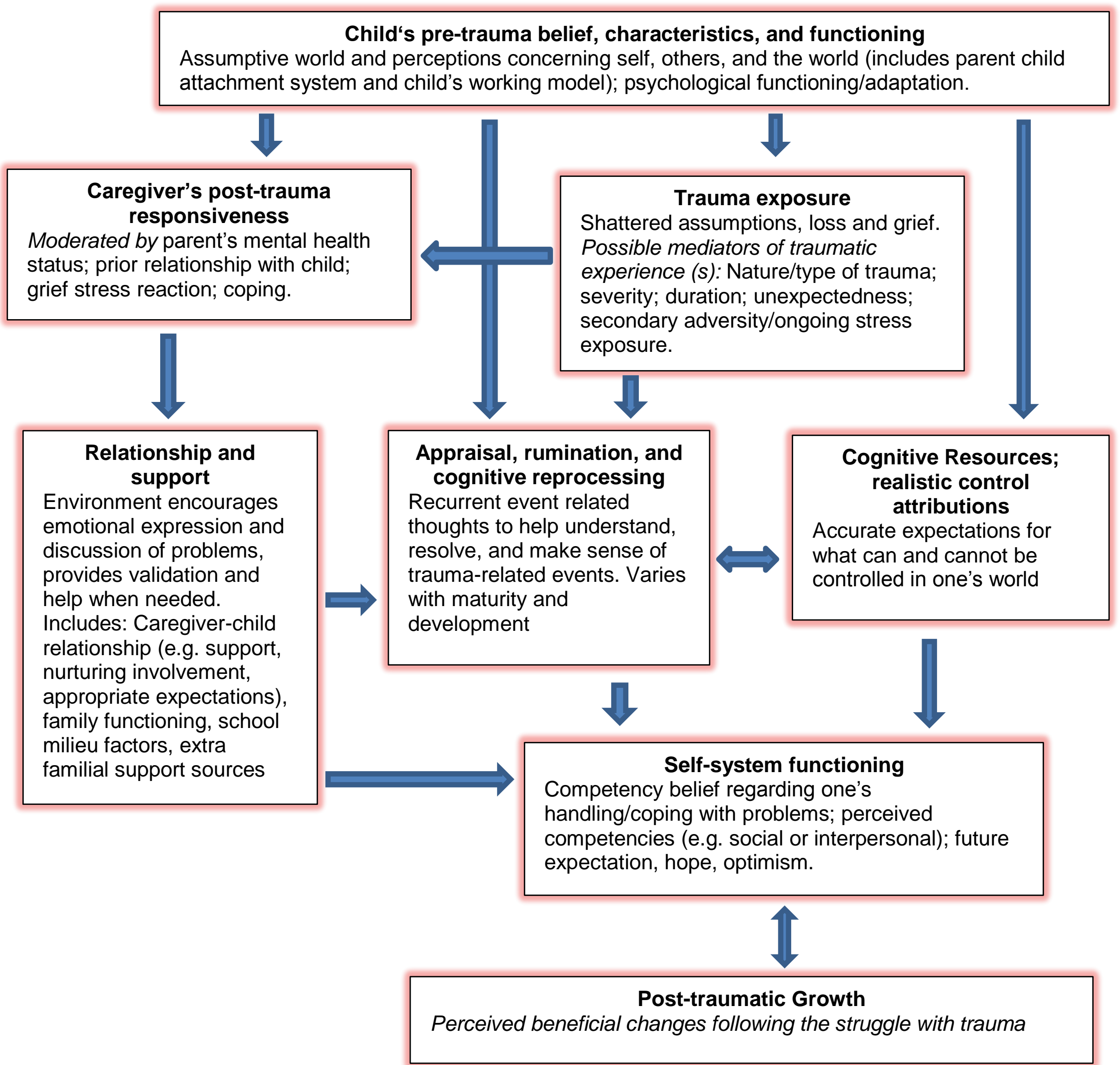
2.9.2. PTG in adults and the PTG model in children

Recent meta-analysis findings of PTG among adults (Helgeson et al., 2006; Vishnevsky et al., 2010; Prati & Pietrantoni, 2009) show evidence of relationships between: environment characteristics (e. g. trauma severity); social processes (e. g. social support, religious involvement); distress responses (e. g. perceived stress, intrusive cognition); psychological processes (e. g. rumination, positive reappraisal, acceptance); positive outcomes (e. g. reduced depression, positive effects) and demographic variable with some evidence that females and ethnic minority individuals experience more growth (Meyerson et al., 2011).

In comparison with the state of knowledge about PTG in adults, very little is known about relationships between such variables and PTG in children and adolescents in general and about children and adolescents affected by armed conflict in particular. Kilmer presents a hypothesised model of PTG in children (Figure 2.2.) and illustrates how PTG may unfold in children (Kilmer, 2006). However, at the time many questions remain unanswered about the various pathways to PTG and the relationships consistent with the PTG model.

Meyerson stated that until recently there was not sufficient published and unpublished research available to justify a review. Meyerson and colleagues (2011) published the first review assessing the extent to which conceptual models based upon empirical research conducted with adults are consistent with data collected in children and adolescents. The aim was to establish links between the theoretical model of PTG in children (Figure 2.5.) and the findings of the review.

Figure 2.5: Hypothesized model of post-traumatic growth in children (Kilmer, 2006)



2.9.3. Associations between PTG and conceptually relevant variables in children and adolescents: review.

Myerson's systematic review (2011) of studies investigating PTG among children and adolescents demonstrated links between environmental, social, psychological and demographic predictors and PTG in youth as indicated by PTG research in adults. Consistent findings (positive correlations) emerged in support of the link between: subjective stress, post-traumatic stress and PTG; social support, religious involvement and PTG; coping and PTG and other positive outcomes and PTG. Some evidence was found that PTG in children and adolescents may decay more rapidly over time as demonstrated in adults. Also gender differences, that females report more growth than boys, did not seem to emerge until late adolescence/adulthood. From the three studies investigating association between

PTG and psychological factors only one study demonstrated a direct link between rumination and PTG.

Meyerson identified several important limitations in his review. Several constructs were only examined by a few of the included studies; although a majority (80%) of the researchers used research instruments developed to assess benefit finding and trauma related growth, a minority (20%) used measurements that were not initially designed to assess growth. Furthermore, qualitative methods were not combined with quantitative methods to gain a more thorough understanding of the context and the impact of the event on the child's life. Another limitation was that very few studies used a prospective, longitudinal design to measure the process of PTG over time; in addition most PTG research did not use non-trauma control groups in order to compare and also distinguish 'normal' developmental growth from post-traumatic growth.

Meyerson concludes that the identified weaknesses limited the conclusions that could be drawn about directions of effects and processes relevant to PTG in relation to normal growth. He also stressed the need for much more research in order to determine whether the pattern identified in adults would also hold true in children.

More research was also suggested to determine the extent to which the type of trauma was associated with PTG and how they could be explained. Also the need to conduct research in high risk areas using a longitudinal approach was emphasised (Meyerson et al., 2011).

2.9.4. PTG and conceptually relevant variables in children and adolescents affected by armed conflict: primary studies

Five primary studies were retrieved in this literature review that addressed PTG in children and adolescents in conflict settings. All researchers used a retrospective, cross-sectional design, and adapted the 21-item adult version of the PTGI into a more 'respondent friendly' version. Kane (2009) added 14 open ended questions to the PTGI so that children and adolescents had the opportunity to report stress and growth experiences in an open ended manner and for the researcher to gain a more thorough understanding of the responses provided during the structured PTGI interview. The retrieved studies are summarised in Table 2.6.

In addition to the quantitative results from the PTGI of the five studies presented in the summary table (Table 2.6.), Kane's study provides important additional

insights and explanations derived from the open ended questions addressing all five domains of PTG (Kane, 2009):

Relating to others: Respondents with high PTGI scores in this category reported greater compassion for others and/or had formed stronger bonds with families and peers as a result of the most traumatic event-(s). They reported a better understanding about 'who one's real friends are' and/or a greater ability to rely on these people for help. Respondents with low PTG scores did not feel closer to others, including children and adolescents who had experienced similar traumas. Some of these children also reported to feel even more distant from others than before, some felt guilty for having survived and some of them reported that the war itself and their experiences as child soldiers were their main reason for not being able to relate to others anymore.

New possibilities: Respondents with high scores reported a greater desire to make a difference and/or to seek new opportunities. Education was seen as the most important means to return to a normal life and/or as an important source of strength. Also the end of the conflict was described as an opportunity for positive change and/or for new possibilities to emerge. Respondents who did not experience growth in this category reported that nothing they had experienced associated with their abduction and/or the war had provided new opportunities for them, and some of them reported experiencing greater anxiety if confronted with new 'things'.

Personal strength*:* Participants with high PTG scores reported a greater amount of self-reliance and/or more strength to overcome future obstacles. Participants who denied positive experiences mentioned that they felt less capable than before the traumatic event(s).

Spiritual change: This was found to be the strongest category. Children with high scores reported a deepening of their faith affecting many aspects of their lives. A majority reported that they had become more religious than before the experienced traumatic events and/or that prayer's helped them to overcome obstacles, manage their problems and/or helped them to forgive others.

Appreciation of life**:** Participants who scored high mentioned that their faith in God had helped them to better appreciate their life. Also the fact that they had survived their abduction and were still alive helped them to appreciate the 'small things' in their life. Children also reported that they better appreciated the relationships with their family and/or the opportunity to go to school more (Kane, 2009). Kane's findings from the reports of adolescents who did not experience growth seem to suggest an additional dimension of 'negative transformation' (e.g. feeling less capable and experiencing greater anxiety when confronted with new

things than before) in contrast to ‘no growth’ and ‘positive growth’ (i.e. transformation).

The findings from the four studies conducted in Israel are presented in the summary table (Table 2.6). All studies investigated the relationship between post-traumatic stress and post-traumatic growth and reported a positive correlation between the two variables (Laufer & Solmon, 2006; Laufer et al., 2009, 2010; Levine et al., 2008). Laufer et al., (2009) found this to be true only for Israeli youth who did not identify themselves as ‘religious’. Religiosity/spirituality was found to be positively correlated with PTG and negatively correlated with post-traumatic stress (Laufer & Solmon, 2006; Laufer et al., 2009, 2010). Laufer and colleagues also found that youth who identified themselves as religious reported more PTG than those who identified themselves as ‘traditional’ or ‘secular’ (Laufer et al., 2010). The presented studies do not address: type of traumatic event, time since event, social support, and rumination in relation to PTG. Also positive mental health resources such as ‘optimism’, ‘self-esteem’ and hope in relation to PTG were not investigated.

Table 2.6: Summary of included primary studies on post-traumatic growth in children and adolescents affected by armed conflict

Author, year and study site	Objective	1. Study population 2. methods used	1. Key findings 2. Limitations
(Kane, 2009) Uganda	Estimate the prevalence of PTG and investigate successful coping strategies.	**1.** Former child soldiers N=47; 23 male and 24 female. Mean age 16.5 years. Non probability sampling from 3 boarding schools. **2.** PTGI, HTQ, HSCL. Cross sectional.	**1.** 40% of the participants met symptom criteria for PTSD, 60% for anxiety and 34% for depression. Prevalence of PTG by category: I. Relating to others: 40% II. New possibility: 23% III. Personal strength: 15% IV. Spiritual change: 74% V. Appreciation for life: 13%. No significant difference between male and female. No relationship between PTSD and PTG. No relationship between time of traumatic event and PTG. **2.** Sample is small and not representative of Ugandan former child soldiers.
(Levine et al., 2008) Israel	Examine the components of PTG and the relationship between growth and PTSD.	**1.** Pooled samples N= 4,054 from two adolescent samples with various terror exposure. First sample, 2,999 adolescents aged 13-15 selected from 11 schools (Laufer & Solomon, 2006). Second sample 1,745 adolescents aged 16. **2.** PTGI, Child Post-traumatic Stress Reaction Index. Cross sectional.	**1.** Principal component analysis showed two correlated components of outward and intrapersonal growth. Regression modelling showed that the relationship between the growth and PTSD measures was linear and curvilinear (inverted – U). According to the author, these results imply that post-traumatic growth in adolescent is characterised by two robust components, and is greatest at moderate post-traumatic stress levels. This study used the largest sample identified in the literature. Cluster sampling was used to draw the 11 school from four different areas. **2.** Sample is not representative of Israeli adolescents.
(The Psychosocial Working Group, 2003) Israel	Examine the role of religiosity in post-traumatic growth in Israeli religious, traditional, and secular adolescents.	**1.** Jewish adolescents who were exposed to terror events from 14 schools; non-probability sampling. N= 1482, 909 (62%) girls and 560 (38%) boys. Mean age 16 years. **2.** PTGI, Live Event Questionnaire, Child Post-traumatic Stress Reaction Index Cross sectional.	**1.** Most youth reported some level of growth following exposure to terror. - Religious youth reported higher levels of growth than secular youth. - Among secular and traditional youth post-traumatic symptoms and an unwillingness to forgive were positively associated with growth. - Fear of terror was positively associated with growth across the groups. - Fear was a strong predictor for growth. Fear was more relevant in predicting growth than that of objective exposure. **2.** Sample is not representative of Israeli adolescents.

Author, year and study site	Objective	1. Study population 2. methods used	1. Key findings 2. Limitations
(Laufer & Solomon, 2006) Israel	Assess the pathogenic and salutogenic effects of exposure to terror among Israeli youth.	**1.** 2,999 adolescents (42% boys and 48% girls) aged 13 -15 were chosen from eleven schools using cluster sampling. The schools were drawn from four areas which differed in their levels of exposure to terror. **2.** PTGI, Exposure to Terror questionnaire and the Child Post-traumatic Stress Reaction Index. Cross sectional.	**1.** 70% of the study participants were exposed to at least one terror incidents. 11% reported losing a close relative, having been shot at 4% and being injured 1.6%. - Significant association was found between the objective level of exposure (number of terror incidents) and levels of fear. 42% of the participants reported mild to severe post-traumatic symptoms (27% mild, 10% moderate, 4% severe and 1% very severe) and 74.4% reported feelings of growth. - PTG and post-traumatic symptoms were significantly correlated with the likelihood of growth increasing with the number of post-traumatic symptoms. - Positive correlations were found between subjective exposure and both post-traumatic symptoms and feelings of growth. - Girls reported more feelings of growth than boys. Religious adolescents reported greater feelings of growth. **2.** Sample is not representative of Israeli adolescents
(Laufer et al., 2010) Israel	Examine competing explanations of the relationship between religious and political ideology commitment with PTG.	**1**. The same study population as above (Laufer & Solomon, 2006) **2.** Measurement included the PTGI, religious orientation and ideological commitment and subjective and objective exposure to terror. Cross sectional.	**1.** 70% of the study respondents were exposed to at least one terror incident. Both religiosity and political ideology mediated the effects of fear on growth. -Political ideology but not religiosity had a moderating effect, such that subjective fear was positively associated with growth only among those with stronger ideologies. **2.** Sample is not representative of Israeli adolescents. Religion and ideology are multidimensional variables the entire scope of these concepts cannot be covered

PTGI, Post-traumatic Growth Inventory, adult version (individual adaptation to the study population).

2.10. Rationale and justification for this research

The literature review identified a paucity of available research addressing mental health of conflict affected children as well as children's participation in conflict settings. The manifold limitations, barriers and challenges to research in conflict and post-conflict settings were acknowledged by all authors of the primary studies (Table 2.4 and 2.6) and the four reviews presented. The following research needs were identified:

Children's participation

- Children's participation in conflict settings is still minimally researched and remains largely restricted to informal research conducted by international, child mandated NGO's (Lansdown, 2006)

- Percy-Smith argues for participation as a 'relational' and 'dialogical' process and stresses the need to pay more attention to the role of adults and the way in which the agenda and values of children and adults are negotiated and responsibilities are shared not only in children's day to day lives but also at the organisational level (Percy-Smith & Thomas, 2010).

- Usually, the space for children's participation will not exist and has to be created. Research can contribute to the creation of enabling environments at different levels (i.e. home, school, community, and organisation) in which different forms of participation can be developed and issues of mutual concern for children and adults can be identified (Hart, 2003; Percy-Smith & Thomas, 2010).

Mental health of conflict affected children

- While research on individual factors such as trauma exposure, age and gender was generally addressed (Table 2.4 and 2.6) the influence of family, community and societal factors as well as the role of culture in shaping distress symptoms and coping mechanisms were largely neglected (Reed et al., 2012; Betancourt et al., 2013a).

- Post-traumatic growth among children and adolescents is a new field of research and is minimally researched in children affected by armed conflict (Meyerson et al., 2011).

- Securing appropriate representative samples is difficult in conflict zones. The humanitarian situation may change rapidly and the civilian population in insecure areas may relocate. Purposive sampling and school based sampling predominates in research involving children and adolescents (Table 2.4 and 2.6), excluding the children who are not enrolled.

- The importance of qualitative research to investigate local symptoms expressions and indicators of impairment was pointed out by Betancourt and colleagues. The added value of mixed method was stressed in order to apply context specific qualitative findings to the adaptation of quantitative measurements and improve their cultural appropriateness, local relevance and safety (Betancourt et al., 2013a).

- All reviews presented (Attanayake et al., 2009; Betancourt et al., 2013a; Reed et al., 2012; Meyerson et al., 2011) found that the existing evidence base was limited by weak instrumentation and analytic procedures.

- Direct exposure to armed violence received disproportionate attention relative to everyday suffering caused by social and material stressors in the wake of war, engendered by poverty, displacement, stigma, malnutrition, disease, stressful family environments and the loss of social networks (Betancourt et al., 2013a; Reed et al., 2012).

- While the relationship between the number of experienced trauma and mental health outcomes was investigated, little information was available on associations between different types of trauma and mental health outcomes. Research also tended to focus on PTSD, rather than to investigate the full range of psychological distress and behavioural problems (Table 2.4).

3. Background to the study area

3.1. Local context

All investigations reported in this study were undertaken in Bilkey and Nyandit Payams, Akobo East County, Jonglei State, South Sudan over a six month period from February until July 2010. All data were collected about one year after two major attacks had killed over 1000 Lou Nuer men, women and children and displaced an estimated 19,000 people from Nyandit Payam towards Akobo town (UNOCHA, 2009). The security situation remained relatively calm during the time of data collection.

3.2. Geography of the area

South Sudan is administratively divided into ten states. Each of these states is divided into a number of counties. Each county is further divided into a number of payams and each of those into an average of four to eight bomas or villages.

Akobo County is divided into Akobo East and Akobo West. Bilkey and Nyandit Payams are two of four Payams in Akobo East County. Bilkey Payam has four Bomas: Akobo town, Dima, Old Akobo and Dilule. Nyandit Payam also has four Bomas: Mer, Padide, Chibang and Obor. The area is part of the eastern flood plains livelihood zone and borders Dengjok Payam to the north, Akobo West to the west, Pibor to the south, and Ethiopia to the east. Akobo town is the administrative centre and is situated in Bilkey Payam. The town and most of the villages are located along or near the Pibor or the Geni River. In the Dry season (November to April) Pibor, Akobo West and Malakal are accessible by road. The river is the main supply route in the rainy season (May to October) when road access is limited or impossible.

3.3. Background to the conflict

Inter-ethnic clashes in Akobo County (Akobo East and Akobo West) occurred mainly between the Lou Nuer and the Murle to the south and the Lou Nuer and the Jikany Nuer to the north. After a failed peace conference between the Murle and the Nuer, Lou Nuer from Akobo, Wuror and Nyrol counties attacked several Murle settlements near Pibor in March 2009. The bodies of those killed were said to be too

numerous to be buried. An estimated 5000 people sought refuge in Pibor town (UNOCHA, 2010).

The Murle reprisal attack took place in Nyandit Payam in April 2009 and resulted in the displacement of an estimated 19,000 Lou Nuer of which about 3000 people crossed the border into Ethiopia (Figure 3.1). The great majority, about 16,000 people, sought refuge in Akobo town where they intended to remain until safe return to their villages was guaranteed by the government (BBC News Africa, 2009; UNOCHA, 2010).

Figure 3.1: Village burned to the ground in Nyandit Payam (UN photo, 2009)

Displaced people who fled attacks arrived not only from Nyandit Payam, but also from other insecure areas, such as Dengjok Payam in the north. As a result, the population of Akobo town increased from 20,000 to 54,800 within a short time and stretched the already scarce resources to their limits (ICRC, 2012).

The continuing presence of the displaced population in the town led to increased water shortages and to poor sanitation and hygiene. These conditions, along with serious food shortages, increased malnutrition and furthered the spread of communicable diseases (SCUK & MEDAIR, 2010; Famine Early Warning Network., 2010).

In May 2009, Lou Nuer fighters attacked the Jikany Nuer in Torkey. A month later, the situation deteriorated when armed men from the Jikany Nuer tribe attacked

a flotilla of boats on the Sobat River carrying WFP food and other supplies for the displaced people in Akobo town. The incident led to a blockade of the river, cutting off the food supply and all trading activities with Ethiopia and Upper Nile State.

With the river closed and the roads impassable during the rainy season, the market place in Akobo town was soon empty. Even the few people who could afford to pay any price for food were not able to do so. WFP was left with no alternative but to air drop food supplies until Akobo town could again be accessed by road (UNOCHA, 2010).

Because of a general food scarcity, residents and IDPs from the town of Akobo established a temporary fishing camp in Mareng, 40 km to the southwest on the Geni River, to improve their diet. On 2nd of August 2009, only four months after the Nyandit attack, Mareng was attacked by Murle fighters. 185 people were killed, mainly women and children (BBC News Africa, 2009). The Mareng attack orphaned many more children who had remained in Akobo town, waiting for their parents to return with dried fish. Other community members, men, women and children managed to survive the Mareng attack just a few months after fleeing their own villages in Nyandit Payam. The great majority of the people had lost their homes and their cattle and were dependent on food aid at the time the study was conducted.

3.4. The population

According to the 2008 census figures, the population of Bilkey Payam is 35,797 persons and of Nyandit Payam 25,499 persons. Apart from a few remaining Anyuak, the people belong to the Lou Nuer ethnic group. Frightened by repeated ethnic violence in 2009, many people from Nyandit Payam and the Bomas surrounding Akobo town stayed in the town itself.

By April 2010, about 3000 people had returned to Nyandit to clear and cultivate the fields, but the fear of attack remained and the men were cautious about bringing back their families.

Figure 3.2: Jonglei State and approximate territories of principal ethnic groups

Source: Distribution of ethnic groups Hutchinson 1996

Quite apart from displacement there was a normal seasonal movement of people. In the dry season, the few remaining cattle keepers moved their cattle to the camps further north. Inhabitants from villages away from the river moved to the riverside for water and to fish. Villagers usually returned home for the planting season. The schools were closed from January until May because of these movements. Most people did not return to their fields to cultivate in 2010 for fear of new attacks against which the government was arguably unable to provide protection. The great majority of IDP's stayed in Akobo town to collect the monthly food rations distributed by WFP.

3.5. Health and nutrition

The hospital in Akobo town was operated by the Ministry of Health and supported with drugs and supplies by the International Medical Corps (IMC) and UNICEF. Services offered included in- and outpatient treatment, laboratory, surgery, reproductive health, maternal and child health (MCH), expanded program of immunisation (EPI), voluntary HIV counselling and testing (VCT), and x–ray diagnosis.

A therapeutic feeding program at the hospital had been running since June 2009. The number of malnourished children admitted soon exceeded the capacity of the program and the two International NGO's, Save the Children and MEDAIR, started an ambulatory feeding program for children younger than five years as a consequence of the nutrition survey conducted in February 2010, which revealed a severe crisis. The UN stated that food assistance was the number one humanitarian need besides protection in Akobo County and increased its monthly general food distribution to include 80,000 people (UNOCHA, 2010). By April 2010 the number of food warehouses had increased from five to nine.

Primary health care centres (PHCC) and primary health care units (PHCU) were to be found in the two Payams in Dilule and Burmath, both operated by the Presbyterian Relief and Development Agency (PRDA).

3.6. Service providers

The magnitude of the emergency characterised by extensive violence, loss of life, massive population displacement, and complete destruction of livelihood and the local economy overwhelmed local government capabilities. It required an international response far beyond the capacity or mandate of any single agency. An increasing number of NGO's flocked to Akobo town soon after the rainy season in 2009 to cover the manifold needs throughout Akobo County. The local authorities soon started to fear that the town would become a pull factor because of all the unique services offered. To avoid more overcrowding and encourage people to return to their original cultivation plots, the municipal authorities wanted to decentralise all services provided by NGOs and the UN. Even though these aims were discussed with the service providers, the latter were rather reluctant to set up

services outside the town because of the unstable security situation. They also feared that most places outside Akobo town would again become inaccessible by road in the next rainy season, thus rendering the supervision of ongoing projects and the maintenance of regular supplies difficult. The following agencies, shown in Table 3.3, were present in Akobo town.

Table 3.3: Overview of non-governmental service providers and their activities (April 2010)

AGENCY	ACTIVITY
Alternative Poverty Eradication bureau for Africa (APEBA).	Orphan school
Carter Centre (CC).	Trachoma program; guinea worm eradication; eye surgery at Akobo hospital; annual distribution of antibiotics.
Christian Relief and Development Agency (CRADA).	Mosquito net and fishing hook distribution to IDP's in 2010. Distributing partner for FAO (seeds and tools) in 2009. Distributing partner for Handicap International in 2009.
International Committee of the Red Cross (ICRC).	Construction of three water yards in Akobo town
International Medical Corps (IMC).	Hospital services in Akobo town
MEDAIR	Support of SCiSS to set up the therapeutic feeding program in Akobo town
Nile Hope Development Forum (NHDF).	PHCU program (Kir, Dengjok, Gakdong), drilling of boreholes; School construction; non food items (NFI) and food distribution for returnees and IDPs.
Population Services International (PSI).	Mosquito net distribution
Samaritans Purse (SP).	Assessment of feasibility of PHCU construction in Kier, Wanding, Dengjok and Nyandit.
Save the Children South Sudan (SCiSS).	Child protection; NFI distribution; support of NHDF to deliver services to the PHCUs; nutrition and food security.
United Nations Children's Fund (UNICEF).	Accelerated child survival initiative in 2010
Upper Nile Youth Mobilisation for Peace and Development (UNYMPDA).	Peace talks and anti-violence program; school construction and teacher support in Nyandit. Plans vocational centre in Akobo town for 2011.
World Health Organisation (WHO).	Polio eradication program.
World Food Program (WFP).	Food distribution for IDPs and the vulnerable population.
Danish Demining Group (DDG)	Explosive Remnants of War (ERW) and mine clearance in Akobo town and surrounding areas.

Source: Southern Sudan Relief and Rehabilitation Commission (SSRRC)

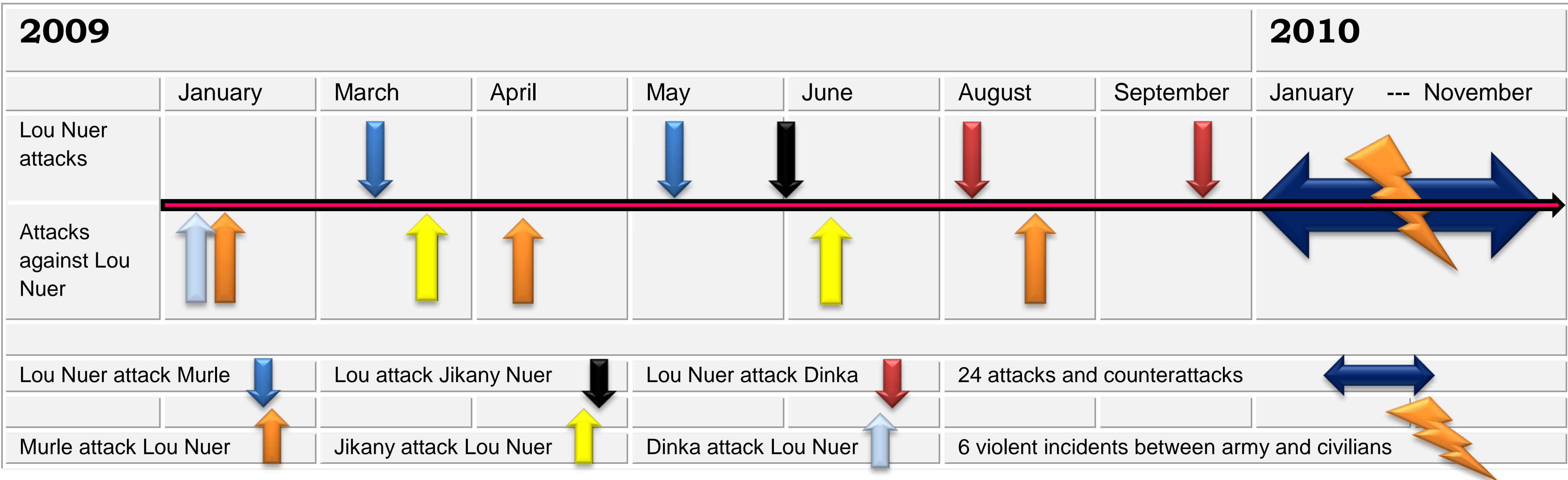
3.7. The children of Akobo

The children's exposure to armed violence was unique in many ways. In striking contrast to other studies, the sample children in this research were distinguished by the fact that the life threatening events they experienced were not only historical but continued to persist. Throughout the study these children were at risk of being shot dead, wounded or abducted by patrolling Murle fighters as soon as they left their homes to collect firewood, gather wild fruit, or go hunting or fishing.

Cattle raiding between the Lou Nuer and the Murle, targeting not only cattle but also men, women and children, continued throughout 2010 and did not stop in 2011 and 2012[6]. While major attacks saw a reprieve over the election period in 2010 and the run-up to the referendum in January 2011, they resumed almost immediately after the voting (UNOCHA, 2012; BBC, 2011; BBC, 2012; BBC News Africa, 2009). An overview of the armed conflicts involving the Lou Nuer from 2009-2012 is provided in Figure 3.4a and 3.4b.

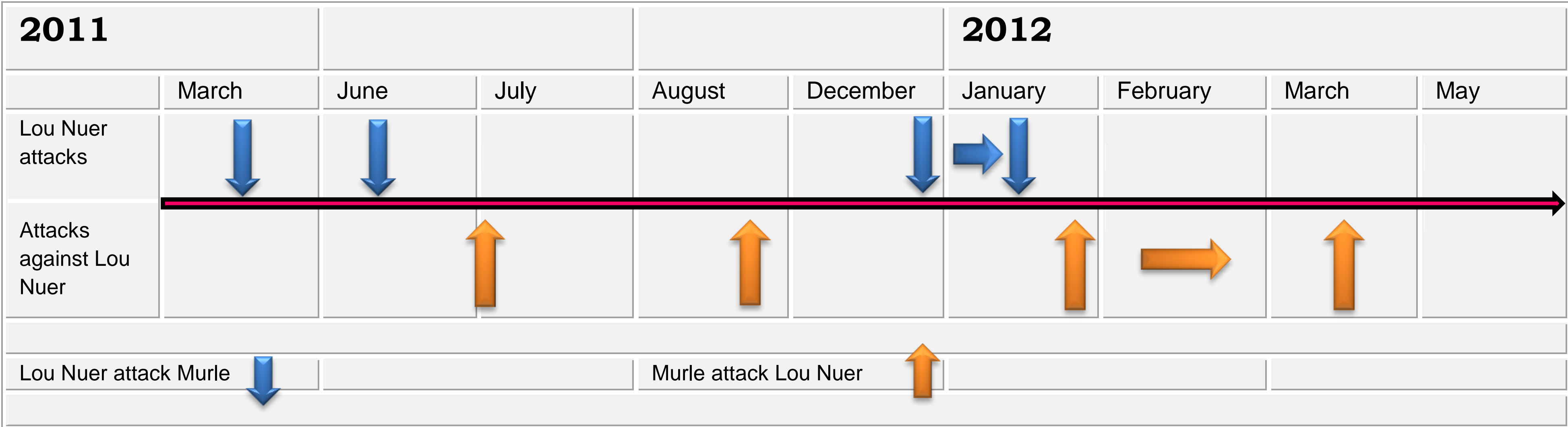
[6] From January until November 2010, which included the time this study was conducted, UNOCHA reported 24 intertribal clashes in Akobo and Pibor County and 6 violent incidents between the army and civilians. In August 2011 Murle fighters attacked the Lou Nuer in Pieri town. During the attack an estimated 600 Lou Nuer men, women and children were killed, 200 children abducted and 25,000 head of cattle stolen. The Murle attack in Pieri was in response to the March and June assaults by Lou Nuer fighters in which an estimated 400 Murle were killed. In January 2012, 6000 Lou Nuer fighters marched towards the town of Pibor, burning villages and seizing livestock on their way. The entire town of Lukangol was burned to the ground. An estimated 20,000 civilians were able to flee before the attack. The 6,000 Lou Nuer fighters who attacked the area around Pibor outnumbered the 800 SPLA soldiers and the UN forces stationed in the town. Media reports have put the death toll in the clashes as high as 3,000, but the UN was not able to confirm the number. The number of newly displaced was estimated at 50,000 civilians.

Figure 3.4a: Major attacks involving the Lou Nuer in 2009 and 2010 in Jonglei State



In 2009 the cycles of attacks and retaliation reached unprecedented levels, resulting in the death of over 1200 people and the displacement of over 20,000 people in Akobo County alone (MSF, 2009). The estimates of people killed in 2010 in Akobo and the bordering Counties reached 1000 people (UNOCHA, 2011).

Figure 3.4b: Major attacks involving the Lou Nuer in 2011 until May 2012 in Jonglei State



The inter-ethnic violence between the Lou Nuer and the Murle intensified in 2011 and 2012. During the second half of 2011 a series of attacks conducted by Murle fighters took place in Lou Nuer and Dinka territory resulting in the death of over 1000 peoples. By early December 2011, Lou Nuer youth began gathering in Akobo County to organise a revenge attack. Reports on the number of people killed in the subsequent attack on the Murle in Likuangole and Pibor town remained inconsistent ranging from 200 to 3,000 people. In January 2012 the Murle responded by attacking the Lou Nuer in Akobo County in Walgak and Dengjok Payam (UNOCHA, 2012; BBC, 2012).

4. Methodology

This chapter provides a detailed description of the methodology used in this study. Section 4.1 states the study aim and objectives and presents the conceptual framework as a study outline. Section 4.2 describes the study design and the theoretical considerations which have informed the study. Sections 4.3 to 4.6 describe the sampling methods, the study area, the study respondents, the data collection methods and the instruments used, and provide information about the research team. Section 4.7 addresses ethical consideration. Section 4.8 provides a chronology of the qualitative data management and analysis process, and section 4.9 addresses quantitative data analysis.

4.1. Study aims and objectives

The aim of this study:

To explore children's health needs from a child perspective and to determine existing and potential opportunities and challenges for children to participate in health decision making.

General objective 1:

To assess children's capacity to become key contributors in identifying health threats, prioritising them, proposing solutions and implementing action.

General objective 2:

To explore the communities' understanding and perception of children's health needs, their roles, responsibilities and capacity in health decision making.

General objective 3:

To explore health service providers' perception of children's health needs and the capacity of children to participate in health decision making.

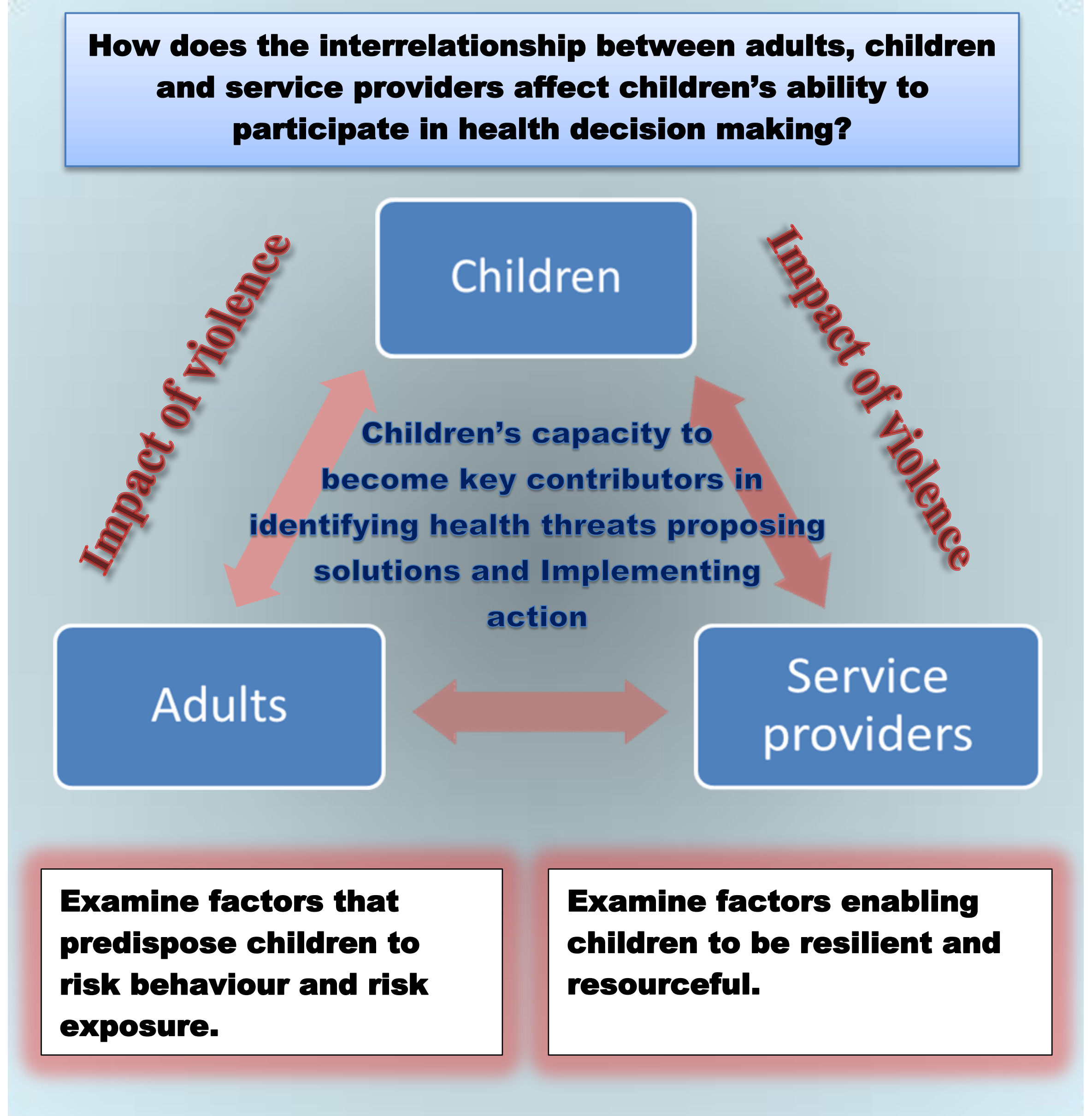
General objective 4:

To investigate mental health effects of experienced traumas and the relationships between experienced trauma, post-traumatic growth (PTG) and mental health outcomes.

4.1.1. Conceptual framework

The conceptual framework, presented in Figure 4.2, was designed for the exploratory phase of the study to outline a possible approach and to establish contact with the community. The exploratory phase aimed at gaining new insights and to learn from the target population. Social and environmental phenomena were looked at in regard to perceived health threats for children and child participation from various angles without explicit expectations. This methodology is also referred to as grounded theory approach and is an attempt to unearth a theory from the data itself rather than from a preconceived hypothesis (Bernard, 2000).

Figure 4.1: Conceptual framework, a study outline



The conceptual framework helped in maintaining focus during data collection and to deciding on the relationships that were likely to be of importance. In order to explain the interrelationship between children, adults and service providers and how this affected child participation, the three target populations were addressed individually.

It was expected that for children to be able to engage in health decision making it would not only depend on the capacity and motivation of the children, but also on the attitude of adults towards child participation and the attitude and capacity of service providers to facilitate children and consult with them. The impact of violence on children's mental health with the potential to influence child participation emerged in the course of data collection and re-appeared during the initial qualitative data analysis. As a result the conceptual framework was reviewed and the dimension 'impact of violence' was added. To suggest ways in which desirable change might take place and to propose interventions, it was seen as important not only to examine factors which predispose children to risk behaviour but also to determine factors that enable children to be resilient and resourceful.

4.2. Study design

This research combines two different research strategies, a case study to explore the subject of child participation and child health in conflict affected children, and a household survey to further investigate child mental health. Thus, this research combines qualitative and quantitative methods, using a Priority-Sequence Model which relies on the principle of complementarity (Morgan, 1998). Health researchers have been particularly interested in the complementary use of qualitative and quantitative methods in order to overcome the errors and limitations implicit in each type of methods and to validate research findings through different approaches (Reichardt & Cook, 1986; Hammersley & Atkinson, 1983). The main reason for the interest in the use of multiple methods is the complexity of the many different factors influencing health (Goering & Steiner, 1996; Morse, 1991). The Priority-Sequence Model acknowledges the importance of paradigms and recognises the epistemological differences between qualitative and quantitative methods in the pursuit of knowledge (Morgan, 1998).

At the core of this approach is the aim to integrate the complementary strengths of different methods using qualitative and quantitative methods for different but well defined purposes within the same overall research project. This division of labour is

accomplished through two basic decisions: a priority decision that pairs a principal method with a complementary method and a sequence decision that determines whether the complementary method precedes or follows the principle method (Morgan, 1998).

In this research the priority decision was the qualitative approach which was followed by a quantitative approach. In this design the quantitative method (cross sectional mental health survey) provided a means to follow up on what was learned through the qualitative study. The classic use of this design is to explore the generalisability or transferability of conclusions from qualitative research (Nichols-Casebolt & Sparkes, 1995).

A design in which follow-up quantitative research complements a principally qualitative approach is not unproblematic (Morgan, 1998) since these designs promote the perception that qualitative results must be treated as tentative until they are confirmed by quantitative research (Morse, 1996). Morgan (1998) argues that this is largely a matter of perception and states that there is nothing about these designs implying that qualitative research is inadequate or incomplete, instead the argument is that quantitative methods have different strengths that can in some cases and for some purposes add to what has been achieved through qualitative research alone.

As a result of the complexity of research topics, health researchers are particularly likely to connect different methods; this is especially the case when the goals of a project include both pure research and applied uses in real world settings (Morgan, 1998) as was the case in this research.

4.2.1. The primary qualitative approach

The purpose of the case study is to gain a deeper understanding of the health problems of children carrying adult responsibilities and the capacity and possibilities of children to address them, from the perspective of the children themselves, the community members and the service providers in Akobo East County. Qualitative research is mainly concerned with inductive generation of ideas providing in-depth and rich explanations of individual's views and experiences (Robson, 1999; Patton, 2002). Data collection takes place in real world settings and participants are interviewed with open-ended questions under conditions that are familiar and comfortable to them (Robson, 1999:60). The main emphasis is in providing explanations and meaning to individuals' responses and experiences rather than imposing a story or perspective on them (Pope & Mays, 1995). The suggested

design of a case study entails a conceptual framework, a set of research questions, a sampling strategy and a decision on the methods and instruments for data collection. It is not necessary and often not possible in real world settings to have all this in a fully developed form at the start of the study. The work on design can and should continue after the start of the study (Robson, 1999:150-152).

The case study uses also a naturalistic approach to explore how both the mental health effects of experienced trauma and the interrelationship between children, adult community members and service providers affect child participation in health decision making in a conflict setting (Robson, 1999:61). Both, mental health and child participation have been constructed to be a social creation and for it to be well understood there is a need for examination of how these concepts are influenced by socio-cultural norms and how these norms have changed over time, not least as a result of decades of warfare. This can be achieved through a better understanding of how adults interact with children, the language they use, the meaning they attach to mental health issues and children's participation.

The theoretical underpinning of this study is a social constructionist approach. Social constructionism is an epistemological approach to acquiring knowledge (Bernard, 2000:8). Berger and Luckmann (1966) have played an important role in the development of social constructionism, an aspect of the sociology of knowledge which asserts the notion that 'reality' and 'knowledge' are socially constructed. They suggest that language provides the means for making sense of everyday life and that the reality of everyday life presents itself as something that is comprehensible and can be shared with others through face to face conversation. This interaction with other people is shaped by the meaning we put into our lived experiences and what we perceive to be happening (Berger & Luckmann, 1966). Therefore social constructionism is not concerned with uncovering the "truth" about "reality" and the validity of the knowledge generated; it is concerned with seeking meanings and explanations in order to gain a deeper understanding on how people make sense of the world in which they live (Berger & Luckmann, 1966).

> "*…The sociology of knowledge has to deal with the empirical variety of knowledge in human societies, but also with the process by which any body of knowledge comes to be socially accepted as 'reality', regardless of the ultimate validity or invalidity of such knowledge" (Berger & Luckmann, 1966:15).*

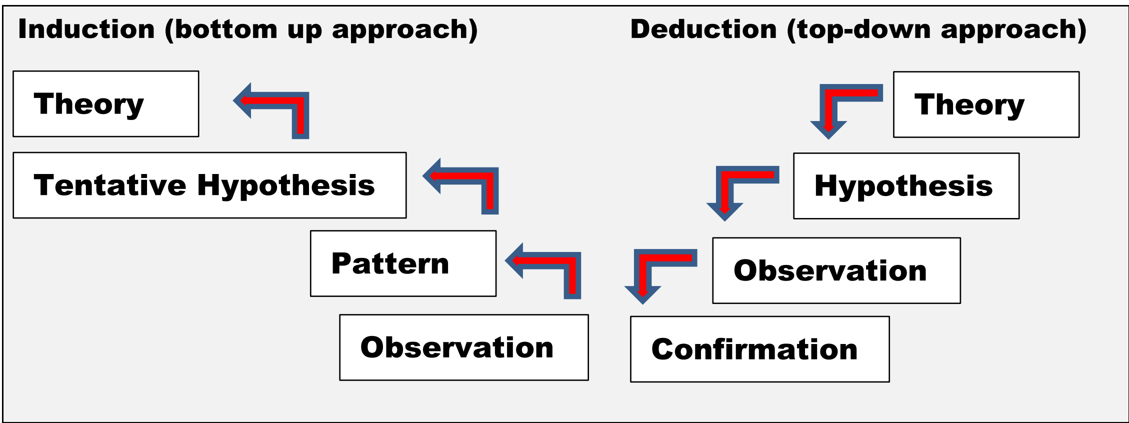
In that sense mental health and child participation are viewed as social constructs in this research and, as such, the meanings attached to them are strongly reflective of social and cultural values present within different respondent groups.

4.2.2. The complementary quantitative approach

The purpose of the complementary cross sectional mental health survey was to further investigate child mental health in a representative non-biased sample. The term 'survey' commonly refers to the collection of standardised information from a specific population or a representative sample of it. Surveys are descriptive and well suited to answer questions such as: what is the magnitude of the problem? Who is affected? Where does the problem occur? When does it happen? How is a particular problem associated with other contributing factor? (Voughan & Morrow, 1989). Surveys are often cross-sectional with a focus on the make-up of the sample as well as the situation within a population at just one point in time. The external validity of this kind of 'snap-shot' approach depends on choosing a representative non-biased sample to ensure (through statistical means) that there is a high degree of confidence as to the situation in the population (Robson, 1999:49-51). Internal validity, the confidence in the overall picture, is also dependent on the quality of the individual responses and there is legitimate scepticism about the validity of self-reporting. A great number of survey instruments rely on self-reporting and carry the potential for error, the Harvard Trauma Questionnaire (HTQ), Hopkins Symptoms Checklist (HSCL-25) and the Post-traumatic Growth Inventory (PTGI) used in this research are no exception and may be prone to some degree of bias, as with other reports of life experiences (Tedeschi & Calhoun, 2004).

The approach used in this study is shown in Figure 4.1. It combines induction and deduction as the two broad methods of reasoning to build a theory and to create a systematic procedure for analysing qualitative and quantitative data where the analysis is guided by objectives. In this research, induction predominates in the case study (exploratory) and deduction predominates in the survey (confirmatory).

Figure 4.2: Inductive and deductive analysis (source Web Centre for Social Research Methods).



4.3. Selection criteria and sampling methods

A 'Child' was defined according to the United Nations Convention on the Rights of the Child (CAC) as a 'human being below the age of eighteen years' (UNICEF, 1989). All children carrying adult responsibilities (as defined by the children themselves) were eligible for the qualitative study. Adult community members of all ages and national and international staff of service providers who were either permanently based in Akobo or supervising projects in Akobo were invited to participate in the case study. Resident and displaced populations were included. As most people were displaced at some point in time during the civil war, being a resident was defined as having lived in the same place at least since the CPA in 2005. Stratification of the population into homogenous groups was done by age, gender, resident population, displaced population, members of the 'White Army' (militia group), children under parental responsibility, orphans and half orphans, and married girls. This approach aimed at covering the population and the different views and experiences of adults and children as broadly as possible.

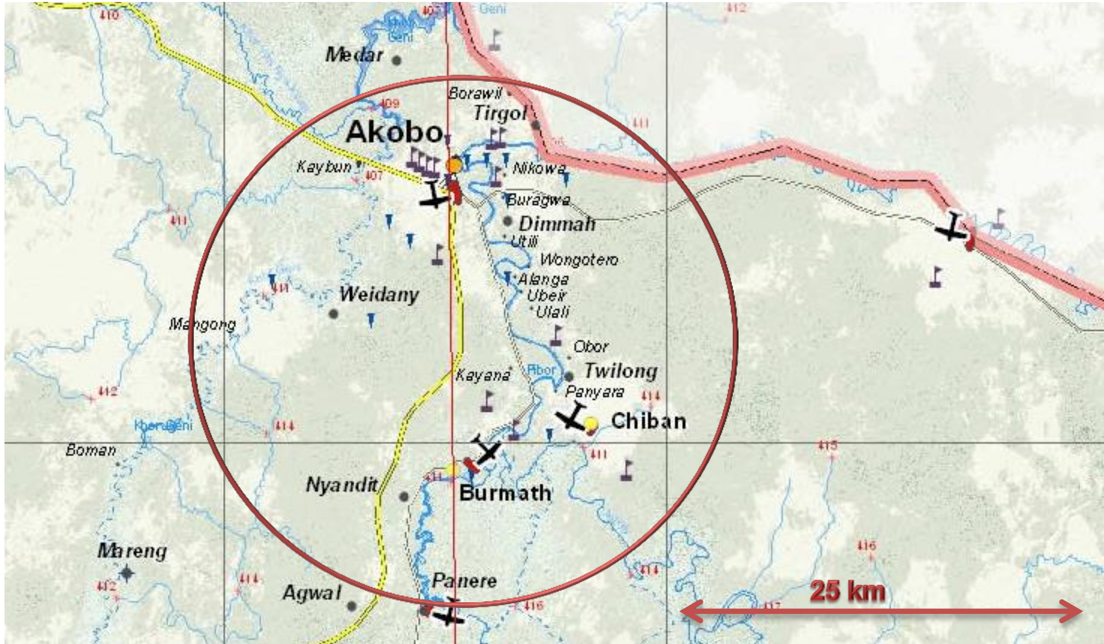
The mental health survey included IDP children aged 12-18 from the 19,000 people displaced by the Nyandit attack in April 2009. This population was chosen because they had settled in locations that were accessible and not considered 'off limits' by the Save the Children in South Sudan (SCiSS) security advisor and the SSRRC. Of the 19,000 people displaced approximately 3000 had crossed border into Ethiopia and were excluded from this study. Data were collected in three different locations where the 16,000 displaced persons from Nyandit Payam had settled. One group of IDPs (estimated population 9,000) lived among the resident population of Akobo town; another group (estimated population 4,000) lived in an

IDP camp close to Akobo town and a third group (estimated population 3,000) had returned to Nyandit Payam.

4.3.1.	Study area

All investigations reported in this study took place in Bilkey Payam with four Bomas: Akobo town, Dima, Old Akobo and Dilule, and in Nyandit Payam with the four Bomas: Mer, Padide, Chibang and Obor. The two Payams belong to Akobo East County. Figure 4.3 shows the approximate research area.

Figure 4.3: Approximate research area in Akobo County



Source: Map of Jonglei State University of Bern Switzerland 2008

4.3.2. Sampling methods: qualitative

Three non-probability sampling techniques were used in the selection of the study respondents. They included purposive or judgement sampling, quota sampling and snowball sampling.

Purposive or judgemental sampling is mainly used in the selection of 'information rich' respondents who are able to provide an in-depth understanding of the area or the population under investigation. Purposive sampling differs from quota sampling in that there is no overall sampling design indicating how many of each type of informant is needed (Bernard, 2000:176). Respondents may be regarded as 'information rich' if they have extensive knowledge about particular groups of people or about a particular behaviour, experience or phenomenon under investigation. Most purposive samples are small (Bernard, 2000:178). In this research purposive sampling was used in the selection of key informants and health service providers.

Quota sampling is mainly used in the selection of subpopulations of interest and the proportions of those subpopulations in the final sample. Quota sampling resembles stratified probability sampling with the important difference that the respondents are not chosen randomly but by the investigator on the spot (Bernard, 2000:175). In this research quota sampling was used in the selection of children and adult community members to account for the heterogeneity in a population by obtaining representatives of the various subgroups.

Snowball sampling is mainly used in studies of social networks with the objective to find out who people know and how they know each other. It is also used in studies of 'difficult to find populations or population groups' (Robson, 1999:142). In this research snowball sampling was used for 'difficult-to-find' groups: orphans and half-orphans, married girls, and members of the 'White Army'. The starting point in each group was an already sampled respondent who selected people they knew who fitted the selection criteria.

4.3.3. Sampling methods: cross sectional survey

Random sampling is used in quantitative research to obtain an unbiased sample, although this can be problematic in situations where no sampling frames are available (Bernard, 2000:147). A sampling frame is a list of units of analysis from which a sample is taken in a way that each unit, for example an individual person, has exactly the same chance as any other unit of being selected. This is a considered by many researchers as being a precondition for a sample to be truly representative and to allow for generalisation (Bernard, 2000:147). In many settings (including those pertaining for the study reported in this dissertation), however, these requirements for representative sampling are very difficult, if not impossible, to fulfil (Robson, 1999:142-144). For this study, therefore, a modified systematic random sampling approach was used because no sampling frame was available; this was based around the 'spin the bottle' technique suggested by WHO in the Expanded Program of Immunisation (EPI) manual (WHO, 1991) because no household lists were available to randomly select a starting point.

4.4. Primary data study respondents

Four categories of primary data study respondents were included in this study according to the four objectives.

- Children carrying adult responsibilities aged between 7 and 18
- Adult community members including key informants
- Service providers based in Akobo town
- IDP children displaced by the Nyandit attack age between 12 and 18

4.4.1. Selection of children

Quota sampling and snowball sampling were used in the selection of children in the qualitative study. Boys and girls aged between 7 and 18 years were included. All children were selected from the community in Bilkey and Nyandit Payams. The aim of selecting children from the community and not from the schools was to allow for inclusion of children who have not been able to attend school and the fact that all schools were closed for five months until the end of May. Local knowledge as well as information from key informants helped to decide on the homogenous groups of

children. The saturation principle (Bernard, 2000) determined the proportion of participants needed in each group. Saturation within a category of study respondents can be achieved if interviews and FGDs for each research question are continued until no new information is elicited. Children for FGD's and workshops (in consultation with caregivers) were asked to participate the day before the actual event took place. All caregivers considered their children to be mature enough to participate unaccompanied. This was so even for children as young as seven. Children for individual interviews were selected and invited through the same approach but on the same day the interviews were conducted. Snowball sampling was used for 'difficult to reach' children. The initial reference points for snowball sampling were individual children from a particular group, leaders of existing social networks such as the orphan school, the parent teacher association, children's clubs, and the local authorities. This process identified 144 children, 77 boys and 67 girls who took part in 6 workshops, 6 FGDs and 46 individual interviews.

4.4.2. Selection of adult community members and key informants

Quota and snowball sampling was also used to identify adult community members for individual interviews and FGDs. They were selected by taking into consideration the existing diversity within the social structure of the community. Participants for FGD's were selected based on identified sub-groups and invited to participate the day before the actual event took place. The location was negotiated and people were requested to assemble at a particular time in a particular place. The walking distance was within 30 minutes. The locations chosen were empty school or church buildings, empty tukuls in participant's compounds, under big trees, in the compound of a local NGO or in administration buildings provided by the local authorities. Participants for individual interviews were selected on the spot and invited to participate at the time and in the place of their convenience. All adult community members were eligible to participate in this investigation. It was assumed that all adults were able to offer their opinion on health risks for children as well as their views, experiences and perceptions with regards to child participation. It was also expected that adults were able to describe and explain cultural and societal changes over time. Community members were excluded if they did not have time to participate. Key informants were selected through purposive sampling. They were selected because of their first-hand experience in providing services for children and their willingness to participate: they included teachers, medical officers, returnees from bordering countries, leaders of the parent teacher association, leaders of youth

groups including sports clubs. The key informants were identified in consultation with the local authorities, the head teacher and with NGOs. Once identified, key informants were approached and asked to participate at a day, time and place of their convenience. Key informants were excluded from the study if they were too busy or gave two consecutive appointments which were not honoured. Overall, a total of 88 adult community members, 44 men and 44 women, were identified who took part in 12 FGDs and in 28 interviews. 9 of the 28 interviews were key informant interviews.

4.4.3. Selection of service providers

Staff members of service providers were selected based on their first-hand experience in providing services to adults and children in Akobo County and their willingness to participate in the study. Preference was given to staff members based in Akobo County who had at least one year professional experience working in Southern Sudan. With the assistance of the local program manager or person in-charge of a particular organisation an appointment was made to introduce the purpose of the study and to identify participants. The selection approach was repeated and included all service providers present in Akobo town at the time this study was conducted. The respondents were later approached individually and appointments were made at their convenience. A total of 20 staff members of service providers, based on the above criteria, participated in individual interviews.

4.4.4. Sample size: mental health survey

The sample size for the survey was calculated in order to estimate the proportion of children found to have a mental health outcome (probable PTSD, anxiety and/or depression) with a pre-specified level of precision. Informed by previous research (Attanayake et al., 2009), it was assumed that 30% of the children in the study population would have such a mental health outcome, and it was estimated that the total study population size was 16,000, of whom 2880 (18%) would be children aged 12 to 18 years. Although the children were at the time resident in three different locations, it was considered that location would not in itself influence the prevalence of the mental health outcome of interest, so no design effect adjustment was made for this factor. Using the standard equation for a 95% confidence interval for a proportion with a finite population size correction:

$$CI = p \pm (z * sqrt[p * (1 - p) / n] * sqrt[(N - n)/(N - 1)])$$

where z is the standard Normal deviate (=1.96 for a 95% confidence interval)
p is the proportion of children sampled expected to have a mental health outcome

n is the actual number of children sampled

N is the total number of children in the study population.

So, assuming that there are 2880 children in the study population, that 30% of children sampled would have a mental health outcome, and that a 95% confidence interval for the prevalence estimate of ±5% is required (i.e. assuming that prevalence would be estimated to a precision of ±5%):

$$0.05 = 1.96 * (sqrt[0.30 * (1 - 0.30) / n] * sqrt[(2880 - n)/(2880 - 1)])$$

Solving this equation for n gives a desired sample size of 291. This was rounded up to 300, and a further 10% added to allow for refusals, giving a total sample size of 330.

4.4.5. Selection of children for the mental health survey

A systematic random sample approach was used to select the required 330 households in the three locations where an estimated 16,000 survivors of the Nyandit attack had settled. The characteristics of this population have been described in section 4.3, page 76. Households were defined as people living and eating together. The average household size, identified in the case study, was six people (6.48). The total population of 16,000 people was divided by 6.48 (the average household size) which resulted in 2469 households. With an estimated total of 2880 children in the appropriate age range, it was expected to find at least one child aged 12-18 per household, so the theoretical sampling interval calculated was 2469/330 = 7.48.

In reality, of course, not every household sampled would have a child in the required age range – so, to allow for this while preventing overlap / contamination between sampled units (i.e. to ensure a reasonable geographical distance between sampled households) and to ensure that the sample was collected within a reasonable and sensible timeframe, it was decided to slightly reduce the sampling interval to every 6th household (instead of every 7.48th household) in consultation with a statistician.

Starting from a point as close as possible to the geographic centre of the target study population in each section (identified by local chiefs or village leaders), a bottle was spun to *determine the direction* in which sampling would commence. The *random starting point* was determined by counting and numbering the first six households along the way (sampling interval) in the direction indicated by the neck of the spun bottle. The first household (random start) was then determined by drawing one of the numbered cards. The data collectors then walked in a straight line through the study area in the direction indicated by the neck of the spun bottle, taking a systematic sample of households that fell within a pre-specified distance either side of the walking line. When the data collectors reached the perimeter of the study area, they returned to the central starting point, spun the bottle again, and repeated the exercise. This process was repeated as many times as was necessary to obtain the required sample size for that study area.

If there was more than one child in a household, the child for the interview was randomly selected by drawing numbered cards, and asked to participate. The random community-based approach was only possible because the schools were still closed at the time the survey was conducted so that all children had the same probability of being chosen without excluding the children enrolled in school. The pre-testing of the research instruments used to assess mental health demonstrated that children aged 12 and above were able to answer the questions without difficulties. As a result, children younger than 12 and children who were too busy and still not available after returning twice were excluded from the study.

The systematic random sample approach allowed selecting the children approximately proportional to the estimated population size (PPS) in all three locations. The weights were computed using the optimum sample size of 330 children estimated. Using these figures, the required weight was 0.56 in the first location (estimated population 9000), 0.25 in the second location (estimated population 4000), and 0.188 in the third location (estimated population 3000), giving expected sample sizes of 184.8, 82.5 and 62.7 for the three locations respectively.

The final total sample size was 353 children. 179 children took part in face to face interviews conducted in Akobo town, the first location, 95 children participated in face to face interviews in the second location (IDP camp), and 79 children participated in face to face interviews in the third location (Nyandit Payam).

The intended sample size was 330 children. However, at the beginning of the rainy season, a few questionnaires (empty questionnaires) were reported damaged by the floods in two locations. They were replaced with new questionnaires without collecting the wet ones. Since some of the flood affected questionnaires were subsequently salvaged by the data collectors by drying and ironing them (without the knowledge of the supervisor), these questionnaires re-entered the system so that more children than anticipated completed questionnaires in the IDP camp and in Nyandit Payam. This explains the slightly higher sample size of 353 children.

4.5. Data collection methods and research instruments

Four main data collection methods were used in this study: focus group discussions (FGD), unstructured and semi-structured interviews, participatory workshops with children (PWS) and face to face survey interviews (SI).

A combination of FGDs and Interviews were used as prime methods of data collection from children and adult community members as these methods complement each other in terms of generating ideas and understanding respondents experiences, perceptions, views beliefs and expectations about a phenomenon under investigation (Robinson, 1999). The combinations of the two methods provide a social context in gaining a deeper understanding and in putting meaning to children's and adults' experiences of child ill-health, underlying causes and child participation. They also provide a means to explore issues in more details and enable for participants and researchers to ask questions and seek clarification of issues raised (Robson, 1999:289).

4.5.1. Focus group discussion

A focus group consists of a number of people, usually six to ten, who are roughly of equal status and have identifiable common interests, characteristics and a shared knowledge. Unlike a one-way flow of information in individual interviews focus groups generate data from interactions of group discussions. Listening as people share and compare their different points of view about what they think and why they think the way they do provides a wealth of information (American Statistical Association, 1997). Under the guidance of a moderator, the participants discuss specific questions or areas of expertise. FGDs resemble lively and informal discussions among friends who share opinions and feelings about a topic for a

predetermined time. FGDs are organised and directed towards understanding people's feelings and views towards a particular subject, product or service (Krueger & Casey, 2000). Focus group discussions can also take the form of a workshop, where there is a structured agenda with specific group activities accompanied by plenary sessions (Finch & Lewis, 2003). Focus groups have gained in importance in health research and are a great asset in exploring people's own views and understanding of health and illness (Pope & Mays, 1995). FGDs have the capacity to bring out the multiplicity of views, areas of consensus and voices of dissent in relation to a socio-cultural environment (Kitzinger, 1995).

In this study, FGDs were conducted with children and with adult community members. Focus groups were held separately for males and females to avoid gender dynamics. Other subgroups were younger and older children, younger and older adults, residents and IDP population, orphans, married girls, and members of the 'White Army'. Group compositions should be as homogenous as possible as the unit of analysis is the group (Delgado, 2006:150). The aim was to understand participants' perception of children's health needs; health risk and protective factors in their environment and to elicit participants' views about potential and existing challenges and opportunities for children to address important health issues at various levels. FGDs with adult community members also included activities such as historical timeline diagrams, mapping and ranking of health risks for children.

Age groups in children were defined using the classification of the Pan American Health Organisation (PAHO), shown in Figure 4.4. Although this classification has been used in different settings, it should be noted that it has not been validated for South Sudan. The younger and older boys and girls were each divided into two groups at the pre-adolescence and early adolescence cut-off points. Both age groups were equally represented among the boys and the girls.

The cut-off point for the two groups of younger and older adults was 35 years. This was derived from interviews and the general perception of adults that old age would start around that age. Both cut-offs were used as a rough guideline and no one who finally reported to be a little younger or older was sent away. While children knew their age, this was not always the case in adults.

Table 4.4: The stages of adolescence PAHO classification.

Age	8	9	10	11	12	13	14	15	16	17	18
Girls	Pre-adolescence					Early Adolescence		Middle Adolescence		Late Adolescence	
Boys		Pre-adolescence					Early Adolescence		Middle Adolescence		Late Adoles cence

The number of FGDs conducted largely depends on whether complementary methods are being used (observation, unstructured and semi-structured interviews) and the knowledge required from a particular group (Ervin, 2000). If detailed knowledge is required about a particular subject with a particular subpopulation, then two or three focus groups are seen as appropriate. If the study is of a wider scope, one FGD in each important subgroup may suffice. A general rule that applies is to continue focus groups until no new information is gained (Ervin, 2000).

The FGD's were conducted with three trained research assistants: one moderator, one note taker and one observer. The moderator guided the discussion and followed up the discussion with appropriate probes for depth and clarification. The note taker and the observer were responsible for noting down verbal and non-verbal responses and ensuring an on-going digital recording. All FGDs were conducted in Nuer language so that the flow of the conversation was not interrupted through translations into English. FGDs with children lasted no longer than 60 minutes. FGDs with adults lasted no longer than 90 minutes. The strengths and weaknesses of FGD's are presented in Table 4.5.

Table 4.5: Strengths and weaknesses of FGDs

Strengths	Weaknesses
Useful in establishing 'face validity' (verifying whether the researcher and the participants are talking about the same thing) and internal triangulation or corroboration (verifying common perceptions) (Ervin, 2000).	Unsuitable for precise, probability oriented social science because it is next to impossible to select a random sample of participants. A roughly proportionate sample of people who represent the community is the best option and only possible if a researcher has become familiar with the community (Ervin, 2000)
Possibility to sample the degree of consensus and uncover different opinions by hearing a number of people (Ervin, 2000).	The shy, the non-vocal or hostile members of a community may not be adequately represented in focus groups (Patton, 2002).
A good way of establishing the context for research and setting the stage for developing interpretations that remain true to the way members of the community think (Krueger & Casey, 2000; Ervin, 2000).	Reliability demands the same results from the same methods used every time with different researchers. But each focus group has a different dynamic and takes on a shape of its own. To some extent it has to be recognised that each moderator can influence the tone and direction of the group discussion (Ervin, 2000).
Provides opportunities for checking out the meaning of concepts that are important for the research in order to develop further lines of questioning (Ervin, 2000).	Group facilitation skills are demanding and need social skills. Screening for moderators and training can be extensive, time consuming and costly (Patton, 2002).
Data are generated through interaction between participants. Responses are spontaneous and less influenced by the researcher who is more of a listener (Finch & Lewis, 2003).	Focus groups can raise expectations among participants especially in applied research (Ervin, 2000).
The flexible nature of an FGD allows the moderator to rephrase questions that are misunderstood (Ervin, 2000).	Focus groups can occasionally raise 'more heat than light'. Conflict and bitterness can arise over sensitive issues that are normally avoided. People may be condemned for revealing 'secrets' to outsiders (Ervin, 2000).
People have a face to face opportunity to correct one another which cannot be done in individual interviews (Ervin, 2000).	Confidentiality may not be totally assured as there is little control over what participants discuss outside the research environment (Ervin, 2000).

4.5.2. Unstructured and semi-structured interviewing

Cannel and Kahn, as cited by Cohen and Manion, defined an interview as: *"a conversation initiated by an interviewer for the specific purpose of obtaining research relevant information and focused by him on contents specified by research objectives of systematic description, prediction or explanation"* (Cohen & Manion, 1989:307). Interviews mainly focus on the individuals' personal perspective and understanding of the subject under investigation. They also provide an opportunity for giving personal opinions, history and experiences in discussions about sensitive issues (Lewis, 2003). Unstructured interviews are based on a clear plan kept in mind by the researcher, but are also characterised by a minimum of control over the

participants' responses (Bernard, 2000:190). Semi-structured interviews are guided by a loose structure consisting of open ended questions that need to be covered in a particular order. Probing on specific issues is done by the interviewer to gain depth and clarity of participants' responses and construction of meaning (Legard et al., 2003). The strengths and weaknesses of unstructured and semi-structured interviewing are presented in Table 4.6.

Unstructured individual interviews were conducted with children and adult community members. Semi-structured interviews were conducted with key informants and service providers. The interviews addressed five main topics: experiences about displacement and the current living situation; how these experiences affected children's lives and their health; underlying causes for ill health and particular risk and protective factors in children's ecological environment; children's rights and responsibilities within their society and the challenges and opportunities for children to address health issues important to them. Interviews conducted with service providers further aimed at getting a better understanding of their involvement with children and the community at the project level and their capacity to facilitate children.

Key informants provide an important source of information because of their position and/or role in society and their personal skills and expertise (Marshall, 1996). Interviews conducted with key informants concentrated in large parts on such in-depth knowledge of key informants with regard to the study objectives. Interviews with children took between 30 and 45 minutes. Interviews with adults took between 45 and 60 minutes. Interviews were conducted by the Sudanese co-investigator (SCI) and by the principal investigator (PI). All interviews were digitally recorded.

Table 4.6: Strengths and weaknesses of interviews

Strengths	Weaknesses
Interviews bring out socially sensitive issues including personal experiences (Patton 2002:389)	Some respondents find one-on-one interviews intimidating and may not share some issues for such reasons (Patton, 2002:389)
Allows greater possibility for the interviewer to be task oriented and to bring the interviewee back to the question at hand (Watts & Ebbutt, 1987).	Presence of a digital recorder may be intimidating to the interviewee (Bernard, 2000)
Interviews cover issues in greater depth as the interviewer has the possibility to ask questions and seek clarification of issues raised (Stokes & Bergin, 2006).	In depth interviews offer less breadth of both the range of issues generated and the contextual information (Stokes & Bergin, 2006).
Interviews offer the possibility of modifying ones line of enquiry, following up interesting responses and investigating underlying motives (Robson, 1999:229).	The flexibility of interviews calls for considerable skills and experience in the interviewer (Bernard, 2002:195). The lack of standardisation that such a flexibility implies raises concerns about reliability (Robson, 1999:230).

4.5.3. Participatory workshops

Participatory methodologies are characterised as being reflexive, flexible and iterative, in contrast with more rigid linear designs of most conventional science (Rifkin, 1994; Chambers, 1992). Although conventional methods used in this research, such as FGDs and interviewing, achieved a high level of in-depths participation at some stages, they cannot be considered participatory. The key difference between participatory and other research methodologies lies in the location of power which enables participants to seek their own solutions according to their priorities (Cornwall & Jewkes, 1995). Participatory workshops have the potential to produce results that are contextually relevant with regards to the identification of health priorities and solving local health issues. Participatory workshops aim at creating spaces in which participants can be 'empowered' to engage in a process through which they can identify and confront their problems (Cornwall & Jewkes, 1995).

Six participatory workshops with children were conducted in this study. Five of them were conducted to assess children's abilities and motivation to identify health threats, prioritise them, propose solutions and implement action. One participatory workshop was conducted with displaced children from the Nyandit attack and engaged the children in a process through which they could share their views, and assist in the design and adaptation of research instruments, the training of data collectors, the pretesting of research instruments, and in the analysis of data collected as part of the research team. Workshop participants were drawn from the community and the workshops were held in places were children felt safe and where privacy could be guaranteed. All workshops had two moderators and a note taker. The note taker also noted down observations with respect to the dynamics between participants, children's confidence in what they knew, their interaction with others and their ability to concentrate on a task.

The first four participatory workshops were conducted with younger and older boys and girls separately and had the objectives to identify health threats for children, to identify structural and contextual factors that may influence risk exposure in a positive or in a negative way; to explore children's views on the provision of health services and to explore children's perceived role and responsibility to take action for what is most important to them. All four workshops

were one-day workshops and lasted two hours in the morning and two hours in the afternoon. The following participatory methods and exercises were used: *mapping and modelling* which refers to maps made by participants on paper, the floor or on the ground. They can be used for identifying, presenting, checking, analysing, planning and monitoring (Chambers, 1992). In this research mapping and modelling were used to establishing a rapport with children; to identify health risks in general and according to the area, and to identify underlying causes and vulnerable groups. The maps constructed by the children were used for the *ranking and scoring* of identified health threats, vulnerable groups and child support systems (part of the analytical process). Ranking and scoring are particularly useful to elicit peoples own analysis, to share knowledge and to identify and express priorities and options for action (Chambers, 1992). Ten children participated in each workshop.

One workshop was conducted with twenty orphans (boys and girls) using the same participatory methods and exercises as described above. This workshop was different in terms of organisation and in terms of objectives. The research team was approached by ten orphans who wished to discuss the subject of abuse and rejection of orphans by community members and in their foster homes. This was considered by the children as the main threat to their physical and mental well-being. The objective of this workshop was to gain a better understanding of the situation of orphans within their communities, for SCiSS to find ways to address these issues and for the children to share their views and to propose solutions from their own perspectives. The teachers from the orphan school proposed to conduct the workshop during official school hours so that it would not result in repercussions for participants if they returned home late. The workshop with orphans was conducted in the presence of the child protection officer from SCiSS based in Akobo and the child protection officer from SCiSS based in Juba.

The sixth workshop included six IDP children (boys and girls) aged 14 to 18 and six adult research team members. The workshop was an ongoing participatory process with children as part of the research team. The workshop was conducted in a *collegiate* way in which researchers and participants work together as colleagues with different skills to offer, in an interactive process of mutual learning (Biggs, 1989). This workshop was conducted over a four months period. Children's participation was intermittent and lasted between one and two hours at a time.

4.5.4. Face to face structured questionnaire interviewing

There are three methods for collecting survey questionnaire data: face to face interviews, self-administered questionnaires and telephone interviews (Bernard, 2000:230). In this research face to face administration of the questionnaire was used because phones were inaccessible for a great majority of the population and the illiteracy rate was high within the population. Face to face interviewing was in accordance with the instrument guideline from the Harvard Program in Refugee Trauma (Mollica et al., 2004b). Four research team members conducted 353 face to face interviews with IDP children aged between 12 and 18 in Bilkey and Nyandit Payams under the supervision of the SCI and the PI. Each interview lasted about 40 minutes. Data collection was completed within seven weeks. The difficult climatic conditions at the beginning of the rainy season, the long walking distances and the fact that the caregivers and the children were often not found in the same location sometimes limited the number of questionnaires that could be completed in a single day. Thus, each investigator conducted between two and six interviews per day.

Face to face interviews are personal and allow the researcher to explain if questions are not well understood by the respondents. On the other hand 'personal' is not necessarily good and it takes skills to administer a questionnaire without subtly leading the respondent to a particular answer (Bernard, 2000:230). Although all data collectors participated in the adaptation and translation process of the questionnaire, and knew the tool at hand well, additional training was provided to ensure that all interviews were conducted in a similar way. Each data collector observed at first how the SCI conducted two interviews; then he or she conducted the first four interviews under the direct supervision of the SCI who could give some advice if needed. Data collectors were advised to return twice to the same household if a respondent was absent. To return more than twice was not possible because of time constraints and extreme weather conditions at the beginning and during the rainy season.

4.5.5. The survey instrument

The research instruments used in this study, the Harvard Trauma Questionnaire (HTQ) and the Hopkins Symptoms Checklist (HSCL-25) are now widely accepted internationally as a 'gold standard' in the assessment of mental distress in conflict-affected populations (Mollica, 1992; Annan et al., 2007; Kleijn et al., 2001; Mollica et

al., 2004b; Sabin et al., 2003). Extensive research conducted by the Harvard Program in Refugee Trauma (HPRT) and others have shown that these instruments are reliable and culturally valid (Mollica, 1992). They can be easily adapted and effectively used in culturally diverse populations in assessment and monitoring of mental health outcomes (Mollica et al., 2004b).

It is generally acknowledged that the better the cultural variation in meaning given to different types of trauma is understood, the better these research instruments can be adapted. Thus their adaptation needs to be more than a linguistic translation and requires ethnographic fieldwork to some extent (Mollica et al., 2004b). Jones, who looked more closely at the usefulness of 'Western designed' research instruments, compared the HTQ and the HSCL-25 with qualitative methods for assessing adolescent mental wellbeing in conflict affected societies. He concluded that the structured questionnaires were useful instruments as a public health measure to assess mental distress of adolescents in war affected areas. He also stressed that these instruments should always be combined with qualitative approaches for clinical screening to avoid unnecessary pathologising of children and adolescents (Jones & Kafetsios, 2002).

Post-traumatic growth, coined in 1996 by Tedeschi and Calhoun sparkled considerable interest in a new field of research and investigations; namely as to whether trauma can sometimes be the springboard to greater wellbeing (Joseph, 2006). Although a variety of instruments have been developed to assess positive changes resulting from traumatic life events (Joseph et al., 1993; Park et al., 1996); the Post-traumatic Growth Inventory (PTGI) has been used most often among adults and children (Joseph, 2006).

The research questionnaire used to assess child mental health in this research combined the HTQ, the HSCL-25, and the PTGI and consisted of five distinct sections (see appendix I). These instruments were chosen because they represented most precisely the experienced traumatic events; the positive experiences as well as the symptoms for psychological distress described by adult community members and the children during the qualitative data collection and analysis. Furthermore, the HTQ, HSCL-25 and PTGI have been used and validated in different cultural settings and have also been used for mental health assessment of adolescents and youth (Kane, 2009; Annan et al., 2008; Annan et al., 2007).

(1) The first section of the survey instrument included demographic and socio economic characteristics of the respondents.

(2) In the second section an adapted Bosnian version of the Harvard Trauma Questionnaire (HTQ) was used to identify exposure to trauma events. The final version consisted of 43 questions on life–time exposure to traumatic events with a yes / no response (Mollica, 1992).

(3) In the third section symptoms of PTSD were measured using 40 questions on trauma symptoms with a 4 point severity scale and a one month recall period. The first 16 questions were based upon the Diagnostic and Statistical Manual for Mental Disorders, Fourth Edition (DSM-IV) and the remaining questions had been developed specifically for conflict settings (American Psychiatric Association, 1994; Mollica, 1992). Mean PTSD scores >=2.0 were considered significant for meeting symptom criteria of probable PTSD based upon the instrument standard (Mollica et al., 2004b).

(4) In the fourth section symptoms of anxiety and depression were measured using the 10 anxiety items and the 15 depression items from the Hopkins Symptoms Check List-25 (HSCL-25) with a 4 point severity scale and a one month recall period (Mollica et al., 2004b; Mollica et al., 1987). Mean anxiety and depression scores >=1.75 were considered significant for meeting symptom criteria of probable anxiety and depression.

(5) The fifth section, the Post Traumatic Growth Inventory (PTGI) measured positive outcomes of experienced trauma using 21 items with a five point severity scale (Tedeschi & Calhoun, 1996) and included three open ended questions considered as important by the six children integrated in the adaptation process of the questionnaire. Mean PTG scores >=3 were considered significant for meeting PTG criteria.

The HTQ and HSCL-25 were specifically developed and validated for conflict affected populations and have been adapted and used in a wide range of conflict settings among adults and children (Mollica et al., 1987; Vinck et al., 2007; Kleijn et al., 2001; Kane, 2009; Roberts et al., 2009; Roberts et al., 2008; Mollica, 1992; Sabin et al., 2003).

4.5.6. Pre-testing of the data collection tools

An initial assessment was carried out to build rapport with the children and their communities and to gain a better understanding of the context. Informal interviews and focus groups were conducted to design a more focused research agenda and to provide research instruments that were adapted to the population. The initial assessment also aimed at identifying more homogenous sub-groups of children and adults within the population. The initial assessment included participant observation. Participant observation reduces the problem of *reactivity*, of people changing their behaviour when they know that they are being studied. As researchers become less and less of a curiosity, people take less and less interest in researchers coming and going (Bernard, 2000:324).

In practice, the primary investigator and one or several research team members walked through villages and the town, sat at the river bank, the market place and other places where people used to go, giving children and adults the opportunity to come and talk and leave again whenever they liked. If invited by community members' participant observation also included walking with them to places where they accomplished their daily duties. Participant observation in that sense was continued throughout this research in order to build trust, lower reactivity and possibly increase the validity of data collected.

All study instruments were pretested in Akobo town. The relevance, clarity, accuracy and flow of the questions asked was assessed as well as the approximate time needed for each tool, the clarity of the instructions to the respondents, the digital recording process for interviews and FGDs, and the accuracy of the translation into Nuer language. To ensure accuracy of the translation, the instruments were back translated from Nuer into English by the research team. The data collection from the pre-tests were also used to train research assistants how to work as translators if interviews were conducted in English and on how to translate FGDs conducted in Nuer into English verbatim on tape for transcription. The pre-testing of instruments included conducting one focus group with children, one with adults; two IDIs with children, two with adults and one IDI with health service providers. Twenty face to face survey interviews were conducted and the sampling method was tested.

4.6. The research team

The research team comprised the principal investigator (PI), the Sudanese Co-investigator (SCI) and five research assistants. All except two team members worked full time on the project. To have a South Sudanese co-investigator was a general requirement to obtain ethical approval from the MOH-GoSS. All six team members were of Nuer origin. They had fled the country during war time and returned to South Sudan from Ethiopia and Kenya after the signing of the CPA. The team members were chosen on the basis of having previously participated in social health research with some experience in organising and conducting interviews, FGDs and workshops, being fluent in English and Nuer and having completed at least secondary education. One research assistant had a medical background and was a Kenya registered midwife. The SCI graduated from Interworld College (ICCET) in Kenya. He also held a Diploma in Business Administration and Management; a Diploma in Purchasing and Supply Management and a Diploma in Community Development and Social work from the Kenya Institute of Professional Studies (KIPS). His professional experience included: child protection officer and emergency preparedness and response officer for Nile Hope Development Forum (NHDF); EPI supervisor and logistics supervisor for PRDA/MEDAIR. He had been a chairperson of the Akobo youth association for four years. All team members including the SCI were recruited through the Save the Children in Southern Sudan (SCiSS) local network in Akobo town and were interviewed and employed by the PI for the duration of this study.

Although this research was conducted in close collaboration with SCiSS who had chosen the study site, the PI and all research team members were not employed by, or working for SCiSS. The study was privately funded and all expenses, including accommodation, food, transport and salaries were covered by these funds.

4.6.1. Training of the research team

The research assistants underwent an initial five day training workshop in February 2010 before data collection. The workshop was conducted by the PI and by two SCiSS staff members, using the teaching materials from a qualitative methods workshop conducted in Ifakara, Tanzania (WHO, 1994). The research team was informed about the study aim, the study objectives and the data collection

methods. Ethical considerations such as the importance of informed consent, confidentiality of the data collected and the follow up or referral procedures of participants who suffered from illnesses was discussed.

1st day: Introduction to qualitative research methods. Purpose: using qualitative methods exclusively; menu of available methods; handling data from qualitative research; clarification and discussion of introduction to qualitative research methods.

2nd day: Introduction to unstructured and semi-structured interviews. Purpose; designing interviews; type of information sought; selection of respondents for interviews; strengths and weaknesses; unstructured and semi-structured interviews as a complementary method to other research techniques; clarification and discussion; practical exercise.

3rd day: Introduction to observation techniques. Purpose; participant observation; non-participant observation; techniques involved; example of studies using observations; strengths and weaknesses; observation as a complementary method to other research techniques; observation exercise.

4th day: Introduction to focus groups. Purpose; type of information sought; techniques involved; selection of respondents for FGDs; strengths and weaknesses; distinction between FGD and group interviews; practical FGD exercise.

5th day: Introduction to participatory methods. Purpose; histories and narratives; historical timelines; role plays; mapping and modelling; ranking and free listing; participatory methods as complementary methods; when and where useful; practical exercises.

Before the commencement of the survey, the research team underwent an additional one day training to introduce face to face structured questionnaire interviewing and the systematic random sampling method. The data collectors had been involved in the adaptation and translation process of the questionnaire used so that they were familiar with the questions. Each data collector then conducted at least four interviews under the supervision of the SCI as part of the training before

they conducted interviews on their own to ensure interview quality. Security briefings were held together with SCiSS and the local authorities.

4.7. Ethical considerations

All participants were informed about the purpose of the study, about privacy and confidentiality and about their rights to refuse to participate and to withdraw from the discussion at any time. Permission was sought from participants to have interviews and FGDs digitally recorded. All explanations were given by the research team in Nuer language before the sessions were held and written consent was obtained as an indication of an agreement to participate in this research (appendix V.). The consent forms for adults, or assent forms for children, were signed or finger printed by all participants. Consent was also obtained from parents and/or caregivers of children. Parents or caregivers did not accompany children to group sessions so that consent was sought at the time children were recruited for FGDs or workshops the previous day. Permission to conduct interviews and workshops with children at the orphan school was provided by caregivers and/or the head teacher. If participants wished to take part in individual interviews, but were too busy at the time, they either defined how much time they could afford for an interview or set another appointment that would suit them better.

Ethical approval for this study was obtained from the Liverpool School of Tropical Medicine Research Ethics Committee (LSTM-REC), and the Ethics Committee at the Ministry of Health (MoH), Government of South Sudan (GoSS).

Research with children raises additional ethical issues. The developed ethical standards in SCUK's Practice Standards in Children's Participation (2005) were followed at all times. In accordance with the SCUK guidelines, no pictures of children were taken unless written consent was obtained. The O'Kane model related to ethical issues provided a framework which was particularly useful (Figure 4.7).

Figure 4.7: Ethical issues in involving children (O'Kane, 2004)

Key ethical issues
Overburdening children
Fair represen-tation
Incentives good or bad idea
Consent and use of information
Raised expectations
Non-discrimination and exclusion
Minimising risk

A follow up of children under distress was ensured according to pre-defined criteria through members of the research team and through health and child protection staff members from SCiSS in Akobo town. Consent for follow up was sought from parents and other caregivers. This was also the case if injured or physically ill children needed to be referred to the hospital in Akobo town.

4.8. Qualitative data analysis

Qualitative data analysis is mainly concerned with bringing out people's views, opinions, perceptions and experiences about the study object irrespective of the validity of these views (Thorne, 2000). Qualitative data analysis is also a continuous process which starts at the very beginning of data collection and aims at bringing meaning to the object under investigation (Rabiee, 2004). The quantity of qualitative data is often large so that the process of data analysis involves reducing these data into a format that is organised and manageable. Due to the large quantities of text data collected in qualitative research, it is essential that data collection and analysis take place in *'tandem'* so that subsequent interviews and discussions can be built onto previous ones (Krueger & Casey, 2000).

This approach also allowed eliciting the significance of poor mental health for children from the respondents' views (adults and children) at an early stage of data collection/analysis. The decision to conduct the complementary quantitative mental

health investigation was based on the confirmation of these findings throughout qualitative data collection/analysis. The *'tandem'* approach was also important in order to define the point at which no new information was provided and 'saturation' was reached for particular subjects and by particular sub-groups. The analysis of qualitative data is therefore an inductive process that is highly iterative, time consuming and largely driven by the researcher (Lofland et al., 2006).

In this research the objectives were important elements of qualitative data analysis, as the analytical process was geared towards answering research questions raised at the onset of the research process. In this study a thematic framework approach was used to analyse qualitative data (Ritchie & Spencer, 1994). This approach is grounded or generative. As such it is based in, and driven by, the original accounts and observations of the people it is about. Furthermore it allows for both, the collection and subsequent analysis of data, and for data analysis to occur simultaneously with collection. The analytical process is systematic and involves a five step process (Ritchie & Spencer, 1994).

1. Familiarisation (transcription of recordings and field notes)
2. Identifying a thematic framework
3. Indexing
4. Coding of the transcripts using the thematic framework
5. Charting and interpretation of the data (Ritchie & Spencer, 1994)

In reality the data analysis process is not a straight forward linear approach as listed above and involves moving back and forth between the different steps in order to seek clarifications of the responses, and to understand the context within which particular information is provided (Ritchie et al., 2003).

4.8.1. Familiarisation, transcription and the validity of transcripts

Familiarisation refers to the process through which the researcher becomes familiar with the transcripts and more grounded in the data by listening to recordings, studying field notes (including observations and workshops) and reading the transcripts. Through this process the researcher becomes aware of key ideas and recurrent themes (Ritchie & Spencer, 1994).

Transcription of the recorded materials into verbatim text documents was done by the PI and the SCI. Interviews conducted in English or directly translated from Nuer into English were directly transcribed into English by the PI and the SCI. All interviews conducted in Nuer (FGDs) were directly transcribed into English by the SCI. The transcripts were typed as a Word document and copied into the data base for coding. Each document had clear labelling, showing the study site, the type of interview and the demographic data collected for each participant. In order to ensure accuracy and consistency of the transcripts, the SCI, who was fluent in Nuer and English language, checked and validated all the transcripts. Transcript checking was a rigorous activity that involved listening to the recording while at the same time reading the transcripts to ensure accuracy in language translation. Amendments were made when necessary. To ensure accuracy of the transcripts, six individual interviews and six group interviews (FGDs) were chosen randomly and reviewed and cross-checked for accuracy and language translation by one SCiSS staff member fluent in Nuer and English. Apart from typing errors, the transcripts were found to be of good quality. The checking and validation process of the transcripts was an important step in becoming familiar with the data and in identifying common thematic areas.

4.8.2. Identifying a thematic framework

The development of a thematic framework occurs after familiarisation with the data when emerging themes in a data set are recognised (Ritchie & Spencer, 1994). In this research a thematic framework for each set of transcripts, by the three categories of respondents and by particular sub-groups was developed. This was guided by the research questions, the study objectives and the themes, key issues and concepts that emerged from each data set. All data were explored inductively to generate thematic categories. Initially five transcripts were read individually. The themes generated from each paragraph were noted manually on the right hand margin of the transcripts and emerging themes were listed and re-grouped into main themes and sub-themes or sub categories (Ritchie et al., 2003). The development of the thematic framework was also guided by questions such as: What is the meaning of what the respondent is expressing in this section of the data? Is this expression similar to what has been said earlier? This enabled similar sections of the data to be grouped together into similar categories.

For example "mental health" was a thematic area derived from sections of data where respondents identified mental health problems experienced by children. The

specific causes of mental health problems such as attacks, witnessing the killing of loved ones, parental neglect, forced child marriage, abuse, stigma or poverty, formed one set of sub-themes. Specific symptoms experienced or witnessed such as crying a lot, nightmares, difficulty concentrating, madness, headaches when the mind speaks through the body or going numb, formed another set of sub-themes under the heading 'mental health'.

Particular attention was paid to: the frequency with which emerging issues were mentioned among the different respondents; differences in views across the three main respondent groups and/or the sub-groups; identification of majority and minority views; identification of conflicting arguments and the identification of similar thematic areas across study groups which aimed at increasing the trustworthiness of the data (Patton, 1999; Krueger & Casey, 2000).

Richie & Spencer stress that the thematic framework is only tentative and needs to be refined at the subsequent stages of analysis (1994).

4.8.3. Indexing and coding of the transcripts using the thematic framework

Coding is basically the idea of getting away from using the respondents terminology and their way of expressing things towards a more concise, analytical and theoretical description of what is going on (Strauss & Corbin, 1990). In this research, an open coding approach, also referred to as indexing, was used to code the transcripts and conceptualise the data (Strauss & Corbin, 1990), using a qualitative data analysis software package (QDA MINER version 3.0.3). QDA MINER can manage complex projects involving a large number of documents and provides a wide range of exploratory tools to identify patterns in codings and relationships between assigned codes and other numerical or categorical properties. QDA MINER has a 'drag and drop' feature which allowed for an easy coding of the text on to the different themes, sub-themes or categories using the 'tree-node' function. QDA MINER allows also for multiple coding of text onto different 'tree-nodes' which helps in the identification of links and associations within data. The function of splitting codes or merging codes into a new code accelerated the process of refining the preliminary initial thematic framework as new transcripts were added in the process of coding or as minority views challenged the existing framework. The coding retrieval tool of QDA MINER lists all text segments associated with some codes or specific patterns of codes which was used to

compare whether data were coded the same way. This is also referred to as constant comparison (Strauss & Corbin, 1990).

4.8.4. Charting and interpreting the data

The data that was coded in the previous stage was then lifted from its original textual context and placed in charts that consist of the headings and sub headings that were drawn during the thematic framework in the manner that was seen as the best way to report the research (Ritchie & Spencer, 1994; Ritchie & Spencer, 2002). The identification of the original data source was maintained in the analytical process.

The final interpretation was guided by the following three colon headings: coded text, dimensions identified, and analytical categories (Ritchie & Spencer, 2002). The following example illustrated the coding process from the sub-group of orphans (after ten interviews) and how the categories were related in the analysis of how orphans viewed their situation leaving two text examples for each dimension (Figure 4.8).

Table 4.8: Example illustrating coding process and analysis: Analysis of how children who lost both parents viewed their situation

Coded Text	Dimensions Identified	Analytical category
The sickness began when my parents were killed. I don't feel comfortable and when I am thinking a lot about what has happened to my parents I fall sick. **Whenever I am beaten and locked away I remember the event and I get very weak and I cry a lot and then I have a bad headache, my whole body gets hot and I cannot even walk and get up anymore**; than it goes away after one night. This is what worries me. There is no medicine for what I have.	**RISK**	**FACING THE SITUATION**
When I was sick last time I went to the hospital but they did not have the medicine and they told me to go to the pharmacy and buy the medicine. I got a prescription. I went home and the women I am staying with told me:" Did you bring any money from your home to this home?" how can you expect me now to give you something?" I said that the people from the hospital told me to go home and get five [Sudanese] pounds for the medicine. But she did not give me anything she said:" the money I am earning is not for you, I even use it to buy food for us; how can you ask me to give you more money. Where do you think I can get that money?" **I did not get any medicine and I had a high fever and joint pain, only God could help me.**		
There is only one thing important that can change our situation, this is education, there is no hope without education, it will be better to die. If we are educated we can become good people and we can be independent from others. We can have enough food and our own tukul and we will be respected again.	**HOPE**	
I am happy because I am still alive and **may be somebody can come and help us one day,** this is my hope.		
I would just take my little brother if this [orphan school] became a place to stay if I can be educated it will be the only way to be respected again in the community**. I want to proof that I can be as smart as children with parents and when we are grown up we can tell the people that we can be the same even when our parents are dead.**	**STRENGTH**	
Even if my father is dead and all the other family members **I am still alive and want to do something with my life. This is why I am here and go to school.**		
I am worried that I get killed one day and **when I am dead there is nobody to take care of the wife of my uncle who is very sick. She is a good person [...] I always worry for her.** If there is an orphanage, I can also take her to the orphanage if there is food and shelter we can be together.	**VALUE**	
It is not good to steal other people's property. I want to become a good person who can take care of a family without stealing from other people.		

Coded Text (continued)	Dimensions Identified	Analytical category
I am not happy at all because without parents there is nothing for a child that can ever make a child happy again; we do not belong to the community anymore. My grandmother is very old but there is nobody else we can go, she can still cook and I help her with bringing firewood and fetching water, I can do the hard work**. I am well treated by my grandmother but she cannot protect me because she is too weak.**	PROTECTION	EVADING HARM
Sometimes they tell me to work and not to go to school, but I refuse and I just go, if I cannot go to school I have no life and nobody will ever respect me if I am not educated and can give something to the new family. They tell me to do work and I say no I need to go to school. When I come back they tell me: "why do you refuse to work?" I tell them:" how can I leave the school because of the work?" They beat me, but **if the neighbour is there she will say: "why do you beat this child, let this child go to school, it is important for all children to go to school!" Without my neighbour I would be beaten up every day for going to school.**		
I stay separate from the children with parents because they abuse me and insult me. This is why I isolate myself as much as I can from other people.	HARM REDUCTION	
When I went to the normal school I was beaten by two girls and I did not fight back, but I went to the teacher. He said: "what do you want? You have no parents!" And then he also beats me. **This is when I thought it will be better for me to go to the orphan school.**		
If I fall sick the wife of my uncle will not agree to take me to the hospital. She tells me: "you can go alone." When I am at the hospital they ask me: "where is your mother, how can I know your sickness if your mother cannot tell me? How can I identify what you are suffering from?" Then I will end up not getting any medicine. **If I say my parents are dead they may beat me. It is better for me not to return.**	STIGMA MANAGEMENT	
When I am beaten by the women [guardian in foster home] there is nobody who can rescue me, the neighbours will just keep quiet and do her things while this women is beating me. This people they don't help me. I get beaten every day and nobody is helping me. For example when I go back from school the women will beat me because I am not allowed to go to school and I should be working all the time. When I come home they will ask me:" where have you been?" when I say in school, she will be very angry. Sometimes I do not want to go home anymore **I just want to stay here in this place [at the orphan school] where I am safe. I will only need shelter and little food and a good guardian, like the teachers and nobody from the orphans would ever go to their homes again until we are grown up and can defend ourselves.**		

4.8.5. Reflexivity and research practice

The problem of reflexivity and the ways in which our subjectivity becomes entangled in the lives of others are important issues in qualitative research (Denzin, 1989; Hammersley & Atkinson, 1983). It is well acknowledged that since the researcher is an instrument in qualitative research, the values, knowledge and experiences a researcher brings into an investigation may positively or negatively influence the research process (Patton, 1999). In this research, the "tandem" approach of collecting and analysing data in parallel as well as the translation and transcription process allowed discussing the interpretations of the respondents word's with the research team, drawing from the insights of team members who knew the context well. This allowed the PI to retain some grasp over the blurred boundary between the respondent's narratives and her own interpretations.

Although the researcher has to make choices about how to interpret the voices of the respondents and which transcript extracts to present as evidence (Frith & Kitzinger, 1998), attempts were made in this research not to simplify the complex processes of representing the 'voices' of the respondents and to let these voices speak for themselves.

4.8.6. Trustworthiness of the data

Trustworthiness is about establishing whether data collected during the research process is credible, transferable and confirmable (Lincoln & Guba, 1985). In this research, the trustworthiness of the qualitative data collected was met through triangulation by using multiple and different data sources, methods of data collection such as workshops, individual interviews and FGDs, and the complementary use of qualitative and quantitative research methods (Patton, 1999).

Denzin (1970:300) described triangulation as "a plan of action that will raise sociologists above the personalistic biases that stem from single methodologies". Triangulation is a term derived from navigation for orientation and positioning and refers to the complementary use of qualitative and quantitative methods in order to overcome the errors and limitations implicit in each type of method and to validate research findings through different approaches (Hammersley & Atkinson, 1983).

4.9. Quantitative data management and analysis

Quantitative data management and analysis followed the instrument guidelines from the Harvard Program in Refugee Trauma (HPRT) (Mollica et al., 2004b). In this research the research instruments were used for:

1. Determining prevalence rates of experienced trauma, PTSD, depression, anxiety disorder and PTG.
2. Establishing risk and resilience factors.

Cut-off points (criterion values) were used in order to determine prevalence rates for PTSD, depression, anxiety disorder and PTG (Mollica et al., 2004b). Linear regression analysis was used for establishing risk and resilience factors.

Cut-off points are viewed as useful for the determination of prevalence rates, not least because policy makers and planners often find the interpretation of mean scores on scales difficult, and want to know how many respondents are checklist positive (Mollica et al., 2004b). As a general rule HPRT strongly recommends treating symptom scores as continuously measured variables, and analysing them with regression methods and comparisons of means stressing that cut-off points would not be very helpful in the research setting because they would needlessly degrade the quantitative information of a continuously measured scale into a qualitative dichotomy (above and below the cut-off point) (Mollica et al., 2004b). Thus, linear regression analysis was used in this research to establish relationships.

The research assistants marked the children's responses on each copy of the questionnaire during data collection. The completed questionnaires were returned on a daily basis and each participant was discussed with the data collectors. All questionnaires were entered into SIMSTAT [7] version 2.5.5 data analysis software. At this point, the consent form attached to the questionnaire was removed and stored in a separate place. The SCI supervised data collection and the PI was responsible for entering and analysing the data.

[7] http://provalisresearch.com/products/simstat/simstat-features/

Frequencies were generated for experienced traumas, mental health morbidities and categories of post-traumatic growth. Frequencies (after coding) were also generated for the three open ended questions.

Mann-Whitney U-tests were used to compare the two sexes as all of the measurement scales were ordinal (i.e. were based on a set of ordered categories). These scales are only pseudo-continuous, and cannot be assumed to have a Normal distribution. Chi-square tests are often used in this situation, but such an analysis does not take account of the ordering. Therefore the most commonly used and widely accepted approach was adopted, that is the use of nonparametric statistical tests. As the two genders constitute statistically independent groups, the Mann-Whitney test was used.

Linear regression analysis was conducted to describe associations of demographic and socio-economic characteristics and of number and type of experienced trauma on children's mental health and post-traumatic growth outcomes.

Univariate linear regression analysis was initially conducted to identify statistically significant ($p<0.05$) variables for each model (demographic variables, trauma categories and individual trauma variables). Multivariate analysis was then conducted using the identified statistically significant variables in each model.

5. *Results: case study*

The analysis of the data collected in the case study reports on the understanding of children's health needs, their roles and responsibilities and their capacities to engage in health decision making from three different angles; from the adult community members point of view (Section 5.1); the children's point of view (Section 5.2); and the service providers point of view (Section 5.3). Section 5.4 summarises the results of the case study and shows the common thematic areas that have emerged from the three groups of respondents. The case study had three main objectives.

5.1. To explore the communities' understanding and perception of children's health needs, their roles, responsibilities and capacity in health decision making.

5.2. To assess children's capacity to become key contributors in identifying health threats, prioritising them, proposing solutions and implementing action.

5.3. To explore health service providers' perception of children's health needs, and the capacity of children to participate in health decision making.

5.1 Adult community members views, experiences and perspectives

This section presents adult community members' views and understanding of children's health needs, their roles and responsibilities in the community and the effect of sociocultural norms on children's exposure to risk behaviour or their ability to protect them from harm. The adult perspective on children's capabilities and the potential role children can play to improve children's health and the health of the community is assessed.

Changes over time are investigated to gain a better understanding of the challenges faced by the community and how they relate to children's health. The nature and level of violence to which people are subjected is assessed to develop a better understanding of how and why decisions are made which expose children to, or protect them from violence.

The cultural acceptability of children taking an active role in decision making is established and the cultural logic which underlines the degree of child participation

is defined. Local concepts that can result in creating health threats for children and delays in attending health facilities are described and the extent to which age, gender and family structure play a role is determined.

The adult study population consisted of both IDPs and residents. The great majority of the people who survived the attacks in Akobo County lost their livestock and had to find new ways of rebuilding their livelihoods. 80,000 people in Akobo County were included in the WFP food distribution program at the time. Thus, almost everyone was dependent to some extent on food aid. Only a few people had returned to their villages to cultivate their land; security was still precarious. Food distribution was centralised in Akobo town (Figure 5.1). For the people who had returned to their land it was not without risk to travel to Akobo and collect food.

> *"…All organisations are staying in Akobo town, it is not safe for them too. They do little things for us [in Nyandit] but they cannot stay. It is dangerous for us to go to Akobo and get food aid; you can get killed on the way. So we have to take care of ourselves in this place" (Young men, FGD code DF10, Nyandit)*

Figure 5.1: Waiting for food distribution in Akobo town (Source Author)

5.1.1. Sample characteristics of adult community respondents

Forty-four men and 44 women participated in the study. FGDs were held in more homogenous groups and divided by age and gender to balance influence and power differences. The characteristics of the adult respondents are presented in Table 5.2.

Table 5.2: Characteristics of adult respondents (n = 88)

Characteristics	Number	%
Women	44	50.0
Men	44	50.0
Age, range	>18 - 82	
Age, mean	38	
Religion		
Christian	88	100.0
Ethnicity		
Lou Nuer	88	100.0
Marital status		
Never married (male / female)	9 / 5	20.8 / 11.8
Married (male / female)	28 / 22	65 / 52.7
Separated (male / female)	1 / 0	2.3 / 0
Widowed (male / female)	5 /16	11.9 / 35.5
Education level		
Never attended school (male / female)	(12 / 37)	(26.5 / 85.5)
Completed or partially completed primary school (male / female)	(20 / 4)	(47.0 / 8.7)
Completed or partially completed secondary school (male / female)	(8 / 3)	(17.6 / 5.8)
Completed College (male / female)	(4 / 0)	(8.8 / 0)
Education, mean in years (male / female)	(5.2 / 0.8)	
Displacement characteristics		
Never displaced	22	25.0
Displaced because of attacks	51	57.9
Displaced because of insecurity	13	14.8
Displaced for economic reasons	2	2.3

Adults were not always sure about their age. In such cases, long discussions ensued until the correct age was determined. People below the age of 35 were considered as young and those above 35 as old. The age groups were therefore defined along these lines.

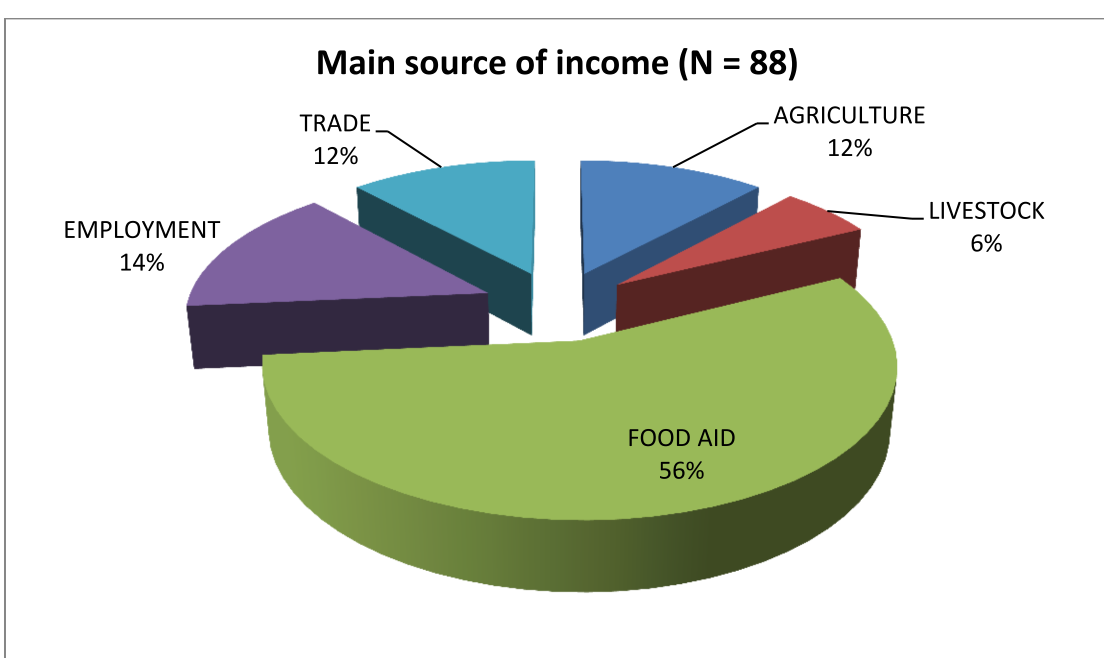
The level of education with an average of 5.2 years for men and 0.8 years for women was low. In addition, only primary level education up to the second or third grade existed in many places. Thus, it cannot be assumed that people with eight years of education reached the eighth grade. Instead they remained for the following years in second or third grade until they were exhausted or dropped out for other reasons.

23.9% of the sample population was widowed, 21.7% as a direct result of the attacks. Attacks (57.9%) and insecurity (14.9%) were the main reason for displacement.

5.1.2. Main source of income

Pastoralism was no longer seen as a sustainable livelihood strategy. Only 5.9% reported that livestock was still their main source of income (Figure 5.3.).

Figure 5.3: Main source of income



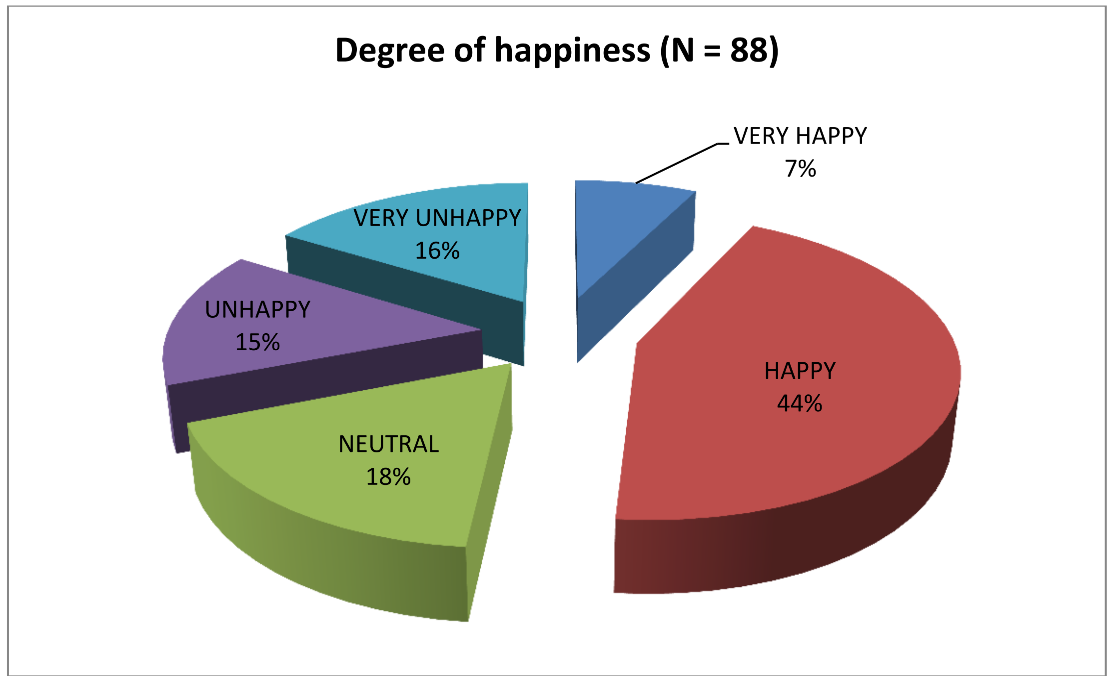
People who engaged in trade and cultivation were not able to earn enough to sustain their families and received additional food aid. 55.9% of the sample population depended fully on food aid with no other additional source of income.

14.7% of the people found employment. The main employers were NGOs and to a smaller extent the local Government. Management positions were mostly held by Lou Nuer returnees from Kenya, Ethiopia or Khartoum.

5.1.3. Security and happiness

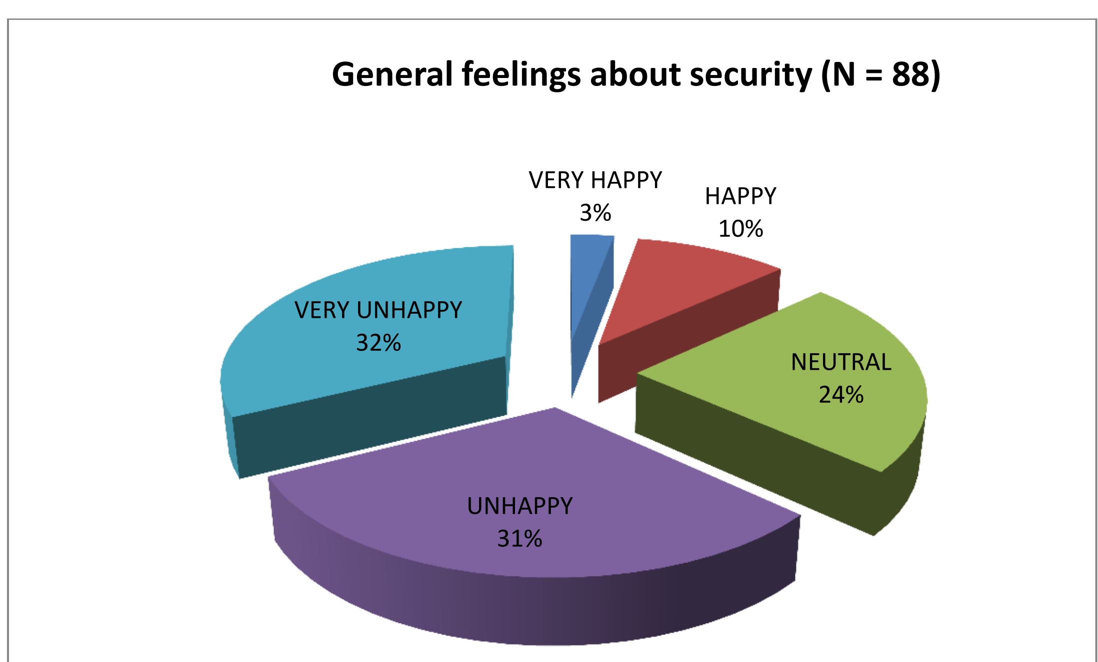
A faces scale was used for the respondents to describe their general feelings of happiness (Figure 5.4) and safety (Figure 5.5). The faces scale developed by Kunin (1955) to measure job satisfaction, has been widely used ever since for adults and children to describe pain (Belter et al., 1988; Bieri et al., 1990), but also satisfaction with health care (Pound et al., 1993), or life in general (Andrews & Withney, 1976). The meaning of the faces in the scale are arguably seen as universal (Ekman et al., 1969).

Figure 5.4: General feelings of happiness



51.1% were happy or very happy with their lives. People felt that they were not left alone, particularly with so many NGOs helping them. At the same time, people feared remaining dependent and not being able to return to their villages to rebuild their livelihoods. Security issues were seen as a major obstacle to a better future

Figure 5.5: General feelings about security



13.2% of the respondents reported to be happy or very happy with the security situation.

> *"..I think the future will be better. The security situation I hope will be going well because of the ongoing disarmament. In the Nuer land it is already completed, and in the Murle land it is ongoing. It is like there is hope that the security will be OK" (Man aged 20, Interview code RI001, Akobo town).*

The great majority reported to be unhappy, many of them about 'the inability of the Government to protect them'. Despite the presence of the SPLA in Akobo town, many Lou Nuer did not believe that the soldiers would or could protect them should further attacks take place. Survivors of the Nyandit attack reported that SPLA soldiers fled with the people or were killed during the attacks.

> *"..We have returned but there is no safety. The army cannot protect us. The commander is not one of us. When the attack came in April everybody tried to run and many were killed, also the soldiers. Now there are soldiers again but if another attack happens it will be the same again and all we can do is run. This is not a good situation" (Young men, FGD code DF10, Nyandit).*

> *"..The guns have been taken away but sometimes people just get the guns back. I am not sure what the future will bring, we have to wait and see what will happen. Everybody is traumatised and people just came to Akobo town, there is*

almost no life in the villages outside because of the killing" (Man aged 72, Interview code RI008, Akobo town).

"..I cannot go back, with what has happened in Nyandit, I was not happy. We do not believe in the existing security because the Akobo community is disarmed but the surrounding people are not. We are vulnerable to the people around and nobody can protect us. I feel we are vulnerable to any situation, the rebel groups may not be disarmed and I cannot feel safe" (Woman aged 20, Interview code DI003, Akobo town).

5.1.4. The adult perspective, the past, the present and the future

"…Life before was good to us, we had our livestock and we had space, but now people fight each other. The Murle are very hostile to us and now everybody is congested in this town. There is no life anymore in the villages because of the killings; all our houses are burned to the ground." (Older women, FGD code DF_06, Akobo town).

The long history of violence which peaked in several attacks in 2009 was said to have not only affected peoples livelihoods but also cultural beliefs and traditions. Adults reported that children were raised to be strong and resistant in order to survive a hostile environment and many respondents, both men and women, stated that the way children were raised was not only threatening their health, but in many cases their lives as well.

Arranged marriages had always existed but a steady decline in age of the brides was reported by several respondents and seen as a result of the violent past. Respondents stated that marriage for girls below the age of eighteen had developed during the war to ensure enough descendants because people were being killed at an early age. Before the war, it was seen as more important for a woman to be experienced enough to shoulder all responsibilities for her new household. At the time this study was conducted, married girls were found to be as young as thirteen. Despite the dearth of livestock, bride prices to be paid by the future husband and his kin remained high with 15-30 cattle.

Older community members reported that they had cared about each other in the past but this had changed over time. It was recounted that 'in the old times' it was common that the community mourned together when somebody died. But this had changed and it was reported that individuals not directly related to the deceased

person did not care and would often not get involved anymore. Several respondents reported to be inured to death as it was now common compared to the ‘old times’.

> *“…Here there are many diseases and children die of it. When we were in the village with the cattle we were not used to people dying so much, if somebody died people came together and mourned the person or the child, but now people are so used to death that they don't even care. In my time we had good and enough food. The children were strong, they had a lot of milk and meat and fish and sorghum. We knew how to take care of things but now there is no good food and children have weak blood and become easily sick” (Woman aged 72, Interview code RI006, Akobo town).*

The respondents said that in the old times when they were cattle keepers they had ‘strong blood’ while now they had ‘weak blood’. Blood was seen as the vital force which accounted for a person’s bodily constitution. The strength of blood did not only refer to physical but also to mental conditions and was understood as one entity. Mental and physical strength were equally important to the respondents. A person with weak blood was described as somebody who was frail, depressed or easily startled, and as somebody who was prone to illness and who had less strength to recover.

From the respondents point of view, their violent environment forced them from independence to dependence, from food security to food insecurity, from wealth to poverty, from being mentally and physically strong to being mentally and physically weak; from being united to being separated; a situation that reportedly provided a poor foundation for adults to protect children and to handle stressful situations. Although the ongoing food distributions and nutrition programs saved lives, many respondents did not see how this could help them to sustain their families in the long-run.

> *“…Marriage was easy, we had plenty of cows and everybody contributed so that life could go on. If there was plenty, everybody had plenty, if there was scarcity everybody was starving. We shared the plenty and we shared the scarcity. This is what brought us together and the relationships were strong.*
> *Now people steal from each other and try to take away other people’s property. If you are weak, you will not survive. Before the war we also had enemies and we fought them together with spears. We had to be united to succeed. Now we are separated, the guns have changed everything and the strong ties between people are no longer there. The only value left is the power of the gun. Life has*

become more violent. Even if we raided our neighbours' cattle or if they raided our cattle women and children were not killed. If a wife could hold the horn of a cow, that cow was not taken by the enemy because of the spirits and the connection between the women and the cow. Now this has changed and as it was in Nyandit women and children are killed first. The people in Nuerland cannot exist without cattle. It will not be possible; how can people get married, how can compensation be paid. We know about the cattle of money but there is no money. We feel very much humiliated that we [the men] are no longer able to protect our assets, our wives and children. There is sadness and our minds and souls are getting weaker because now we even depend fully on different food from WFP and not even our children can provide for their parents" (Older man, FGD code DF12, Akobo town).

Many respondents, men and women, feared the increasing dependency on aid, but had no suggestions as to how this development could be reversed in the future. They were not convinced that other income generating activities could replace their former animal wealth in the near future. But they clearly saw education as the starting point for a better future.

"…Sometimes I think our culture is not good for the health of children, there are so many risks because of what people think are the right things. So what we need most is to change and make the security better so that people can go back to the villages to cultivate and build schools in the villages so that people can learn new things. If we become civilised, then things will change" (Woman aged 20, Interview code DI009, Akobo town).

It was generally believed that education would help to build peace and that educated men would take better care of their families.

"… *If the head of the household is a civilised person because he is educated and can provide for his family because he can earn something with trade or other work, he will take care that his children and his wife will also be educated. The children will follow the example of the father and they will let their families become educated as well. This is one cycle. If the father is uneducated he will not allow the wife and the children to become educated and the children when they are adults will do the same with their children. This is the other cycle. One is better than the other. One leads to development and the other leads to death. People came back from Ethiopia and Kenya and they told us what they have learned and we must listen to them". (Man aged 28, Interview code KI008, Akobo town).*

Young men and women alike identified that the role and attitude of the men needed to change. Men had to learn to feel responsible for their families' wellbeing. In Lou Nuer culture, the man's only responsibility towards his family was the duty of reproduction to maintain or possibly increase the size of his clan. However, respondents felt that the number of children should be less important and a man should be judged on how well he can take care of his family.

> *"…Things are changing, though change is a process. Before, you married one, two or three wives, what you gave as a man, were cows for each woman. Then you told them: "this is your farm and these are your cows this is your tukul, take care of your farm and your children and your cows, this is how life continues, either you work or you go and beg!" That is how our life was before. So the life of the man was very easy. But now comes the time where the men are supposed to be responsible for providing income and this needs a big change. You will see many young men sitting idle, still with the attitude that everything needs to be provided by aid organisation for free and all you hear from them is complaining about food insecurity and poverty but still there are many things that need to be done but the men are waiting for a miracle. They want to be independent but they do not want to do something themselves to achieve this. They have all these complaints about what needs to be in place first so that they would finally move, but until then they sit and discuss politics and play games and take the little money others have earned. Still I think that things are coming now and some men are committed and see that the change cannot come from the organisations and the government only, they see that they have to participate. Things are changing. If you compare the past and now, then things are changing though it is slowly by slowly." (Man aged 26, Interview code KI004, Akobo town).*

Interviews conducted in the cattle camps, among families who still had their cattle, portrayed a different view and there was no desire to change cultural aspects. Adults felt that there was no benefit in more education than what parents could teach the children. This was perceived as sufficient for the future of their children.

Whereas respondents outside the cattle camps linked the word education with 'going to school' and a 'different kind of knowledge than traditional knowledge', the word education meant solely traditional knowledge and skills by the respondents who still had their cattle wealth. All respondents shared a deep concern about the security situation, which could easily change everybody's lives in the future.

5.1.5. Chronic violence, cultural change and impact on child health

The following three areas of potential health threats for children were identified by adult respondents in interviews and FGD's: the way children were raised; early child marriage; and children's exposure to armed violence resulting in psychological distress, referred to as 'injuries of the mind' by adult community members.

Children's direct experiences of attacks, massacres and the general ongoing violence were identified as the main causes for children's 'injuries of the mind'. The majority of the respondents described the way children were raised as well as forced early child marriage as 'survival strategies' that had developed over time as a result of decades of armed conflict.

The way children were raised was described as 'being harmful in many ways'. At the same time, respondents indicated that it was necessary to raise children 'like soldiers' to 'make them strong and resistant' so that they had a chance to survive their harsh environment. The majority of the respondents perceived their culture as disadvantageous to children.

> *"…The Lou Nuer culture is not friendly to children. The work given to a girl or a boy child is very threatening for children's lives. For example for boys; you are given a duty of taking care of the cattle in a highly dangerous and violent environment, even in places where people fear attacks. Even if there are Murle at any time, the children are forced to go to these places and they cannot refuse. If you look to the girls, the situation is not very friendly to them either. Adults give them so much work, fetching of water and collecting firewood, workloads that are far too much for young girls and will destroy their bodies at an early age. Body beating for children is at any time and you may be beaten even by people who are not your relatives if you misbehave. No one will ask you why you are being beaten. So in that sense, if it comes to orphans the situation becomes now horrible for them to survive that situation; whether you are being taken care by a person that is a relative or no relative to you, you will be very much intimidated and humiliated as if it was your fault that you have lost your parents.*
>
> *To raise children is like we train someone to be hard and resistant so that they are prepared for everything that may come. It is like training soldiers. You train them the hardest things so that they will be able to survive. The children will learn to cope with fear with lack of food and all these things, this will make them stronger and in time of disasters and conflict the children can take care of themselves" (Young man, FGD code DF03, Nyandit).*

5.1.5.1. Raising children: daily duties and risk exposure

> *"…As it is now, children need to be very strong because of what they have seen and witnessed. Many have been displaced and some of them have lost their parents or brothers and sisters. Children have more work to do than ever before. They need to be strong, self-reliant and independent they also need to be obedient and survive attacks, it is good for them to be hardworking it will also help them in the future. I want my children to become educated and other women also want their children to become educated. But the situation has to improve and people need to become civilised and stop fighting each other" (Woman aged 23, Interview code DI010, Akobo town).*

Being injured, killed or abducted were described by adult community members as important health threats for children, boys and girls alike. People explained that children were at great risk of being injured, killed or abducted as soon as they left the town or village for daily duties.

> *"…Going to the forest for fruits and wood is very dangerous and the children can be abducted by the Murle, or killed. There are also snakes and other wild animals. When you go to the forest the Murle can kill you but when you are hungry you do not fear the Murle. But you still have to go for it. If you meet the Murle they are definitely going to kill you. There are also hyenas and leopards; they can kill a child easily. It is not good to meet with them" (Young woman, FGD code DF01, Nyandit).*

In some situations adults went to the forest themselves to collect wild fruits, cut grass or collect firewood, but mostly children were sent to such places and they were not allowed to refuse. Several respondents stated that this was good for children as it taught them how to behave in dangerous areas; it would help them to cope with fear. At the same time, children would learn to be disciplined and follow orders.

Another explanation was that everyone who encountered the Murle fighters in the forest would be killed by them. It did not matter whether they were adults or children or whether they were alone or in groups. It was argued that if a child died, even if the death was difficult for the family, it was not as difficult as if a mother was killed because the woman was believed to be the only one who was able to take care of the children.

"…To get killed by Murle fighters patrolling the area is very threatening. Everybody is frightened for this, also the children but the children have to go to dangerous places, they cannot refuse if we send them. They have to obey; so there is great danger for all of us, either we go and die or the child goes and dies, it's one or the other" (Young man, FGD code DF10, Nyandit).

"…If they go far, the Murle will kill or abduct the child. Sometimes they go not far and come back […] we cannot protect them from the Murle. Either we die that the child survives or the child dies that we survive this is how it is for us, one way or the other" (Woman aged 45, Interview code RI012, Akobo town).

A child's risk of injury was not only seen as the result of violence perpetrated by 'the enemy' but also as the result of encounters with wild animals, mainly snakes and hyenas. Girls' injuries were also found to be related to domestic chores including burns, bruises and scorpion bites. Children's activities were largely unsupervised by adults. Many adults reported to be proud that their children were independent at an early age.

"…The daily work can also lead to injuries or burns of children. They are very young and have to cook with fire or charcoal, children get easily burned, there is not much supervision because the adults are also busy and the children do things on their own. Sometimes there are also scorpions in the firewood and the sting is very painful. There is also lots of diarrhoea and vomiting and also malaria but now it is less. These are the main dangers as I see it. Diarrhoea is often because children spend a lot of time at the river and drink river water. Some families even do not want to wait at the bore whole and fetch water from the river for drinking" (Woman aged 20, Interview code DI009, Akobo town).

Injuries were also related to beatings that were frequently observed, also during interviews and FGDs. At one FGD with young women, a small child aged about three fell over close to the group and started crying. One of the women seemed annoyed, took a large stone and threw it directly at the child without interrupting what she was saying. The child stood up, cried even more and ran away. This happened without the slightest reaction from the participants of the focus group and the translators present.

On another occasion, the research team picked up wooden branches with the intention of sitting on them during interviews. Eight curious children surrounding the team immediately ducked, protected their heads and ran away out of fear of being

beaten. What seemed like a reflex by the children was observed on several occasions. Since adults reportedly did not need a reason to beat children, they thought it safer to hide from them in any case. Adults considered beating a disciplinary measure to make children 'behave'. It was described as a means of controlling them. The great majority of the respondents believed that beatings were mostly 'OK' for children because they would understand why they were being punished and would know that they deserved it. Only one respondent stated that beatings could also be humiliating and traumatising for children.

Adults generally described the workload given to girls as overdone and many respondents mentioned that girls suffered from headaches and body pains as a result. The damage was attributed to the heavy weights they had to carry and to their long working hours. Girls were normally six years old when they were introduced to their duties.

> *"…Girls nowadays also want to be educated which is good for them, still we have to force them to carry a workload that may destroy their body when they are still young. But if this is not done they will not survive their marriage. It is not a choice we are making this is how we [women] survive" (Young woman, FGD code RF11, Akobo town).*

> *"…Yes what I can see, is when the girl goes to fetch water this is what can be harmful. You see, some girls are very small but the water they carry is very heavy, when a child is still growing it is not good to carry so heavy loads, this can be harmful, also wood and other things they carry on their head. Many girls are very proud that they can carry so much, but it is not good for their health. From what I know girls often suffer from body pains and headaches this is what I think is not good for them" (Man aged 26, Interview code RI 006, Akobo town).*

Respondents stated that even if there was a risk of damaging the bodies of young girls, it was important for them to start their chores at a young age to prepare them for marriage. The majority of the female respondents reported that there was no joy in being a woman. It was generally believed that it was necessary for girls to experience a measure of hardship during their childhood so that they would survive what was to come.

> *"… How can you feel ready for what is going to happen to you? You do not know what is going to happen to you. The parents tell all the girls that they must be proud to marry early because only very beautiful girls are asked by a man, if*

he brings many cows you must be proud of this, but when you go to the house of the husband it is very bad and if you do not do all the work, everybody has a right to beat a woman if she makes mistakes. I learned to carry a lot of responsibility when I was a child and I was working very hard and this made me very strong and this is the only reason I survived. These are the only things that make us survive." (Young woman, FGD code RF03, Akobo town).

Interviews and FGD's with old women showed a different picture from the past when people had reportedly everything they needed and when there was more space. They reported that when they were young there was more joy and less work for girls and women. They stated that the work was more equally shared and that the mothers would take better care of the children and supervise them because they were happier. Several respondents pointed out that 'unhappy and depressed mothers were not able to take good care of their children'. They remembered that there was a lot more traditional dancing, singing and celebrating and that children who had both parents could still enjoy their youth. Two very old women were not sure whether there was less work when they were young or whether it just felt like less work because they were happier and had therefore 'stronger blood'. Women above the age of seventy reported that they had felt mature and ready for marriage at the time. All women had married above the age of sixteen. In their view, girls nowadays had good reasons to be terrified because they were sold to anyone who could provide cows, no matter who that person was and no matter what their age. This was seen as a consequence of poverty which forced parents to give their daughters away even at the age of thirteen.

The loss of parents was identified as a major threat to children's health. An orphan's life was described as 'very difficult' or 'horrible' by adult respondents. Only a few adult respondents elaborated on the subject. Adults reported that the loss of parents resulted in most children in experiencing abuse and rejection not only by community members but also in their foster homes. An orphan's workload was described as 'tremendous' because boys and girls in most cases had to do all the work in their foster parents homes.

"…The children with parents are more honoured in the community than the children without parents, because the children without parents there is the belief, that they are not being taught and are therefore lower than other children, that they live a life of their own and that these children are not good for other children to be with. The children without parents are more likely to be beaten by

people and some of them get sick in their mind and in their body because of this" (Man aged 23, Interview code RI009, Akobo town).

"…Children have to take over more responsibilities but for the children who have lost their parents their life has become very bad and they may not survive in their foster homes. The neighbour is fostering such a child and does not give the child food. I tell her, why do you beat that child all the time, and the lady does not have an answer. I am not well for the child but there is nothing I can do to help. When the aunt is not there I give the child little food but if she finds out she will beat the child more. These children are kept in the community and at the same time they are not part of the community, very few people have the courage to help these children and to intervene. The children are held responsible for the death of their parents" (Woman aged 23, Interview code DI013, Akobo).

"…These cases are happening, they are in the community and the children are very scared or very depressed […]. It is also when you have lost both parents, where will you go, who will take care of you? It is difficult to be an orphan, these children have a horrible future, people believe that you do not belong to the community when you have no father and mother because there is nobody to raise you and whatever you do you will not be doing it the right way. They say orphans have no manners and do not know how to behave" (Man aged 42, FGD code DF07, Akobo town).

5.1.5.2. Early marriage and negative health impact

Early child marriage was seen as very damaging for children's mind and body. Girl's inability to cope with additional responsibilities and increased workload was mentioned by adults as well as reproductive health issues. Women reported that it took girls a long time to deliver their first babies. Some of them explained that after five or six days in labour, the baby was dead. A delivery time between one and five days was perceived as 'normal' by most women. Most respondents had heard that it was safer to deliver at the hospital. However, despite such knowledge everyone in the sample had delivered at home and mentioned various reasons why such a decision was taken. For example, at the hospital women felt rushed to deliver fast. They reported that they feared to be 'cut open' at the hospital if they did not deliver within one day.

Women also indicated that the hospital staff was neither experienced as qualified nor friendly to them. In addition, they were perceived as 'not as patient and

trustworthy as traditional birth attendants'. According to the women patience and trustworthiness was highly rated and the perceived lack of these attributes among hospital staff was found to be an important reason why women preferred to deliver at home.

The first delivery of a teen mother always took place in the home of her parents because of the 'embarrassment a young girl can cause during her first delivery'.

> *"…I remember that I was in labour for six days, I do not remember all of it but some of it I do remember. I did not know what was happening to me and I was unconscious sometimes. My mother said that it was a lot of bleeding. It is not good to have children when you are small. To marry early is not good, it is not good for your mind and it is not good for your body, even if you have your menstruation it is not the right time to deliver a baby. All the girls are scared and know that they can die, some cry during delivery, this is a problem and the parents are embarrassed. This is why you deliver the first child at home and not at the house of the in-laws because they do not want them to see all the problems. This is the main danger to the life of girls; it is like being killed by the Murle". (Woman aged 20, Interview code DI009, Nyandit).*

Obstructed labour was not viewed as something that needed a referral to the hospital by the majority of the traditional birth attendants, but as something that could be solved with patience.

> *"…The most important thing is to be patient and wait. This is what we do; we are patient for days and wait for the baby to come out. If the baby does not come out it can be because the lady is a coward and because she started to cry early, even before the real labour started". (Older woman, FGD code DF04, Akobo town).*

Another explanation for obstructed labour was that the girl's husband was unlikely to be the father of the baby and therefore 'the baby refused to be born'.

> *"…We want to keep everything from the in-laws. We believe that when the time comes for the girl to deliver the child and if the child does not belong to the husband, the child will not come out. The child will not be delivered until the girl tells the exact name of the real father of the child. If she does not tell the name of the real father of the child, the child will wait and complain until you say the whole thing. This is also a reason why we want to keep that secret in the family; because if this happens at the house of the in-laws they will automatically divorce her". (Man aged 26, Interview code KI04, Nyandit).*

Since the majority of the women believed that obstructed labour in young girls had no medical causes, it was not expected that the hospital could be of assistance. In addition, the hospital staff was not perceived as trustworthy which was identified as a precondition to consider a referral.

Haemorrhaging during delivery was recognised as a ‘medical problem’. Traditional birth attendants hoped that bleeding would stop spontaneously, but patience was not seen as the solution and referrals to the hospital were considered. It was seen as important to deliver the baby fast once bleeding had started. Birth attendants reported that bleeding was more of a problem these days compared with ‘old times’ when all women had ‘strong blood’.

> *“…Before the bleeding was not a big issue but now bleeding has become a big issue. What we do, we just let it bleed and later the lady will recover. But now we came to realise that bleeding can also be dangerous because now the women have weak blood and are not strong when they deliver. But before when the women were strong, bleeding was not a problem”. (Older woman, FGD code DF04, Akobo town).*

Most men had married a young girl. At the same time, they reported that they would prefer an older, educated woman because a young girl was not ready to take care of the husband, family and relatives. The delay that was caused because a young girl remained at the parental home until she delivered her first child was not appreciated by most men.

Male respondents reported that a husband will only frustrate his young wife and if a woman was beaten frequently because she was not able to do her job, she would become depressed and weak and was finally unable to take care of her children. Thus a mature woman was less ‘trouble’ because she knew how to take care of the relatives, even if she was uneducated.

Educated women were hard to find and more expensive than uneducated women. The costs were estimated at 60 to 100 cows which was more than most men and their kin could afford. If a girl was not married at the age of fifteen, education was the only accepted reason. Respondents indicated that if marriage was not delayed because of a girl’s education, the community would become suspicious and think that something was not quite right, either with the girl or with

the girl's family. Several women explained that the girls had to accept their fate because there was no other choice.

> *"…Early marriage is bad in any way; there is nothing good coming out of this. It is mentally very traumatising because a girl cannot fulfil all the responsibilities she has. In my culture the woman has to produce as many children as possible and be the servant of everybody who has participated in paying the cows […]*
>
> *The girls belong not only to the husband but to the whole family or community and she has to serve them. Also there is no way out, if the husband dies the girl will be taken by the brother so that she can continue to produce children. This is seen as her investment in the clan […]*
>
> *If a woman delivers only three children she will have a difficult life and the family will tell her that she was not worth the cows. Life is very hard and a girl aged thirteen will not be able to take her responsibilities and will be beaten for it. Sexual relationships are often forced and girls have many infections and are likely to have complications during deliveries. In my culture the first delivery is at the parent's house so that the girl can learn how to behave. But if there is a problem, the parents bring the girl to the hospital only after six days in labour and the girl will be unconscious or already dead." (Woman aged 54, Interview code KI03, Akobo town).*

Despite the dearth of livestock, bride prices remained high and even though bride for wealth exchange was considered out of date, no other solution presented itself. Livestock exchange therefore often occurred over a period of time and required the participation of the extended family. It thus generated enormous pressure, not only on the bride to perform but also on the groom to redeem his debts. The contribution of the larger family was not understood as a gift. It represented a debt to be paid off. Many believed that the inability to change such a cultural obligation was to blame for the ongoing cattle raiding, which represented the only possible way for many young men to pay off their debts. Quotes related to early child marriage are presented in Table 5.6.

Even if people identified the causes of a problem, there was not necessarily a solution that presented itself. In regard to early child marriage, the age of the girl had steadily decreased as a result of decades of warfare, but it was seen as difficult to reverse the process in a situation where almost everyone had lost what they once owned.

Giving away a girl as soon as somebody was able to pay for her in cows had become a survival strategy for many. Even if a husband decided to have his daughter educated first, the decision was not necessarily his. If he had not been able to pay back all his debts to the extended family, they remained in charge and decided what happened to the girl. Many respondents indicated that the imposition of a marriage partner upon a child was unlikely to change as long as there was no law forbidding it.

Table 5.6: Quotes on early child marriage and reproductive health

	Early child marriage and health	
	MEN	**WOMEN**
FGD's	"…With peace coming people will go back to the real traditional part of it and how it was before the war when women married at the age of 20 and men at the age of 30. Early child marriage is very damaging for girls. It is influenced by the war so that people could have children before they died. So this is not really tradition….it is like conflict tradition…, but because the conflict lasted for such a long time, people believe that it has always been like this" (FGD young men).	"…I believe age factor is also a contribution point. Even if you are married by the age of thirteen or fourteen the husband is expecting a child soon. In this place, life is women for children, there is no other purpose. So the husband expects a child quickly. Life as a woman is for having children it is not for fun. You get married, you get children and that's it. This also contributes. Your pelvic is damaged early and this contributes to problems in delivery or you cannot have more children. Children have complications during delivery. In other cases it delays getting a child" (FGD young women).
	"… The parents tell the girl who to marry because girls may like other guys but the parents know what is best for them. The girl may not know the background of the man they want but the parents know. Also if the parents decide that the girl should be married this year it is because they know that the girl will be mature enough because they know when she was born" (FGD young men).	"…Weak blood is a general problem. But now as it is bleeding during deliveries, it has become a huge problem. Before bleeding was not a problem but now because of the weakness women may die. From our experience bleeding can be a problem for both [mature women and girls]. Deliveries can take a long time because we are patient and wait until the baby comes out, but when the bleeding starts the child has to be delivered fast" (FGD old women).
	"…The father does not care about the age of a girl but he cares to get a cow from another man. This is why he forces the girl and he would give a 14 year old girl to a man who is almost 70 if he can provide a cow. He does not really care about the age of the man. But if he really dislikes the man, he may give the child to another man" (FGD old men).	"…Before the bleeding was not a big issue but now bleeding has become a big issue. What we do we just let it bleed and later the lady will recover. But now we came to realise that bleeding can also be dangerous because the women have less blood at the beginning and are weak when they deliver. But before when the women were strong, bleeding was not a problem" (GFD old women).
	"..Marking has always been in our culture but early child marriage is because of poverty and because people have not enough food and give the girl for cows. As a girl you cannot refuse, if you do people will die of hunger. If you still don't want the man, they will beat you; if you still resist after one week of beating you will be told to settle out. You would be chased away and there is insecurity. They would leave you to die. This is not our culture; this comes from the situation of food" (FGD, older men).	"…To marry early is not good. Girls do not understand what happens to them […]. The girl is the servant of everybody but she can have many children. She can also die early because of her age and because of the bleeding and because the child does not want to come out. Some die during delivery. If you marry early you can have many children, this is a good thing in our culture but it is also dangerous" (FGD young women).
	"…For me a young girl is not ready to take proper care of the husband and the family, they are many demands and if she is too young she will fail and this is upsetting for the family. She is also not able to raise a child properly when the lady is too young" (FGD, older men).	

Early child marriage and health		
	MEN	WOMEN
INTERVIEWS	"…I think one of the main issues is forced child marriage this affects the children and the whole community. People still think that their girls are the source of income generating activities; they sell them out as soon as somebody proposes enough money or cows. This is a real concern because it affects not only the body of a girl and leads to many complications during delivery or even death of the child, it affects also the mind of a child. In many cases this is a form of slavery and abuse that comes with it in terms of reproductive health and mental health of a child. It might be as bad as any attack that children have lived through" (Key informant aged 26).	"…To marry early is not good for the health of the girls, they go to the hospital frequently and have lower body pains. Some die during delivery. If you marry early you can have many children, this is a good thing in our culture but it is also dangerous for the women. What can you do as long as not many children survive you need to have more children" (Woman aged 23).
	"…It is almost a must for the girl to stay at the home of her parents and deliver the first child in the house of her parents. The reason behind is that the girl will be at an early age. Nuer believe that when the girl is at delivery stage there are many complications […]. They do not want to make all these problems to the in-laws so they better keep her at their house with the mother so the mother will protect the in-laws from all these stories" (Man, aged 26).	"…In the old age, people married at the age of 18 and above, this is when people got married at the time. But during the war, most of the men died in the attack. You see, girls are hungry for men, at the age of 14-15 they are competing with men. Some even go to men without permission. Girls go to men places and as a parent may be you advise her not to do that, but she is angry with you and this things may also be contributing to early girl marriage", (Woman aged 52).
	"…people believe in traditional birth attendants. There are almost two birth attendant for 10 women. What they know is just how to catch the baby. The women do not go to the hospital because they feel not well taken care off. At the hospital they are rushed to deliver, they also feel that they are humiliated by the nurses, but at home they have time and the birth attendants are very patient. The ladies have more trust in the birth attendants than in those working at the hospital. This is the problem I see when it comes to delivery", (Man, aged 21)	"…I was married at the age of 14. I was still young and wanted to complete the school first but my parents were poor and I could not refuse for a long time because they needed the cows and I was beaten by the community and the family until I agreed. I dropped out of school and I cannot write my name", (Woman aged 23).
	"…We did not know about this before but this new people [returnees from Kenya, Ethiopia] are teaching us. Otherwise we people as Nuer we only count on the first menstruation sickle that if the girl has the first menstruation sickle she is ready to be married. This is how we understand; if you are in sickle you are mature. But now because of the people coming in from Ethiopia and Kenya and also organisations we learn that the body of a woman is not ready to be married and that there is a problem during delivery because of this. We try to acquire knowledge from the people who come from abroad and travel in Africa" (Man, aged 29).	"…Many girls are dying and many face problems during pregnancy. Some are even for long without getting children because of all the problems in the stomach and women's issues […]. Most women are uneducated and do not go to the hospital for delivery, even for educated people the hospital is not a good place to deliver. The people are not patient and some are not friendly. The woman is rushed to deliver fast; if not she will be cut open. Most of them believe in delivering at home (Woman aged 20).

5.1.5.3. Mental health

Mental ill-health was almost exclusively seen by adults as related to the violence committed by fighters of rival tribes. Respondents stated that attacks could result in death, 'injuries of the body' or 'injuries of the mind'. Depending on its severity, the latter could take a long time to heal because 'nobody could help'. Adults often stated

'there is no medicine for what we have'. 'Injuries of the body' were often described as severe because the enemy always tried 'to finish them off' but in that case people felt that there was help at the hospital.

The Nyandit and the Mareng attack were still present in people's minds at the time of data collection. Many recounted their experiences. Witnessing the murder or mutilation of loved ones was identified by the respondents as the main reason for 'injuries of the mind', but witnessing the collapse of their social world within a short space of time was also blamed for 'injuries of the mind'. Children were seen to be more affected by the former, whereas adults reported to suffered more from the latter.

Symptoms such as sudden aggression, anxiety, 'madness' or flashbacks were attributed to the massacres themselves and people described, how 'everything that moved' was directly targeted. Flashbacks were described and observed in children only. Respondents indicated that children suddenly ran away and that adults were unable to call them back. When they returned after some time, they described that they had seen the enemy attacking again and so they just tried to run and hide.

Symptoms such as recurrent nightmares about burning houses, inability or unwillingness to talk, sudden lack of interest or crying frequently were described as related to the destruction of their way of life and were seen to affect adults more than children. Overall, the respondents were not sure whether adults suffered more from mental trauma than children, but adults pointed out that the children were more resilient because they were able to forget what had happened to them something adults were reportedly not capable of 'they would never forget'. Respondents generally pointed out that they did not know what kind of illness or disability somebody had since they were not educated and therefore did not have knowledge about the diseases. However, people described what they observed and listed many symptoms that belonged to a particular illness. The following symptoms and behaviour change, shown in Table 5.7, were attributed to mental ill health:

Table 5.7: Behavioural changes of children described by adults

Behavioural changes
○ Emotional outbursts such as sudden aggression or frequent crying.
○ Sudden inability to talk and withdrawal.
○ Lack of appetite.
○ Recurrent nightmares, screaming at night.
○ Great agitation for no obvious reason, inability to calm down.
○ Running away because the enemy is perceived as coming, even when there is no enemy around.
○ Apathy.
○ Sudden unconsciousness when reminded of the event.
○ No reaction when spoken to, despite being conscious and having eyes open.
○ Strong headaches and stomach pains when the mind speaks through the body because of what has happened.
○ Madness. Have no idea of what they are saying or doing.
○ Great fear and great sadness, different from how they were before.
○ Loss of creativity because the mind is preoccupied by the bad event.
○ Difficulties concentrating on the task.
○ Easily exhausted, no energy, falling asleep during the day.

Not all headaches were associated with mental trauma, but those triggered by bad memories (strong headaches or stomach pains when the mind speaks through the body because of what has happened) were. Headache as a result of the heavy loads women and girls had to carry and headache caused by a high body temperature such as in malaria were distinguished and perceived as unrelated to 'injuries of the mind'.

The effect of mental disorders on children's lives was seen by the respondents as something that would heal in time because 'unlike adults, children were able to forget'. After decades of war and violence, most people were reportedly used to 'being traumatised' and to witnessing 'strange behaviour' as a result. Several adult respondents had been former child soldiers and mentioned that nothing in terms of atrocities and suffering was new to them. Many said that the children of today were

not the first to have experienced violence in all its forms, including the loss of their parents, and that they were unlikely to be the last.

Several adult respondents saw young age as an advantage when handling a bad situation and reported from their own experiences during the north- south war when they had been young.

> *"…You know, I think to be young is the best thing that can happen in such a situation, because you don't get most of the things that are happening around you and you easily forget them. You are far more preoccupied with yourself. It is the details and most of the emotional parts involved that you don't get. From my experience as a young child, as long as you have your parents you are fine. I went through everything I was hungry, thirsty, sick and weak, I had no shelter in the rainy season and I was wet for months. I thought more than once that I would die. But as long as I had my parents, things were somehow ok […].I think it is much harder for them [older children] because they connect more at the time they experience trauma. It is like they remain with all the details and find it hard to forget them or they come back if you see something that reminds you of something from the past" (Man aged 28, Interview code KI08, Akobo town).*

Younger age of children was seen as an important protective factor in developing mental health disorders resulting from the attacks. It was believed that younger children had better chances to 'heal' than older children and a better ability to 'forget' the traumatic experiences.

> *"..Older children suffer more from mental problems because they knew what was happening in the massacres and can remember all the details. The small children were taken by parents or older siblings so that they were not alone but older children that could not be carried were lost and had to run on their own. It will take time for them to forget. Adults have their own problems as a result of the violence and cannot help the children a lot with what they have witnessed. But some relationship have also improved because parents were very happy when the child returned and was not dead or abducted" (Old woman FGD code RF13, Akobo)*

Additional quotes from adult respondents related to child mental health are presented in Table 5.8.

Table 5.8: Quotes on child mental health, risk and protective factors

	Mental health	
	MEN	**WOMEN**
FGD's	"… Our children are raised to be strong survivors and they can handle difficulties. But the attacks affected them and some have dreams and suffer from things that are hard to explain, we have little knowledge and do not know many diseases but some children have mental difficulties and cry a lot or run off for no good reason. The slaying was horrible and many of us watched the killing of others also the children, but children can forget what they have seen, adults will never forget" (FGD young men).	"…Life here is not friendly to children because with all these attacks men were killed, than you were alone with the mother. Some are brought up by mothers. It is also very hard for mothers as a bread winner. Some are left with their father only which is a terrible one because fathers all the time they do not know how to take care of children. Then your father may ask for another wife and the child will live with the step mother who will become horrible to the child. Some children are without mothers and fathers and life is terrible to them. This is the situation here. Many children are suffering from mental trauma…. it is the killing… but not only" (FGD young women).
	"…Not everyone can handle well the big loss and the horrors of the massacres and when I am depressed there is no medicine for what I have. Some women cannot take care of their children anymore and children get sick because they are neglected. Men do not know how to take care of children. Once they are older [the children] they can take care of themselves and younger siblings. But some of them would also need counselling to help them forget the traumatic experiences. These kinds of services are not available at the hospital […]. Our children are very strong, but not all of them are and some need help" (FGD young men)	"…Things have to change because many adults are depressed and it is hard for them to take care of their children and to make a new living. The scarcity of livestock is a problem and people's minds are not well anymore. This makes us weak and we cannot afford to be weak. I am still happy that God has saved me and my husband and all of my children. This gives me some strength so that I do not think of killing myself" (FGD young women).
	"… I think this is not the first time this happens. You know some of these children, the parents are dead and they are not the first one there are many of them, also several years back. But what happens, you do not stay alone you have to find someone and talk to that person, or join a group. You do activities, you do counselling and after a while it will take your mind away from what has happened so that you can start as a new person. This worked for me and it will also help the children. I believe that people will go back to Nyandit where all this has happened, because at the end what counts is being together with the people you are used to and not be alone scattered all over Akobo town" (FGD young men).	"…The children come together and play and talk together and the child after some time forgets totally what has happened. This is good in children. Adults cannot forget what has happened and it will remain with them until they die […]. Education is also very helpful if a child goes to school it will concentrate on what the teacher teaches and can forget all the bad things" (FGD older women).
	"…The children have many health problems, but we cannot tell what they are, we are not trained and only know the signs, but the children have a lot of headache, some children have changed their behaviour since the attack and many are very much afraid, it is like a disease" (FGD old men).	".. Many children have mental injuries for what they have witnessed and from the danger of being killed if they are sent to the forest; forced child marriage can be as bad as being killed by the Murle for the mind of a child" (FGD older women).
	"…They run around and are careless, anything can happen. When they go for wild fruit or firewood they are in danger from the Murle and wild animals. But when the children are hungry they do not care and just go, sometimes they do not return. Sometimes they are different in their minds" (FGD old men).	

Mental health		
	MEN	**WOMEN**
INTERVIEWS	"…In some cases children are traumatised by attacks, some of them their mother was killed while they were present. Some had gunshot wounds, some were held at gunpoint, and some had to hide under dead bodies. There are a lot of mental health problems here. Some children get mad, some get like paralysed, others don't know what they are saying or doing" (Man aged 29).	"…It is all the same whether you are young or old, we have weak blood and suffer from the weakness of the mind because of all the killing and because we have lost everything and the people fight each other. Children, middle age and old people; there is no good health at all, no energy at all. Children do not eat good food, not like before. Before we were energetic people but now the body and the mind, even of the children, and even of the young men, they do not perform like before. People are weak and this is why there is no health. Even if I keep things in a place I cannot find them anymore, I lose my memory this is how weak I am. This is also because every morning at any minute there is bad news, there is no good food and the conflict is not over, it is there at all the time. There is this violence, this is what influences children's minds and makes them scared a lot" (Woman aged 70).
	"…As for me I am someone who beliefs in sports, sports has helped me to resolve some of my problems and I know it can be good for children, also the ones who were traumatised and have seen their loved ones die in attacks" (Man aged 21).	"…Early child marriage is what makes girls very depressed it is a lot of abuse like rape and forced labour" (Woman aged 20).
	"…There is the clever, there is the medium and there is the ones who may not understand. And you can not only work with the clever, you have to bring the others up so that all children can follow. The children with mental problems may have to repeat until they can move to the next level. At the end you have to bring up all of them. This is what we try, not to leave children behind […] If you want them [children with mental problems] to be with you; if you want them to love you, you do not make yourself important. Then they will come close to you and will tell you all the secrets and you learn from them so that you can do the right thing" (Man, aged 58).	"… I saw so many people being killed during the attack in Nyandit and some people even burned in their houses. We ran to the river, I have small children, we took them and left, we crossed the river, the water was not deep and the Murle came from all the sides, it was dark I could not see well, all the children are small, we kept them with us, everything was burning people were running I could not see well, the attack was early, we just run, there was no time to take things with us […]. I was raised to be strong this is how I survive. We learn to be strong in our home this is what we learn from our parents. I can survive without water and food for a long time. All the girls are strong and this is why we do not go mad after the horrible events (Woman aged 23).
	" … For the children there are many who got mad because of too much violence and some hide and do not talk". (Man, aged 72).	".. For the life of this generation to be changed is a process and the first process they can try and invest in is to put these children into schools so that they can change as they learn, they can heal mentally and will be better prepared for another world, not the world they are in now. The life before was good, now it is like that and it is not possible to go back, so they go into a modern life. Things can be better for them and they can have a brighter future for themselves. This is the only thing that can make their health and their lives better" (Woman aged 52).

5.1.6. Children's health risks related to 'blood strength'

Further health threats to children from the adults' point of view were the lack of proper housing which exposed them to heat, dust, overcrowding and heavy rains in the rainy season. Such living conditions, together with 'bad food' were largely seen as the main reason why children nowadays had 'weak blood'. Adults indicated that they were therefore more prone to contract illnesses such as malaria, diarrhoea, vomiting and other diseases and had less strength to recover (Table 5.10).

It was frequently mentioned that 'children had malaria all the time'. The respondents reported that 'weak blood' was not a good precondition for children's health in general and for malaria in particular. Women and children were considered as having naturally less strong blood than men and being frightened could also change blood strength temporarily.

> *"…It depends. It depends on their age. For the younger children, diarrhoea and vomiting is a big problem because of overcrowding, the hygiene is very bad and children are not supervised. Young boys spend their days at the riverbank and drink bad water. Also mothers are very much overwhelmed with their workload so that children are neglected and get sick because of this neglect. Malaria is also a problem, but for all the children because of blood strength and because the parasite can easily move in weak blood and can even go up to the brain" (Old woman FGD code RF13, Akobo town).*

It was believed that if a person's blood was strong, the parasite could be more easily combated, but if a person's blood was weak, the parasite could move inside the body freely and go to the stomach provoking severe pain and vomiting. If malaria was not treated at this stage, the parasite continued spreading through the blood until it reached the brain. In such cases, the child was severely affected with consequent convulsions, unconsciousness or even death. The combination of physical and mental weaknesses was seen as very dangerous for it created weak blood and made people prone to contract malaria and other illnesses.

> *"…The slaying was horrible and many of us watched the killing of others also the children, but children can forget what they have seen, adults will never forget. These problems and also bad thoughts can weaken the blood and children can easily contract other diseases like malaria because the parasite can move freely in weak blood and go to the stomach to make children vomit and if there is no treatment it can move on to the brain and then a child may*

even die. This place [Nyandit] is much better for the health of the children than Akobo town" (Man aged 20, FGD code DF10, Nyandit).

Despite ongoing malaria prevention in Nyandit and Bilkey Payams and the population-wide distribution of impregnated mosquito nets, only few adult respondents were familiar with the mosquito – malaria link. The great majority of the respondents was convinced that the parasites entered the blood by other means. The parasite could, for example, enter the blood if a child was left on the cold ground, exposed to contaminated water, weather change, strong heat or cold rain.

The use of impregnated bed-nets was not well understood by adult respondents and a great number of impregnated bed-nets was cut into thin strips and used as ropes in construction (Figure 5.9).

Figure 5.9: The use of impregnated mosquito nets (Source: Author).

Table 5.10: Quotes on general health threats for children

	General health threats and underlying causes	
	MEN	**WOMEN**
FGD's	"…In terms of what affects the boy child this is marking. The marking of the forehead of the child is now dangerous because of HIV/AIDS and other kind of diseases like infections. This can be very dangerous because the Nuer say that there is no AIDS in this place" (FGD young men).	"…We suffer from weakness of the blood and the overcrowding is not good for us it makes everybody sick but here [back in Nyandit] we have space and this is good for children's health" (FGD young women).
	"…I cannot see anything that can be harmful to them. The work of the boys is simple without cows so nothing bad can happen. But it is the work of girls that I think is a little bit harmful" (FGD young men).	"…Here in this place, it is very crowded. There are many people and many cannot return. There is more disease in this place than in Nyandit, people are too close together. Also children are not being taken care of by the family" (FGD young women).
	"…Exactly, because they are tired and weak without good food. When I see my child and see that he is hungry, I will go and find something for him and may leave the child alone […] than the child gets out and may be hit by a car on the street. Until the government is not looking for more security the children will not be safe" (FGD young men).	"…Small children have diarrhoea, there is coughing and also eye problems. Older children have few health problems. Malaria is what can affect everyone" (FGD older women).
	"…Children are very careless and accidents can always happen with fire […]. Sometimes when the river is high in the rainy season children can drown. But the dangers in the forest, they just happen and we cannot help. They happen to children and adults. But we have no other choice than to go there" (FGD, older men).	"…A man came to Akobo; he is an artist and made a song about HIV. The boys are now refusing to be cut with the same blade during initiation because of the disease that may spread through blood. I am not convinced that this is a serious health problem, we don't know much about the disease. Also we are not educated and we do not know much about diseases and cannot tell the symptoms" (FGD young women).
	"…The children have many health problems, but we cannot tell what they are, we are not trained and only know the signs. People live too close together in Akobo because of the high population it is congested in this place; this is what makes children sick" (FGD older men).	"… Children have diarrhoea and vomiting, they have no appetite and some have fever" (FGD older women).
	"…It is also that many children that are more than five years old are often on the street and there can be accidents with all the vehicles that have arrived since the beginning of the dry season. The children are not supervised. They go to the market or the river and when they are in these places they drink river water; this is not good for them" (FGD older men)	"… When you drink milk it gives you a lot of energy, but now the cows are taken by Murle and this is also why women are malnourished and have little blood. Children get diarrhoea and malaria because the food is not there. Some suffer from malnutrition because they are sick all the time and cannot eat", (FGD older women)

General health threats and underlying causes		
	MEN	**WOMEN**
INTERVIEWS	"…Food and nutrition is a problem that affects health but also bad sanitation, many children are sick and weak because of frequent diarrhoea and lack of food. Some parents do not teach their children or do not know themselves why the children get diarrhoea but there is no supervision and the children drink water from the river and have no personal hygiene. The children are very dirty and you can see that flies are everywhere on the children. Also some children were not given the vaccines and they can get sick" (Man, aged 23).	"…The main problems are diarrhoea, vomiting, malaria, and cough. Older children and adults have malaria, this is frequent. Injuries are also common and wounds. Children are careless and even with their daily activity they can have injuries or burns with charcoal. They can carry buckets and hurt themselves because it is heavy" (Woman aged 20).
	"…The biggest threat is malaria and for smaller children diarrhoea and cough" (Man, aged 20).	"…There is also lots of diarrhoea and vomiting and also malaria but now it is less. These are the main dangers as I see it. Diarrhoea is often because children spend a lot of time in the river and drink river water. Some families even do not want to wait at the borehole and fetch water from the river for drinking" (Woman aged 20).
	"…Nutrition is one problem, than I have seen already some diseases. Many children are unsupervised and the result is diarrhoea and vomiting because the children put their dirty fingers in their mouth and most of the children are full of flies" (Man, aged 21).	"… The main problem is that once the child is over the age of five, nobody supervises the child anymore and the child is responsible for personal hygiene, the water it will drink and were to get food. The only meal that is provided for older children is in the evening. For the rest of the day the chid has to find something to eat someplace else. This means that children suffer from poor hygiene and often drink river water. This can cause skin disease, diarrhoea, malaria, cholera and so on. The children also often get wounded through thorns when they go for wild fruits of for firewood and also burns happen rather frequently […]. If a child get sick it usually takes a long time until the parent realise that the child is sick and bring the child rather late" (Woman aged 54).
	"…This depends on the environment many children are affected by bad sanitation because the parents do not watch the child and do not care of the environment. Despite the water supply through boreholes many people have bad water, some take it out from the river, but now in the dry season, when the water is low there is a lot of contamination and so diarrhoea is a real problem. We even had cholera in this place. Then of course malaria is always there but more during the rainy season" (Man, aged 40).	".. They [the parents] feel not responsible for many things. The children can get injured on the street and they defecate everywhere, many children have no personal hygiene and drink water from the river, in a crowded place like this, this is very dangerous and many children have diarrhoea or dysentery or even cholera can happen […]. Children drown in the river during the rainy season. If there is no witness, the parents my think the child is abducted by a Murle and not even search for the child. Many parents do not know where the boys are during the day and the boys are very careless. How can you teach a child if you are not with the child"? (Woman aged 23).

5.1.7. Children's rights, roles and responsibilities

According to the adult respondents, the traditional role and the main purpose of a girl was to increase cattle wealth for the family through marriage. The role of the boys was to protect the family and the family assets. People were reluctant to talk about the subject of 'protection' because protection implied violence and the use of arms. The disarmament had just taken place in Akobo County and nobody was therefore supposed to have weapons. Even members of the White Army, a former militia group often joined by young people, claimed that all weapons were handed in. This was unlikely to be the case since local violence continued. It was also observed that most hunted antelopes as well as other wild animals continued dying of bullet wounds.

People revealed that before the disarmament boys generally received their first weapon when they were initiated into adulthood between the age of thirteen and fifteen. Weapons were meant to protect the family assets but they were also used to acquire more assets through cattle rustling. Once the boys were initiated, they were seen as mature. It was the traditional role of the boys to be introduced to weapons and to learn how to use them.

Even though children had many responsibilities and had to make decisions affecting their health and the health of others every day, most adults stated that in their culture, children had no rights and only men decided 'important things' such as when to sell a cow or a goat and how to solve problems. At the same time, it was also mentioned that such customs were about to change because many new ideas were brought in by the Lou Nuer returnees from exile, but change was seen to be very slow. At the time, children were perceived to have 'no rights', apart from receiving one meal a day and being with their parents and relatives.

The main concern of many respondents was that children would be more difficult to control if they had more rights. Parental control and obedience of their children was important to many adults. This was particularly true for tasks that were highly dangerous, but perceived as necessary in order to survive.

> *"… The child has no rights, even if you tell a child to go out for food, they rather want to stay at home, they want more food at home and this is why the mother has to force the child to go out and look for food elsewhere. Children need*

people who can direct them, what to do and what not to do". (Older men, FGD code DF07, Nyandit).

5.1.8. Cultural change and the role of children in decision making

That children had few rights, was understood as a means of controlling them and not as a lack of trust in their capabilities. Outside domestic chores, children were allowed to decide on matters that concerned them; for example whether they wanted to participate in this research or not.

The majority of the caregivers felt that their consent was unnecessary because the children were perceived as mature enough and able to decide themselves whether they wanted to participate or not. Thus, it often required considerable skill to explain to the parents and caregivers that their consent was absolutely necessary in addition to the assent of a child.

The word 'change' was omnipresent in all transcripts. Not only adult community members, but also children talked about change, which was seen as crucial for a better and more peaceful future[8]. The great majority of the adult respondents felt that their life had reached an impasse and many were open for new ideas and suggestions to escape poverty. Independence through education was not only promoted by the Lou Nuer returnees, but also by the Commissioner, a returnee himself, whose family had remained in the USA. Since these people were highly respected, many felt that they should listen to what they had to say.

The new idea, that 'change' was a necessity for the future of the Lou Nuer, also challenged the attitudes and beliefs of adults with regard to children's rights and child participation. Many respondents wondered about the consequences if children were better educated and informed. The attitude of the people can best be described as cautious, but open to the 'new ideas' because they came from 'their

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[8] It was noted by looking at the expressions used in Nuer language that "change" had not the same meaning for adults and for children. Children often used a word that can be translated from Nuer into English with "arrival". It was used to describe the ability to change an environment by moving ahead or by catching up with something and eventually "arrive in a better place". Change for children was motivated by the feeling that change in itself was a good development and would inevitably lead to a positive outcome. Adults, however, often used a word to express "change" that can be translated into "separating", "splitting apart" or "moving away" from how it was before. Change was seen as an externally motivated process that either way would lead into separation. Change for adults was generally seen as something forced on them by decades of warfare and the current circumstances with an uncertain outcome.

own people'. Many also realised that the returnees were able to 'provide for themselves' and their families because of their education.

> *"…I think children have no rights but some think children have the right for one meal a day. The Nuer coming back from Kenya and Ethiopia tell us that children have rights. For example that even adults should listen to children and that there are rights for education and rights for proper health. When we have basic services and enough food then the children will be educated and informed, even more than adults. When the time comes we should listen to the ideas of the children and then we can still decide what the best solution is". (Older man, FGD code DF_07, Nyandit).*

> *"…Adults tell children what to do and children have to be obedient. But children have ideas and if they can present a case [convince with arguments] adults should listen. This may help the children if adults listen. Many Lou Nuer came back from Ethiopia and Kenya and have new ideas. Life is changing and new ideas can be discussed". (Woman aged 72, Interview code RI06, Akobo).*

Adult respondents reported that their children could be very persistent if something was important to them. For example, girls who attended school tried to convince their parents to let them finish education before marriage.

> *"… If a girl refused to be married, the parents would force her by all means. They would beat her until she accepted, but now things are changing. If a girl refuses to be married because she is learning, the parents can accept because they also need to learn that for the young girl there will be only 20-30 cows but educated girls will go beyond that; it will go up to 50 or 100 cows because she is educated". (Young woman, FGD code RF05, Akobo).*

Many parents felt under pressure from their own children to 'release' them to attend school. They reported that children often did not give in despite beatings. Adults generally saw education as important for boys and girls, but because there were domestic chores to be performed, it was more difficult to 'release' a girl.

Decision making at the household level was not seen as the role of children. It was the domain of the man, the head of household. Yet adults were aware that in children's daily lives, most activities were unsupervised and there was often nobody to ask for guidance and acknowledged that children thus had to make decisions affecting their lives and the lives of loved ones every day. They had to decide where

to find food and clean drinking water, how to earn money, how to cope with past experiences and how to confront abuse and rejection by the community. They had to decide which health related resources to use and how to find protection and safety. Further quotes on children's rights, roles and responsibilities are presented in Table 5.11.

Table 5.11: Quotes on children's rights, roles and responsibilities

Children's rights, roles and responsibilities		
	MEN	**WOMEN**
FGD's	"…When they are educated we should also consider their views but it will also be good for us to be educated first. My brother came back from Kakuma refugee camp and tells that children can even have rights. For example the right to health and education but this is difficult for adults. Even to let children participate in family meetings is something new to our cultural beliefs. Save the Children told us about children's health needs and the issues to be addressed. This is very new but we also know that something has to change for a better life and to stop the killings that make our life impossible. May be the view of children should be considered" (FGD young men).	"…There is change now and everybody needs to be educated first. Since I have arrived here in Akobo town people talk that education is life and this is important for girls and boys. Adults also should be educated even women. I do not want to have my children marry when they are not ready they may be not as strong as we are because of what you have to endure, but there will be peace and it will be like in Kenya where there are other ways of life and people can provide for themselves because they can earn money. I have a good husband and there is adult education in Akobo we can go there and be more informed and make decisions different from before" (FGD young women).
	"… Children observe well and are responsible for others. They do know what is good for them and what is not good for them" (FGD young men).	"…Girls can milk the cow and help with the tukuls, they can also go for firewood and clean the houses and outside. Girls can also catch fish and sell it on the market. When a girl is 12 years old, she knows everything and can be given away to a husband when she is 14 or 15" (FGD young women).
	"…The girls are proud if they are chosen to be married. But this is only because they are so much influenced by their mothers who tell the child that they were also married at an early age and that something is wrong with girls who do not marry early. The whole community will try to influence this until the girl beliefs herself that something is wrong if she is not married" (FGD young men).	"…There are many new ideas coming from the people who returned from abroad and some say that children have rights, but I don't know what they are. I think children have no rights because what matters is to be obedient to their parents. If children have rights they become difficult to control and we cannot raise them in a good way. Adult cannot protect children if attacks come. When the attack came people just run. I did not know which direction to take when the shots were fired. I lost sight of my children, I grabbed the smallest one and run with the crowd. Children have to be able to take care of themselves or else they will not survive in situations like that. This is why children cannot have rights as long as there is no security" (FGD young women).
	"…We trust our children a lot and give them many responsibilities. Girls do cooking and go for firewood, fetch water and prepare or dry fish, they look for small children and go for wild fruits. Children participate a lot. They grow up fast. Girls can start to do all this when they are 6 years old by the age of 15 they can do everything and the girls can get married" (FGD older men).	"…It is not in our culture for children to express themselves. For children that have been in town it is a different issue. Many young people came back educated and have different ideas. I do think that children can make suggestions but adults can or cannot listen. It is up to them. It also depends on the issue" (FGD young women).
	"…The boys do fishing, cut trees and help with the building of the tukuls, they can help with the roofs. Children can work very hard and the boys get stronger. These are the responsibilities of the children" (FGD old men).	"…It depends of the family; some consult children but not many. Mostly children are not consulted. Children are not taken into consideration. It depends on the age, if the child can make a case than she might be considered" (FGD young women).

Children's rights, roles and responsibilities		
	MEN	**WOMEN**
INTERVIEWS	"…I think there is a good relationship in general between adults and children even if the children are raised in a very strict way; they have not many rights […]. The right of the child is to be with their parents and their relatives" (Man aged 23).	"…Boys become adults at the age of 16. Sometimes they can be younger, it depends on initiation, this can be at the age of between 14 and 16. After initiation boys can get guns and some join the White Army. They are trained by the leaders to protect the family and the clan. The boys do farming, look after cattle and go to school. Girls go to school not often and only in the town, not in the village […]. The girls have to learn how to become responsible for the household and for the children. They do the cooking; younger girls can cook only for the small children. They can grind and fetch water. When a child is six years old it helps in the house" (Woman aged 20).
	"…All the children from the age of 6 years are taking over adult responsibilities they are introduced to the tasks very early and it takes a lot of time away from a child. In the early times this was true for boys and girls. The life of a boy was determined by the cattle. Boys were looking after the calf of the cow or collecting cow dung for the huts. They are the ones who go to cattle camp to look after the cows; this is still ongoing for the people who have not lost the cattle. But when it comes to the girls these are the ones who are collecting water from the pond or river. They cook for the smaller children they are also the ones milking the cow. For example if you go to cattle camp, the girl will go with the brother and some other relatives to cattle camp. But the girls are the ones who are taking care of everyone. There is work for the girls that boys cannot touch and there is work for the boys that girls cannot touch" (Man, aged 26).	"…I do not think this [giving children more rights] is a good thing if this happens now in our situation. But when education comes for adults and the children this can change. Children are critical and observe what is going on so that they can contribute something. There are matters in children's day to day life that concern's them and there are matters that do not concern them. We have to distinguish the two" (Woman aged 21).
	"…When you have children, they are very creative unless the child has a mental problem that may hinder the child to develop. But if the child does not have this, it is very active, it can understand very quickly and it can create things that you even did not think about. Children have a great capacity of creating things, they have ideas and try to find out how they can realise this ideas" (Man, aged 58).	"…The children have no rights and if the parent sends them to get wild fruits they cannot say that they are afraid and just leave, the same is for early marriage, if you refuse you will be beaten until you agree" (Woman aged 23).
	"…Children if they work together, play together, share ideas they can forget what has happened. Our children have many abilities and are strong" (Man, aged 42).	"…The girls have to do what we tell them to do. (Woman aged 30).

5.1.9. Child participation

The great majority of the respondents were open to child participation in health programming provided it was not too time-consuming and caregivers were asked for permission beforehand. Respondents stated that children were often more sceptical than adults about the services provided by NGOs. It was therefore concluded that it would be better to ask children in order to improve the situation.

In addition adults perceived that children, if appropriately facilitated, were much better equipped than adults to help other children. The reasoning was that children would only listen to adults because they had to, but children would listen to other children freely and this would have a much better impact. This was mentioned several times in relation to helping children under mental distress to overcome their difficulties.

Within their own families however, few children were allowed to attend family meetings and many respondents feared that children burdened with such 'inappropriate responsibilities' would become disrespectful.

Children's participation at the organisational level, referred to as 'external' child participation, was largely perceived as a positive development for the benefit of the community. 'Internal' participation of children at the family and community level raised a number of concerns as children could become more powerful if they knew about their rights. Listening to children and respecting their views within the family was far from being accepted as practical, but for service providers to engage with children at a local level and to enable children to take part in decision making was not perceived as a threat and was largely accepted.

> *"…I am very sure that children can do something good for the future and it is important to start integrating them somehow in the adult world and find out what they see, think, want and can achieve by themselves. All you need is someone good to guide and support them. Children are not as self-centred as adults, they observe and are open to what happens around them, this is because children are so curious and want to know and to see everything. If there is someone trustworthy to guide them, for example a coach or a teacher, it will be accepted by the community." (Man aged 20, Interview code KI09).*

Additional quotes on the adult perception of children's participation are presented in Table 5.12.

Table 5.12: Quotes on the adult perception of children's participation

Children's participation		
	MEN	**WOMEN**
FGD's	"…Children are very strong when they are in groups. When children are together with adults they are very shy and are not able to talk. But when they are among themselves the children talk and even in mixed groups the girls talk as much as the boys. This is the moment when they speak out what they have in their mind" (FGD young men).	"…Children can do a lot and are very critical. Children have ideas that can be addressed by NGO's" (FGD young women).
	"…There will be change in some years but not this year only little by little […]. Also at the time children have nothing to say, they have no rights. But here in the town there is a little bit change and it also depends on the family but in the villages children have nobody to address their issues or to say what they like or don't like. But in the town…… I know of some children that argued for not being married and instead went to school and succeeded. What I can say is that this is also because of education because if you go to school now you can see so many girls and also mothers, so people are informed. As long as you are not informed, what can you do? There will be change because so many young girls go to school and so many ladies" (FGD young men).	"…Children can help other children because there is trust among them many children are traumatised after what has happened, but children can help other children who are mentally not well and talk to them so that they stay together and do not withdraw and stop talking. This is very important. Our children are very strong because we raise them to be that way. At times adults give up because it is too much to handle, how long can you live without peace and security in your own country? The children have more strength left than adult" (FGD young women).
	"…The girls can go to the mother and the boys can go to the father for advice. It depends on the family some families have a good relationship and others have many problems. If the family is well taken care of by the father, the children can participate and talk to the parents" (FGD older men).	"…If peace comes and people have opportunities and can earn money and there are roads that trade can start all this will be different. But as it is now children's opinions can only make a difference at the level of NGO's if they can help and address what is important for children because even if we know what is important to the children we cannot do anything as it is now" (FGD young women).
	"…For children to go in groups is a new thought of doing things. This was not a common thing in our culture. But for children to solve their problems within the community when they are in groups may help a lot" (FGD young men).	
	"…There is also the school that can help children and the parent teacher association. There are also children's clubs that are formed by Save the Children and children learn how to be strong and address things in a good way. The children and also the mothers and fathers of the children are having workshops and both sides talk about the rights of the children. If the community is informed they let children go to such places. If there is supervision and the community trusts the leader than this is a very good thing for children and adults. Everybody wants to learn new things so that they are better prepared for the future" (FGD older men).	"…Education is the only way. I think this is important for all the children also boys and girls and not only for children for adults as well. This is what we need most of all so that we can be informed […]. It will take time to become educated but if there is peace we can all learn to write and to read. For the children if they can go to school, they can encourage their children to do the same and it will grow bigger and bigger until even everybody is educated and can provide for the family even if there is no cattle, there can be other ways. This is what our children can do for the future" (FGD older women).

Children's participation		
	MEN	**WOMEN**
INTERVIEWS	"…Children are stronger when they are together but it has to be initiated and the parents have to agree. Children in groups need to be organised with a leader and need to know their responsibilities. Men are the leaders at the household level, the one to decide and say yes or no" (Man, aged 20).	"…Children know a lot of things and observe what is going on they should be helped to say what they experience, otherwise adults think that something they do is what the child wants but the child is only manipulated by adults to say what the child knows adults want to hear. Even children without education can have good ideas and when education comes children will learn about many things and will be encouraged to tell adults about it. This will come little by little, but it has already started as we speak" (Woman aged 20).
	"…Children should be able to participate and the directives can still come from the adults. I think this will change in the future and it will be like in other more advanced African countries like Kenya or Ethiopia. With education children will be better informed and can talk about what they think is god and bad for them. The parents can still decide at the end but it is not good that children cannot even talk about the experiences they make" (Man, aged 23).	"… The children have to convince the mother and the father. The mother can make the suggestions if she thinks the girl should go to school and can see how it can be organised, but the father is the person who takes the decision. The men are the ones who decide", (Woman aged 23).
	"…At the moment is a good time for children, if they are in an organised group and know their rights and the right way to address what is important to them, they are very likely to be listened to but they have to learn to make an argument" (Man, aged 26).	
	"…It is a good idea to have interventions somewhere for these children. We do not know what can be done and how because we are not educated. But if somebody could come and teach us about what can help we can learn from them. In that case humans can help humans. What I mean is that the children listen to adults because they have to it's the culture; but children listen to children freely. If they are trained they can better help each other. Somebody from outside can also help the children because they listen freely to people from the outside" (Man, aged 29).	"…Most people believe that a child participating in household activities is everything a child can do to participate. My husband says that this is not true. Children can also be a part of other activities that can also ask for the opinion of children. For example in family meetings. Children have a very difficult life and many are unhappy because they want their life to be different. Unless you have an educated husband, early child marriage is a big problem and very bad for a girl's life and her health; beatings are all the time and the parents of the girl have no means to protect her if she moves to the house of the husband. My husband is educated and this is the reason that I am happy and not scared for my future even though I am not educated. I understand that it is good for children to participate in family meeting there are many bad things for children happening at the family level that can change" (Woman aged 23).
	"…What we are thinking is if in Sudan there is security and plenty of food and education than we can change this and the children will be allowed to be stronger. If there is development everything else will follow" (Man, aged 32).	

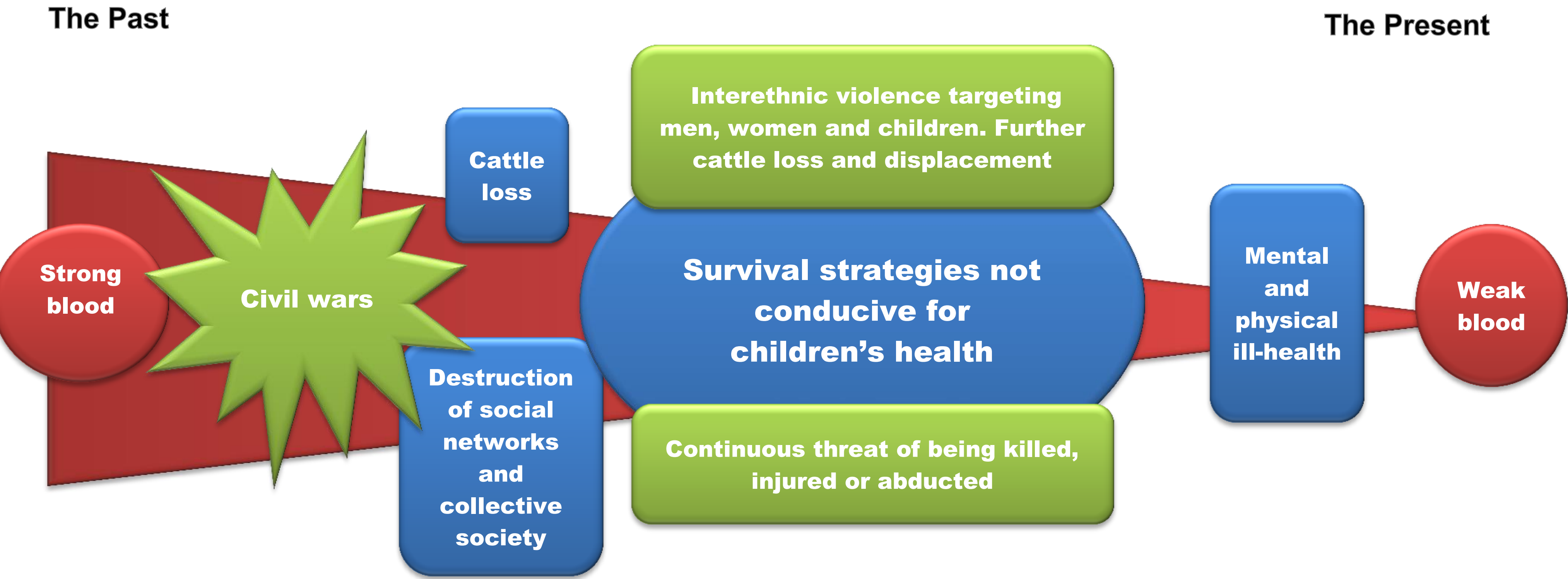
5.1.10. Historical timeline and blood strength

The concept of ‘blood strength’ did not only indicate to what extent people were prone to contract illnesses and whether or not they were able to recover from diseases, it also defined the historical timeline and the timeline from the present to the future. Adult community members illustrated how the major events in their past have contributed to the decay in blood strength and why their society had moved from being wealthy and independent in the past to being poor and dependent at present. Education was largely seen as the most important factor to reverse the process in the future.

The decades of civil war showed a major negative impact. Also most survival strategies, which developed as a consequence, contributed significantly to ‘weak blood’ in men, women and children. The great majority of such survival strategies were not considered as doing much good to them; they were however seen as necessary. The same accounted for inter-ethnic violence and cattle rustling. A life without cattle was unthinkable. As long as there was no money to buy cattle, they had to be raided. The people were aware that such violence would create more violence.

Education was defined as the key element in order to move from dependency to independence and from ‘weak to strong blood’. Adults also attributed children an active role in the development process. Cattle remained the most important resource with the difference that raiding was not necessary because they could be acquired through money ‘the cattle of money’ and through money generated through education ‘the cattle of paper’. A summary of the timelines is provided in Figure 5.13:

Figure 5.13: The concept of blood strength (A historical timeline and future perspectives)



The Present

The Future

Weak blood

Education for men women and children

Income earning

Children as agents of change

The cattle of money and the cattle of paper

Livelihood strategies conducive for children's health

Ability to take better care of own family and children, better health

Good mental and physical health

Strong blood

5.2. The children's views, experiences and perspectives

This section assesses children's capacity and motivation to define health threats, propose solutions and implement action for health issues considered as most important by the children. The challenges children face in their environment, their roles and responsibilities in the community are described. Children's reports are used to establish whether environmental and cultural factors are health promoting or health threatening. Children's experiences with relief interventions and their involvement in decision making are investigated and children's own views about their abilities and resources are assessed. Children's capacity to take an active role in the relief and recovery process is examined.

5.2.1. Sample characteristics of the children

Seventy-seven boys and 67 girls participated in the qualitative study. Girls were often busy with household activities and it was difficult to find a suitable time for them to participate. With the loss of cattle, the boys had fewer chores and were almost always available. All children were eager to take part in interviews or group sessions and it was easy to invite them. The sample characteristics are presented in Table 5.14.

Table 5.14: Characteristics of the child respondents (n = 144)

Characteristics	Number	%
Boys	77	53.5
Girls	67	46.5
Age, range boys and girls	7 - 18	
Age, mean boys and girls	13	
Religion		
Christian	144	100.0
Ethnicity		
Lou Nuer	144	100.0
Caregivers of the children		
Both parents	47	32.6
Mother only	37	25.7
Father only	6	4.2
Other relatives	39	27.1
No relatives	15	10.4
Education level		
Never attended school (male / female)	(0 / 14)	(0 / 20.9)
Completed primary 1 + 2 (male / female)	(34 / 44)	(44.2 / 65.6)
Completed primary 3 + 4 (male / female)	(24 / 8)	(31.2 / 12.0)
Completed or partially completed primary 5 - 8 (male / female)	(19 / 1)	(24.6 / 1.5)
Education, mean (male / female) in years	(3.3 / 1.4)	
Enrolled in school for 2010 (male / female)	(76 / 48)	(98.0 / 71.6)
Work		
Work for pay (male / female)	(20 / 19)	(26.0 / 28.4)
Displacement characteristics		
Never displaced	31	21.5
Displaced because of attacks	104	72.2
Displaced because of insecurity	9	6.3
Displaced for economic reasons	0	0

Only 32.6% of the children in the sample population lived with both parents. The remaining children had lost one parent (half-orphans) or both parents (orphans) in attacks. 72% of the children had survived the Nyandit attack in April 2009 and some

of them also survived the Mareng attack in August 2009. 18.1% of the children were heads of households and took care of younger siblings and/or severely handicapped or blind relatives. The youngest child fully responsible for a household was eight years old.

98% of the boys and 71.6% of the girls stated they were enrolled for school in 2010. These are very high proportions, in particular for girls. On average, the girls spent 1.4 years in school, whereas the boys in the sample spent 3.3 years in school. Attending school regularly was reportedly very difficult for most girls because of their workload and many reported to have dropped out during the first or second grade.

> *"…Many girls drop out of school because they do adult work, but it is also good for girls to get education. We should not do all this but it is in our culture and there is nothing we can do about it" (Older girl, FGD code MF02, Akobo).*

> *"…I was in school only for two month and then I dropped out. I help my mother at home. We were attacked in Mareng and fled the place. I was often depressed but today I am happy because I belong to a group of children. I think day and night how I could go to school again but I am not sure that I will be able to return. There is too much work for me", (Older girl, FGD code MF02, Akobo).*

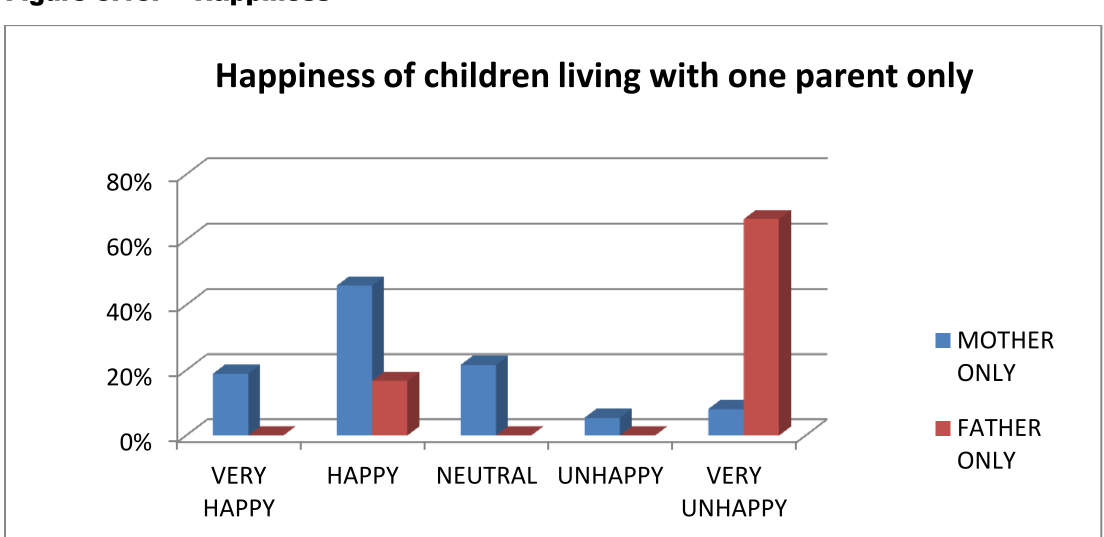
5.2.2. Happiness and security

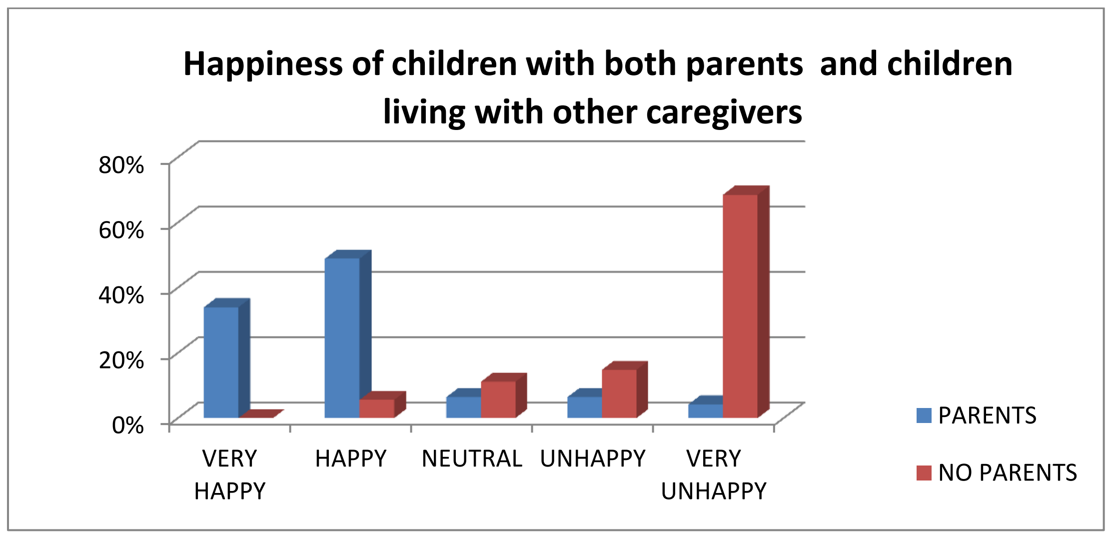
Children were asked about general feelings of happiness (Figure 5.15) and safety (Figure 5.16) using a five point faces scale. Large differences in how happy and safe children felt depended on whether they lived with both parents, with their mother only, with their father only or with other relatives or no relatives. No difference was found by looking at the two variables by age and gender. The findings supported general statements and observations made throughout the study to the effect that orphans and children living with their father only were in a more difficult situation than the children living with both parents or with their mother only. These children were also more concerned about their safety than those who lived with both parents or with their mother only; they reported that the people they stayed with did not care about them and would therefore not protect them in case of further attacks.

The majority of boys and girls reported the following as the reason for their happiness: To be able to go to school; to have parents; to be alive; to help family

members to forget what had happened in the past; to find work and earn some money; to be safe in Akobo town; belonging to a group of children; to have overcome traumatic experiences; to be back in Nyandit with the family and have a proper shelter; to be in a group of children and help each other; to be able to forget all the bodies in the river that were not moving; good relationship in the family; not being scared; to be treated well by a foster parent; not being married.

Figure 5.15: Happiness

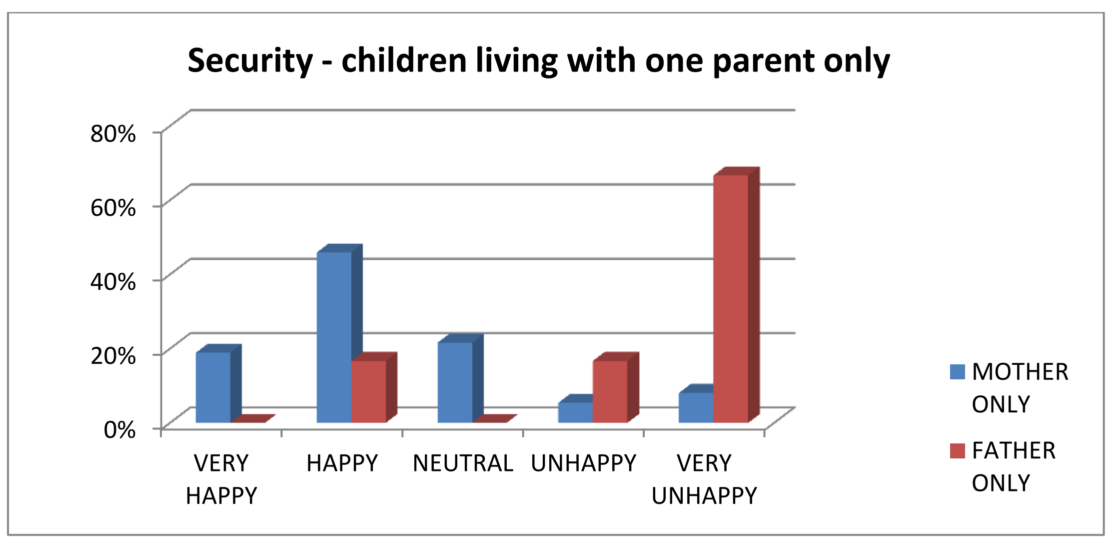


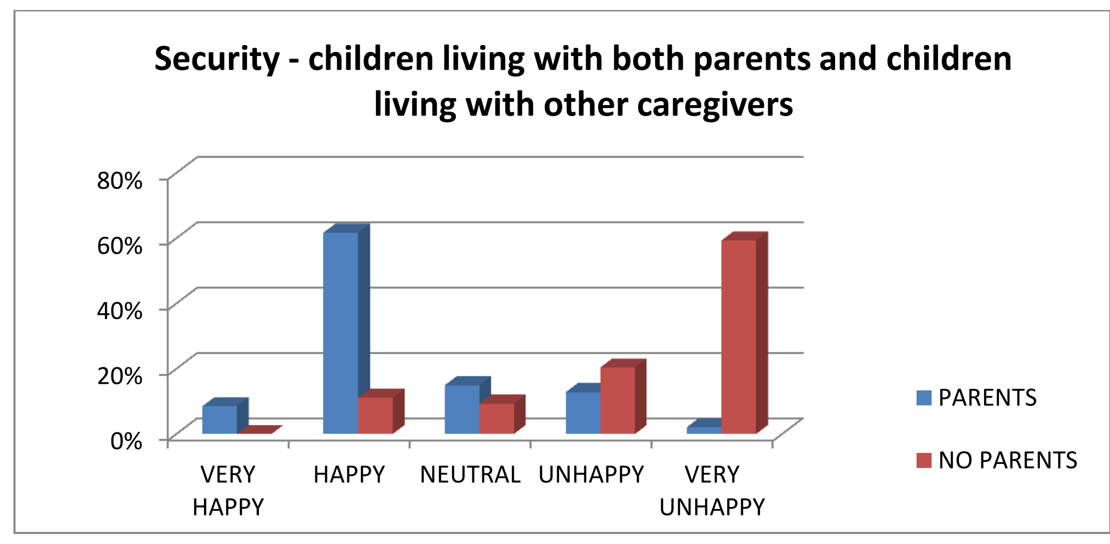


The majority of the boys and the girls who were not happy about the security situation stated the following reasons: Inability of soldiers to protect the people in Nyandit and the fear that the same would happen in Akobo; uncertainty that the army and the police could protect the people; overpopulation of Akobo town leading to tension among people; boys are given guns at an early age and engage in fighting; lot of beating and disputes in the community; more beating of children because more people in town that can beat children; domestic violence.

> *"…At the household level fathers beat their wives; sometimes it is about the children who do not behave, sometimes we don't know why, sometimes they are drunk. Sometimes it is between families because of a girl that misbehaves with another boy or a girl that was raped; some people cannot pay their debts; some people have now started to fight for the land to cultivate". (Boy aged 15, Interview code OI02A, Akobo town).*

Figure 5.16: Security





5.2.3. The child perspective: the past, the present and the future

The majority of the boys and girls observed their environment in great detail and also younger children analysed and discussed their observations and experiences. Education was described as important by boys and girls in order to solve a great number of key issues identified by the children such as: violence, forced child marriage, trauma and mental health issues, physical ill health, dependency on others and stigmatisation of orphans.

> *"…Education, this is the most important thing for our future, if we had more educated people these problems of South Sudan would not even be there. We all want to study hard and we can be the future of Akobo", (Boy aged 15, Interview code OI005, Akobo town).*

> *"…There is no other way in life than to go to school and learn for life and get a job. One day the fighting for cows will stop because people are educated and then there is more security, more will be possible because people can move freely" (Boy aged 18, Interview code DI002, Akobo town).*

> *"..It is good to be in school, it helps to forget what I have experienced and makes the bad dreams go away. But I am not happy if we have to return to Nyandit. I have a lot of bad memories about this and even if I am happy here in Akobo I am not happy because of what has happened. When the children can go to school they are not so scared anymore and the bad memories can go away" (Young boy, FGD code MF001, Akobo town).*

> *"…I think a girl should go to school for 8 years and marry later, not before 18. I think for example 20 years can be good. Young girls die when they deliver a child. It is better to be older. Education makes the girls survive" (Young boy, FGD code DF03, Akobo town).*

> *"…The people run and many were killed. I saw them in the river they were not moving; the river was full of bodies. I still have my mother. I can talk to her and she teaches me how to do the work for the family. I can now go to school; there was no school in Nyandit; this is why I am happy now… I can go to school. With the school children can forget and it will make them little happy again. The children cry a lot because of the killing" (Girl aged 9, Interview code DI006, Akobo town).*

"…Everybody needs to go to school children and adults to learn how things can be improved. I can plant mango and papaya trees if I have seeds I can do that. I do not know what I can do but in school the teacher can teach me what I can do. I am only seven but I can earn little money and help my family. Educated people can help each other ... the violence stops… people can go without fear and cultivate this can help us" (Young girl, FGD code RF05, Akobo town).

"…It is very important; all children should go to school. If you go to school you can find work afterwards and can earn money […]. Sometimes they have many more cows when they come back from the cattle camps and other people get killed. There are many fights for cows. If I get educated I do not have to fight for cows I can earn money and do what I want" (Young boy, FGD code RF06, Akobo town).

Education was described as particularly important by orphans as it was seen as the only way to be respected in the community in the future.

"…I do not want to go home [foster home], this place is bad for me. I go to places that make me happy. When I go for wild fruits I am alone and I have time to think then I think it will be better to be killed or abducted by the Murle. When I am at the orphan school I think there is a solution for my life. I can go to school to be accepted one day in the community and I have more courage to do something. When there is no school it is more difficult" (Boy aged 9, Interview code RI010, Akobo town).

"… When I get educated I can earn money this makes me respected and we will be like one again in the community. Without education it will be better for us to die. We can never forget the killing of our parents when people mistreat us. I want to have a future again". (Boy aged 13, Interview code OI12A, Akobo town).

"…Education is the only thing that can change my life. If orphans remain in the community people will keep on beating us, but when we are educated we will be respected again in the community and our lives will change. If I am an educated person I can provide something, may be food or little money and then people will respect me. If I am educated, I can become more independent and I can find work and take care of myself and other people". (Girl aged 11, Interview code OI08A, Akobo town).

Many orphans among the sample children, boys and girls reported that they were forbidden to go to the orphan school by their foster parents, but disregarded this ban completely, despite being beaten on return from school. The children explained that they did not understand how work could be more important than education.

> *"…I am not allowed to go to school; I just go because without education I will never be accepted in this community again, I want to become a good person. If I cannot go to school it will be better for me to be dead. So I just go but my aunty does not allow it. She tells me to do the work instead. I am beaten every time when I come back from school; if I can walk after the beating I go to school the next day. I cannot go every day, today I may go and tomorrow I will stay at home because I fear that women" (Girl aged 9, Interview code OI09A).*

> *"…I am not allowed to go to school. I am told: "who will take care of these children [her younger brothers] when you go to school!" I just walk away and go to school and I will work for them when I am back from school. There is a lot of beating because of this. If I am dead it will be better for me. Education is very important when you grow up; even my brothers will get something when I become a good person. Education is the only thing that is important for my future" (Girl aged 16, Interview code OI09B).*

> *"…There is only one thing important that can change our situation, this is education, there is no hope without education it will be better to die" (Girl aged 10, Interview code OI06A, Akobo town).*

> *"…School is very important for me. This is why I have to go to school. I am not allowed to go. I am beaten but if I do not go to school I will never be respected again as an orphan, I have nothing to give to anybody, and this is why I am mistreated by other people and other children who still have parents. Everything I do, people are not happy and they tell that I do bad things because I have lost my parents and nobody would teach me" (Girl aged 11, Interview code OI17A, Akobo town).*

The massacres of the past were still very much alive for the children. Experiences during attacks and the consequences of such violence were current subjects in conversations among children. Many children answered the question about happiness by elaborating first on how they had survived and how they felt at the time of the events. Once they had explained the past, they answered the

question about how they felt at present. Children's quotations are presented in the section experienced trauma exposure related to armed violence.

The majority of the IDP sample children wished to stay in Akobo town and feared the day when their parents would decide to return to their villages.

> *"…Sometimes I cannot sleep and I think what has happened to us. Why we have no cows and that the parents may marry us early to get cows. Sometimes I want to return to Nyandit and then I am scared and do not want to return to Nyandit. Younger children are abducted and older children are killed in Nyandit by the Murle" (Girl aged 9, Interview code DI006, Akobo town).*

> *"…I am very happy in Akobo it is a good place there is a river and enough fish to eat. I do not want to go back. When the Murle came and attacked us I could hide but it was still dark and I was scared. Here I am safe I do not want to return. But my family will not listen to me" (Older boy, FGD code MF01, Akobo town).*

Many children feared new attacks, but another important reason for their desire to stay was the better chance of being educated. Unlike in Nyandit and the surrounding villages, all the primary levels up to level eight were taught in Akobo town.

IDP children reported that going to school had helped them 'to overcome mental problems' because it took their minds off 'bad memories'. The orphan school was the only place that most orphans enjoyed because the teachers treated them 'like normal children'. Abuse and humiliation at home continuously reminded them of the loss of their parents. Feelings of guilt for having survived remained with many children.

> *"… I feel very guilty for having survived, not only my parents and my brothers and sisters were killed, but also all the children of my uncle. Maybe some were not killed and were abducted instead, but we don't know and they won't come back. I think maybe I should not have survived." (Boy aged 10, Interview code OI07A, Akobo town).*

Feelings of guilt were particularly strong in children who had lost a family member or witnessed the killing of loved ones. The children felt that they had betrayed them because they had been unable to avoid their death.

"…Many children think it is their fault that the parent died and they suffer a lot because they feel responsible" (Boy aged 9, Interview code RI010, Akobo town).

The great majority of the children were hopeful for the future. Their priorities were education, health, food and peace. Health and food was often described as a means to the end to become educated.

"…Health, food and education is most important for children. Children cannot learn when they are hungry and sick" (Boy aged 9, Interview code RI009).

Peace and security were often mentioned in relation to people's ability to return to their land, cultivate and rebuilt their livelihoods.

"…A good education and security for the surrounding area so that people can move back to the villages and cultivate and feel safe. Many people are traumatised from what has happened to them, still they want to go back but they are scared that the same can happen again. The children from Nyandit also need good schools so that they can continue school in their places. My friends from Nyandit do not want to go back because they are scared" (Boy aged 16, Interview code RI007).

The great majority of the children felt that whatever served the purpose of becoming well educated was important for them. Orphans also had a clear vision for their future.

"… We are children like other children, but as it is now we are not part of the community. People should be educated so that this can change and adults who abuse children should be punished. There should be an orphanage for us where we can have a good education, food and shelter, protected from the community! We can work and help with what needs to be done, with shelter and other things; boys and girls have learned to work hard. When we are older and educated we will be respected and the same as other educated children. Then we can go back to the community and tell the people what we have achieved. When we are old enough and strong enough and educated enough we can tell them that orphans are like other children who have parents and that children should not be abused and treated differently. We are the only ones who can help our cause, but we need to be strong first" (Orphan boy aged 16, Interview code RI10B, Akobo town).

All orphan respondents wished to be protected from the community in this manner. They firmly believed that neither the Government nor NGOs could change the community's attitude. Many stated that if the orphan school were to become an orphanage, they would never leave the compound until they were mature enough to face the community as an educated person.

> *"… If I am beaten by the women there is nobody who can rescue me. The neighbours will just keep quiet and do her things while this woman is beating me. This people they don't help me. I get beaten every day and nobody is helping me. For example when I get back from school the women will beat me because I am not allowed to go to school and I should be working all the time. When I come home they will ask me: "where have you been?" when I say in school, she will be very angry. Sometimes I do not want to go home anymore I just want to stay here in this place [orphan school] where I am safe. It will only need shelter and little food and a good guardian, like the teachers and nobody from the orphans would ever go to their homes again until we are grown up and can defend ourselves" (Girl aged 12, Interview code OI05A, Akobo town).*

> *"…It is only here at the orphan school that children do not mistreat each other because we are all orphans. We face the same conditions we are all orphans. Here the teachers are taking care of us and they are good people. The best for us would be to stay here but we have no mats or blankets and no shelter. There is no food; so we cannot stay here, we come to school and go back home. If we had all the things I would take my brothers and we would stay here and never leave the compound. I would leave only when I am grown up and educated so that I can help myself and be independent. I do not believe that somebody can change the attitude of the people towards orphans and all we can do is have our own place until we are strong enough" (Girl aged 9, Interview code OI09A, Akobo town).*

5.2.4. Children's roles and responsibilities, the child's view

Children perceived most of their domestic chores as adult work. A frequent statement made by the girls was that 'adults should do adult work and children should go to school'. They reported that the workload had increased for the great majority of IDP and resident children as a result of attacks, displacement and the new living situation. Many had to take over more responsibility in terms of workload. Some children wished to have a different kind of responsibility in their day to day lives.

"…I think children can be responsible and can have ideas that are important for adults. If children are brought up to be responsible for their ideas and decisions, they will bring up their own children in the same way and teach them to take responsibility. Many adults see the responsibility of the children in doing the work in the household. For them children are responsible when they do as they are told, but this is not the same as taking responsibility for own decisions. Children need to be able to make decisions at the family level" (Young girl, FGD code DF02, Nyandit).

"…All children should take part in meetings of adults. There are decisions were children are needed but there are decisions where children are not needed. It is also good to have children taking part for decisions. Older children can contribute" (Girl aged 16, Interview code RI01, Akobo town).

"…One child alone can do nothing. In the community children are not recognised. From our culture we are not involved in anything, not even in family meetings" (Older girl, FGD code MF02, Akobo town).

"…Adults do not listen to my suggestions and ideas. Also the mothers do not listen to my ideas" (Young boy, FGD code DF03, Nyandit).

"…Girls should not do adult work, they should go to school like the boys and nobody should be forced to marry […]. Children need to be respected more and be asked for their opinion. This is important. I am not educated and do not know much but this I know from experience. Many girls think the same" (Girl aged 15, Interview code DI011, Akobo town).

Children observed that in families where the father was educated, the children had more rights and were also allowed to participate in family meetings. Education was largely perceived by the boys and the girls as something that would make people 'better people'.

The great majority of the girls were opposed to the cultural role of girls to marry early and expressed the following as some of the reasons for not wanting to marry early: dropping out of school; increased workload, not being able to serve everybody; beating and abuse by husband and in-laws; loss of protection from own family; fear of dying during delivery; social expectations of married women; physical and mental problems; having no future.

> *"… It is not good to be married early. You cannot do everything that is expected because there are too many people you have to serve. I am not happy. When you are married you cannot go to school, some wives do, but most mothers are not allowed to go. There is no one to help you; once you are married at an early age your life is miserable, there is no future for me. I do the best I can, but I did not go to school. I worked hard and I am strong, this is how I survive. I have often body pains and headaches. The work young girls do is not good. They carry very heavy things, the body is not prepared. For a girl everything starts too early. We have no time to develop first. This is why we suffer a lot. Now girls want to be educated and I have not gone to school until now. I wanted to start but then my parents forced me to marry. I refused at first, but I was tortured until I agreed. I was beaten and locked away then I agreed to go to the other place. My parents need the cows, we are poor but now I have no future" (Girl aged 16, Interview code RI014, Akobo town).*

The traditional role of boys, to protect the family, family assets and clan members was not opposed by the boys. One boy mentioned that it could be dangerous and a reason why young people got killed.

> *"… When you are in the village, you build up a relationship and you have your friends but here the way things are young people engage very early in fights for cattle and other things and so many of your colleagues get killed. Before the disarmament every young boy once marked was given a gun and you go and try to get something like cows and other things so that one day you can marry. Many of my friends were killed" (Boy aged 18, Interview code DI002, Akobo town).*

5.2.5. Children's perceived health risks and their responses

The analysis of the transcripts demonstrated that the children had a broad approach in looking at health issues. Often a range of factors and how they were related determined children's mental and physical health. The range of answers given also reflected the heterogeneity of the children by age, gender and living situation. Children's concerns not only about their own but also about adult's psychological wellbeing emerged in interviews. In particular girls stated that psychological distress of adults in general and their parents in particular affected them. The effects most often mentioned were: increased workload, increased violence and beatings and the inability of 'traumatised' parents to take 'proper care' of them.

Older boys and girls indicated that vulnerability of people was the result of a lack of protection. They explained that to be vulnerable in this society was very bad because everybody would abuse such people because there was nobody willing to protect them. People would abuse others because they had the power to do so and nobody would tell them to stop. To be an orphan was seen as the worst form of vulnerability.

Children's access to health care, clean drinking water and food depended largely upon the persons with whom they lived and also on children's acceptance in the community.

> *"…This [whether a child can get clean drinking water from the borehole] depends on the people that are already there. It is possible that the child gets denied the water. It is possible that the child has to join the queue like everybody else or it will be served last. It depends on the people. But many children take chances if it is water for them only and drink from the river to avoid all complications" (Boy aged 16, Interview code DI003, Akobo town).*

> *"…I do not go to the hospital because there is nobody to accompany me and I am afraid of the people that are waiting at the hospital, I cannot fight with these people when I am sick and weak. I am too overwhelmed by the sickness and I need somebody to accompany me but nobody is there for me" (Orphan girl aged 13, Interview code OI01A, Akobo town).*

If adults were not available, children often helped each other to access health care.

> *"… I go to the hospital they help. I get medicine, it is for free and I can go there on my own. When my sister got burns from the kitchen fire, I brought her to the hospital" (Girl aged 8, Interview code DI005, Akobo town).*

> *"…I was boiling water and left to get more wood and the child of the neighbour came close to the fire and the pot with boiling water fell and the child was burned on the chest and arm. The child did not stop crying and we did not know what to do, we brought the child to the river and he stopped crying but we had nothing to make dressings and brought the child to the hospital in Akobo [from Nyandit]. My older sister took the child. There is no transport and we had to walk. (Young boy, FGD code DF03, Nyandit).*

> *"…I have injuries all the time, when I cut trees for firewood. I fell from a tree and my arm was broken […] my older brother came with me to the hospital in Akobo and brought some food and water. I could not carry anything because of the pain in my arm" (Young boy, FGD code DF03, Nyandit).*

Also younger children indicated what was needed to improve children's health in their community

> *"… We have many injuries; cutting wood is difficult, many things can happen. We do need material to make dressings and keep the flies away, there are many flies. We can clean the wounds with water but there is nothing to protect it. It would be good to have a health centre close to where we live so that we do not have to walk so far to Akobo town. We also need treatment for malaria. It would be good to have somebody who can know what we have. The smaller children are more sick, but we do not know what they have and what we can do to help" (Young girl, FGD code DF04, Nyandit).*

Whether a disease qualified as a 'health threat' for children depended not only on the number of people affected, but also on the availability or accessibility of treatment. Even a disease known to kill people was not necessarily given high priority if treatment was readily available.

> *"…I have malaria all the time, we all have malaria all the time and all ages are affected. It is not a problem because we go to the hospital and they give you tablets. Sometimes they are white and yellow but you have to take all the tablets. If you do not take all the tablets the disease can come back and then you may not survive" (Young boy, FGD code RF01, Akobo town).*

Some children, particularly younger boys, decided on the severity of a disease according to whether they thought treatment was necessary at all.

5.2.5.1. Diarrhoea and underlying causes

A great number of children reported diarrhoea or diarrhoeal episodes, but it was rarely perceived as a health problem because according to them 'older children do not need treatment'. Young boys in particular declared that they were never sick, even though they reported having diarrhoea 'all the time'. Diarrhoea was only seen as a health hazard for very small children because unlike older ones, they could easily die and needed treatment.

The boys in Akobo town spent most of the day at the riverbank and in the river. The dirty river water they drank was often seen as the cause for their diarrhoea. Many boys reported that they were 'too lazy' to go to a borehole for 'healthy drinking water'. 'Dirty flies' coming from the numerous defecation sites were also mentioned as a cause for diarrhoea and vomiting. Another cause mentioned was that many adults neglected their children and did not feel responsible for children's personal hygiene.

Unlike the girls who wished that caregivers would take better care of children, the young boys did not mind the lack of adult supervision; they enjoyed their freedom and that 'nobody cared much about their personal hygiene'. Overall, most children knew more than one cause for diarrhoea. Older girls were more concerned about hygiene and diarrhoea and saw the lack of parental supervision as an important cause.

> *"…The health of the children is not good because they are not supervised by their parents, this is a problem. When you look at the children in Akobo town, all of them are dirty and look like street children, flies are everywhere they don't even care. Everybody is busy and the children are in the river, hygiene is bad and people have no time to supervise and educate the children. Sometimes an older boy takes care of a younger boy. There is a lot of diarrhoea and vomiting" (Girl aged 18, Interview code RI012, Akobo town).*

Additional Quotes on children's experiences with malaria and diarrhoea is provided in Table 5. 17.

Table 5.17: Quotes on children's experiences with malaria and diarrhoea

Malaria and diarrhoea		
	BOYS	**GIRLS**
FGD's	"…I have malaria all the time. All age is affected; yes we all have malaria all the time" (FGD, older boys).	"…Younger children have Malaria. Everyone has malaria all the time. Here it is better because of the hospital, we get treatment" (FGD older girls).
	"…Flooding is also a problem. Wherever you settle you get floods. Hygiene is a problem if everything is flooded. People can have cholera when the floods come" (FGD, older boys).	"…Dirty water leads to diarrhoea, The hand pump is for healthy water and the river is for dirty water" (FGD young girls).
	"…We have malaria and diarrhoea and there are also many injuries because of the work we do" (FGD young boys).	"…Flies spoil food and that food gets contaminated because flies are dirty and the children get cholera and diarrhoea" (FGD older girls).
	"…Children under five years can get sick but not older children, they can only get diarrhoea. When there is cholera, older children and adults can die but this is different because cholera is not coming from the river. I do not know where it comes from, but it is dangerous because everybody needs treatment it does not go away on its own" (FGD young boys).	"…I am healthy because I am strong and I take good care. My brother was very sick, we thought it was cholera but the doctor said it was dysentery and he was treated. My brother spends the whole day in the river. I think it was because of the river water, the boys who spend the day there drink lots of water from the river" (FGD young girls).
	"…Diarrhoea is quite common and also malaria. Diarrhoea is rather dangerous for the small children but malaria is also dangerous for older children. At the hospital is a treatment for malaria. For diarrhoea it is not necessary to get treatment" (Boy aged 15).	"…I have stomach pain and diarrhoea but we have no other choice. Sometimes I have stomach pain because I do not get enough food. There is nothing we can do" (FGD young girl).
INTERVIEWS	"…This [diarrhoea] could be because of the river and children are also not supervised. Sometimes they stay in the sun for a long time. There are some children being taken care of by their parents but only some. It depends on how responsible people are. The others survive alone they have more diarrhoea and also malaria" (Boy aged 16).	"…We have many net [mosquito net] and we go fishing with the net, but the little children they sleep under the net. It is very hot, I do not use one. When it is cold I will use it […]. It is to protect from mosquitoes and malaria this is what we were told by the lady. The small children can die of malaria but we get only sick, we do not die" (Girl aged 9).
	"…I have diarrhoea all the time but I do not get sick from diarrhoea. Small children have to go to the hospital and they need treatment, but I am strong I do not need treatment" (Boy aged 9).	"…Most children have diarrhoea and some have malaria as well. For families that depend only on food aid it will be difficult to give a good diet to the children they can get weak; once a child is weak it may die" (Girl aged 17).
	"…Malaria and diarrhoea is a big problem and small children can die, sometimes older children too and even adults".(Boy aged 14).	"…No, the small children do not know that the water is bad but the children that are older they all know but they are too lazy to get safe water. The boys spend the whole day in the river and drink the water, most of them have diarrhoea but they do not care. The parents are busy and do not supervise the children". (Girl aged 10).
	"…Yes, it [diarrhoea] comes and goes this is because I drink a lot of river water, it is very hot. All the boys spend much time in the river it is a good place to play" (Boy aged 9).	"…I have no bed net. There is also malaria in Akobo, and may be this is also a reason. It [mosquito net] was taken away by the neighbour; the net is now for his property and to hold the fence together" (Girl aged 11).
		"…Some of the children are very dirty because some parents do not care enough and let the child be in the dirt; the flies are not good when they are in the eyes and the mouth of the children they are very dirty. Insects can make diseases; children in Akobo are often sick. I have diarrhoea more often than in Nyandit" (Girl aged 9).

5.2.6. Trauma exposure and mental health

The majority of the boys and girls indicated that mental trauma was dangerous for children's health because 'there was no cure', 'it could happen anytime to anyone' and according to the children 'many of them were affected'. Several children described that even if they went to the hospital there was nothing anyone could do to help.

The following effects of being mentally traumatised were observed by the children: not being able to pay attention at school; withdrawal; extreme sadness and crying a lot; not being able to take care of own babies; flashbacks; running away; inability to work hard; hatred and aggressiveness; a wish to die; numbness.

Psychological distress and experienced trauma was ranked highest by the children participating in all four workshops (conducted with 1. younger and 2. older boys, and 3. younger and 4. older girls separately) on the main perceived health threats for children. Mental trauma also resurfaced as a main theme in interviews and FGD's with children.

Whether or not an event was perceived as traumatic depended on the extent to which children were able to control the symptoms they experienced as a result of the event. The Nyandit and Mareng attacks were described as 'very dangerous attacks' and as 'very traumatic'. Particularly children who had witnessed atrocities committed on family members reported that this had contributed most to their current situation of 'being traumatised'.

IDP and resident children maintained that attacks were not the only source of traumatic experiences. They pointed out that other aspects of their lives could also contribute to having mental difficulties. Examples given were forced early child marriage, heavy beatings, fear of death during delivery, being sent to the forest for wild fruit and the fear of being killed, injured or abducted there, abuse, rejection and humiliation by caregivers.

Children living in foster homes often described their situation as traumatic. They reported that nobody cared for them. Beatings and abuse by foster parents reminded them of the 'event' and the loss of their parents who once had cared for and protected them. Sadness and also anxiety were reported by these children.

"…I am very much scared and sometimes it is difficult for me to sleep because I think day and night what to do because if there is any insecurity here in Akobo town, nobody will take care of me and my younger sister and my younger brother. I earn my own money and I can take care of my younger brother and sister, but if we are attacked again I am very scared because we are vulnerable to any insecurity because nobody will take care of us. I think if we are attacked by the Murle I will go where all the other people go. I will just follow when the people start running. If I follow the people maybe somebody will help me" (Orphan girl aged 13, Interview code OI01A, Akobo town).

Many children indicated concern about other children's mental health and many felt that it was their duty to help each other. Affected children reported that being able to go to school had helped them most to overcome trauma. Anything that kept children's minds occupied like sports, or a person who spoke to them and engaged with them was perceived as helpful. Boys and girls reported that it was not good to be alone with mental problems. To be in a group with other children was seen as one solution to overcome 'mental difficulties'. Several children who had joined organised children's clubs and other groups reported that this had helped them to overcome their difficulties resulting from experienced trauma. The children also indicated that they were better qualified than adults to help other children.

"…I think children can do a lot because there is trust. We need some training and then we can help others, but some have to help themselves first because they are traumatised as well" (Older girl, FGD code MF02, Akobo town).

5.2.6.1. Experienced trauma exposure related to armed violence

The majority of the boys and the girls indicated that the experienced massacres and the fear of being killed or abducted by the enemy had affected their lives and their mental health in different ways. Data analysis also demonstrated that no two children experienced trauma or were affected in them the same way. While some children reported that they could handle the symptoms but were a little scared as a result of the event, others reported to be 'severely traumatised' or that they had been severely traumatised but felt better now. In the following citations children describe these experiences.

"…When the attack came to Nyandit I jumped into the river because I know how to swim and I crossed the river, I climbed up the riverbank and then I was hiding

somewhere close to the river until the attack was over. I waited until everything was burned and all the people were killed. Then when the fighting ended and the enemy left I run home but nobody was there. I found nobody, so I just stayed at home sitting and waiting but nobody came. I spent two days at home but nobody came. Then people came back to Nyandit to bury the ones who had been killed" (Girl aged 9, OI09A, Akobo town).

"…I witnessed so many things [during the attack], the children were slaughtered. They took the small children and just took out their knives and cut the head of the child off. They would just shoot the old people who were not able to move. I survived because I run to the river. When I saw the Murle coming after me I took off and run very fast to the river I jumped into the river and dived, they tried to shoot a bullet into me but they could not see me and they missed. Then I was hiding at the riverbank where there was some grass and I went under the water again and again and only when I felt that I was drowning I came up for air. This is how I survived. There were many dead bodies in the river just floating. When the Murle run for the cattle I left the place and started running with other people who managed to escape and I came to Akobo" (Girl aged 12, Interview code OI05B, Akobo town).

"…The whole family was killed during the attack and also the whole family of my uncle was killed. I was the only person who survived the attack […]. When the attack started we were sleeping in the compound. The mother the father and the children were together. When the Murle came into our compound they fired and killed my mother, my father and the children. I thought they will kill me as well like they killed the others. I slept on the ground in a corner and I lay very still. The enemy started to shake the people they had killed and I did not move. There was blood on my body from the brothers and sisters and they thought I was dead. When the Murle left, I just took off and waited in a safe place. When I saw them moving away, I just run and joined the other people who escaped the attack. So I came to Akobo" (Boy aged 10, Interview code OI07A, Akobo town).

"… During the attack I was holding the small brother and my father was close, my mother came behind and was running after us. The Murle followed us and when we crossed the river they shot my mother dead. She fell down right behind me; I did not turn my head I just continued until I crossed the river. When we reached the other side and climbed up the riverbank the Murle came from this side, some men fought them and so we could escape" (Boy aged 12, Interview code OI12A, Akobo town).

The majority of the children indicated that even if there were no major attacks at the time, the daily activities of children outside the town or villages could result in being killed or abducted by Murle fighters patrolling the area. Children expressed that the people who encountered the Murle fighters were killed and did not return to tell what had happened. A girl who participated in a workshop had survived such an attack and wanted to talk about her experience. This girl reported that she was not traumatised by her experience, but that she was a little scared now.

> *"… We went for wild fruit and we went in three, my mother my grandmother and me. We were caught by the Murle, a group of twelve men. When they caught us they said: "We are lucky that we have caught you, our plan was to go and attack your village, but now we have you, and what we will do is to kill all of you!" One Murle said: "I will take this girl and bring her to my father." Another man told: "No, this is not our mission! Our mission is that we are looking for cattle and not for children. You cannot take the child, we better kill her!" So one of them came and knifed me, I fell to the ground but remained conscious. They thought I was dead but I was not. Then they went to my mother and wanted to kill her but one Murle said: "This mother is lactating, she has milk for a child. If we kill this mother it will also affect the child let us not kill the mother. Leave her alone and kill this old lady!" The Murle attacked my grandmother and knifed her to death. Another man said: "If we leave this lactating mother she will report to the villager that we are here and that we want to attack them". They took my mother and knifed her. They left her to die and went away.*
>
> *At night my mother started to move slowly away from me and I saw that she was not dead, but I could not move, she moved away and I did not see her anymore. She told me later that she did not seen me and that she felt strong enough to return to the village but did not make it because she was weak. The people from the village by that time thought that we must have been attacked and came for us. They found the grandmother killed and my mother with some signs of life in her. They brought my mother back to the house and buried the dead woman. They could not see me and they thought that I was abducted. I remained in the forest. In the morning I felt strong enough to cry and I started crying and I called the name of my twin sister again and again. I tried to move toward the house, the village, but I did not make it; I was too weak and too wounded. But then some boys from the village found me and my mother and I were brought to the hospital". (Girl aged 8, Workshop code DW03E, Akobo town).*

Girls and boys reported that it was distressing for them to be sent to the forest to collect wild fruit, firewood or to cut grass for the roofing of the houses. Children who survived attacks were more likely to report that they were 'extremely scared'.

"… My father was killed in the Nyandit attack and we came along with my mother. After a few weeks the hunger came and we could not find much food, people went for wild fruits, but there were many people and the fruits were not easy to find anymore. I had to go far into the forest and I was very much scared to be killed by the Murle […]. I am much traumatised from what I have experienced. When the Murle attack again, I will not be able to run, this is how scared I am" (Girl aged 16, Interview code OI09B, Akobo town).

5.2.6.2. Experienced trauma exposure related to cultural, social and material stressors

The majority of the boys and the girls expressed the following as major cultural, social and material stressors: Forced child marriage; stigma abuse and rejection by family and community members; material deprivation and poverty.

Early child marriage

Early child marriage was perceived or experienced as a serious health risk by the great majority of the girls. Several of the younger girls reported that they would refuse marriage despite 'the beatings and the torture'. Boys and girls reported to be aware that poverty forced parents to marry girls off. Early marriage was largely perceived as 'dangerous for a girl's mind and for a girl's body'. The married girls stated that nobody could be ready for what was about to come. The two main concerns were inability to manage the huge workload and being beaten as a result and death during delivery.

Girls reported that the body of a young girl was too small to deliver a baby and some of them had witnessed the death of an older sister during delivery at home. Children who had refused marriage described severe beatings and 'torture' for disobedience and some girls had been locked away until they agreed. All girls reported that they had eventually agreed to be married off.

Boys and girls observed that married girls were often 'very unhappy' or 'very sad'. This was mentioned as one reson why it was difficult for them to take care of their own children.

"… If young girls are left alone it is not good for their babies, they cannot feel responsible and they have to work a lot and sometimes their children are

neglected […]. Some girls are on their own; and many of their children die very soon, they do not know how to feed a child; some girls are not accepted in their new family, there is a lot of abuse and their life is very miserable. They cannot take care of a child because they are not happy" (Older girl, FGD code MF02, Akobo town).

Older girls participating in this study did not accept the view that it was a natural course of their life to become wives, caregivers and child bearers and to drop out of school. These girls expressed that they often felt like breaking off this 'bondage' and pursue education, even if it would take them a long time to accomplish.

Workload, stigma, abuse and rejection by family and community members

The great majority of the girls reported that the daily workload and the responsibilities had increased as a result of the conflict.

"…The situation before was better than it is now. The houses were not burned and we stayed with our moms and dads in the houses. Now some moms and dads were killed and brothers and sisters. We had many cows and now little is left. Everyone is working hard to make houses, fences, latrines, there is less food and we have to collect wild fruits in the forest. There is still fish in the river. The children have to help a lot. Before we helped also but it is more now" (Young girl, FGD code DF04, Nyandit).

Body pains, headaches and tiredness were most often mentioned as a result of the workload. Also beatings for making mistakes were frequently mentioned. A few girls who still had their parents reported mental difficulties as a result of the workload. These girls indicated that they were forced to work despite feeling sick and/or that the beatings were 'too much' or 'undeserved'. The majority of the girls with parents reported no mental difficulties. Several girls expressed pride that they were able to accomplish the workload.

"..Everything I do is adult work. I am proud to be strong but often I have body pains and headaches. I am just small and the loads are heavy and I can hardly walk. In the beginning you use your hands to hold the water and the firewood and not drop it, and then you just walk slowly, slowly and then you walk faster […]. There is a good relationship between children and adults but sometimes we are beaten for minor mistakes. This is how we do it; there is a lot of beating" (Girl aged 8, Interview code DI005, Akobo town).

The boys who still had their parents reported to have little work to do because the cattle had been stolen and some of the boys reported that it was good not to be a girl with respect to the workload. This was different for orphans because there was no distinction between 'girl's work and boy's work'.

The reports from boys and girls who still had their parents indicated that losing parents would change a child's life completely in their society.

> *"… These children [orphans] are not happy and they have nobody to show them things. Only children with parents can be happy. When the mother is dead only, it is also difficult because to raise children in not men's work and they do not know anything and it is bad but not as bad as being an orphan [full orphan], this is the worst a child can have, and people and children accuse you of doing things wrong because you are an orphan, it is even better not to be alive. This is why I am happy because I still have my parents. Sometimes the relatives take care of you but it is better to have parents". (Girl aged 8, Interview code DI005, Akobo town).*

Orphans, boys and girls alike indicated that they suffered greatly from being abused and rejected in their foster homes and by community members. They expressed the following as the main reasons for 'being', or 'remaining' traumatised: not being allowed by community members to fetch clean drinking water from boreholes and to be forced to fetch contaminated river water instead; severe beatings for various reasons and the fear of being beaten to death; not being allowed to sleep inside; difficult access to health services; no food available for them; food only for working 'hard enough'; humiliation and being blamed for the loss of parents; being excluded from society.

> *"…I am with the brother of my mother and other relatives. It is a bad place here and I want to leave I am not treated as a child; I am treated as something else. I am blamed for everything because I have no mother and no father who can take care of me. There are other children like me and life is very difficult. I do not get much food I have to take care of my own, I go for wild fruits; I go very far if the Murle kill me it will be better. I do not feel safe, people throw stones at me and I get beaten a lot this is why I do not feel safe in this place. I can go to Ethiopia this is better for me". (Boy aged 9, Interview code RI010, Akobo town).*

> *"…I have to sleep outside even if it rains. My aunty sleeps in the house. I am not allowed to go inside the house; this is why I stay outside. She does not*

allow me to come inside even when it rains I remain outside. She would beat me" (Girl aged 9, Interview code OI09A).

"… I went to the market and I was walking barefoot. Some boys came and started to joke about me and they said:" why are you walking barefoot don't you have parents who can buy you shoes?" this makes me very sad and I realise that my situation is miserable and it makes me cry a lot" (Girl aged 13 Interview code OI01B, Akobo town).

"…I miss my parent every time I am insulted or beaten, it will not go away unless I am in this place [orphan school] where we are all the same and people are friendly. Outside even if we want to play football with other children they say: "you are not playing with us because you have no parents!" Then I go away and think a lot and I am very sad […]. I have to think all the time about the incident that has made my life miserable" (Girl aged 10, Interview code OI06A, Akobo town).

"… If I do not bring water or firewood, if I do not work hard nobody will give me food. The other children abuse me a lot even a small boy beat me with a stick. When I tried to defend myself the brothers of that boy came and insulted me, one boy said:" you can kill this dog, he is not a child, he has no parents he is like a dog". They beat me and I just ran away" (Boy aged 10, Interview code OI07A, Akobo town).

"…It is not good for children if they are beaten every day by other children who still have parents and by adults. I do not even know what my mistake is. Whenever I see a group of other children on the way I just take off or wait until they have passed. They can beat you at any time because they know that I have nobody that will protect me". (Girl aged 9, Interview code OI09A).

"… My life has completely changed because the girl I am staying with is disturbing me a lot. If I go to fetch water I will be beaten by the girl and if I go to another place for example if I go to school, I will not get food, the food will be eaten by this child. The mother of this child will not say anything. It makes me sad because it reminds me every time that this could not happen to me if my mother was still alive. I feel isolated from that family, often there is no food for me and I will just go and sit somewhere else. When I sit there, they will come and tell me:" Why are you just sitting, why don't you just do this or that. You can bring water, you can wash clothes!" they disturb me when I don't have anything to eat and I feel uncomfortable" (Boy aged 10, Interview code OI07A, Akobo town").

"… I passed by the school, some children were insulting me because I had no parents and then they started fighting; I wanted to run away but there were too many children. A small child had something very sharp in his hand and while four children were holding me down, the smaller child started to cut my toe off and the children said:" you have no shoes, it does not matter!" It was bleeding a lot and they let me go and I run away from them" (Girl aged 12, Interview code OI13A, Akobo town).

"…I went to the borehole to fetch water and the people started to insult me, that there was no water because I had no parents and I would have to pay to get water. I did not listen to them first and then I complained because the water is good water. They took my bucket away and threw my container into the mud. They said, this is our land and the water is for us. I wanted my container back and grabbed it and run home because I was afraid. Two children run after me. I run back to my compound where my uncle and his wife are. The children grabbed me and we fought in the kitchen, the wife of my uncle was there. The children were very strong and pushed me into the kitchen fire. The wife of the uncle was there. She watched and kept quiet…. she watched how I burned" (Girl aged 9, Interview code OI13B, Akobo town).

Orphans reported to be isolated and to avoid playing with children who still had parents. Most orphans had experienced that this would end in quarrels; many of them feared additional abuse and rejection by children who still had parents.

"…We [two sisters] remain among people of the same status, it is better to be with children of the same category who are like us. We do not go to places where there is a lot of food while in your house you cannot get anything. We are also not accepted and it is better not to try, because if we go to this people there is a lot of fighting and quarrelling with these children and we have nobody who can protect us. If other people start to fight us we always lose and we get beaten often. It is better not to go to places where the people are different from us. These people do not like us […]. The situation of being abused and the situation of fighting makes me sad and I think of the killing and the bad things and I cry a lot and then my body gets hot and I get very weak and I cannot work. It is not good for us to be weak. It is better to be alone the two of us because we understand our situation better" (Girl aged 13 Interview code OI01A, Akobo town).

The orphan school was reportedly the only place where orphans felt happy, protected and not left alone with their problems. All orphans interviewed deemed it impossible to 'heal mentally' without leaving the community until they felt strong and educated enough to 'make people understand that orphans were not any different than other children".

> *"…Here in this place we are good to each other, we are all the same. Even the boys let us play with them. When I am in this place I can forget about what happened to us and my life is little better. If we had some mats and blankets and little food, then the orphan children would not have to leave this compound and we could stay together" (Girl aged 9, Interview code OI09A, Akobo town).*

> *"…. The compound of the orphan school is the only safe place for me. Outside I get beaten a lot and I am worried that I get killed one day, and when I am dead there will be nobody to take care of the wife of my uncle who is very sick. I wash her and help her; I bring her water and food. She is a good person, she tells me every day: "you just go to school, don't worry about me." But I always worry for her. When I get beaten I am very sad and I think it might be better to be dead and it makes me cry a lot and then my head is aching a lot and it makes my body weak. I have a lot of work I cannot be weak, this is not good for me" (Girl aged 13, Interview code OI012, Akobo town).*

Material deprivation, poverty and relationships

Boys and girls reported that the tension between people had increased and that they had to take more risks which could affect their mental health. The following main reasons were expressed: Cattle loss and poverty; the lack of food; overcrowding; lack of shelter and poor living condition; poor relationships and increased fighting between people and families and clan fighting.

Children indicated that material deprivation particularly the lack of food was related to psychological distress because it would force children to find food elsewhere which could result in being insulted or beaten but also in being injured, killed or abducted in the forest.

> *"… I take many risks when I go to the forest for wild fruit, but I am often hungry when I have no money to buy things. In the forest you can encounter the Murle, it is often more than one, sometimes many and you cannot protect yourself, when there are hyenas you can fight them you can go in a group and they are afraid if you have sticks but the Murle you cannot fight. Being killed is not good for your health but if you are dead you do not care about your health, if you are*

not quite dead you can be traumatised" (Young boy, FGD code RF06, Akobo town).

"…*We also get weak because there is not enough food. If there is food in the morning there will be food again the next day in the evening but only if I keep on begging people. They can beat me and when I cry a lot it also makes me weak and I cannot get up and my body is very hot" (Girl aged 10, Interview code OI06A).*

Several children who had lost their parents in the Mareng attack indicated that the lack of food reminded them of the killing of their parents which resulted in sadness. The lack of shelter was also described as a source for distress by some children.

"… We were given mats and plastic sheeting, than we made some shelters and a tukul, but now everything is destroyed again by the survey [destruction of houses where a new road was planned in Akobo town]. We live outside now and we have no shelter because our compounds are destroyed. We just live under the trees with the people we are staying now. We cannot make tukuls because my grandfather is not strong enough and nobody will help us. When it is raining we just put the plastic sheets or the mats over our heads until the rain is over" (Boy aged 10, Interview code OI07A).

Children indicated that the relationships between people had suffered as a result of the conflict and that there was more violence between people. This also affected the children. One girl suggested that there was more beating because there were more people in Akobo town.

"…I think it is not good if children get beaten so often. There is more beating than before, I do not know why. There are more beatings because there are more people in Akobo town who can beat children" (Young girls, FGD code RF05, Akobo town).

"…The security here is not ok since the attacks in Mareng and in Nyandit you can see many people and children who look traumatised. People have changed because of the attacks, some are hostile and some are not so friendly anymore. Some are just scared and think that anything may happen to them in this place as well. This is one of the problems, I cannot say whether this place is safe or not. People are very tense and there could easily be violence again. There are

a lot of family issues and clan to clan fighting. Here [in Akobo town] at least 5 people are killed every week" (Boy aged 15 Interview code OI05A, Akobo town).

5.2.7. Children's involvement in decision making

The great majority of the boys and the girls reported that they had little or no involvement in the decision making process at the family level. Older children also indicated that the boundaries defined by adults left little space for them to negotiate their role within the family and in the community.

> *"… One child can do nothing. In the community children are not recognised. From our culture we are not involved in anything, not even in family meetings. But now we have formed groups […]. As a group you can speak in public meetings. So if we want to say something we can be given a chance" (Older girl, FGD code MF01, Akobo town).*

> *"... People who have a say in the community are men, men only. They do not involve women and children. But in the children's club girls can be leaders and are respected" (Older girl, FGD code MF01, Akobo town).*

> *"…The fathers are the decision makers, the mothers do not make decisions, some can give their opinions but it will be the fathers who decide. The village leaders are also very powerful" (girl aged 16, Interview code RI001, Akobo town).*

> *"…Men are the most powerful in the village. The women do not decide anything neither do the children" (Young boy, FGD code DF03, Nyandit).*

Many children wished their views to be recognised by adults. The children who had formed groups reported that they could have more influence.

To become educated was viewed by most children as the key to dissolve these cultural boundaries. Children expressed that to be informed and educated was a precondition for them to be respected and involved in family and community matters. Several children reported that they had learned from the returnees from Kenya and Ethiopia that the people in these countries would take children's opinions into account.

Boys and girls expressed that it was also their responsibility to address the various underlying causes that resulted in mental and physical ill health. Some children indicated that this was only possible if children were more involved in decision making at the family and the community level.

5.2.8. Children's own resources to maintain their own health and the health of loved ones.

The majority of the boys and the girls indicated the use of the following strategies to maintain their own health and to protect them from further harm: avoiding dangerous places; avoiding people; support parents and seeking parental advise; forming children's groups; forming peer relationships; seeking peaceful places and supportive people; finding work and earn some money; stealing 'little food' to avoid being sent to dangerous places to collect wild fruit; helping others; counting on own strength.

Several children also pointed out that they were raised to be strong, responsible and resourceful in order to survive a hostile environment.

> *"…I am strong and I can hide I can be without food for many days, if I do not eat much now it will not be new to me when I have to hide for some time. This is what we learn. If you are used to being hungry you will survive, I can escape from the Murle I can run fast and I will find my way back and I cannot starve I can be without water for some time and I can survive anywhere. I am not afraid because I know that I am strong" (Young boy, FGD code RF06, Akobo town).*

Orphans indicated fewer resources at their disposition to protect them than children with parents. A few orphans reported that they had found people who would give them food or intervene if they were beaten by foster parents. The orphan school was described as the place where they felt protected and accepted.

> *"…There is no quarrelling in this place, no fighting, we unite ourselves as orphans. I like the teachers very much they are kind and do not bother that we are orphans. They tell us that we can achieve the same things in life like the children with parents" (Girl aged 13, Interview code OI13A, Akobo town).*

> *"…The teachers are the people we trust most, this is the only place that can make our life better, it is the only place in which we are safe, as soon as we go out our lives are in danger" (Boy aged 14, Interview code OI14A, Akobo town).*

The great majority of the children reported that they felt responsible for others. Caring for others had high priority in their lives. Several children indicated that they felt responsible for elderly, blind or handicapped people as well as depressed family members. Girls saw it as their responsibility to take care of younger siblings (Figure 5.18).

Figure 5.18: Girls taking care of their family and younger siblings (Source Author)

Information collected during workshops indicated that most children had a clear knowledge of the factors contributing to ill health and how to mitigate or prevent disease. Depending on children's age, gender and living situation children expressed different causes for mental and physical ill health and most children were able to tell which additional resources were needed to address these causes and improve the situation.

> *"… There are many children who have gone through traumatic experiences, the only way to help is to have somebody experienced with such children so that we can learn from the person, we need to know how to give good advice to these children so that we can make their lives better for them. It will be good because children listen more to other children and not so much to adults. From there we need to encourage the children to go to school because if the children go to school they can forget the event and all the horrible things little by little" (Boy aged 14; Interview code, RI08 Akobo town).*

The majority of the boys and the girls recognised their need to learn more, but equally demonstrated their belief in their own strength and capabilities irrespective of that learning.

5.2.9. Children's capacity and motivation to participate in health decision making.

Children's capacity and motivation to participate in health decision making was examined through analysis of the group dynamics, and the results obtained from workshops conducted with different groups of children in terms of age, gender and living situation. These workshops were conducted with the following five groups of children: ten younger boys aged 8 to13; eleven older boys aged 14 to 18; ten younger girls aged 8 to13; ten older girls aged 14 to18; and twenty orphans, ten boys and ten girls, aged 12-18. These workshops aimed at identifying children's capacities to define and prioritise health threats and to propose solutions.

The ranking of the main perceived health threats identified is presented by age groups and gender in Table 5.19. A picture of the ranking exercise with the young boys is shown in Figure 5.20.

Table 5.19: Ranking of the main perceived health threats by age and gender

The main perceived health threats by age and gender (1: most important health threat)				
Rank	**Younger boys**	**Older boys**	**Younger girls**	**Older girls**
1.	Lack of food that forces children to go to the forest for wild fruit and get killed by the enemy.	Violence resulting in mental trauma.	Violence: The fear of being killed by the Murle in the forest.	Violence: conflict within the community because of scarce resources; being abducted or killed by the enemy; fights over girls if a boy approaches a girl without consent from parents of the girl.
2.	Violence: massacres by enemy and violence in family and community, too much beating.	Bad water resulting in diarrhoea. Not enough boreholes and children often chased away by adults.	Lack of food resulted in weakness. Weak children have more frequent malaria. Children with good food are strong.	Harmful environment and workload: long walking distances under the sun with heavy loads; accidents with charcoal.
3.	Not enough and not healthy food makes children weak.	Initiation of boys: HIV/AIDS transmission from cutting many boys with the same knife.	Heavy workload: to heavy loads to carry.	Early marriage resulting in physical and mental health problems.
4.	Daily activities, going to the bush.	Malaria.	Early marriage: more beatings, the body is not ready to deliver babies.	Lack of food and bad food.
5.	Malaria.	Lack of food being forced to go to the bush for wild fruit and encountering wild animals and/or the Murle.	Malaria because of high fewer and convulsions.	Going to the bush and being killed or abducted by the enemy or being attacked by wild animals.
6.	Flies are dirty and make children sick.	The rainy season for children with no shelter.	Bad river water and dirty flies can make diarrhoea and vomiting.	River: contaminated river water resulting in diarrhoea and cholera; animals such as snakes and crocodiles and drowning in the rainy season.
7.	Contaminated water resulting in diarrhoea and vomiting.	Flies that spoil food because they are dirty and make children sick.	.	Malaria.
8.	Accidents: drowning in the river, wild animals and cars.		.	Hygiene and sanitation.

Exposure to violence and its effects ranked highest in all four groups of children. The boys and the girls discussed and suggested the following main solutions to address the identified health threats: To end violence so that the people can return to their land and rebuild their livelihoods and build schools for the children; education so that people become better people who can take care of their families and their children; to have opportunities to earn money and buy cattle instead of raiding them; to support children so that they can be better accepted in the community; to create more health services that can help the 'traumatised' children

and adults; to create more children's groups supported by adults who can understand the situation of children and their health needs.

> *".. Most of the health problems are due to violence. You cannot go far from Akobo town because the Murle will find you and kill you. They are like a militia and they come in groups. When you are out in the villages they observe the villages first. When they know all the people in the village they will attack. They will burn down the village and kill everybody […]. Some of the children are not meant to be killed; these children will be abducted and will not be returned. This situation creates all the problems" (Older boy, Workshop code WS02, Akobo town).*

Figure 5.20: Workshop with young boys: ranking exercise (Source Author)

The workshop conducted with orphans addressed stigma and abuse of orphans; in their foster homes and by community members, which was identified as the most important health threat for them. The workshop aimed at identifying children's possible solutions to improve their situation. The following citation reports on what the children described as 'the only solution' to change their situation within the community.

> *"… Even if there is no shelter and only little food I would decide to stay here at the orphan school. Because here nobody is mistreating you at home people are mistreating me and at home there is often no food for me. Even if I have no*

house to stay I would still go and live at the orphan school even if there was little food. If there is little food and shelter, than you can only concentrate on education and the teachers will be your guidance and like your parents. Even if you do the daily work in this place, it will not be the same because you do what needs to be done so that we all will have a meal a day and clean cloth and enough water and there is nobody who will abuse you and take everything away from you. When you concentrate on such a life there is nothing that will remind you of the event and that you are without parents. Things will be better. And even if we quarrel from time to time it will not be the same because we cannot insult each other for not having parents like the way other children insult us. We are all orphans and we feel very much united. This education is the key to our life in the future. If I become an educated person my situation in the community can change. Children are not well respected in general but when you become an orphan your life becomes horrible at once" (Boys and girls, Workshop code WS05, Akobo town).

Orphans, boys and girls alike presented how they would organise such an 'orphanage'. The children identified their own role and the kind of support and protection they would need in order to stay and manage such a place. The children also suggested to transform the selection criteria of the children living in such a place and argued that some households might have just one parent but be just as vulnerable as full orphans because of old age, blindness or disability of that person.

In two groups, boys and girls drew the new buildings and facilities necessary to transform the compound of the orphan school into a permanent home for orphans in the workshop. Also daily activities and the children's responsibilities were listed as well as material assistance suggested by the children. Several boys and girls differentiated between what was absolutely needed and what would be 'nice to have'.

Facilitators from 'Save the Children' also probed for other possible solutions in the course of the workshop. For example to provide care, supervision and guidance of children living without parental protection through regular home visits by trained adults. Also assigning several smaller places to orphans within the community where care and protection was ensured by an adult supervisor was discussed. The great majority of the boys and the girls rejected both suggestions.

"… That idea is not good at all for us. Because if we are outside this compound and within the community like this, the food that will be given for us will be eaten or sold by the person who is supposed to take care of us. The food and the shelter that is given by the person or the organisation that is helping us can be

taken away from us by the person who is supervising us. All the adult people start to abuse us, the people who we stay with abuse us, so this is not good for us. Only if this person is also supervised and has to face consequences for trying to take things away from us. It is better to be all together outside the community in this compound where nobody can harm us. This place we know already and this is a good place. All of us want to live in this place only that it is not possible at the time. We are fearful now because of what we experienced" (Boys and girls, Workshop code WS05; Akobo town).

Figure 5.21 shows the children from the orphan school participating in the workshop. The first picture shows all the children who wished to participate. 20 of them were chosen.

Figure 5.21: Workshop at the orphan school (Source Author)

In all workshops children demonstrated their motivation to participate and to share their views, knowledge and experiences. On several occasions children indicated that their situation needed to change and that they wanted to be part of this change.

All workshops conducted identified children's wish to induce change in their everyday environment and to improve their relationships with adults. Participants pointed out that children's health and their lives could only be improved if adults could be convinced to respect children and listen to them.

The language children used to portray the meaning of participation allowed to distinguish two forms of participation. One form referred to by children can be described as an activity extraordinary to their daily life and involved the language of 'being heard' and 'listened to' as 'advisors' or 'consultants'. It also included the forming of 'new relationships' with children and adults outside their homes. The second form of participation can be described as rooted in the structure and activities of children's daily lives, working on and improving ongoing relationships as a means of accessing other rights within the family or community.

Three boys and three girls, aged 14 to18 years participated in the research process over an approximately four months' period. They assisted in the design and adaptation of research instruments, the training of data collectors, the pretesting of research instruments, and in the analysis of data collected. All the children had been displaced by the Nyandit attack. Two children lived with their mother only, two children lived with their father only, one child lived with both parents and one child was an orphan and lived with his older brother who was the head of household. The scope, quality and impact of children's participation from this group of children is presented in a Matrix form and illustrates the effectiveness of the participatory approach to this research (Table 22a-c).

Table 5.22a: Matrix for measuring child participation: the scope of participation

Measuring the scope of participation: What degree of participation has been achieved, at what stage of study development.

	Situation analysis *	Study planning **	Study design	Implemen-tation ***	Monitoring and evaluation
Self-initiated or managed	--------------	------------	--------------------	-----------------	--------------
Participatory	The recognition for the need to conduct a mental health survey was greatly influenced by children		Children were given considerable power in the adaptation process of the survey instrument. They decided on its length, appropriateness for the target children, how items could and should be explained to the children and which items could be threatening to children.	Children were involved in the training of the data collectors in how to translate and explain items to the children so that they would understand their meaning in role plays. They were observers for the pilot testing of the questionnaire	Children were involved in the preliminary evaluation of interviews and FGD's conducted with children in the case study
Consultative	-------------	------------	--------------------	-----------------	---------------

* To conduct the case study was determined in advance by the primary investigator in collaboration with SC-UK.
** To use the HTQ, HSCL-25, PTGI combined with open ended questions as a frame for the mental health survey was decided by the primary investigator and the Sudanese Co-investigator.
*** For security reasons children were not involved in the survey data collection.

Table 5.22b: Matrix for measuring child participation: the quality of participation

Measuring the quality of the participation: To what extent have participatory processes complied with the agreed standards for effective participation (Save the Children UK, 2005)				
	Poor	**Adequate**	**Good**	**Excellent**
Ethical	------	-----------	The children were fully informed about the process and the estimated time involved, they were clear about the boundaries of what they could and could not influence. The interpretation of findings from the research and the possibilities for program implementation was checked and discussed with the children. Consent was sought from children and their caregivers.	-------------------------------
Child sensitive	------	-----------	A wide range of creative strategies to allow children to explore their ideas was applied. Caregivers were informed and involved to a high degree. Although caregivers did not participate directly, space and time for children to participate had to be negotiated between children and caregivers.	--------------------------------
Relevant for children	------	-----------	--------------------------------	The decision to prioritise child mental health and to conduct a mental health survey arose from children's own expressed concerns
Inclusive	------	------------	-------------------------------	The group included boys and girls, one child with parents, half-orphans and one orphan. All children were treated with equal respect and were provided with opportunities to participate at levels appropriate to their capacity

	Poor	Adequate	Good	Excellent
Safe	-----	-----------	The study did not expose children to any additional risks	-------------------------------
Committed and sensitive staff	------	------------	----------------------------------	The members of the research team were experienced and skilled in child protection and participatory techniques and committed to respect children's rights.
Family and community links	------	------------	---------------------------------	Caregivers were consulted about whether their children could take part over a longer period of time. They were fully informed about the nature of the project and the possibility of implementation of the findings by SCiSS.

Table 5.22c: Matrix for measuring child participation: the project effect

Measuring the effect of the project: What has been the effect on the children themselves, on caregivers and staff, on the study project and the realisation of children's rights.				
		No effect	**Limited effect**	**Considerable effect**
On children	Skills and knowledge			Children acquired a variety of new skills and a greater understanding of their environment and their role in developing it.
	Confidence			Children gained confidence in themselves as they applying their newly gained skills and through the experience of having their views listened to and being respected.

		No effect	Limited effect	Considerable effect
On children	Rights awareness		An implicit outcome was that children realised that they were entitled to be taken seriously and respected	
	Connectedness with other children			Improved relationships among children from different living situations (children with parents, orphan, half-orphan)
	Mental health			Improved capacity to build relationships through gained self-confidence. Reduced symptom experiences and 'bad thoughts' through talking about experienced trauma and engaging in something meaningful.
On caregivers and staff	Awareness of children's capacity			Caregivers and staff were impressed by the level of skills children demonstrated and their determination to investigate what was important to them
	Greater understanding of the importance of listening to children			The caregivers involved gained insights into how children experienced their environment and what was important to them.

		No effect	Limited effect	Considerable effect
On caregivers and staff	Greater respect for children's rights		This project to involve children to some degree in this research did not explicitly focus on promoting children's rights. However, the right of children to be listened to and taken seriously emerged as a project outcome.	
On the realisation of rights	Sustained commitment to respect children's right to participate and address the expressed key health issues			Because the project involved the local authorities, research staff, caregivers and SCiSS, it resulted in the strengthening and broadening of the application of children's participation through children's rights clubs. Some of the findings from this research are implemented with a particular focus on psychosocial health.
	Commitment to child participatory research			Strengthening of research through mental health survey and a better understanding of risk and protective factors in children's environment.

5.3. The service providers’ views, experiences and perspectives

This section presents findings from interviews with twenty staff members of service providers in Akobo town. The findings describe their view and understanding of children’s health needs, their capacity to take an active role in disease prevention and the delivery of health services. Staff attitude towards children taking an active role in decision making and the capacity of service providers to facilitate children are assessed. The extent to which service providers can engage with children and the mechanisms of consultation and participation they employ are defined.

Twenty national and international staff of the fifteen service providers (SP) present in Akobo County at the time of the study participated in interviews. All participants had been working between one and ten years in South Sudan. Twelve respondents were male and eight respondents were female.

5.3.1. Perceived challenges to service provision

All participants reported that they were under a lot of pressure to implement their programs fast and had little time to look at how projects interfaced with the community. Donor grants were time bound and tangible results were expected soon.

More than half the staff members reported frustration about having to implement projects designed elsewhere. They found that it was often difficult to translate them into the given context of Akobo County and questioned the benefit to the population as long as they had no say in it. The majority of the SP reported that in the situation of Akobo County, often described by the respondents as a ‘chronic emergency’, the focus was on ‘doing things quick instead of right’ and that it was often impossible to measure whether a program was effective or not. Engaging with the whole community, including children, was seen as important in order to have a beneficial impact.

> *“…Even though we have many programs we do not have a great understanding of the community this is probably the most frustrating thing for me, I am so busy with my daily activities that there is no time to engage with the community. I would like to have a better understanding about why people react or think the way they do” (SP, Interview code IIJ03, Akobo town).*

Changes in aid policy were suggested in order to make public health activities participatory. One of these suggestions was to encourage additional funding by measuring the impact of community participation. Most respondents indicated that they wanted to know, after years of working in Southern Sudan, whether they had made a difference.

Moving away from defining success by measuring the quality of program implementation toward measuring program effect by using outcome and impact indicators was suggested by these respondents. It was indicated that the mosquito net distribution and their current use in construction was seen as the juncture at which some of the service providers had started to wonder whether they were satisfied with program implementation alone or if measuring whether something actually worked should be prioritised.

Impact assessment was believed to put a greater emphasis on community involvement since it was expected to have its strengths predominantly on the program effect side. To define measurable impact indicators and to collect such data was however perceived as difficult to accomplish without a foreseeable, greater investment in professional capacities and skills by several respondents.

With respect to community and child participation it was further suggested that this would only work if there was some personal gain for participants involved and if aid agencies were able to demonstrate more robustly the impact of their programming.

> *"…The assumption that poor people, living in collective societies care so much for everybody else that they want to help improve other people's lives no matter what, simply out of the kindness of their hearts is clearly 'a killing assumption' […].Community and child participation can only work if participants have some personal gains from investing their time. This could be money but it could also be micro credits, or chickens, or school fees for children, or textbooks, or notebooks….pens…whatever, … well,…. it can basically be anything; this depends on the situation" (SP, Interview code FIA04, Akobo town)*

Security was another important challenge mentioned by a majority of the participants to assist the people in remoter areas.

"…The main problem is really security. People in remote areas in east and west Akobo are never sure what will happen to them, and whether they want to move to town like many others or whether they want to stay. It's a difficult situation for the people. Some feel threatened by the Murle, others by the White Army, in any case this makes it difficult for them to settle down. It also makes it difficult for NGO's to work in these areas and you will only find local NGO's and national employees in these places. We run several PCC's [primary health care centres] and PCU's [primary health care units] in these regions and we are the only organisation. I do not think that from the security point of view any international organisation would work in these places. So far we had nobody killed and the Sudanese working for us are very committed. I think as long as we work in these places people feel safer and they are more likely to stay. It will be important in the future to bring health and education to the people so that they are not moving to the town" (SP, Interview code FIA07, Akobo town).

5.3.2. Service providers understanding of children's health needs and their living situation

All service providers indicated that the ongoing violence, which displaced more and more people to an already overcrowded place, created an increasingly stressful situation for the resident and the IDP population in Akobo town. The difficult living situation for the people and the increasing tension over scarce resources were also seen as important causes for the lack of child supervision which reportedly exposed them to risk behaviour and made them prone to get injured or to contract infectious diseases.

Several respondents indicated that children, if they had a choice, would prefer clean drinking water from boreholes, but also indicated that several children continued drinking river water. Also the many defecation sites all over Akobo town were noted and the gazillions of flies buzzing around all day long were described as a health hazard for everyone living in the town.

The lack of parental supervision was expressed by the majority of SP as an important cause for the poor health and nutritional status of children. The lack of hygiene was described as a source of infectious diseases.

"… Many children are affected by bad sanitation because the parents do not watch the child and do not care of the environment. Despite a sufficient water supply through boreholes many people take it out from the river […] and so

diarrhoea is a real problem. We even had cholera in this place" (SP, Interview code FIA01, Akobo town).

"…Neglect is leading to a lack of hygiene, diarrhoea and all sorts of other diseases, injuries, and also malaria because even if there are now bed nets distributed […] if the parents do not care the child will not sleep under a net". (SP, Interview code FIA03, Akobo town).

".. A lot of infectious diseases and nutritional problems of children are due to neglect by the parents" (SP, Interview code FIA05, Akobo town).

The same view was shared from SP assisting or running medical facilities. They indicated that parental neglect of children resulted in treatment delays, and that children often came on their own for treatment.

With a few exceptions, public health services had not been decentralised for security reasons and because many places became inaccessible during the rainy season. Thus many SP reported that people had to walk long distances to attend health facilities and collect relief food. This created additional risks for adults and children and exposed them to violence and delayed treatment as a result of long walking distances. Many places in Nyandit Payam were perceived as too far away for mothers to bring malnourished children to therapeutic feeding centres in Akobo town.

The ongoing violence was identified as the key issue threatening children's health and their lives in many ways. Violence was reported at various levels and included domestic violence but also violence between families, clans and ethnic groups.

"…There is more violence than during the war. This is a great problem. People have lost respect for each other. Everybody has lived through traumatic experiences and even if it is true that people are strong and have developed strong coping strategies, not everybody has and nobody takes care of these people. We see a lot of symptoms typical for PTSD, depression or anxiety disorders. Other people just go numb and have no feelings anymore. In my opinion this leads to a whole cascade of violence starting at the domestic level" (SP, Interview code IIA07, Akobo town).

"…There has always been cattle raiding or revenge killings, but never were children and women targeted. Now just everybody gets killed and it does not seem to matter. How can you build a society if this is the baseline? The respect for other human beings seems completely lost" (SP, Interview code IIJ07, Juba).

"…Many children experience violence not only in their family but also through intertribal and clan fighting". (SP, Interview code IIA11, Akobo town).

"… The ongoing violence is a serious threat for children's lives. In the past, cattle raids were about cattle, now if cattle raids are conducted children become targets. Firearms are used by adults and children and people are either killed at random or women and children are particularly targeted and killed. It's the same for raids and revenge fighting. If small children survive they are abducted. This has never been so violent before. The way raids are conducted has clearly changed for the worse since the war, and the revenge killings conducted as a result are getting more brutal every time. It is not surprising that more people are killed in Jonglei state than during the war" (SP, Interview code IIJ08, Juba).

One respondent suggested a way to address children's health needs through education and training.

"…Much more should be done in terms of vocational training. I am sure that such skills would help young people to get on with their lives and generate income. This is the only way to give them a future, develop the country and reduce violence. As long as we have so many young people, who most of them have lived through traumatic experiences, and there is nothing meaningful to do for them we should not blame them if they resume to violence and are easily recruited by all kind of armed groups, or for cattle raiding or revenge killing" (SP, Interview code IIA10, Akobo town).

To invest in education for adults and children was seen by another respondent as the first step in order to change cultural aspects and attitudes which expose children to health risks.

National respondents and respondents engaging directly with children mentioned mental health as an important issue for children in Akobo town.

".. I think there are many people suffering from trauma, particularly children. I think it would be good that children, through children's clubs can be facilitated to

talk about their experiences among themselves. There is a great need to look at mental trauma" (SP, Interview code IIA11, Akobo town).

"…There are cases of psychosocial problems. Some are milder forms, but we also have severe cases. There are two children who cannot talk anymore since the event when they lost their parents. Two other children, when they think about the past or the problems they have encountered, they go automatically unconscious. Then some children are very depressed so that it is difficult for them to be together with other children. Two other children have an abnormal behaviour in the sense that they can get very aggressive and restless. But what we see is that if we take care of them and engage with them in activities, they can change their behaviour to a better one". (SP, Interview code IFA06, Akobo town).

The respondents also indicated that there was a great uncertainty among SP about how to address mental health and psychosocial needs of children in conflict settings.

The majority of the respondents explained that the term psychosocial intervention comprised a variety of interventions and one respondent felt that psychosocial was largely understood as 'everything and nothing in particular'. One respondent mentioned the existence and availability of the IASC Guidelines on Mental Health and Psychosocial Support in Emergency Settings as a useful guidance to address mental health.

Early child marriage and the absence of reproductive health services targeting young girls and teen mothers were perceived as an important risk to girl's health by several respondents. In particular the absence of antenatal care, the practice of home deliveries, late referral and sexually transmitted infections were mentioned as an important reason for the high maternal mortality in young girls.

"…*I think one of the main health issues is forced child marriage. This affects the children and the whole community. In the community fighting and violence is often the result of sexual relationships, or suspected rape. For the girl it is a reproductive health and a mental health issue" (SP, Interview code FIA01, Akobo town).*

"…A main problem for the young bride is that she has to serve everyone and become the hostage of the family. In general many people in the clan pay cows and by that the husband is in debt and cannot protect the girl as long as he has not paid his debts. Even the children will belong to the community. Other

important problems are related to sexual and reproductive health. Young girls are expected to have children soon and the maternal mortality is very high, and the majority of girls and women deliver at home" (SP, Interview code FIA02, Akobo town).

".. Early child marriage is an important health issue. When you are on the street you see younger boys, older boys, and younger girls; then you see a few older girls and none of them is smiling […]. Then you talk to them you will find out that they are terrified because they can be married off at any time and they know that they are not ready. They worry about the workload and the complications during delivery or that they may die" (SP, Interview code FIA03, Akobo town).

Except for the NGO supporting the orphan school and SCiSS, orphans were not singled out as a group of children with particular health needs. The situation of orphans was largely seen in a positive light because most of them lived with foster parents who were either relatives or friends of relatives. It was assumed that these children were well treated or at least not treated differently than children who still had their parents.

5.3.3. Service providers understanding of children's roles, capacities and responsibilities

The majority of the respondents indicated that children had to carry many responsibilities that also forced them to make decisions affecting their health and often the health of younger siblings every day. It was further noted that children's responsibilities had increased as a result of attacks and displacement. The workload of girls was generally described as 'enormous'.

Children's capacity and willingness to engage in decision making and the benefit of letting children participate for the community as a whole was reported by the majority of service providers.

"…I think that children have a great potential to come up with ideas, be creative, and advise others. I believe that children know what they want. I believe all it needs is somebody who can facilitate children and supervise them in an encouraging way. To integrate children is very much needed. The society here must change if they want to survive and catch up with other African Nations. I believe children could help in this process of change. I do believe that particularly here in Akobo people start to realise that they cannot go back and

the way forward is through education and finding ways to become independent. This will be a chance for the children and hopefully also for women. It is good to look into the capacity of children. This seems to be a black hole and not much is known" (SP, Interview code FIA04, Akobo town).

"… I am convinced that children can be consulted for anything that is affecting them. The question is rather do adults let them? I think if children are better informed, and this may come with education, they will be less shy to speak out. Somebody needs to facilitate children and tell them their rights and with the support from some educated adults particularly people who have made such experiences abroad this could change the current situation. This culture is not friendly to children and most of the significant problems, particularly health problems can only be addressed if the culture changes in the sense that parents start to take care of their family and set their priority on education of all family members. The school can have an important function and the Commissioner is pushing in this direction and this is promising for the future". (SP, Interview code FIA08, Akobo town).

"…There is no question about this if children are facilitated and can create something together a lot is possible. As soon as children feel comfortable they can be very creative and some are very strong and even dare to negotiate with their parents" (SP, Interview code FIA05, Akobo town).

The respondents also indicated that despite children's strength, capacity and willingness to address health needs, engagement with children could interfere with their daily activities, and endanger their livelihoods. Respondents also indicated that an engagement with children should not interfere with their education and not create more tension between children and their caregivers. The majority of the SP expressed the need to involve the community as a whole in order to engage with children systematically and address their health needs through children's participation. All SP except for the child mandated organisation expressed that this was outside the scope of their programming and also their own capacity.

5.3.3.1. Service providers understanding of cultural challenges to children's participation

Respondents from the child mandated organisation indicated that children's participation in South Sudan would face several challenges. The following cultural and contextual challenges were highlighted.

"…We believe that we need a world in which children's voices are heard and respected. If an enabling environment is created, these children can express their opinions and take decisions in matters that affect their life and contribute to development. This is really a challenge in Southern Sudan and particularly in a place like Akobo County with so many problems. But the idea is to have children not just as recipients of programmes but as active participants with a say in prioritizing their needs and have a say in implementation. However, adults in the communities have another definition of child participation. For them it means that children work in the household or herd the cattle. It is not about children expressing their opinion it is about children taking over adult responsibilities and to do what they are told to do. This is a major challenge" (SP, Interview code IIJ01, Akobo town).

"…There is a lot of resistance from the adults of communities who are not used to communicate with children the way we do. Even though adults trust children with a lot of responsibilities like herding the cattle or taking care of younger siblings it is not in their culture that children ask like critical questions or make suggestions. Empowerment of children is not something that is well received and creates resistance in the communities. Children's participation is not possible without engaging the wider community because what we need is a shift in attitude towards children's right and participation. What we often see here is that parents know what children need but that they are not able to provide it; this can be a starting point" (SP, Interview code IIJ01, Akobo town).

"… In most places there is already a lack of adult participation. So if you work on child participation it is not surprising that you get no adult support for child participation. Therefore working on child participation means to include both adults and children. The community needs to be seen as a whole and children as part of it. So even if children are a priority, the community has to be engaged at the same time" (SP, Interview code IIJ06, Akobo town).

"…In southern Sudan, just as in most cultures of the world, there is no tradition of involving children in formulating decisions that affect them. In fact, parents are rather known to exercise power and authority to control children's lives. Children are expected to do as they are told and not ask questions and parents are afraid that involvement of children will make children disrespectful, that children should not be burdened with inappropriate responsibilities and that involving children is time consuming or it may place children at risk. It's a long way to go and can only be done if adults are part of the process" (SP, Interview code IIJ06, Akobo town).

5.3.4. Engagement with children - mechanisms of participation

Almost half the SP reported that they had consulted with children in the past. They indicated that children were easy to talk to and recognised children's particular knowledge in some areas. One respondent, for example, consulted with children because of their unique knowledge of the location of explosive devices.

> *"… Children are the most important informants for several reasons. First of all they know the area well because they go to places and stroll around all day long, in particular the boys. Secondly, and this is the dangerous part for them, they are curious and if they are not informed they dig out these objects, simply out of curiosity and even use them as toys, therefore they are able to describe such devices in details to us, this gives us a clearer idea about the device beforehand. Thirdly the children have a good memory of places and the area and are able to show us the places where the devices are. Also area mapping conducted with children is often more precise than the ones conducted with adults" (SP, Interview code FIA09, Akobo town).*

Another SP reported that children were invited to participate in meetings if the subject discussed was of children's concern.

> *"… We do invite children to be part of meetings and actively ask them; after a while the children get used to this new process and so you can build their capacity, and so children can learn to say what they like and what they don't like. Children need to be integrated. We also encourage the integration of children in family meetings. Once children feel more comfortable they automatically start to speak out." (SP, Interview code FIA06, Akobo town).*

Another SP had integrated older children in the distribution of impregnated mosquito nets.

> *"…There is no question about children's capacity. When we did the bed net distribution we also included children and they came up with many ideas; they were reliable and committed […]. The children also told us that the problem of the distribution was that they did not have time to inform the people about how and why to use the net. Later we found out that several children had returned to the people to pass on that message" (SP, Interview code FIA07, Akobo town).*

Respondents from the child mandated organisation had a clear strategy on how to engage with children in a systematic way through children's rights clubs. Their aim was to create an enabling environment for children to express their opinions, to take decisions in matters that affected their lives and so contribute to development in their society. Children's participation was described as part of a larger participation plan including adults and children in order to develop an element of active citizenship. It was understood that a lack of adult participation when working with children often resulted in a lack of support for them. Children were perceived as 'rights holders' and therefore not just seen as recipients of assistance provided by NGOs.

The respondents indicated that they had learned through their child based approach that despite some challenges, it was a propitious time to give children a voice in Akobo County.

> *"… These groups can sit together, play together, make some brainstorming in order to find solutions to the problems affecting the children and they can also take action; this has already happened on several occasions. At the moment the main topic for the children in the children's clubs is to bring children into schools, so if they find a child who wants to go to school and the parents do not allow it, the children take a lead and talk to the parents […] the children tell them that the child has a right to go to school and that the child has a right to education. If this does not help the children go to the local authority and at the time they always help the child to go to school because it is the time where education is a priority and this is supported by the Commissioner and therefore the local leaders. At the moment it is a good time for children. If they are in an organised group and know their rights and the right way to address what is important to them, they are very likely to be listened to, but they have to learn to make an argument […]. This is what we do; we teach the children that they have rights and responsibilities. We try to find a good way to convince adults and to find solutions. Before we form a children's club, adults have to be informed and they have to give their consent. In this way they are involved from the beginning. Several workshops are done in parallel with adults and children" (Interview service provider, Interview code FI01, Akobo town).*

Participation of children at the family level was seen by the respondent as the most challenging area. On the one hand it would be most important for children to be able to influence decisions on the family level which determined their day to day

life, and on the other hand, adults, even if they would say that children's opinions should be considered, feared losing authority and power at the family level if children were 'informed' and learned about their rights. It was therefore seen as important to find the right approach and involve the whole community in children's participation and that adults could have a direct benefit from children's activities.

> *"…When we form this clubs, we inform the stakeholders in the Payams and particularly the community leaders. So we share this idea with them and they agree with us. We want to bring children together, we want children not to be neglected and that they can learn from one another. Children do speak out for example they make songs or plays. In that way they can create something together and it is educational for the adult population at the same time" (Interview service provider, Interview code FI01, Akobo town).*

5.4. Summary of responses from three respondent groups: children, adult community member and service providers.

Figure 5.23 provides an illustrative summary of the results of the case study presented in this chapter. The figure shows the common thematic areas that have emerged from the three groups of respondents.

The summary shows several commonalities in the results with regards to the main perceived health risks and health needs for children, the perceptions of children's capacity to participate in health decision making, and the challenges and opportunities for children to participate.

The summary also shows specific key findings that have emerged in the three groups of respondents as well as areas of divergent views or perceptions.

Figure 5.23: Summary of responses from three respondent groups: Children, adult community members and service providers

Adults

Health risks for children: poverty and social disintegration as a result of decades of warfare increases general violence; heavy workload at a young age; children are sent to dangerous areas; early child marriage; loss of parents and parental neglect; weak blood, mental ill health can reduce blood strength permanently.

Health needs and protection: education for adults and children; improve family relationships through change in men's attitude. ending violence and being able to return to a healthy environment (more space, better food, people feel connected, less fighting among adults); addressing mental health in adults and children to improve blood strength.

Children's participation: adults see children as strong survivors with the ability to address issues. Children's participation supported at the project level as long as it does not interfere with chores. Empowerment of children at the family level not envisaged; fear to lose power if children assume greater control over their lives.

Children

Health risks for children: loss of parental protection; early child marriage; ethnic, community and domestic violence; daily activities in dangerous areas; lack of adult supervision; high workload; abuse. Also seen as causes for mental problems which results in further weakness; children often on their own less access to health services

Health needs and protection: education for children; improved family and peer relationships; being respected in the community; being protected from foster parents and community members; being allowed to address health issues; to have a say and be heard; counselling for mentally ill children; helping other children; ending violence.

Children's participation: children want to take an active role in shaping their future and address the identified health issues. They see a need to take an active role at the project level as well as at the family and community level to address issues affecting their day to day life

Service provider

Health risks: parental neglect; early child marriage; infectious diseases as a result of a lack of hygiene and overcrowding; armed and general violence. access to health services, nutrition; workload of girls, home deliveries and late referrals. Mental ill health (child focused NGOs').

Health needs and protection: decentralise and improve service access; security for people to return to their land; education and training for youth; reproductive and psycho-social health; services according to locally defined needs. Assistance seen as too much donor driven, not interfacing with the community.

Children's participation: children seen as capable and motivated to participate; can improve program effect. The perceived need to involve the family and the community is largely seen as outside the scope of most SP;

COMMONALITIES

Health risks for children: perceived high exposure to general and armed violence; psychological distress, high workload starting at an early age; forced child marriage; parental neglect of children; loss of parents, material deprivation; being killed, injured or abducted during daily activities outside the village; lack of hygiene, child care and supervision. **Health needs and child protection:** addressing underlying causes for psychological distress: improved access to health care, nutrition and clean drinking water through service provision and parental care and assistance of children, ending violence for people to return to their lands and rebuild their livelihoods, education and vocational training to become independent and reduce poverty and violence, abandon early child marriage. **Children's capacity to participate:** Children seen as, and demonstrated to be strong survivors capable to play an active role in addressing health needs. **Challenges and opportunities for children's participation:** Embedding children's participation at the family and community level. Children's strength and capacity to participate is acknowledged so is the need for change.

6. Results mental health survey

A cross sectional survey design was used to investigate mental health effects of experienced traumas and the relationships between experienced trauma, post-traumatic growth and mental health outcomes.

In this chapter, the number and typology of traumatic events in IDP children who had survived inter-ethnic violence are defined and the prevalence of PTSD, anxiety disorder and depression is estimated. The prevalence of post-traumatic growth (PTG) is investigated and the relationships between demographics, the number and typology of traumatic events and mental health outcomes are determined. Also the relationships between demographics, the number and typology of experienced trauma, mental health outcomes and PTG are established and the extent to which ‘suffering’ and ‘growth’ coexisted in children is defined.

The data collection took place between April 7th and May 19th 2010. This included the hottest period of the year with temperatures rising to 50°C and the beginning of the rainy season (Figure 6.1).

Figure 6.1: Data collection at the beginning of the rainy season (Source: Author).

Nyandit and Bilkey Payam were visited in order to cover the estimated 16,000 IDP population from the Nyandit attack in a systematic manner. 12 children were absent and one interview was not completed. 353 completed interviews were entered into the database. The overall response rate was 96.4%.

6.1. Sample characteristics of the respondents

The age range of the children interviewed was between 12 and 18 years with a mean age of 15 years for both boys and girls. More boys (58.6%) than girls (41.4%) were represented in the sample. This difference is explained by the fact that more girls than boys were reportedly killed in the attacks[9]. All respondents belonged to the Lou Nuer ethnic group and described themselves as Christians. Five boys (2.4%) and 32 girls (21.9%) were married. One girl was separated and one girl was widowed.

Length of school attendance was low with a mean of 3.3 years for boys and 2.1 years for girls respectively. It was observed that many children who reported three or more years of education were unable to write their names on the assent form. Children who reported several years of education had often repeated the last taught grade several times. Due to a lack of qualified teachers, only grade one and two were taught in many places outside Akobo town.

The household size of the sample population varied between one and sixteen people with an average size of seven. A household was defined as people eating and sleeping together. The sample characteristics are summarised in Table 6.2.

[9] It was reported that the girls were more likely to be killed in attacks than the boys because they tried to return to their homes to get at least some of their belongings whereas the boys were more likely to run immediately or to hide in a safe place. Many of them reported that they just ran and never looked back when the enemy attacked.

Table 6.2: Characteristics of respondents (N = 353)

Characteristics	Number	%
Boys	207	58.6
Girls	146	41.4
Age, range boys and girls	12 - 18	
Age, mean boys and girls	15.03 / 14.91	
Age, standard deviation boys and girls	1.6 / 1.7	
Religion	**Number**	**%**
Christian	353	100.0
Ethnicity	**Number**	**%**
Lou Nuer	353	100.0
Marital status	**Number**	**%**
Never married (boys / girls)	202 / 112	97.6 / 76.7
Married (boys /girls)	5 / 32	2.4 / 21.9
Separated (boys / girls)	0 / 1	0 / 0.7
Widowed (boys / girls)	0 / 1	0 / 0.7
Reason for displacement	**Number**	**%**
Attack (boys / girls)	206 / 146	99.5 / 100.0
Insecurity (boys / girls)	0 / 0	0 / 0
Other (boys / girls)	1 / 0	0.5 / 0
Years of school attended	**Year**	
Mean in years (boys / girls)	3.3 / 2.1	
Range in years(boys / girls)	0 - 7 / 0 - 9	
Number of people in household (HH)	**Number**	
Mean number of people in HH	7	
Minimum and Maximum HH size	1 - 16	
Number of loved ones killed in attack	**Number**	**%**
Children with 0 close person killed	52	14.7
Children with 1 close person killed	85	24.2
Children with 2 close persons killed	159	45.0
Children with 3 close persons killed	47	13.3
Children with 4 or more close persons killed	10	2.8

All respondents had survived at least one attack. 14.7% of the respondents reported that nobody close to them had died in attacks. 85.3% had lost at least one person close to them. The people mentioned were father, mother, sister, brother,

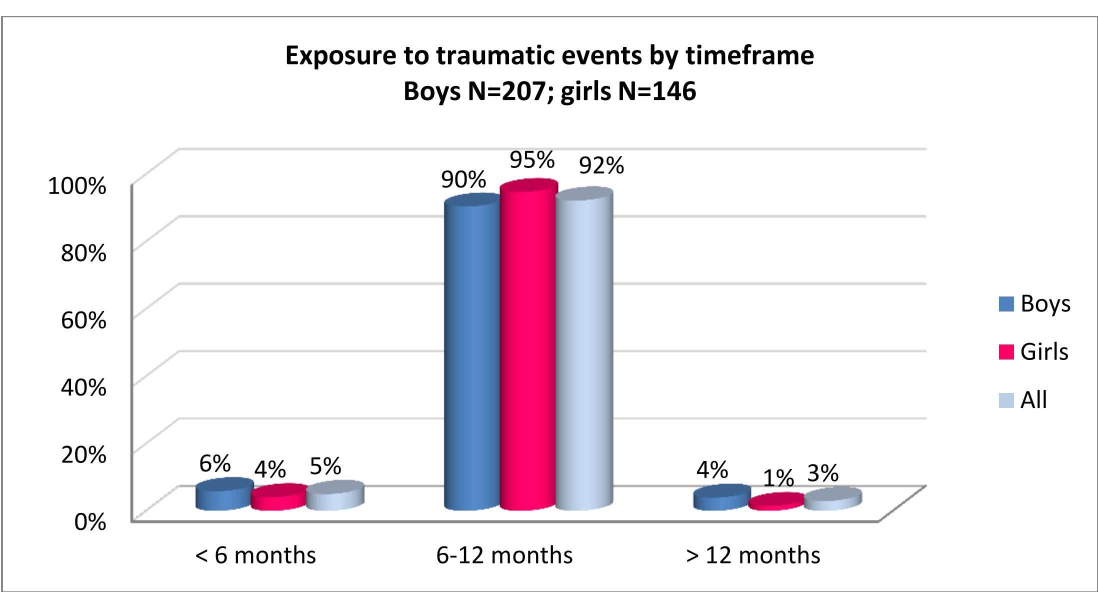
grandfather, grandmother, uncle, aunt, cousin, nephew, niece, neighbour, children of uncle and friends. 66.6% of the children witnessed the killing of one or several of the loved ones mentioned. 19.3% of the sample children were orphans and 22.1% were half - orphans. 58.6% of the children still had their parents.

Family composition	Number	%
Child lives with both parents	207	58.6
Child lives with father only	23	6.5
Child lives with mother only	55	15.6
Child has lost both parents	68	19.3

6.2. Timeframe since the most frightening event

For 97.1% of the children, the timeframe to exposure to the most traumatic event was <=12 months (Figure 6.3). 73.4% of the children reported that the Nyandit attack in April 2009 was the most terrifying event. 12.5% reported that the Mareng attack in August 2009 was the most terrifying experience for them. It was often difficult for the children who had experienced several massacres to name the most terrifying. The two most violent attacks, the Nyandit and the Mareng attacks, explain the high percentage of children in the 6 to 12 months timeframe. They also explain the high number of orphans and half-orphans.

Figure 6.3: Timeframe since the most terrifying event



6.3. Exposure to trauma

Part A of the Harvard Trauma Questionnaire covered 43 questions dealing with past experiences of traumatic events. The 43 questions were later grouped into 7 categories. The results on exposure to traumatic events by gender are presented in Tables 6.5a-g. The prevalence of experienced trauma by category and by gender is presented in Figure 6.4.

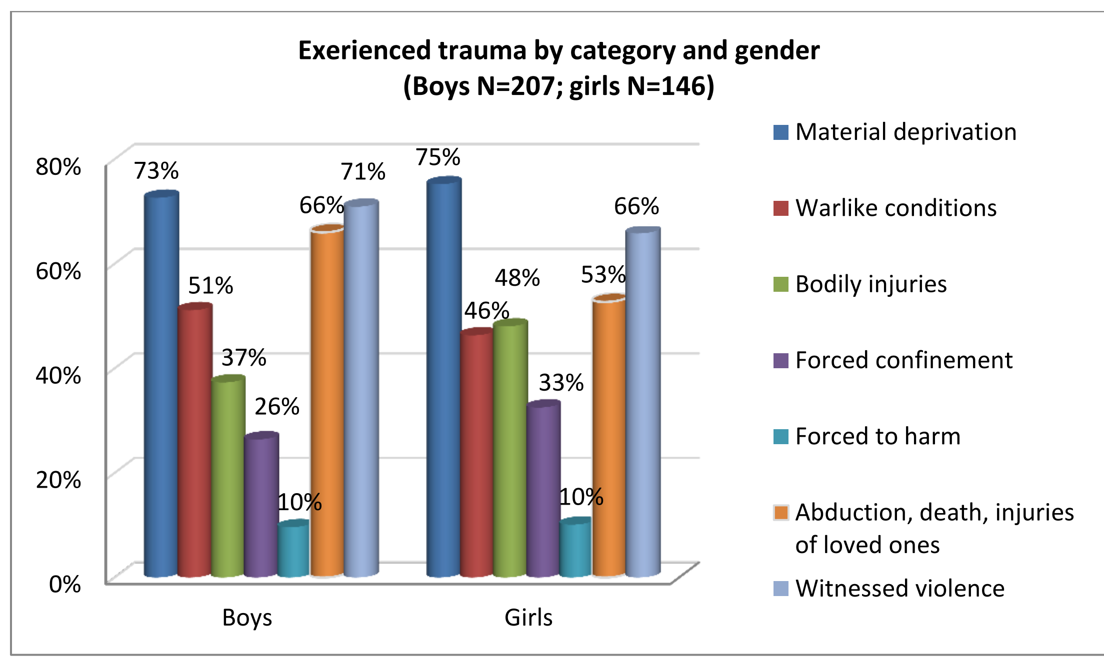
The adaptation process of the questionnaire revealed that not all events pre-defined in the questionnaire as 'traumatic event' were unconditionally perceived as such by the children even if they had experienced them personally. Children for example indicated that 'body beatings' were so common that they were not always perceived as traumatic. In particular, if children reported that they misbehaved and deserved the beatings it was 'just normal' for them and not reported as 'traumatic'. Also 'to have betrayed or killed another person' was not always perceived as traumatic; it depended on the circumstances in which such violence took place. The questions were therefore asked in a way that the children were obliged to answer with "yes" if they had experienced the event as traumatic as opposed to "just normal".

A more detailed description of the 'interpretation' of trauma variables from English into Nuer language is presented in Annex Ib.

6.3.1. Prevalence of experienced trauma by categories and by gender

The category ‘material deprivation’ contained the most commonly experienced trauma events with 73.7% [95%CI 67.6%-79.7%]. The magnitude of violence is evidenced by the fact that 60.5% [95%CI 55.4%-65.5%] of the children had ‘witnessed abduction, death and injuries of loved ones’, 49.1% [95%CI 44%-54.1%] had experienced ‘warlike conditions’, 68.6% [95%CI 63.8%-73.3%] had experienced the category ’witnessed general violence’ and 42% [95%CI 36.9%-47%] of the children had experienced the category ‘bodily injuries’. All the 353 children in the sample had survived at least one attack. The categories ‘forced to harm’ (9.8%) [95%CI 6.8%-12.7%] and ‘forced confinement’ (28.9%) [95%CI 24.1%-33.6%] were least experienced by the respondents (Figure 6.4).

Figure 6.4: Experienced trauma by category and gender



6.3.2. Prevalence of experienced individual traumas variables by gender

73.7% of the respondents experienced the first category **'material deprivation'** (Figure 6.5a). Gender differences were not statistically significant in this category. 'Lack of shelter' with 90.3% for the boys and 89.7% for the girls and 'lack of food and water' with 89.4% of the boys and 90.4% of the girls were experienced to a very high degree as traumatic.

Difficulties in the availability and accessibility of appropriate health care was evidenced by the high reporting of 'Ill health without access to medical care' which was experienced by 75.8% of the boys and 78.1% of the girls.

'Confiscation or destruction of property' was reported by 72.9% of the boys and 73.3 % of the girls. The high percentage represents the children who experienced the Nyandit attack during which the vast majority of the villages in the Payam were burned to the ground. 'Robbery' was experienced by 34.8% of the boys and 44.5% of the girls.

Table 6.5a: Trauma exposure: gender differences for individual variables in the category 'material deprivation'

Number of children experiencing traumatic event.			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Material deprivation (Total)	(72.6)	(75.2)	(73.7)
Lack of shelter	187 (90.3)	131 (89.7)	318 (90.1)
Lack of food or water	185 (89.4)	132 (90.4)	317 (89.8)
Ill health without access to medical care	157 (75.8)	114 (78.1)	271 (76.8)
Confiscation or destruction of property	151 (72.9)	107 (73.3)	278 (73.1)
Robbery	72 (34.8)	65 (44.5)	137 (38.8)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

49.1% of the respondents experienced the second category **'warlike conditions'** (Table 6.5.b). The most common trauma events experienced in this category were 'exposure to crossfire' (66.6%), 'forced evacuation under dangerous conditions' (68.8%) and 'combat situation' (62.9%).

Significantly more boys (72.5%) than girls (49.3%) experienced 'combat situations' (p<0.001). Exposure to combat for boys was not solely reported to be the result of attacks but also the result of taking part in cattle raiding and in fighting as members of armed groups.

Children who recorded "yes" to 'combat situation' included the children who also reported 'serious physical injuries during combat' in the following category. 'Present while somebody searched your home for people or things' (24.1%) and 'used as human shield' (23.2%) were experienced less commonly by boys and girls.

Table 6.5b: Trauma exposure: gender differences for individual variables in the category 'warlike conditions'

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Warlike conditions (Total)	(51.1)	(46.3)	(49.1)
Combat situation	150 (72.5)***	72 (49.3)***	222 (62.9)
Used as human shield	50 (24.2)	32 (21.9)	82 (23.2)
Exposure to cross fire	137 (66.2)	98 (67.1)	235 (66.6)
Forced evacuation under dangerous conditions	145 (70.0)	98 (67.1)	243 (68.8)
Present while someone searched your home for people or things	47 (22.7)	38 (26.0)	85 (24.1)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

42% of the children experienced the third category **'bodily injury'** (Table 6.5c). All the children had experienced 'beatings' and 84.7% of them reported 'beatings' as traumatic. Some of them indicated that they were 'too heavy' or 'undeserved'. 'Rape' (24.1%) and 'other sexual abuse or humiliation' (19%) was experienced by boys and girls alike. 16 (50%) of the married girls were among the 39 (26.7%) girls who reported 'rape' and 17 (53%) of the married girls were among the 29 (19.9%) who experienced 'other sexual abuse or humiliation'. Mental, physical and sexual abuse was reported to a high degree as a result of forced early child marriage among the married respondents in the survey. Also the high reporting of 'torture' (51.4%) and 'being locked away' (47.3%) by girls was often linked to 'forced early child marriage'. The reporting of experienced 'torture' was significantly higher in girls compared to the boys ($p<0.001$).

Significantly more girls (54.8%) than boys (31.4%) experienced injuries such as 'axing, knifing or spearing' ($p<0.001$). Approximately one third of the girls reported in the face to face interviews that injuries had happened when they tried to return home to get important things during attacks. 53.4% of the girls and 34.8% of the boys reported 'serious physical injuries'. The gender difference proved to be significant at the $p<0.001$ level. The majority of the boys and a few girls also reported wild animals, particularly hyenas and snakes, as reasons for serious injuries in addition to attacks and the general violence

Table 6.5c: Trauma exposure: gender differences for individual variables in the category 'bodily injuries'

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Bodily injury (Total)	(37.3)	(48.0)	(42.0)
Beatings to the body	179 (86.5)	120 (82.2)	299 (84.7)
Rape	46 (22.2)	39 (26.7)	85 (24.1)
Other sexual abuse or humiliation	38 (18.4)	29 (19.9)	67 (19.0)
Axing, knifing, spearing	65 (31.4)***	80 (54.8)***	145 (41.1)
Torture	68 (32.9)***	75 (51.4)***	143 (40.5)
Serious physical injury during combat	72 (34.8)***	78 (53.4)***	150 (42.5)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

28.9% of the respondents experienced the fourth category **'forced confinement, coercion'** (Table 6.5d). 'Forced to flee leaving everything behind' with 67.1% for the boys and 52.1% for the girls (p<0.01), 'forced to hide' with 42% for the boys and 50% for the girls and 'forced separation from family members' with 44% of the boys and 47.3% of the girls were experienced to a high degree. Almost half of the respondents indicated in the survey that forced separation and in particular not knowing what had happened to family members had been very traumatic for them.

Reported 'abduction' by Murle fighters was extremely high since these numbers only represent the abducted children who had been able to escape. Abduction was experienced by 13% of the boys and 17% of the girls.

Significantly more girls (41.1%) than boys (27.1%) had ever experienced 'forced labour' (p<0.01) with little difference between children who still had their parents, half-orphans and orphans. Five children indicated in the survey interviews that they experienced the workload as traumatic because they were beaten or humiliated in order to get the work done or because they were forced to work despite suffering from illnesses.

Table 6.5d: Trauma exposure: gender differences for individual variables in the category 'forced confinement, coercion'.

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Forced confinement, coercion (Total)	(26.4)	(32.5)	(28.9)
Imprisonment, being locked away	62 (30.0)**	69 (47.3)**	131 (37.1)
Forced labour	56 (27.1)**	60 (41.1)**	116 (32.9)
Forced to hide	87 (42.0)	73 (50.0)	160 (45.3)
Brainwashing	25 (12.1)	26 (17.8)	51 (14.4)
Confined to home because of danger outside	53 (25.6)	42 (28.8)	95 (26.9)
Abducted	27 (13.0)	25 (17.1)	52 (14.7)
Forced separation from family	91 (44.0)	69 (47.3)	160 (45.3)
Forcefully prevented from burying someone	17 (8.2)	8 (5.5)	25 (7.1)
Forced to find or bury bodies	26 (12.6)	26 (17.8)	52 (14.7)
Forced to flee leaving everything behind	139 (67.1)**	76 (52.1)**	215 (60.9)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

9.8% of the children experienced the fifth category **'forced to harm'** (Table 6.5e) with little difference between boys and girls. Both, boys (17.4%) and girls (15.8%) experienced being 'forced to fight in warlike situations'.

Overall, this category was least experienced by the children. Girls were more likely to experience being 'forced to harm family members or friends' and to be 'forced to betray family members or friends' compared to the boys ($p<0.05$). The boys on the other hand were significantly more likely to be 'forced to kill unrelated people' than the girls ($p<0.05$).

25 (12.1%) of the boys who fought with militia groups or participated in cattle raiding answered these questions with "no". These children explained that they participated voluntarily and that they were not forced to harm or kill people and destroy properties against their will. 17 (8.2%) of the boys had harmed or killed somebody but indicated that they could 'handle' these experiences and that they had not been 'traumatic' to them.

Table 6.5e: Trauma exposure: gender differences for individual variables in the category 'forced to harm'

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Forced to do harm (Total)	(9.6)	(10.1)	(9.8)
Forced to fight in warlike situations	36 (17.4)	23 (15.8)	59 (16.7)
Forced to carry out other activities during attack	55 (26.6)	43 (29.5)	98 (27.8)
Forced to harm family members or friends	4 (1.9)*	11 (7.5)*	15 (4.2)
Forced to kill family members or friends	4 (1.9)	1 (0.7)	5 (1.4)
Forced to harm unrelated people	13 (6.3)	4 (2.7)	17 (4.8)
Forced to kill unrelated people	17 (8.2)*	5 (3.4)*	22 (6.2)
Forced to destroy someone's possession or property	16 (7.7)	12 (8.2)	28 (7.9)
Forced to betray family members	14 (6.8)*	20 (13.7)*	34 (9.6)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

60.5% of the children experienced the sixth category **'witnessing abduction, death and injuries of loved ones'** (Table 6.5f). Children participating in the survey who witnessed such atrocities mentioned this as extremely traumatic in open ended survey questions, and as a main cause for their mental difficulties.

> *"…I was very much traumatised when my only sister was killed by the enemy during the attack. They tortured her by hanging her and putting her head in hot water so that she would tell where the rest of the family was" (Girl aged 14, survey interview code I252, Akobo town IDP camp).*

> *"…I was terrified when they tortured my uncle. They should have killed him with a gun instead of torturing him. Now bad dreams come to me every night and make me cry a lot" (Girl aged 14, survey interview code A317, Akobo town).*

> *"…To witness the killing of my parents in the attack was frightening for me and I will forever feel fearful and very sad in my life" (Boy aged 16, survey interview code A106, Akobo town).*

> *"…I was traumatised when I watched the killing of my dad. They killed him while we were hiding ourselves. It was near our home, they knifed him instead of using guns. I have many problems now and I am terrified for no reason" (Girl aged 15, survey interview code A310, Akobo town).*

'Witnessing physical injuries of family members or friends due to combat or attack' showed little difference between the boys (68.6%) and the girls (63.7%). A significant difference was shown for 'witnessing murder of family members or friends due to combat or attack'. This was reported by 72.9% of the boys and by 57.5% of the girls ($p<0.01$).

Significantly more boys 56.5% than girls 37% witnessed 'abduction of children' ($p<0.001$). More than half of the respondents also indicated that they were not sure whether a child was abducted or just taken away to be killed.

Table 6.5f: Trauma exposure: gender differences for individual variables in the category 'witnessing abduction, death and injuries of loved ones'

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Witnessing abduction death and injuries of loved ones (Total)	(66.0)	(52.7%)	(60.5%)
Witnessing physical injuries of family members or friends due to combat / attack	142 (68.6)	93 (63.7)	235 (66.6)
Witnessing murder of family members or friends due to combat / attack	151 (72.9)**	84 (57.5)**	235 (66.6)
Witnessing abduction of loved ones	117 (56.5)***	54 (37.0)***	171 (48.4)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

68.6% of the children experienced the seventh category **'witnessed general violence'** (Table 6.5g). 'Witnessed murder or killing' with 83% of the boys and 80.8% of the girls was experienced to the highest degree. 'Witnessing torture' with 62.3% of the respondents and 'witnessing rape and sexual abuse' with 55% was also experienced to a high degree. A significant difference between boys (80.7%) and girls in this category (59.6%) was shown for 'witnessed body beating' (p<0.01). The great majority of these children indicated that it was very traumatic for them to witness that death did not come quickly and that they had to witness that the fighters took a long time to "finish people off".

"…I was very much traumatised after the event. I saw how the enemy cut off the heads of people little by little. It is better to use guns. When I crossed the river there were many bodies and I thought it would be better for me to drown than to live with all this horrible things to remember" (Girl aged 13, survey interview code A327, Akobo town).

"…After the event I was very sad, there were too many dead bodies and it took a long time for them to die. They should have used guns instead of torturing them. I was very scared but now I feel fine and the bad dreams are leaving little by little" (Girl aged 12, survey interview code A129, Akobo town).

Table 6.5g: Trauma exposure: gender differences for individual variables in the category 'witnessed general violence'

Number of children experiencing traumatic event			
EVENTS	Boys N (%)	Girls N (%)	Total N (%)
Witnessed general violence (Total)	(70.9)	(65.8)	(68.6)
Witnessed body beatings	167 (80.7)**	98 (67.1)**	265 (75.1)
Witnessed torture	133 (64.3)	87 (59.6)	220 (62.3)
Witnessed murder or killing	173 (83.6)	118 (80.8)	291 (82.4)
Witnessed rape or sexual abuse	113 (54.6)	81 (55.5)	194 (55.0)
*** Gender difference is significant at p<0.001 ** Gender difference is significant at p<0.01	* Gender difference is significant at p <0.05		

6.3.3. Number of traumatic events experienced

The high exposures to violence resulted in a high number of experienced traumas with little difference between boys and girls (Table 6.6). On average 18 traumatic events were reported with a range from 5 to 35 events for the boys, and 7 to 31 events for the girls.

Table 6.6: Number of experienced traumatic events, by gender (N = 353)

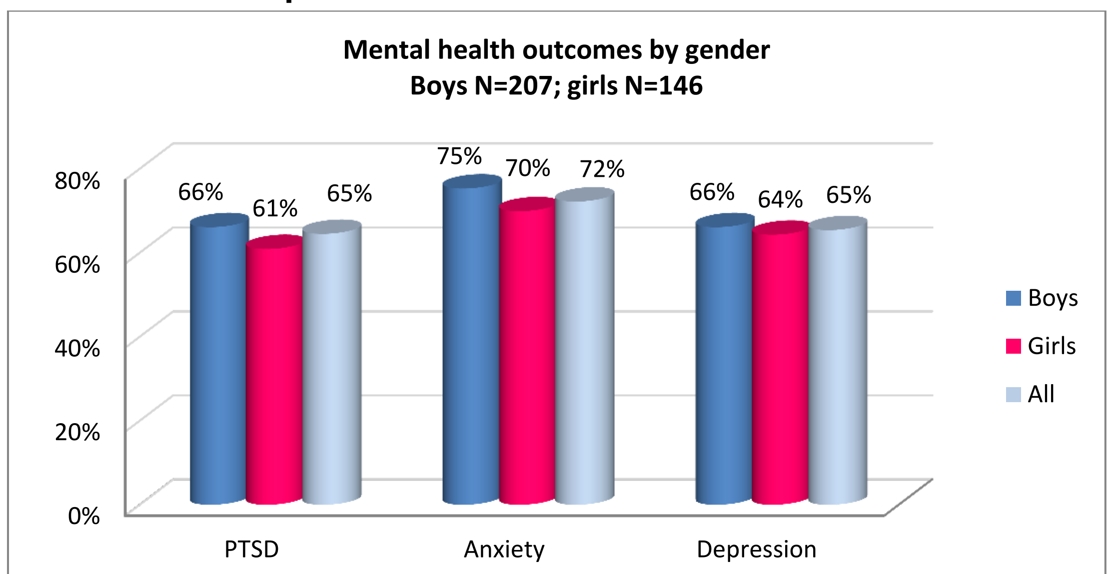
	Mean	95% CI	Std. Dev.	Minimum	Maximum
Boys (N = 207)	17.83	[17.2 - 18.5]	4.61	5	35
Girls (N = 146)	18.26	[17.5 - 19.0]	4.70	7	31
All children (N=353	18.01	[17.5 - 18.5]	4.46	5	35
Percentile	**Value**	**Percentile**	**Value**	**Percentile**	**Value**
25th	15	50th	18	75th	21

6.4. Mental health outcomes

The prevalence of PTSD, anxiety disorder and depression was defined according to cut off levels validated in the instrument guidelines (Mollica et al., 2004). The outcome for PTSD was split into children exhibiting or not exhibiting symptoms for PTSD at a mean cut off >= 2. The outcome for anxiety disorder and depression was split into children exhibiting or not exhibiting symptoms for anxiety and depression at a mean cut off >= 1.75.

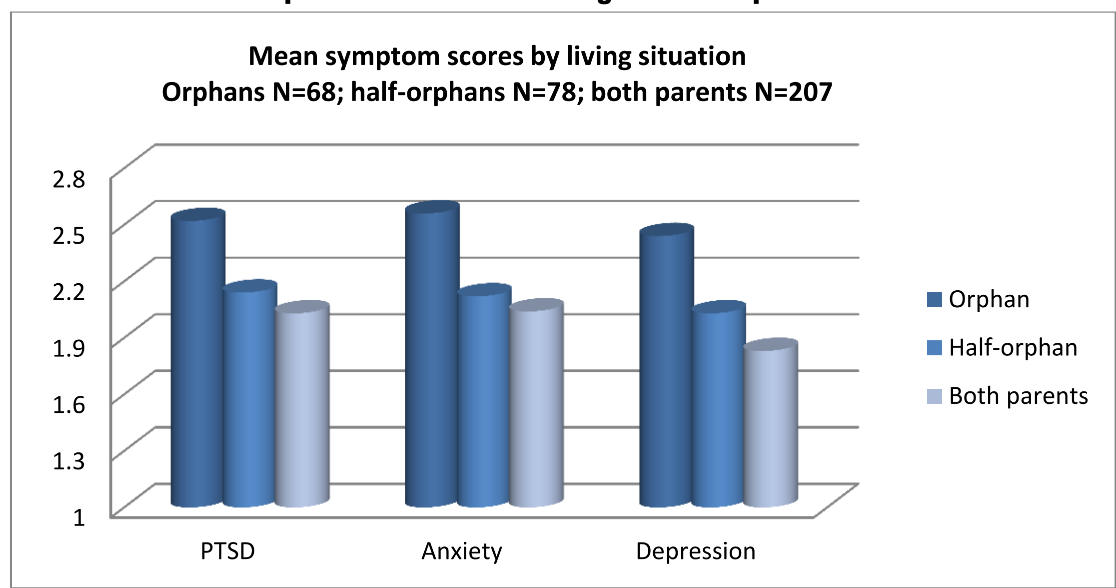
66.1% [95%CI 59.2% - 72%] of the boys and 60.9% [95%CI 53.3% - 68.1%] of the girls met symptoms criteria for PTSD. 75.3% [95%CI 69.4% - 80%] of the boys and 69.8% [95%CI 62.2% - 76.9%] of the girls met symptom criteria for anxiety disorder and 66.1% [95%CI 59.2% - 72%] and 64.3% [95% CI 56.7% - 71.5%] of the girls met symptom criteria for depression. Gender differences were not statistically significant (p>0.05). Figure 6.7 presents the three mental health outcomes investigated by gender.

Figure 6.7: Prevalence rates for symptoms of PTSD cut-off >=2, anxiety disorder and depression cut-off >=1.75.



Significant differences in mean scores for PTSD, anxiety and depression were demonstrated between orphans and the children whose parents were still alive. Figure 6.8 shows the differences in mean scores from the three subgroups of children according to their living situation: orphans, half orphans and children who lived with their parents.

Figure 6.8: Mean scores for PTSD, anxiety disorder and depression in orphans, half-orphans and children living with both parents



PTSD	Mean score	95% CI
Orphans	2.516	[2.3477 to 2.6839]
Half-orphans	2.144	[1.9690 to 2.3188]
Both parents	2.026	[1.9149 to 2.1376]
Anxiety	**Mean scores**	**95%CI**
Orphans	2.560	[2.3991 to 1.7215]
Half-orphans	2.119	[1.9586 to 2.2799]
Both parents	2.039	[1.9300 to 2.1474]
Depression	**Mean scores**	**95%CI**
Orphans	2.437	[2.2763 to 2.5982]
Half-orphans	2.029	[1.8583 to 2.1999]
Both parents	1.831	[1.7231 to 1.9394]

6.4.1. PTSD

The respondents defined to what degree they had experienced each of the PTSD symptoms in the past month. The possible answers were: not at all, a little, quite a bit or extremely. Children's answers as well as the gender differences are presented in Table 6.9.

Symptoms that were most experienced by the children and reported as 'quite a bit and extremely' were: 'recurrent nightmares' (62.3%); 'troubled by physical problems' (60.0%); 'feeling as though the event was happening again' (57.7%); 'spending time thinking why this event has happened to you' (57.2%); 'recurrent thoughts of the most terrifying or hurtful event' (55.5%); 'feeling on guard' (53.8%); 'trouble sleeping' (53.5%) and 'bodily pain' (52.4%).

Symptoms that were least experienced by the children and reported as 'not at all and a little' were: 'feeling ashamed of the terrifying event that happened to you' (69.9%); 'feeling that someone you trusted betrayed you' (65.3%); 'feeling that you have no one to rely on' (63.8%); 'hopelessness' (62.1%); 'unable to feel emotions' (60.3%); 'poor memory since the event' (59.8%); 'feeling as if you have less skills than before' (58.5%), 'feeling humiliated by your experience' (60.6%);' less interest in daily activities' (57.3%).

Gender differences were not significant in 32 out of the 40 symptoms for PTSD ($p>0.05$). The most significant gender difference ($p<0.001$) was demonstrated in the question 'feeling a need for revenge' where significantly more boys than girls had experienced such feelings in the past month.

Boys also scored higher than girls for the symptoms 'sudden emotional or physical reactions when reminded of the event' and 'poor memory since the event' ($p<0.01$).

Further gender differences with boys scoring higher than the girls at a $p<0.05$ level of significance were the symptoms 'less interested in daily activities', 'being told something you cannot remember'; 'feeling as if you are two people', 'feeling unable to make daily plans' and 'feeling humiliated by your experience'.

Table 6.9: Experienced symptoms for PTSD in the past month

PTSD	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Recurrent thoughts of the most terrifying or hurtful event	36 (17.4)	57 (27.5)	55 (26.6)	59 (28.5)	28 (19.2)	36 (24.7)	39 (26.7)	43 (29.5)	64 (18.1)	93 (26.3)	94 (26.6)	102 (28.9)	**0.958**
Feeling as though the event was happening again	28 (13.5)	62 (30.0)	81 (39.1)	36 (17.4)	20 (13.7)	39 (26.7)	66 (45.7)	21 (14.4)	48 (13.6)	101 (28.6)	147 (41.6)	57 (16.1)	**0.953**
Recurring or frequent nightmares	30 (14.5)	45 (21.7)	69 (33.3)	63 (30.4)	20 (13.7)	38 (26.0)	37 (25.3)	51 (34.9)	50 (14.2)	83 (23.5)	106 (30.0)	114 (32.3)	**0.837**
Feeling detached or withdrawn from people	68 (32.9)	56 (27.1)	51 (24.6)	32 (15.5)	43 (29.5)	45 (30.8)	39 (26.7)	19 (13.0)	111 (31.4)	101 (28.6)	90 (25.5)	51 (14.4)	**0.885**
Unable to feel emotions	44 (21.3)	79 (38.2)	50 (24.2)	34 16.4)	45 (30.8)	46 (31.5)	40 (27.4)	15 (10.3)	89 (24.9)	125 (35.4)	90 (25.5)	49 (13.9)	**0.095**
Spending time thinking why this event has happened to you	27 (13.0)	63 (30.0)	76 (36.7)	41 (19.8)	26 (17.8)	35 (24.0)	45 (30.8)	40 (27.4)	53 (15.0)	98 (27.8)	121 (34.3)	81 (22.9)	**0.576**
Feeling jumpy or easily startled	56 (27.1)	65 (31.4)	53 (25.6)	33 (15.9)	36 (24.7)	41 (28.1)	45 (30.8)	24 (16.4)	92 (26.1)	106 (30.0)	98 (27.8)	57 (16.1)	**0.419**
Difficulty to concentrate	38 (18.4)	72 (34.8)	58 (28.0)	39 (18.8)	22 (15.1)	45 (30.0)	54 (37.0)	25 (17.1)	60 (17.0)	117 (33.1)	112 (31.7)	64 (18.1)	**0.359**
Trouble sleeping	40 (19.3)	58 (28.0)	72 (24.8)	37 (17.9)	21 (14.4)	45 (30.8)	60 (41.1)	20 (13.7)	61 (17.3)	103 (29.2)	132 (37.4)	57 (16.1)	**0.804**

PTSD	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Feeling on guard	30 (14.5)	63 (30.4)	65 (31.4)	49 (23.7)	35 (24.0)	35 (24.0)	48 32.9)	28 (19.2)	65 (18.4)	98 (27.8)	113 (32.0)	77 (21.8)	**0.153**
Having outbursts of anger	66 (31.9)	51 (24.6)	52 (25.1)	38 (18.4)	49 (32.9)	43 (29,5)	45 (30.8)	10 (6.8)	114 (32.3)	94 (26.6)	97 (27.5)	48 (13.6)	**0.159**
Avoiding activities that remind you of the event	35 (16.9)	74 (35.7)	56 (27.1)	42 (20.3)	38 (26.0)	48 (32.2)	31 (21.2)	29 (19.9)	73 (20.7)	122 (34.6)	87 (24.6)	71 (20.1)	**0.137**
Unable to remember the event or part of it	50 (24.2)	58 (28.0)	60 (29.0)	39 (18.8)	35 (24.0)	43 (29.5)	51 (34.9)	17 (11.6)	85 (24.1)	101 (28.6)	111 (31.4)	56 (15.9)	**0.499**
Feeling a need for revenge	34 (16.4)	49 (23.7)	60 (29.0)	64 (30.9)	45 (30.8)	49 (33.6)	33 (22.6)	19 (13.0)	79 (22.4)	98 (27.8)	93 (26.3)	83 (23.5)	**<0.001 *****
Less interested in daily activities	49 (23.7)	63 (30.4)	50 (24.2)	45 (21.7)	49 (33.6)	41 (28.1)	35 (24.0)	21 (14.4)	98 (27.8)	104 (29.5)	85 (24.1)	66 (18.7)	**0.033 ***
Feeling as if you don't have a future	72 (34.8)	48 (23.2)	50 (24.2)	37 (17.9)	58 (39.7)	23 (15.8)	43 (29.5)	22 (15.1)	130 (36.8)	71 (20.1)	93 (26.3)	59 (16.7)	**0.632**
Avoiding thoughts or feelings associated with the event	39 (18.8)	75 (36.2)	48 (23.2)	45 (21.7)	33 (22.6)	40 (27.4)	42 (28.8)	31 (21.2)	72 (20.4)	115 (32.6)	90 (25.5)	76 (21.5)	**0.587**
Sudden emotional or physical re-action when reminded of event	35 (16.9)	60 (29.0)	72 (34.8)	40 (19.3)	43 (29.5)	44 (30.1)	45 (30.8)	14 (9.6)	78 (22.1)	104 (29.5)	117 (33.1)	53 (15.0)	**0.001 ****

PTSD	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Feeling as if you have less skills than before	52 (25.1)	67 (32.4)	56 (27.1)	32 (15.5)	46 (31.5)	41 (28.1)	42 (28.8)	17 (11.6)	98 (27.9)	108 (30.6)	98 (27.8)	48 (13.6)	**0.276**
Having difficulty dealing with new situations	39 (18.8)	69 (33.3)	60 (29.0)	39 (18.8)	37 (25.3)	44 (30.1)	44 (30.1)	21 (14.4)	76 (21.5)	113 (32.0)	104 (29.5)	60 (17.0)	**0.207**
Feeling powerless to help others	55 (26.6)	50 (24.4)	66 (31.9)	36 (17.4)	38 (26.0)	45 (30.0)	42 (28.8)	21 (14.4)	93 (26.3)	95 (26.9)	108 (30.6)	57 (16.1)	**0.441**
Feeling exhausted	48 (23.2)	61 (29.5)	66 (31.9)	32 (15.5)	41 (28.1)	34 (23.3)	45 (30.8)	26 (17.8)	89 (25.2)	95 (26,9)	111 (31.4)	58 (16.4)	**0.910**
Bodily pain	33 (15.9)	65 (31.4)	65 (31.4)	44 (21.3)	28 (19.3)	41 (28.3)	43 (29.7)	33 (22.8)	61 (17.3)	106 (30.0)	108 (30.6)	77 (21.8)	**0.874**
Troubled by physical problems.	35 (16.9)	64 (30.9)	63 (30.4)	45 (21.7)	34 (23.3)	40 (27.4)	46 (31.5)	26 (17.8)	69 (19.5)	104 (29.5)	109 (30.9)	71 (29.1)	**0.255**
Poor memory since event	50 (24.2)	55 (26.6)	70 (33.8)	32 (15.5)	47 (32.2)	59 (40.4)	25 (17.1)	15 (10.3)	97 (27.5)	114 (32.3)	95 (26.9)	46 (13.0)	**0.001 ****
Being told something you cannot remember	52 (25.1)	59 (28.5)	55 (26.6)	41 (19.8)	48 (32.9)	48 (32.9)	32 (21.9)	18 (12.3)	100 (28.3)	107 (30.3)	87 (24.6)	59 (16.7)	**0.018 ***
Difficulties paying attention	45 (21.7)	74 (35.7)	61 (29.5)	27 (13.0)	45 (30.8)	47 (32.2)	40 (27.4)	14 (9.6)	90 (25.5)	121 (34.3)	101 (28.6)	41 (11.6)	**0.085**
Feeling as if you are two people	61 (29.5)	62 (30.0)	54 (26.1)	30 (14.5)	59 (40.4)	42 (28.8)	34 (23.3)	11 (7.5)	120 (34.0)	104 (29.5)	88 (24.9)	41 (11.6)	**0.013 ***
Feeling unable to make daily plans	40 (19.3)	71 (34.3)	60 (29.0)	36 (17.4)	44 (30.1)	46 (31.5)	37 (25.3)	19 (13.0)	84 (23.8)	117 (33.1)	97 (27.5)	55 (15.6)	**0.032 ***

PTSD	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Blaming yourself for things that have happened	41 (19.8)	79 (38.2)	60 (29.0)	27 (13.0)	32 (21.9)	42 (28.8)	44 (30.0)	28 (19.2)	73 (20.7)	121 (34.3)	104 (29.5)	55 (15.6)	**0.298**
Feeling guilty for having survived	64 (30.9)	52 (25.1)	57 (27.5)	34 (16.4)	38 (26.0)	33 (22.6)	48 (32.9)	27 (18.5)	102 (28.9)	85 (24.1)	105 (29.7)	61 (17.3)	**0.210**
Feelings of hopelessness	65 (31.4)	65 (31.4)	39 (18.8)	38 (18.4)	45 (30.8)	44 (30.1)	36 (24.7)	21 (14.4)	110 (31.2)	109 (30.9)	75 (21.2)	59 (16.7)	**0.976**
Feeling ashamed of the terrifying event that happened to you	47 (22.7)	91 (44.0)	41 (19.8)	28 (13.5)	46 (31.5)	63 (43.2)	17 (11.6)	20 (13.7)	93 (26.3)	158 (43.6)	58 (16.4)	48 (13.6)	**0.065**
Feeling that you are the only one who has suffered the event	41 (19.8)	74 (35.7)	50 (24.2)	42 (20.3)	28 (19.2)	54 (37.0)	47 (32.2)	17 (11.6)	69 (19.5)	128 (36.3)	97 (27.5)	59 (16.7)	**0.520**
Feeling that people do not under-stand what happened to you	37 (17.9)	62 (30.0)	74 (35.7)	34 (16.4)	36 (24.7)	42 (28.8)	49 (33.6)	19 (13.0)	73 (20.7)	104 (29.5)	123 (34.8)	53 (15.0)	**0.147**
Feeling that others are hostile towards you	68 (32.9)	47 (22.7)	48 (23.7)	44 (21.3)	48 (32.9)	46 (31.5)	32 (21.9)	20 (13.7)	116 (32.9)	93 (26.3)	80 (22.7)	64 (18.1)	**0.217**

PTSD	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Felling that you have no one to rely on	59 (28.5)	70 (33.8)	44 (21.3)	34 (16.4)	44 (30.1)	52 (35.6)	34 (23.3)	16 (11.0)	103 (29.2)	122 (34.6)	78 (22.1)	50 (14.2)	**0.407**
Feeling that someone you trusted betrayed you	74 (35.7)	63 (30.4)	45 (21.7)	25 (12.1)	51 (34.9)	46 (31.5)	29 (19.9)	20 (13.7)	125 (35.4)	109 (30.9)	74 (21.0)	45 (12.7)	**0.873**
Feeling humiliated by your experience	54 (26.1)	58 (28.0)	51 (24.4)	44 (21.3)	45 (30.8)	57 (39.0)	26 (17.8)	18 (12.3)	99 (28.0)	115 (32.6)	77 (21.8)	62 (17.6)	**0.013** *
Feeling no trust in others	54 (26.2)	56 (27.2)	51 (24.8)	45 (21.8)	36 (24.7)	50 (34.2)	41 (28.1)	19 (13.0)	90 (25.6)	106 (30.0)	92 (26.1)	64 (18.1)	**0.309**

*** **Gender difference is significant at p<0.001** ** **Gender difference is significant at p<0.01**	* **Gender difference is significant at p <0.05**

6.4.2. Anxiety disorder

The children were asked to define to what degree they had experienced the ten symptoms for anxiety disorder in the past month. The possible answers were: not at all, a little, quite a bit or extremely. The scores for the individual symptoms are presented in Table 6.10.

Symptoms that were most experienced by the children and reported as ‘quite a bit and extremely’ were: ‘headaches’ (60.9%); ‘suddenly scared for no reason’ (56.4%) and ‘feeling fearful’ (54.4%). 25 (7.1%) respondents mentioned headaches as part of a chain of symptoms which started with ‘crying a lot’ → ‘strong headache’ → ‘hot body’ → ‘weak legs’ → ‘inability to move’ or ‘unconsciousness’.

Symptoms that were least experienced by the children and reported as ‘not at all and a little’ were: ‘faintness, dizziness and weakness’ (61.8%); ‘trembling, shaking’ (61.7%) and ‘feeling restless cannot sit still’ (59.5%).

The most significant gender difference ($p<0.01$) was demonstrated in the question ‘nervousness, shakiness inside’ with the boys scoring higher than the girls. This was also true for the question ‘faintness, dizziness, weakness’ ($p<0.05$).

The girls scored significantly higher than the boys for the question ‘suddenly scared for no reason’ ($p<0.05$).

Table 6.10: Experienced symptoms for anxiety in the past month

Anxiety	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann Whitney_U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Suddenly scared for no reason	53 (25.6)	52 (25.1)	54 (26.1)	48 (23.2)	22 (15.1)	27 (18.5)	68 (46.6)	29 (19.9)	75 (21.2)	79 (22.4)	122 (34.6)	77 (21.8)	**0.037 ***
Feeling fearful	27 (13.0)	72 (34.8)	69 (33.3)	39 (18.8)	20 (13.7)	42 (28.8)	55 (37.7)	29 (19.9)	47 (13.3)	114 (32.3)	124 (35.1)	68 (19.3)	**0.517**
Faintness, dizziness, weakness	52 (25.1)	71 (34.3)	56 (27.1)	28 (13.5)	57 (39.0)	38 (26.0)	34 (23.3)	17 (11.6)	109 (30.9)	109 (30.9)	90 (25.5)	45 (12.7)	**0.037 ***
Nervousness, shakiness inside	49 (23.7)	55 (26.6)	69 (33.3)	34 (16.4)	47 (32.2)	44 (30.1)	47 (32.2)	8 (5.5)	96 (27.2)	99 (28.0)	116 (32.9)	42 (11.9)	**0.005 ****
Heart pounding or racing	47 (22.7)	69 (33.3)	54 (26.1)	37 (17.9)	43 (29.5)	45 (30.8)	42 (28.8)	16 (11.9)	90 (25.5)	114 (32.3)	96 (27.2)	53 (15.0)	**0.121**
Trembling, shaking	56 (27.1)	65 (31.4)	61 (29.5)	25 (12.1)	45 (30.8)	52 (35.6)	31 (21.2)	18 (12.3)	101 (28.6)	117 (33.1)	92 (26.1)	43 (12.2)	**0.245**
Feeling tense or keyed up	51 (24.6)	56 (27.1)	57 (27.5)	43 (20.8)	38 (26.2)	47 (32.4)	40 (27.6)	20 (13.8)	89 (25.3)	103 (29.2)	97 (27.5)	63 (17.8)	**0.187**
Headaches	18 (8.4)	69 (33.3)	68 (32.9)	52 (15.1)	21 (14.4)	30 (20.5)	42 (28.8)	53 (36.3)	39 (11.0)	99 (28.0)	110 (31.2)	105 (29.7)	**0.142**
Spells of terror or panic	63 (30.4)	52 (25.1)	61 (29.5)	31 (15.0)	44 (30.1)	46 (31.5)	36 (24.7)	20 (13.7)	107 (30.3)	98 (27.8)	97 (27.5)	51 (14.4)	**0.535**
Feeling restless cannot sit still	57 (27.5)	58 (28.0)	63 (30.4)	29 (14.0)	40 (27.4)	55 (37.7)	38 (26.0)	13 (8.9)	97 (27.5)	113 (32.0)	101 (28.6)	42 (11.9)	**0.196**

***** Gender difference is significant at p<0.001; ** Gender difference is significant at p<0.01; * Gender difference is significant at p <0.05**

6.4.3. Depression

The children were asked to define to what degree they had experienced the fifteen symptoms for depression in the past month. The possible answers were: not at all, a little, quite a bit or extremely. The scores for the individual depression symptoms are presented in Table 6.11.

Symptoms that were most experienced by the children and reported as ‘quite a bit and extremely’ were: ‘crying easily’ (53.3%) and ‘difficulties falling asleep’ (52.9%) with little difference between boys and girls.

Symptoms that were least experienced by the children and reported as ‘not at all and a little’ were: ‘thoughts of ending your life’ (86.5%); ‘feeling lonely’ (68.2%); ‘loss of pleasure/sexual interest (66.8%) and ‘feeling of worthlessness’ (62.3%).

The most significant gender difference was noted in the question ‘feeling no interest in things’ where the boys scored significantly higher than the girls ($p<0.01$)

A gender difference at the $p<0.05$ level was further demonstrated for the questions ‘feeling like everything is an effort’ and ‘thoughts about ending your life’, with the boys scoring higher than the girls in both questions.

Table 6.11: Experienced symptoms for depression in the past month

Depression	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Mann-Whitney-U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Feeling low in energy	58 (28.0)	63 (30.4)	58 (28.0)	28 (13.5)	50 (34.2)	32 (21.9)	49 (33.6)	15 (10.3)	108 (30.6)	95 (26.9)	107 (30.3)	43 (12.2)	**0.543**
Blaming yourself for things	47 (22.7)	63 (30.4)	63 (30.4)	34 (16.4)	29 (19.9)	55 (37.7)	35 (24.0)	27 (18.5)	76 (21.5)	118 (33.4)	98 (27.8)	61 (17.3)	**0.974**
Crying easily	38 (18.4)	59 (28.5)	75 (36.2)	35 (16.9)	24 (16.4)	44 (30.1)	45 (30.8)	33 (22.6)	62 (17.6)	103 (29.2)	120 (34.0)	68 (19.3)	**0.494**
Loss of pleasure, sexual interest	90 (43.5)	45 (21.7)	34 (16.4)	38 (18.4)	64 (43.8)	37 (15.4)	29 (19.9)	16 (11.0)	154 (43.6)	82 (23.2)	63 (17.8)	54 (15.3)	**0.465**
Poor appetite	40 (19.3)	85 (41.1)	53 (25.6)	29 (14.0)	35 (24.0)	46 (31.5)	49 (33.6)	16 (11.0)	75 (21.2)	131 (37.1)	102 (28.9)	45 (12.7)	**0.901**
Difficulties falling asleep	33 (15.9)	72 (34.8)	60 (29.0)	42 (20.3)	26 (17.8)	35 (24.0)	57 (39.0)	28 (19.2)	59 (16.7)	107 (30.3)	117 (33.1)	70 (19.8)	**0.483**
Feeling like everything is an effort	42 (20.3)	64 (30.9)	61 (29.5)	40 (19.3)	36 (24.7)	57 (39.0)	29 (19.9)	24 (16.4)	78 (22.1)	121 (34.3)	90 (25.5)	64 (18.1)	**0.063**
Feeling of worthlessness	66 (31.9)	66 (31.9)	32 (15.5)	43 (20.8)	44 (30.1)	47 (32.2)	38 (26.0)	17 (11.6)	110 (31.2)	113 (32.0)	70 (19.8)	60 (17.0)	**0.801**
Feeling hopeless about the future	51 (24.6)	63 (30.4)	64 (30.9)	29 (14.0)	37 (25.3)	53 (36.3)	43 (29.5)	13 (8.9)	88 (24.9)	116 (32.9)	107 (30.3)	42 (11.9)	**0.263**
Feeling blue or sad	55 (26.6)	63 (30.4)	62 (30.0)	27 (13.0)	41 (28.1)	51 (34.9)	35 (24.0)	19 (13.0)	96 (27.2)	114 (32.3)	97 (27.5)	46 (13.0)	**0.453**

Depression	BOYS (N=207)				GIRLS (N=146)				ALL (N=353)				*p*
	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremely	Not at all, never	A little	Quite a bit	Extremel y	Mann Whitney U
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
Feeling low in energy	58 (28.0)	63 (30.4)	58 (28.0)	28 (13.5)	50 (34.2)	32 (21.9)	49 (33.6)	15 (10.3)	108 (30.6)	95 (26.9)	107 (30.3)	43 (12.2)	**0.543**
Blaming yourself for things	47 (22.7)	63 (30.4)	63 (30.4)	34 (16.4)	29 (19.9)	55 (37.7)	35 (24.0)	27 (18.5)	76 (21.5)	118 (33.4)	98 (27.8)	61 (17.3)	**0.974**
Crying easily	38 (18.4)	59 (28.5)	75 (36.2)	35 (16.9)	24 (16.4)	44 (30.1)	45 (30.8)	33 (22.6)	62 (17.6)	103 (29.2)	120 (34.0)	68 (19.3)	**0.494**
Loss of pleasure, sexual interest	90 (43.5)	45 (21.7)	34 (16.4)	38 (18.4)	64 (43.8)	37 (15.4)	29 (19.9)	16 (11.0)	154 (43.6)	82 (23.2)	63 (17.8)	54 (15.3)	**0.465**
Poor appetite	40 (19.3)	85 (41.1)	53 (25.6)	29 (14.0)	35 (24.0)	46 (31.5)	49 (33.6)	16 (11.0)	75 (21.2)	131 (37.1)	102 (28.9)	45 (12.7)	**0.901**
Feeling lonely	87 (42.0)	54 (26.1)	36 (17.4)	30 (14.5)	49 (33.6)	51 (34.9)	34 (23.3)	12 (8.2)	136 (38.5)	105 (29.7)	70 (19.8)	42 (11.9)	**0.545**
Thoughts of ending your life	109 (52.7)	69 (33.3)	17 (8.2)	12 (5.8)	92 (63.0)	37 (25.3)	14 (9.6)	3 (2.1)	201 (56.9)	106 (30.0)	31 (8.8)	15 (4.2)	**0.060**
Feeling of being trapped or caught	42 (20.3)	83 (40.1)	50 (24.2)	32 (15.5)	35 (24.0)	49 (33.6)	37 (25.3)	25 (17.1)	77 (21.8)	132 (37.4)	87 (24.6)	57 (16.1)	**0.964**
Worrying too much about things	31 (15.0)	79 (38.2)	55 (26.6)	42 (20.3)	28 (19.2)	41 (28.1)	50 (34.2)	27 (18.5)	59 (16.7)	120 (34.0)	105 (29.7)	69 (19.5)	**0.903**
Feeling no interest in things	58 (28.0)	64 (30.9)	56 (27.1)	29 (14.0)	53 (36.3)	62 (42.5)	21 (14.4)	10 (6.8)	111 (31.4)	126 (35.7)	77 (21.8)	39 (11.0)	**0.001 ****

*** **Gender difference is significant at p<0.001;** ** **Gender difference is significant at p<0.01;** * **Gender difference is significant at p <0.05**

6.5. Associations between individual variables and mental health outcomes

The presentation of associations between variables in this report concentrates on statistically significant associations ($p<0.05$) between key demographics and trauma exposure variables on mental health outcomes.

A univariate linear regression analysis was conducted to explore associations between demographic variables, trauma categories, and individual trauma variables on mental health outcome scores and PTG scores. Only significant variables from the univariate analysis were allowed in the multivariate models. A multivariate analysis was then conducted using statistically significant ($p<0.05$) variables for each of the three categories selected through the respective univariate analysis. Only those variables which remained statistically significant in the multivariate analysis are presented in the regression tables. The adjusted R squared values presented include all statistically significant variables used in the multivariate analysis.

The regression coefficients in the following regression tables show the average increase in mental health score associated with a unit increase in the relevant predictor value. So, for example, in Table 6.14, in the analysis of factors related to PTSD score, the regression coefficient for material deprivation is -1.180. Material deprivation was scored as 1=yes and 2=no. Thus, in this situation, the regression coefficient indicates that if the material deprivation score moves from 1 to 2 (i.e. moves from "yes" to "no"), the average PTSD score falls by 1.180 units. Or, in other words, children who had not experienced material deprivation had a mean PTSD score that was 1.180 units smaller than those children who had experienced material deprivation.

R-squared in the univariate and adjusted R-squared in the multivariate analysis (adjusting for the number of explanatory, independent variables in each model) indicate how well the independent, or predictor, variables (i.e. demographic variables, trauma categories or individual trauma variables) predict the dependent, or outcome variables (PTSD, anxiety, depression and PTG). R-squared denotes the percentage of variation in the dependent variable that can be explained by the independent variables. In making predictions about human behaviour the R square statistic is expected to be small. However, if one or more of the regression coefficient p-values are statistically significant, which is the case in this study, the

relationship between predictors and PTSD, anxiety, depression and PTG may be very important, even though it may not explain a large amount of variation.

Mathematically, R^2 is the proportion of the variation in (trauma) scores explained by the factors (independent / predictor) variables in a multiple regression analysis. A large R^2 value indicates that the factors explain most of the variation – so are excellent predictors of outcome / score in an individual person. A small R^2 value indicates that the factors explain only a small amount of the variation – so are poor predictors of outcome / score *in an individual person*.

The term *'in an individual person'* is key. R^2 measures the extent to which the identified factors to predict the outcome / score *for an individual person* can be used. A large R^2 allows making such predictions confidently – but large R^2 values are rare in clinical research overall – and extremely rare in psychiatric / psychological research. As such, this research is no exception and R^2 values are small throughout (it's not easy to predict human behaviour). However, this means that it is not possible to use the regression analyses to say with a high level of confidence that, if an individual child has factors X, Y and Z present in their lives, then their trauma score will be large and exactly equal to N. But it can be concluded, by looking at the factors in the regression analysis that are statistically significant, that any child with a high score on one or more of those factors is at *increased risk* of a high trauma score.

To put simply, a high R^2 value allows conclusions to be drawn at the individual child level ("this child has high factor scores so will definitely have a high trauma score") – while a low R^2 value only allows conclusions to be drawn at the population level ("this child has high factor scores so is at increased risk of having a high trauma score").

Thus, the fact that the R^2 values reported in this dissertation are generally small is not a limitation of the study as such, but does limit the kind of conclusions than can be drawn from the study findings. The factors that emerged as being statistically significant in the regression analyses are population risk factors – in a population where these factors are very prevalent, there will be more children with high trauma scores than in a population where the factors have low prevalence. But the R^2 values are too small to allow defining exactly which children will have the high trauma scores to be identified. So any intervention cannot easily be delivered

effectively at the individual child level – but interventions delivered at the population level (i.e. designed to reduce the prevalence of factors in the community) are likely to be very effective in reducing the proportion of children with high trauma scores.

6.5.1. Association between demographic variables and mental health outcomes

The univariate analysis included the demographic variables: 'age', 'gender', 'marital status', 'orphaned', and 'years of education'. 'Orphaned' and 'years of school attended' were found to be significant. The multivariate analysis conducted on these variables showed that a decrease in years of education resulted in an increase in reported symptoms on PTSD, anxiety and depression. The same was demonstrated in orphans and half-orphans. Having lost one or both parents was associated with higher symptom scores (worse health) for PTSD, anxiety and depression than having both parents alive (Table 6.12).

Table 6.12: Multivariate analysis of the influence of demographic characteristics on mental health outcomes

All children N = 353	PTSD		Anxiety		depression	
	Multivariate		Multivariate		Multivariate	
Variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Orphaned	-0.221 [-0.382: -0.060]	0.007	-0.234 [-0.392: -0.076]	0.004	-0.364 [-0.527: -0.209]	<0.001
Years of education	-0.068 [-0.122: -0.014]	0.012	-0.064 [-0.117: -0.011]	0.017	-0.026 [-0.101: -0.002]	0.042
Adjusted R squared:	3%		3%		6%	

6.5.2. Association between the number of experienced trauma and mental health outcomes

A significant positive association was demonstrated between the number of experienced traumatic events and an increase in symptoms for PTSD, anxiety and depression in girls. Such a relationship was only demonstrated in girls but not in boys (Table 6.13).

Table 6.13: Relationships between the number of trauma and mental health outcomes

Number of Trauma and mental health outcomes	All N = 353		Boys N = 207		Girls N = 146	
	Univariate		Univariate		Univariate	
Variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Number of trauma and PTSD	0.029 [0.011: 0.047]	0.002	0.009 [-0.015: 0.033]	0.456	0.058 [0.032: 0.084]	<0.001
R-squared	3%		0.3%		12%	
Number of trauma and Anxiety	0.021 [0.004: 0.039]	0.016	0.008 [-0.016: 0.033]	0.477	0.039 [0.017: 0.063]	<0.001
R-squared	2%		0.3%		7%	
Number of trauma and Depression	0.031 [0.013: 0.049]	<0.001	0.012 [-0.010: 0.036]	0.284	0.057 [0.031: 0.083]	<0.001
R-squared	4%		0.6%		12%	

6.5.3. Association between trauma categories and mental health outcomes

The multivariate analysis on PTSD, anxiety and depression was conducted with the following significant trauma categories from the univariate analysis for the total sample children and for the boys and the girls as an individual sample: ‘witnessed violence’, ‘death of loved ones’, ‘warlike condition’ and ‘material deprivation’. For the girls, a further significant trauma category ‘forced to harm’ was associated with depression.

The multivariate analysis showed a significant association of the trauma category ‘material deprivation’ with PTSD, anxiety and depression in boys and in girls.

Further significant associations in girls were demonstrated in the categories ‘witnessed general violence’ with PTSD and depression, ‘witnessed death, injuries and abduction of loved ones’ with anxiety, and forced to harm with depression.

For the boys, significant associations were demonstrated in the categories ‘warlike conditions’ with anxiety, and ‘witnessed general violence’ and ‘witnessed death, injuries and abduction of loved ones’ with depression. A summary of the findings is provided in Table 6.14.

Table 6.14: Multivariate analysis of trauma categories and their association with PTSD, anxiety and depression by gender

PTSD	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma Categories:	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Material deprivation	-1.180 [-1.542: -0.819]	<0.001	-1.060 [-1.569: -0.550]	<0.001	-1.503 [-1.987: -1.019]	<0.001
Witnessed violence	-0.368 [-0.660: -0.077]	0.013			-0.456 [-0.863: -0.045]	0.029
Adjusted R squared:	13%		7%		23%	

ANXIETY	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma Categories:	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Material deprivation	-0.0.986 [-1.336: -0.635]	<0.001	-0.410 [-0.670: -0.150]	0.001	-0.963 [-1.409: -0.518]	<0.001
Witnessed death, injuries, abduction of loved ones	-0.304 [-0.511: -0.097]	0.004			-0.395 [-0.677: -0.112]	0.007
Warlike conditions			-0.603 [-1.076: -0.131]	0.013		
Adjusted R squared:	10%		10%		13%	

DEPRESSION	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma Categories:	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Material deprivation	-0.1.226 [-1.578: -0.873]	<0.001	-0.410 [-0.670: -0.150]	0.002	-1.320 [-1.805: -0.833]	<0.001
Witnessed violence	-0.434 [-0.718: -0.150]	0.003	-0.351 [-0.578: -0.123]	0.003	-0.525 [-0.936: -0.114]	0.013
Witnessed death, injuries, abduction of loved ones			-0.346 [-0.623: -0.060]	0.018		
Forced to harm					-0.895 [-1.658: -0.133]	0.021
Adjusted R squared:	15%		12%		23%	

- Multivariate analysis was conducted using statistically significant trauma category variables ($p<0.05$) selected through a univariate analysis
- A negative correlation coefficient (-) in the equation shows a positive correlation between experienced trauma and PTSDS, anxiety and depression

6.5.4. Associations between individual trauma variables and PTSD, anxiety and depression by gender.

The multivariate analysis on PTSD, anxiety and depression was conducted with the following significant variables from the univariate analysis for the total sample children: ‘lack of shelter’, ‘lack of food and water’, ‘ill health without access to medical care’, ‘confiscation and destruction of property’, ‘combat situation’, ‘exposure to crossfire’, ‘beatings to the body’, ‘witnessed murder or death of family members or friends’, ‘witnessed beatings to the body’, ‘witnessed murder or killing’ for PTSD, anxiety and depression. In addition to these variables, ‘witnessed physical injury of a family member or a friend’ and ‘witnessed rape and sexual abuse’ were significant for anxiety and ‘witnessed rape’ and ‘witnessed torture’ were significant for depression.

For the boys the following significant variables were included in the multivariate analysis on PTSD, anxiety and depression: ‘lack of shelter’, ‘lack of food and water’, ‘ill health without access to medical care’, ‘confiscation and destruction of property’, ‘combat situation’, ‘used as human shield’, ‘exposure to crossfire’ and ‘witness murder or killing’. Further significant variables were: ‘witnessed beating to the body’ for anxiety, and ‘witnessed rape and sexual abuse’ for depression.

For the girls the following significant variables were included in the multivariate analysis on PTSD, anxiety and depression: ‘lack of shelter’, ‘lack of food and water’, ‘ill health without access to medical care’, ‘confiscation and destruction of property’, ‘exposure to crossfire’, ‘beating to the body’, ‘forced to fight in warlike conditions’, ‘forced to carry out other activities during attack’, ‘witnessed murder or killing’, ‘witnessed body beating’ and ‘witnessed murder or death of family members or friends’. Further significant variables were: ‘combat situation’, ‘forced early marriage’ and ‘witnessed physical injuries of a family member or a friend’ for anxiety, and ‘forcefully prevented from burying someone’ and ‘forced to destroy someone else’s possessions or property’ for depression.

The multivariate analysis of the statistically significant individual trauma variables from the univariate analysis showed a strong association of the trauma variable ‘ill health without access to medical care’ with PTSD, anxiety and depression in boys and in girls.

Further significant associations in girls were demonstrated in the trauma variables ‘exposure to crossfire’, and ‘witnessed murder of family members or friends’ with PTSD and anxiety, ‘witnessed body beatings’ with PTSD, ‘forced early child marriage’ with anxiety, and ‘confiscation or destruction of personal property’, ‘witnessed murder or killing’ of unrelated people, and ‘witnessed death of family members or friends’ with depression.

For the boys, significant associations were demonstrated in the trauma variables ‘exposure to crossfire’ with PTSD and anxiety, ‘witnessed murder or killing’ with PTSD and depression, and ‘confiscation and destruction of personal property’ with depression. A summary of the findings is provided in Table 6.15.

Table 6.15: Multivariate analysis of individual trauma variables and their association with PTSD, anxiety and depression by gender

PTSD	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Ill health without access to medical care	-0.598 [-0.789: -0.405]	<0.001	-0.410 [-0.670: -0.150]	0.002	-0.807 [-1.075: -0.539]	<0.001
Exposure to crossfire	-0.341 [-0.509: -0.173]	0.001	-0.351 [-0.578: -0.123]	0.003	-0.390 [-0.622: -0.157]	0.001
Witnessed murder or killing	-0.290 [-0.491: -0.089]	0.005	-0.346 [-0.623: -0.060]	0.018		
Witnessed murder of family members or friends					-0.314 [-0.537: -0.091]	0.006
Witnessed beatings to the body					-0.243 [-0.480: -0.006]	0.045
Adjusted R squared:	22%		18%		40%	

ANXIETY	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Ill health without access to medical care	-0.277 [-0.490: -0.064]	0.011	-0.458 [-0.723: -0.193]	0.001	-0.423 [-0.689: -0.157]	0.002
Exposure to crossfire	-0.320 [-0.490: -0.150]	0.001	-0.3449 [-0.584: -0.105]	0.005	-0.297 [-0.531: -0.062]	0.014
Combat situation	-0.253 [-0.418: -0.089]	0.003				
Lack of food and water	-0.323 [-0.588: -0.058]	0.018				
Witnessed murder of family members or friends					-0.359 [-0.567: -0.151]	0.001
Forced early child marriage					-0.279 [-0.549: -0.010]	0.042
Adjusted R squared:	15%		12%		19%	

DEPRESSION	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Ill health without access to medical care	-0.598 [-0.797: -0.400]	<0.001	-0.415 [-0.689: -0.141]	0.003	-0.805 [-1.077: -0.533]	<0.001
Confiscation or destruction of personal property	-0.299 [-0.483: -0.116]	0.002	-0.318 [-0.570: -0.066]	0.014	-0.390 [-0.622: -0.157]	0.001
Witnessed murder or killing	-0.249 [-0.450: -0.048]	0.015	-0.351 [-0.639: -0.064]	0.017	-0.308 [-0.562: -0.055]	0.018
Witnessed death of family member or friend					-0.353 [-0.562: -0.145]	0.001
Adjusted R squared:	20%		17%		36%	

- Multivariate analysis was conducted using statistically significant trauma variables ($p<0.05$) selected through a univariate analysis.
- A negative correlation coefficient (-) in the equation shows a positive correlation between experienced trauma and anxiety disorder and depression.

6.6. Post-traumatic growth

The PTGI asked for positive change as a result of the most traumatic or life altering event. The vast majority of the children reported events during experienced attacks as most traumatic for them. The following events were reported by the children: the killing of family members or friends, the amount of dead people in the river, being raped during attack, being severely injured, being able to escape abduction, being severely burned, separation from parents during attack, witnessing the torture of loved ones, seeing people burn to death, killing of livestock, burning of property, seeing the amount of people killed, leaving loved ones behind who were later found dead, witnessing the abduction of a family member or a friend.

Two girls were not certain whether experiences during attacks or experiences in their marriage were more traumatic. One child reported her marriage as the most traumatic event.

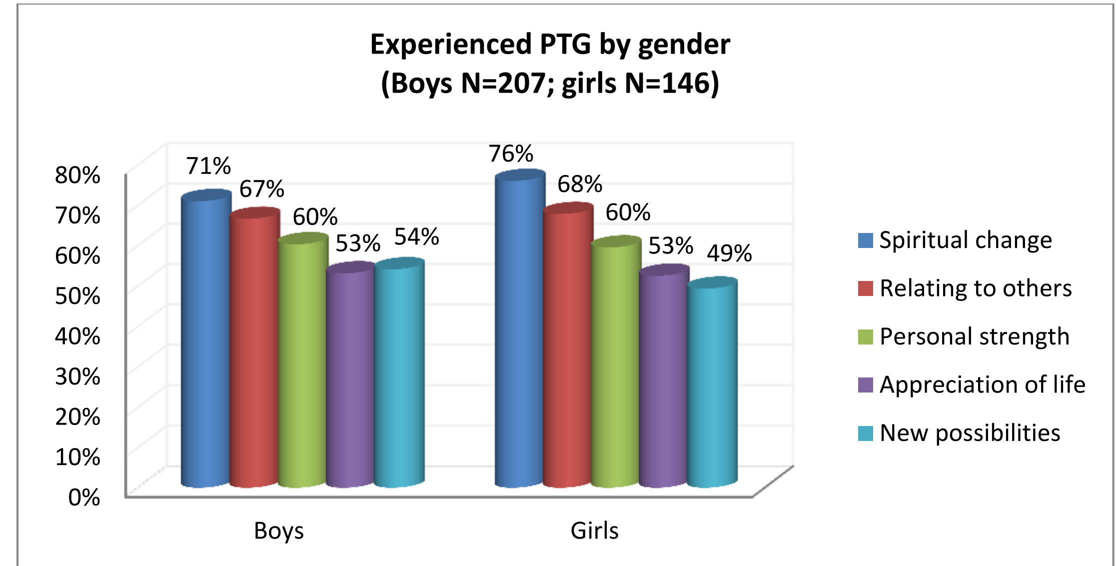
Three dimensions of post-traumatic positive change (changes in self perception, interpersonal relationships, and changed philosophy of life) are measured through 21 items in the PTGI. These 21 items are grouped into five categories: 1 = personal strength, 2 = spiritual change, 3 = appreciation of life; 4 = new possibilities, 5 = relating to other.

The outcome for PTG categories was split into children exhibiting or not exhibiting symptoms for PTG at a mean cut off >= 3.0 for each category. Additional qualitative data presented are derived from the text data from the three open ended questions added to the post-traumatic growth inventory.

6.6.1. Post-traumatic growth categories and individual variables

The categories ‘spiritual change’ (73.0%) [95%CI 68.4%-77.5%], ‘relating to others’ (67.1%) [95%CI 62.2%-72.2%] and ‘personal strength’ (60%) [95%CI 54.9%-64.8%] showed the greatest positive changes experienced, with little difference between boys and girls ($p>0.05$). The categories ‘appreciation for life’ (54.3%) [95%CI 49.2%-59.3%] and ‘new possibilities’ (52.1%) [95%CI 47%-57.1%] was also experienced by more than 50% of the children. A summary of the prevalence of the five PTG categories is presented by gender in Figure 6.16.

Figure 6.16: Prevalence of PTG factors by category and gender



Spiritual change:

The category **'spiritual change'** consisted of the two items 'I have a stronger religious faith' and 'I have a better understanding of spiritual matters'.

The item 'I have a stronger religious faith' in the category 'spiritual change' was experienced by many children to a great (22.7%) or very great (32.3%) degree. These children tended to display enhanced self reliance. Many were convinced that God had given them the strength to survive which made them feel precious and important. The great majority of the children reported to be proud that God had helped them.

> *"…I am proud of who I am. I am proud that I was strong enough to survive; sometimes you think that you cannot live but at the same time God has saved me and that makes me very precious" (Girl aged 14; survey code A007, Akobo town).*

Children who scored high on 'spiritual change' voiced a strong desire to become a good person and to help others. None of the respondents in the sample population indicated that they had ever thought about questioning their faith as a result of their traumatic experiences. On the contrary, most children reported a deepening of their faith as a direct result of the traumatic events.

Relating to others:

The category **'relating to others'** consisted of the items 'I put more efforts into my relationships'; 'I have more compassion for others'; 'I have a greater sense of closeness with others'; 'I more clearly see that I can count on people'; 'I learned a great deal about people'; and 'I better accept needing others'.

Children who had high PTG scores in the category 'relating to others' indicated that they formed stronger bonds with others since the event. 44.8% reported to' put more effort into their relationships'. Children also reported that they had learned to 'count on others' and showed an increased ability to 'rely on others for help' to a great (19.8%) and very great (23.5%) degree. The children with high scores on 'spiritual change' showed a tendency to feel compassion for others.

For a great majority of the respondents reported that good relationships with others had become more important as a result of the event. However, many of them still relied first and foremost on God's help and on their own strengths and abilities to overcome future obstacles and difficulties.

Personal strength:

The category **'personal strength'** included the items 'I am stronger than I thought'; 'I am more likely to change things that need changing';' I am better able to accept the way things work out'; 'I am able to do better things in my life'; 'I know better that I can handle difficulties'; 'I am more willing to express my emotions'; 'I have a greater feeling of self reliance'.

Children with high PTG scores on 'personal strength' displayed enhanced self-reliance as a result of the traumatic events. Some of the children were better able to express emotions and many discovered that they were stronger than they had thought before the event.

Children also tended to report an increased resilience by knowing that they could better handle difficulties and that they were more willing to change things that needed changing.

Appreciation of life:

The category **'appreciation of life'** included the items 'I developed new interests'; 'I have a greater appreciation for the values of my life' and 'I changed my priorities'.

Children who indicated that they had a greater appreciation for their own life since the traumatic event mentioned improved relationships and the ability to go to school. Many of them reported a stronger spirituality and explained that God had not only helped them to survive attacks but that he also gave them the strength to appreciate each day despite hardship.

New possibilities:

The category **'new possibilities'** included the items 'I established a new path for my life; I can better appreciate each day and I see new opportunities for my life'.

Overall, 'new possibilities' was the category that scored lowest. The children who experienced new opportunities to a great (21.8%) or very great degree (9.9%) indicated that education was an example of a new opportunity which had not been available for many IDP children before their displacement to Akobo town. New opportunities to earn a little money and to help rebuild livelihoods were also mentioned.

Gender differences showed to be statistically significant in 4 out of the 21 items investigated ($p<0.05$). Girls scored significantly higher than boys for the item 'I have a better understanding of spiritual matter since the event' ($p=0.01$); 'I can better appreciate each day since the event' ($p=0.03$);' I have more compassion for others since the event' ($p=0.03$) and 'I am better able to accept the way things work out since the event' ($p=0.04$).

Detailed answers provided by the children for the 21 PTG items investigated are presented in Table 6.17.

Table 6.17: Experienced PTG since the life altering event (N = 353)

(1) = I did not experience this change as a result of this event
(2) = I experienced this change to a small degree as a result of this event
(3) = I experienced this change to a moderate degree as a result of this event
(4) =I experienced this change to a great degree as a result of this event
(5) = I experienced this change to a very great degree as a result of the event

PTGI	BOYS (N=207)					GIRLS (N=146)					ALL (N=353)					*p*
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
I have a stronger religious faith	14 (6.8)	35 (16.9)	53 (25.6)	46 (22.2)	56 (27.1)	10 (6.8)	20 (13.7)	24 (16.4)	34 (23.3)	58 (39.7)	24 (6.8)	55 (15.6)	77 (21.8)	80 (22.7)	58 (29.7)	.127
I have a better understanding of spiritual matters	12 (5.8)	60 (29.0)	38 (18.4)	64 (30.9)	31 (15.0)	14 (9.6)	32 (21,9)	38 (26.0)	26 (17.8)	36 (24.7)	26 (7.4)	92 (26.1)	76 (21.5)	90 (25.5)	67 (19.0)	.012 *
I learned a great deal about people	11 (5.3)	42 (20.3)	54 (26.1)	59 (28.5)	39 (18.8)	19 (13.0)	33 (22.6)	36 (24.7)	30 (20,5)	27 (18.5)	30 (8.5)	75 (21.1)	90 (25.5)	89 (25.2)	66 (18.7)	.068
I better accept needing others	15 (7.2)	39 (18.8)	63 (30.4)	40 (19.3)	49 (23.7)	6 (4.1)	35 (24.0)	39 (26.7)	30 (20.5)	34 (23.3)	21 (5.9)	74 (21.0)	102 (28.9)	70 (19.8)	83 (23.5)	.915
I put more efforts into my relationships	22 (10.6)	56 (27.1)	47 (22.7)	37 (17.9)	44 (21.3)	15 (10.3)	27 (18.5)	27 (18.5)	41 (28.1)	36 (24.7)	37 (10.5)	83 (23.5)	74 (21.0)	78 (22.1)	80 (22.7)	.049*
I have more compassion	21 (10.1)	64 (30.9)	55 (26.6)	41 (19.8)	23 (11.1)	13 (8.9)	30 (20.5)	42 (28.8)	35 (24.0)	24 (16.4)	34 (9.6)	94 (26.6)	97 (27.5)	76 (21.5)	47 (13.3)	.003**
I have a greater sense for closeness with others	17 (8.2)	41 (19.8)	57 (27.5)	54 (26.1)	35 (16.9)	19 (13.0)	22 (15.1)	42 (28.8)	47 (32.2)	16 (11.0)	36 (10.2)	63 (17.8)	99 (28.0)	101 (28.6)	51 (14.4)	.667
I more clearly see that I can count on others	22 (10.6)	48 (23.2)	59 (28.5)	51 (24.6)	26 (12.6)	18 (12.3)	35 (24.0)	31 (21.1)	41 (28.1)	21 (14.4)	40 (11.3)	83 (23.5)	90 (25.5)	92 (26.1)	47 (13.3)	.732
I am stronger than I thought	9 (4.3)	53 (25.6)	56 (27.1)	63 (30.4)	23 (11.1)	10 (6.8)	32 (21.9)	35 (24.0)	33 (22.6)	35 (24.0)	19 (5.4)	85 (24.1)	91 (25.8)	96 (27.2)	58 (16.4)	.148
I am more likely to change things that need changing	24 (11.6)	47 (22.7)	50 (24.2)	50 (24.2)	33 (15.9)	16 (11.0)	34 (23.3)	41 (28.1)	25 (17.1)	30 (20.5)	40 (11.3)	81 (22.9)	91 (25.8)	75 (21.2)	63 (17.8)	.708
I am better able to accept the way things work out	19 (9.2)	60 (29.0)	55 (26.6)	47 (22.7)	23 (11.1)	9 (6.2)	40 (27.4)	35 (24.0)	31 (21.2)	31 (21.2)	28 (7.9)	100 (28.3)	90 (25.5)	78 (22.1)	54 (15.3)	.038*

(1) = I did not experience this change as a result of this event
(2) = I experienced this change to a small degree as a result of this event
(3) = I experienced this change to a moderate degree as a result of this event
(4) =I experienced this change to a great degree as a result of this event
(5) = I experienced this change to a very great degree as a result of the event

PTGI	**BOYS (N=207)**					**GIRLS (N=146)**					**ALL (N=353)**					***p***
	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	(1)	(2)	(3)	(4)	(5)	
	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	N (%)	
I am able to do better things in my life	23 (11.1)	49 (23.7)	57 (27.5)	52 (25.1)	24 (11.6)	19 (13.0)	30 (20.5)	44 (30.1)	30 (20.5)	23 (15.8)	42 (11.9)	79 (22.4)	101 (28.6)	82 (23.2)	47 (13.3)	**.715**
I know better that I can handle difficulties	26 (12.6)	43 (20.8)	64 (30.9)	52 (25.1)	21 (10.1)	12 (8.2)	34 (23.3)	37 (25.3)	31 (21.2)	31 (21.2)	38 (10.8)	77 (21.8)	101 (28.6)	83 (23.5)	52 (14.7)	**.095**
I am more likely to express my emotions	33 (15.9)	54 (26.1)	47 (22.7)	48 (23.2)	23 (11.1)	19 (13.0)	36 (24.7)	45 (30.8)	29 (19.9)	17 (11.6)	52 (14.7)	90 (25.5)	92 (26.1)	77 (21.8)	40 (11.3)	**.588**
I have a greater feeling of self-reliance	22 (10.6)	40 (19.3)	59 (28.5)	49 (23.7)	34 (16.4)	16 (11.0)	31 (21.2)	49 (33.6)	24 (16.4)	26 (17.8)	38 (10.8)	71 (20.1)	108 (30.6)	73 (20.7)	60 (17.8)	**.697**
I developed new interests	37 (17.9)	56 (27.1)	63 (30.4)	33 (15.9)	16 (7.7)	16 (11.0)	45 (30.8)	44 (30.1)	23 (15.8)	17 (11.6)	53 (15.0)	101 (28.3)	107 (30.3)	56 (15.9)	33 (9.3)	**.191**
I have a greater appreciation for the value of my life	20 (9.2)	61 (29.5)	59 (28.5)	47 (22.7)	18 (8.7)	17 (11.6)	33 (22.6)	49 (33.6)	31 (21.2)	16 (11.0)	37 (10.5)	94 (26.6)	108 (30.6)	78 (22.1)	34 (9.6)	**.487**
I changed my priorities	34 (16.4)	49 (23.7)	46 (22.2)	40 (19.3)	37 (17.9)	19 (13.0)	36 (24.7)	36 (24.7)	29 (19.9)	25 (17.1)	53 (15.0)	85 (24.1)	82 (23.3)	69 (19.5)	62 (17.4)	**.755**
I established a new path for my life	22 (10.6)	46 (22.2)	65 (31.4)	42 (20.3)	29 (14.0)	19 (13)	32 (21.9)	49 (33.6)	27 (18.5)	19 (13.0)	41 (11.6)	78 (22.1)	114 (32.3)	69 (19.5)	48 (13.6)	**.710**
I see new opportunities for my life	20 (9.7)	48 (23.2)	65 (31.4)	50 (24.4)	17 (8.2)	20 (13.7)	44 (30.1)	35 (24.0)	27 (18.5)	18 (12.3)	40 (11.3)	92 (26.1)	100 (28.8)	77 (21.8)	35 (9.9)	**.437**
I can better appreciate each day	36 (17.4)	63 (30.4)	46 (22.2)	38 (18.4)	23 (11.1)	12 (8.2)	27 (18.5)	53 (36,3)	30 (20.3)	22 (15.3)	48 (13.6)	90 (25.5)	99 (28.0)	68 (19.3)	45 (12.7)	**.003****

*** **Gender difference is significant at p<0.001**
** **Gender difference is significant at p<0.01**
* **Gender difference is significant at p <0.05**

6.6.2. Associations between demographic variables, the number of experienced trauma and post-traumatic growth by gender

A univariate linear regression analysis was conducted to explore associations between demographics variables, trauma categories, individual trauma variables, and PTSD, anxiety and depression on PTG scores. A multivariate analysis was then conducted using statistically significant ($p<0.05$) variables selected through the respective univariate analysis.

The univariate analysis included the demographic variables: 'age', 'gender', 'marital status', 'orphaned', and 'years of education'. 'Age' and 'years of school attended' were found to be significant. The multivariate linear regression analysis showed a negative association between 'age' and PTG and a positive association between 'years of school attended' and PTG (Table 6.18).

Table 6.18: Demographic variables and their association with PTG

Demographic variables	PTG	
	Multivariate analysis	
	Coef. [95%CI]	*P*
Age	-0.058 [-0.106:-0.010]	0.017
Years of school attended	0.051 [0.003: 0.100]	0.037
Adjusted R squared	2%	

A positive association was demonstrated in the univariate linear regression analysis between the number of experienced traumatic events and PTG. This was found in boys and in girls (Table 6.19).

Table 6.19: Number of trauma and their association with PTG

PTG	ALL (N = 353)		BOYS (N = 207)		GIRLS (N = 146)	
	Univariate		Univariate		Univariate	
VARIABLES	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Number of trauma	0.028 [0.013: 0.044]	0.001	0.023 [0.004: 0.043]	0.017	0.033 [0.010: 0.058]	0.006
R-squared	4%		3%		5%	

6.6.3. Associations between trauma categories and post-traumatic growth by gender

Out of the seven trauma categories, the two trauma categories ‘bodily injuries’ and ‘warlike conditions’ were significantly associated with PTG in the multivariate analysis among the boys. The significant categories included from the univariate analysis were: ‘witnessed violence’, ‘bodily injuries’, ‘warlike conditions’ and ‘material deprivation’.

For the girls the category ’witnessed violence’ remained the only category associated with PTG. A summary of the findings is provided in Table 6.20. The significant categories included from the univariate analysis were: ‘death of loved ones’ and ‘witnessed violence’.

Table 6.20: Multivariate analysis of trauma categories and their association with PTG by gender

PTG	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Witnessed violence	-0.559 [-0.813: -0.305]	<0.001			-0.722 [-1.119: -0.325]	<0.001
Bodily injuries	-0.377 [-0.626: -0.128]	0.003	-0.459 [-0.785: -0.132]	0.006		
Warlike conditions			-0.445 [-0.838: -0.052]	0.027		
Adjusted R squared:	6%		7%		8%	

- Multivariate analysis was conducted using statistically significant trauma variables ($p<0.05$) selected through a univariate analysis.
- A negative correlation coefficient (-) in the equation shows a positive correlation between experienced trauma category and PTG

6.6.4. Associations between individual trauma variables and post-traumatic growth by gender

The multivariate analysis on PTG was conducted with the following significant individual trauma variables from the univariate analysis for the total sample children and for the boys: 'lack of shelter', 'lack of food and water', 'confiscation or destruction of personal property', 'used as human shield', 'exposure to crossfire', 'beating to the body', 'knifing, axing, spearing', 'forced to find and bury bodies', 'witnessed physical injuries of family members or friends', 'witnessed beating to the body', 'witnessed murder or killing' and 'witnessed attacks or battle'.

For the girls the following significant variables were included in the multivariate analysis on PTG: 'being locked away', 'imprisonment', 'forced to hide', 'forced separation from family members', 'forced to find and/or bury bodies', 'witnessed physical injury of family members or friends', 'witnessed beating to the body', 'witnessed murder or killing', 'witness rape or sexual abuse', 'witnessed attacks or battle'.

Out of the 43 trauma variables, the following five individual trauma variables were associated with PTG in the multivariate regression analysis in boys: 'witnessed murder or killing',' witnessed attacks or battle', 'beatings to the body', 'axing, knifing, spearing' and 'used as human shield'.

'Witnessed murder or killing' was the only common trauma variable in boys and in girls. Among the girls the variables 'witnessed physical injuries of family members or friends', 'witnessed body beatings', and 'forced to hide' were significantly associated with PTG. A summary of the findings is provided in Table 6.21.

Table 6.21: Multivariate analysis of individual trauma variables and their association with PTG by gender

PTG	All (N=353)		Boys (N=207)		Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
Trauma variables	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
Witnessed murder or killing	-0.239 [-0.813: -0.305]	0.014	-0.243 [-0.482: -0.004]	0.046	-0.294 [-589: -0.002]	0.049
Knifing, axing, spearing	-0.359 [-0.626: -0.128]	<0.001	-0.296 [-0.480: -0.112]	0.002		
Witnessed physical injury of family members or friends	-0.172 [-0.813: -0.305]	0.034			-0.321 [-0.550: -0.093]	0.006
Beating to body	-0.240 [-0.626: -0.128]	0.014	-0.423 [-0.675: -0.171]	0.001		
Witness attacks or battle	-0.327 [-0.626: -0.128]	0.034	-0.404 [-0.781: -0.026]	0.036		
Used as human shield			-0.245 [-0.443: -0.042]	0.016		
Witnessed beating to the body					-0.239 [-0.563: -0.094]	0.007
Forced to hide					-0.219 [-0.430: -0.007]	0.043
Adjusted R squared:	15%		15%		20%	

- Multivariate analysis was conducted using statistically significant trauma variables ($p<0.05$) selected through a univariate analysis
- A negative correlation coefficient (-) in the equation shows a positive correlation between experienced trauma variables and PTG

6.6.5. Associations between PTSD, anxiety and depression symptoms and post-traumatic growth by gender

Linear regression analysis showed a significant association of PTG with all three mental health outcomes in the total population and by gender. The multivariate analysis showed that PTSD, anxiety and PTG coexisted in the total study population. An increase in the number of symptoms for PTSD and anxiety resulted in an increase in PTG scores. Depression, however, was negatively associated with PTG. Thus, an increase in depression scores correlated with a reduction of PTG scores. The gender specific findings demonstrated that only PTSD remained significantly associated with PTG among boys and girls alike (Table 6.22).

Table 6.22: Multivariate analysis of post-traumatic growth and PTSD, anxiety and depression by gender

PTG	PTG All (N=353)		PTG Boys (N=207)		PTG Girls (N=146)	
	Multivariate		Multivariate		Multivariate	
	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*	Coef. [95%CI]	*P*
PTSD	0.501 [0.321: 0.682]	<0.001	0.548 [0.464: 0.632]	<0.001	0.355 [0.220: 0.490]	<0.001
ANXIETY	0.156 [0.019: 0.293]	<0.026				
DEPRESSION	-0.190 [-0.351: 0.028]	<0.022				
Adjusted R squared:	All: 30%		Boys: 44%		Girls:15%	

6.7. Children's own resources and coping strategies

The qualitative and the quantitative (coding and key word frequencies) analysis of text data from the open ended questions showed the importance of children's pride and trust in their own strength; their spirituality; their ability to go to school and the importance of strong peer and family relationships.

The questions asked were: what children thought would help them most in the future; what they considered their strength or what they were most proud of; how they described their family relationships and whether the relationships had changed since the most traumatic events.

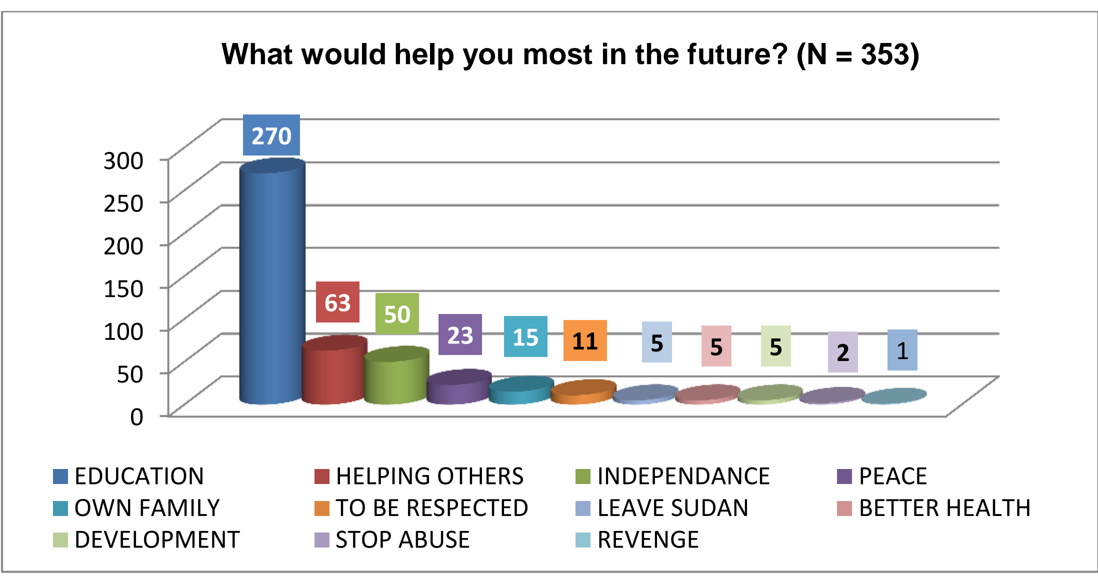
The majority of the children reported that it was important to have a future in order to cope with the situation. To that end the children stated that they needed parents in order to protect them, that they needed to be strong to survive their harsh environment, that they needed to be educated and respected by the community and that they needed to be convinced that God was on their side and would help them in all their future endeavours.

6.7.1. Children's priorities for the future

Looking at the key word distribution from the multiple answers given, education and going to school were mentioned by 76% of the children as a priority. Figure 6.23 summarises children's answers on what they thought would help them most in the future.

The following main reasons were provided by the respondents indicating why education was so important for them: to be respected in the community; to end violence and have a peaceful future; to become stronger; to be able to earn money and become independent; to be able to help the family; to help oneself and others to deal with trauma.

Figure 6.23: Children's priorities for their future



6.7.2. Children's pride and their sources of strength

59% of the children reported their own personal strengths as a source of pride. The children indicated that they were proud to be strong and resistant. Personal strength was understood as being hard-working, resistant, smart, able to run fast, able to survive massacres, able to survive without food and shelter, not to worry about things, still being happy despite horrifying events, and not to give up easily.

> *"I am strong because I do not give up easily. I am hard-working and there is always a solution" (Girl aged 14; survey code A110; Akobo town).*

> *"I am proud of who I am. I am hard-working and sometimes I think that I am also smart even though I never went to school" (Girl aged 18; survey code P014; Akobo town).*

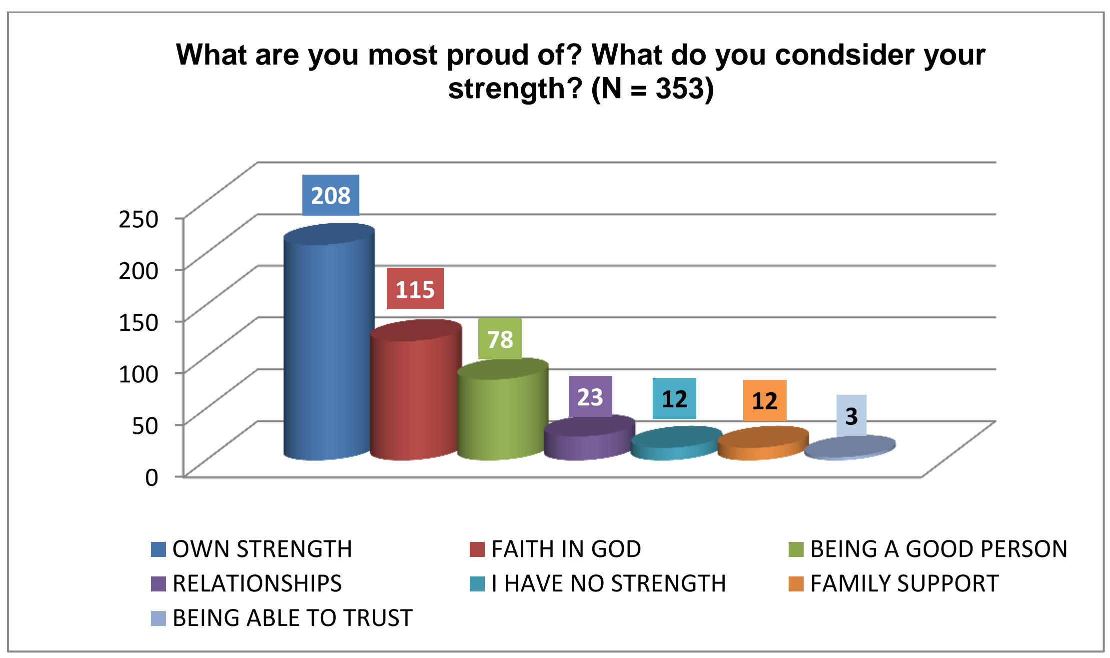
'Being a good person' and 'faith in God' was important for 22% and 33% of the children respectively. God was often seen as the driving force behind children's strength and their capacity to move on with their lives and overcome difficulties.

> *"…I am proud of God who helped me to handle my difficulties and he makes me a very strong person who can work hard" (Girl aged 17; survey code A117; Akobo town).*

> *"I am very proud of myself because I have a very strong faith in God who gives me the strength to do all the daily activities and even in the future he will help me" (Girl aged 16; survey code I272; Akobo town).*

Figure 6.24 summarises the answers provided on what children experienced as their strength, and what they were most proud of.

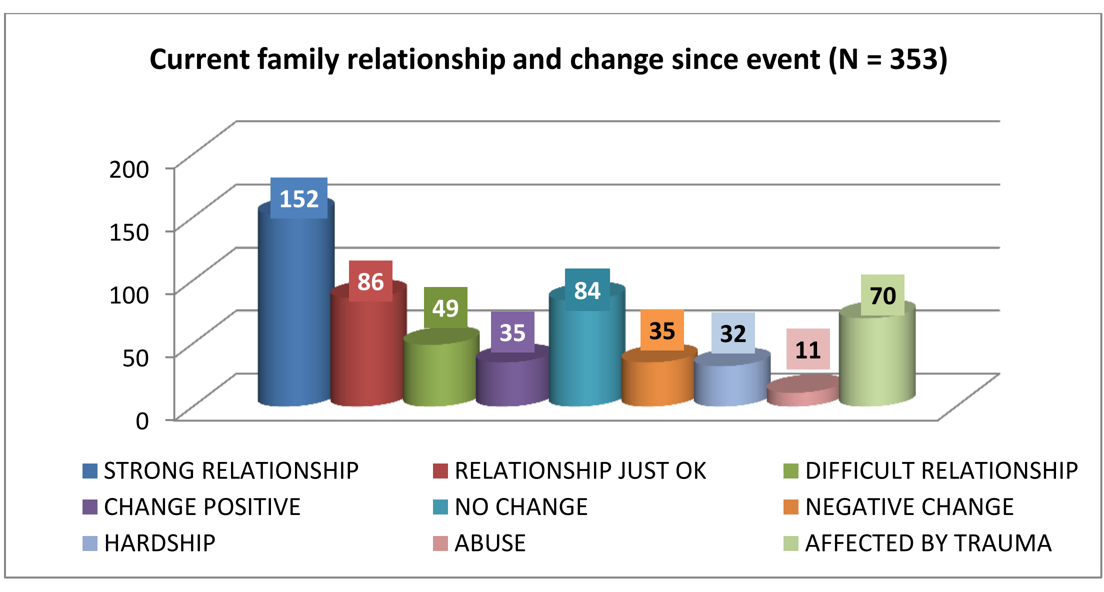
Figure 6.24: Children's strength



6.7.3. Family relationships and change since the event

Family relationships and the family composition were highly affected by violence. The survey showed that 85% of the children had lost one or several family members in the attacks. More than half the children pointed out that within a family anything could happen as a result of the killing so that the family provided little stability and safety for the children. Children's experiences regarding their family relationships and the changes as a result of the event are summarised in Figure 6.25.

Figure 6.25: Family relationships and changes as a result of the event.



The great majority of the children indicated the importance of strong family relationships. 45% of them reported strong family relationships, 24% reported that their family relationships were, just OK, and 13% of the children reported difficult relationships. 23% of the children felt that the family relationship had not changed as a result of the attack. Positive and negative changes since the attack were equally reported by 10% of the children.

> *"…Our relationship is so much stronger since the event; my parents thought I was dead but I could escape the Murle and came back. My family was very happy" (Boy aged 13; survey code N113; Nyandit).*

When children used the word family it did not imply that their parents were still alive. Also child headed households where two or more siblings lived together was described as family. A relationship in which people helped and trusted each other was highly valued. It was further illustrated that a feeling of being united and the ability to protect each other was important for children to manage their situation and their environment.

> *"…I miss my best friend very much but my family is very fine and we can help each other to survive" (Boy 17 years; survey code A126, Akobo town).*

> *"…I am very happy with my family members because when the event occurred they did not leave me alone though it was a very dangerous attack" (Boy aged 15, survey code I281, Akobo town, IDP camp).*

> *"…Our current relationship is very cool; we all do things together at home. We have a sharing of work and a sharing of ideas when needed" (Boy aged 16; survey code I254, Akobo town IDP camp).*

> *"… My new family is small [three siblings], but we help each other. This is good for all of us, we stick together. My neighbour is helping because we have not much to eat" (Girl aged 13; survey code A324, Akobo town).*

6.8. Summary mental health survey

The findings demonstrated a very high exposure to experienced trauma in the study population and a high prevalence of PTSD, anxiety and depression with little difference between boys and girls. Significantly higher mean scores for PTSD, anxiety and depression were found in orphans compared to the children whose parents were still alive. A dose-response relationship between the number of traumas and adverse mental health outcomes was demonstrated in girls only.

The multivariate regression analysis of the demographic variable showed that having parents and an increase in 'years of school attended' were significantly associated with lower symptom scores (better health) for PTSD, anxiety and depression.

Significant associations were demonstrated for the following trauma variables in the multivariate linear regression analysis for PTSD, anxiety and depression: ill health without access to medical care, exposure to crossfire, witnessed murder or killing, witnessed murder of family members or friends, witnessed beatings to the body, forced early child marriage, combat situation and confiscation or destruction of personal property. The adjusted R squared values indicated that the significant individual trauma variables identified in the multivariate model explained between 12% and 40% of the variation within the population on PTSD, anxiety and depression scores (Table 6.15).

Post-traumatic growth in the five categories: spiritual change (73%), relating to others (67%), personal strength (60%), appreciation of life (54%) and new possibilities (52%) was experienced to a high degree.

Regression analysis demonstrated a significant positive relationship between the number of experienced trauma and positive growth and the co-existence of post-traumatic stress and post-traumatic growth.

7. Discussion

The aim of this research refers to children's participation and to child health in general. However, the exploratory nature of this study resulted in a recognition that mental health problems were the major issue for the children studied. Therefore, particular attention was given to mental health, reflecting the importance of this finding.

Chapter seven discusses key findings from this research using available studies on the two main subjects of children's participation and on child mental health in conflict settings. The discussion concentrates on the following: the challenges and opportunities of children's participation (section 7.1); mental health outcomes; risk and protective factors at the individual, family, community and societal level (section 7.2). Section 7.3 presents the limitations which may have affected the study.

7.1. Children's participation: key findings

The findings in this study illustrate children's suffering, but also the resilience and adaptability of children affected by armed conflict and their capacity and motivation to contribute and take action to improve their everyday life. This was also found to be true for children living in the most difficult circumstances affected by parental loss, stigma, abuse and rejection as well as children forced into early marriage.

To be respected by family and/or community members was identified as an important goal of children's participation and a precondition to be able to express views and to be listened to and taken seriously when decisions affecting them were being made. The findings demonstrated that these experiences were similar across all groups of children, irrespective of their age, gender and living situation. To improve relationships between adults and children was identified as crucial to children's participation by the majority of the children. The children indicated that children's participation in order to address identified health issues such as stigma, early child marriage, child neglect, mental health morbidity or being forced to go to dangerous areas was unlikely to succeed without adult support.

The findings from the adult community members showed a high level of trust and belief in children's strength, ability and willingness to address issues, take risks

and make decisions. At the same time, adults voiced great concerns about losing authority and control over their children if they were given more rights.

Interviews with service providers showed that half of them had consulted with children at some point during program implementation. A higher degree of children's participation, described as 'child initiated and/or child directed' (Hart, 1992), where children have the initial idea and decide how the project is to be carried out, with adults available but not taking charge, was found to be an issue of concern to child mandated agencies alone. While different levels of participation may be appropriate for different tasks as part of activities or projects (Shier, 2001), higher levels of participation are seen as more meaningful to children and more effective in influencing change at the community level (Barn & Franklin, 1996; Sinclair, 2004).

7.1.1. Context specific challenges and opportunities to children's participation

Over the past two decades there has been an increasing emphasis on children's participation as part of two related global social trends: democratisation and individualisation (Prout, 2000). These trends, as Prout pointed out, have fostered the understanding of children as 'persons in their own right' and as such as 'having agency and the right to have their voices heard'. The UN Convention on the Rights of the Child is generally seen as having importantly contributed to a global impetus of children's participation and as the benchmark for the adult-child relationship (John, 1996).

Cross cultural studies reveal that the way adult-child relationships are structured and the context in which these relationships are situated are significant for how 'child participation' is constructed. Mason and colleagues explored how children's participation was understood and implemented in five countries in the Asia-Pacific region: Australia, China, India, Sri Lanka and Thailand. They concluded:

> *"Cultural contexts structure adult-child relations in different ways, so that it cannot be assumed that the meaning of 'participation' in a liberal democracy is the same as it is in a country with a hierarchical system of social relations, a predominantly communistic country, or one racked by civil strife. In each of these countries the concept of citizenship structures relations in different ways, giving rise to a variety of ways in which participation is interpreted and enacted" (Mason et al., 2010).*

Findings from our research showed that children under parental protection were integral members of the community, entrusted with adult responsibilities and as such not strictly separated from adult members of the community. Adult community members demonstrated a high level of trust and belief in children's strength, ability and willingness to address issues, take risks and make decisions. Children were expected to be responsible at an early age so that the adult construction of participation emphasised 'taking part' in social practices which was embedded in children's obligations and responsibilities towards their family and community. Accordingly, children did not need to wait until they became adults, as is often the case in many western-societies, to be considered as responsible and active members of their society. At the same time children were placed under total obedience and servitude towards their caregivers and adult community members which did not seem to be compatible with any form of participation based on children's own will.

Main obstacles and challenges identified: Adult concern regarding loss of authority and control over their children if children were given more rights was found to be an important challenge to children's participation emphasising the need to focus on adults as an important component of children's participation. Further challenges to children's participation identified were related to the protection of children experiencing exclusion from society.

Main opportunities and benefits identified: Children aimed to be respected by and connected with adults with whom they wished to participate. The participatory approach of this research indicated that children's participation can provide an important opportunity to address mental health, and to rebuild or maintain positive relationships among children and between adults and children.

7.1.1.1. Challenges: embedding children's participation within the society and the protection of children excluded from society

The importance of children's participation is manifold: as a means to make projects more effective and relevant; to promote children's protection and wellbeing and to help build a more participatory society which strengthens its long term and development trajectories (Newman, 2005). However, in many parts of the world, children have few rights and the community may play an important role in preventing children's active involvement in decision making. In these settings, free expression of children's views necessitates a commitment to cultural change in which adults begin to recognise the importance of listening to children and respecting their views (Lansdown, 2010).

Our research indicated that adults had little doubt about their children's capacity to take on a high level of social and economic responsibility. Children were expected to carry many responsibilities at an early age and to make decisions affecting their lives and the lives of others every day. However, the children's right to negotiate those contributions with adults and to exercise autonomous choices was greatly restricted. Only a few children, from families who had returned from exile, were encouraged to express their views at home, in school or community gatherings.

Unlike reports from previous studies conducted in conflict zones, which demonstrated that the community perception of children's role in society misrepresented them as 'weak', 'passive' and 'powerless' (Steffen, 2007; Hart, 2004), adult respondents in our study described their children as 'physically strong' 'resourceful' and 'strong minded' which gave rise to their main concern that children would become too strong, disrespectful and difficult to control if they were given more rights.

The majority of the respondents indicated that it was safer to maintain the status quo and not renegotiate power relations between themselves as adults and their children. In that sense children's relatively powerless status in their society meant that children could only be effective advocates for their rights, if adults supported and facilitated the process in children's everyday lives.

These findings concur with previous research conducted in conflict settings that child participation work cannot be an isolated act with children and strengthens the argument that focusing on adults is an essential component of meaningful child

participation. If children are trained to know their rights and attempt to assert these rights within a community, it was seen as crucial that the community itself had undergone a process of self-questioning and re-definition. Hart and Steffen further emphasise that if adult support is not achieved, children may be susceptible to repercussions that undermine rather than strengthen their protection (Hart, 2003; Steffen, 2007). Also Lansdown (2010) noted that achieving meaningful children's participation was never going to be easy and that the barriers were significant particularly in settings where even for adults, opportunities for real engagement in active participatory democracy were limited.

The mode and extent to which children will be able to participate is also seen as closely related to one of the main arguments debated in the past decades which is the problematic balance between participation and protection (Ray, 2010). The challenges to protection are described as particularly high for children living in the poorest and most difficult situation, whose rights are most violated (Ray & Carter, 2007). In our research, orphans were identified as the children in greatest need of protection. The analysis of the transcripts from children and adult community members in our study revealed high levels of stigma and abuse of orphans in the community. In this situation orphans' option for participation were extremely limited, and some of these options, for example to attend the orphan school, put children at even greater risk of abuse in their foster homes and/or by community members.

Children most affected by the violation of their rights through: conflict, extreme poverty, violence, abuse, neglect and exploitation, discrimination and social exclusion, experience great difficulties in making contributions to community development processes and to improving their situation within society (Ray & Carter, 2007). What seems to distinguish these children is that they lack adequate care and support and live their lives outside the mainstream of society.

Ray discusses several challenges to children's participation in working with marginalised children. He highlights a common approach to working with such children on a group by group basis according to the different categories of children such as street children, children with disabilities or orphans (Ray & Carter, 2007) and argues that although best practice and important lessons can be learned by working with specific groups, engaging with children on a group by group basis would focus attention on certain groups at the expense of others.

Together with Fenny and Boyden, he further noted that this approach would fail to recognise the varied ways in which children could be marginalised by their society

(Fenny & Boyden, 2003). Thus, a more integrated approach that allowed identifying common principles for working with children and communities to identify, understand and assist in particularly difficult situations was viewed as the most promising way to improve marginalised children's quality of life and or reduce stigma (Ray, 2010).

Also our findings indicate that children's participation using an integrated approach can become a key strategy in assisting children in the poorest and most difficult situations to realise their rights. This insight was gained through measuring the scope, the quality and the effect of the child participatory component in our research conducted with a mixed group of children (orphans, half-orphans and children with parents). The close collaboration with all stakeholders strengthened and broadened the application of children's participation and resulted in a greater understanding of children's capacity and the importance of listening to children independent of their status in society (Table 5.22, page 185).

Despite such positive reports, the challenges in working with marginalised children are considerable and their protection was found to be a priority. Also Ray concludes that all efforts to support the participation of children living in the poorest and most difficult situations should take account of the fact that society has failed in its duty of care towards them (Ray, 2010).

7.1.1.2. Opportunities: addressing mental health through children's participation and children's participation as a strengthener of relationships.

Adverse mental health outcomes as a result of direct armed violence and material and social stressors were emphasised by adult community members and by the children in this research as an important health issue. Adults and children indicated that children would be better qualified to help each other to deal with trauma and argued that children would listen freely to other children because of a trusting relationship between them. The power difference in the adult-child relationship, which would force children to listen, was seen as not conducive to help children by adult and child respondents alike. Thus, our findings indicate that an important role for children could be imagined in addressing mental and psychosocial wellbeing and that this could have a benefit for the children themselves and their community.

The few studies addressing children's participation in the programming of psychosocial interventions in conflict settings indicate that in spite of the growing endorsement of 'child-participatory' approaches in general, only adults were believed to possess the relevant knowledge and insights in addressing psychosocial wellbeing of children in humanitarian settings (Hart, 2003; Chase et al., 1999; de-Berry et al., 2003; Hart, 2004). Hart's findings drawn from project evaluation studies conducted in Nepal, Sri Lanka and the Occupied Palestinian Territories suggest that children might valuably participate in the design, implementation and monitoring of psychosocial interventions in order to address children's main concerns.

Hart found in all three study settings a general tendency of adults to assume that past experiences of war would affect children mentally whereas the children pointed out that the challenges of their daily life were their primary concerns and troubled them most (Hart, 2004). A study conducted among children in Afghanistan reported that children were far more preoccupied with the difficulties of crossing mine fields to fetch water than with memories of experiences during fighting (de-Berry et al., 2003), and for children affected by the conflict in Nepal, snake bites emerged as the greatest threat and caused considerable fear in children (Hart, 2003).

The children participating in our study reported a great number of concerns and threats to their mental wellbeing and not all of them were directly related to experienced attacks. They were also related to children's daily struggle with extreme workloads, stigma, lack of protection, forced child marriage, and children's fear of being killed or abducted by patrolling Murle fighters during their daily activities. These findings indicate the need to consult or engage with children and their communities directly in the design of mental and psychosocial interventions to ensure that their priority concerns are met.

The actual process of bringing children together to engage in different activities and participatory projects that have a real meaning to them appeared to be in itself valuable for children's emotional wellbeing (Chase et al., 1999). Hart indicated that children may as well be agents of their own healing through enhanced peer interaction and argues that although emotional challenges are experienced individually, children's psychosocial wellbeing cannot be produced in isolation. Consequently it would be vital for their mental and emotional health to experience positive connections with other children and adults (Hart, 2004).

In his evaluation study from Eastern Sri Lanka, Hart found that participants had greatly benefitted in terms of their mental wellbeing and that profound changes had been achieved over the course of the programme; to what extent this could be attributed to the simple fact of bringing children together, facilitating relationships of trust and co-operation and to what extent the opportunities provided for children to explore their potential and realise their efficacy had played a role in the healing process was inconclusive (Hart, 2002a).

Hart concludes that participatory programming has a great potential to enhance children's psychosocial wellbeing, and stresses the need for agencies to rethink their approach and to understand that children's engagement in meaningful social action in a supportive environment together with peers may be at least as valid as the implementation of more explicitly therapeutic, adult led interventions (Hart, 2004).

Children, irrespective of their age, gender and living situation indicated the need to improve their relationships with adults and to be respected by them in order to address issues and to change their situation. Building relationships with peers, family members and with adults outside their home was found to be an important theme in the case study. Particularly education, but also children's participation for the few children who had engaged in it, was seen as such an opportunity to bring children together and form positive relationships.

To date relatively little research has been undertaken to evaluate the nature, quality and effect of children's participation, thus the evidence of the beneficial outcomes is mainly anecdotal. The few studies assessing the effect of children's participation on relationships indicate that children's participation can provide an opportunity to build positive relationships among children, and between adults and children. A global review conducted for Plan International on its work with children in the poorest and most difficult situation in Uganda, Sierra Leone, Nepal, India, Guatemala, Senegal and Egypt emphasise the crucial role of participation in order to strengthen and rebuild social relationships. (Ray & Carter, 2007). Also a series of case studies of children and young peoples' participation in South Asia found that respecting what children had to say did not result in a lack of respect for parents but in improved family relationships and greater respect for parents. Parents valued children's increased confidence and skills and expressed the view that participation had opened up new opportunities for their children. In some cases children felt that

the project had changed the attitude of their parents resulting in less physical punishment and that adults were less rigid and more friendly towards them (Lansdown, 2004b).

The monitoring and evaluation of the child participatory component in our research using a mixed group of orphan, half orphan and children with parents indicated that if children are appropriately facilitated, treated with equal respect and provided with opportunities to participate appropriate to their individual capacity, the positive effect on relationships among children who would normally not engage with each other can be considerable and lasting. A better insight into how children experienced their environment and a better understanding of the level of skills and initiative children demonstrated was reported by their caregivers (Table 5.22, page 186).

The need to invest in identifying what has changed as a result of a child participation project was stressed by several authors (Farrar et al., 2010; Hart, 2004). Farrar and colleagues concluded that unless the children themselves and the people involved could recognise the positive changes resulting from their participation, the activities and processes had done little to support the lived lives of the individuals and communities (Farrar et al., 2010).

7.2. Mental health of children affected by armed conflict: risk and protective factors.

In the following discussion, the complex interplay of trauma exposure and protective factors and processes, that likely shape the psychosocial outcome and adjustment trajectories of children in conflict settings, are evaluated and considered in relation to the debates on long-term psychosocial adjustment in children exposed to armed violence.

The discussion attempts to define the extent to which individual, family and community resources play a role in settings where cultural values and the collectiveness among people have largely been destroyed by the combined weight of decades of warfare and socioeconomic adversities. It also attempts to define whether such protective factors are able to offset exposure to repetitive adversities.

The discussion of risk and protective factors is structured according to the ecological model developed by Bronfenbrenner (1979). The model places a child's experience at the centre of the effects and influences of different factors such as individual, family, community and social influences.

7.2.1. Risk and protective factors at the individual level: mental health outcomes

Practically all literature available on conflict-affected children in Africa found consistently high prevalence rates of mental health morbidity. All 19 studies identified (Table 2.4, page 42) measured PTSD. The proportion of children who met symptom criteria for PTSD ranged from 35% to 97%. The prevalence rates of depression symptoms were only measured in three studies (Betancourt, 2011; Klasen et al., 2010a; Ovuga et al., 2008); and ranged from 36% to 88%. The only study which investigated anxiety found that 80% of the girls and 28% of the boys reached symptom criteria for anxiety (Betancourt, 2011). Our findings confirm previous findings of consistently high prevalence rates for probable PTSD (64.5%), anxiety (72.2%) and depression (65.4%). The high prevalence rates found among boys and girls alike was largely explained by the high exposure to traumatic events.

7.2.1.1. Trauma exposure

Trauma exposure in children and adolescents has received most attention in previous research. While all studies (Table 2.4, page 42) assessed war related trauma, only five studies measured daily stressors in addition to war related trauma (Mels et al., 2010; Betancourt et al., 2013b; Betancourt et al., 2010c; Paardekooper et al., 1999; Klasen et al., 2010a).

With respect to war related trauma the survey results in our research found many of the same individual trauma variables that were reported to be consistently high in the literature. They include: 'experienced combat situation', 'exposure to crossfire', 'forced evacuation under dangerous conditions', 'severe beatings, torture and physical injuries during combat' and 'witnessing violent death', including the death of family members and friends.

Extremely high rates were reported in the studies conducted after the genocide in Rwanda. The highest reporting was found in one study conducted among orphans, where 73% of the participants lost brothers or sisters in addition to their parents, 41% witnessed the death of their parents, 88% were victims of attacks or looting, 74% witnessed beating and torture and 77% witnessed the killing of other people (Schaal & Elbert, 2006).

In our survey the rates of experienced trauma were higher than the highest reported rates among children affected by conflict elsewhere (Table 2.4, page 42). 67% of the children in our study reported having witnessed the death of their loved ones, 85% had lost family members or friends, 82% had witnessed the killing of other people and 100% of the children were victims of one or several attacks. 75% had witnessed beatings and 62% of the children had witnessed torture. This indicates that violence exposure and children's suffering can reach extreme levels not only in countries affected by complex emergencies but also in post-conflict countries such as South Sudan.

The number of experienced traumas in our study was also very high with an average of 18 traumatic events out of 43 possible individual trauma variables reported by both boys and girls. The studies which used the same research instrument, both conducted in northern Uganda among former child soldiers, reported an average of 11 traumatic events out of 43 potential traumas (Kane,

2009), and an average of 9 traumatic events for male youths and 6 traumatic events for female youths out of 31 potential traumas (Annan et al., 2007; 2008).

The studies conducted among former child soldiers in the Democratic Republic of the Congo (DRC), Uganda and Sierra Leone investigating daily stressors in addition to war related stressors found a significant association of war experience and domestic violence with PTSD, depression and emotional problems (Klasen et al., 2010a). Also children who demonstrated persistently high symptoms of internalising problems over time were characterised by family abuse and neglect (Betancourt et al., 2013b). Post-conflict stigma as a result of being a child soldier was found to be associated with a decline in adaptive, prosocial behaviour over time (Betancourt et al., 2010c) and Mels found some evidence for the importance of daily stressors such as lack of food and medical care on PTSD in displaced children (Mels et al., 2010).

The survey results in our study also indicated the importance of the combined weight of conflict related and daily stressors in children affected by armed conflict.

The multivariate linear regression analysis, which allowed only significant variables from the univariate analysis to be used in the three multivariate models (demographic model, trauma category model and the model of individual trauma variables), demonstrated a significant association of a ‘decline in years of education’ and of ‘orphan hood’ with increased symptom scores for PTSD, anxiety and depression (worse health) in the demographic model.

The adjusted R squared values showed that between 3% and 6% of the variation in PTSD, anxiety and depression could be explained by these two variables. Although this seems to be a very small number it should be noted that if one or more of the regression coefficient p-values are statistically significant, as is the case in this study, the relationship between predictors and PTSD, anxiety and depression should be seen as important, even though it may not explain a large amount of variation (Table 6.12, page 234).

The adjusted R squared values of the significant variables identified in the trauma category model explained between 7% and 23% of the variation within the study children on PTSD, anxiety and depression. The significant categories from the univariate analysis included: ‘material deprivation’, ‘witnessed violence’, ‘witnessed

death, injuries and abduction of loved ones' and 'forced to harm'. For more details please see Table 6.14, page 236.

The adjusted R squared values of the significant variables identified in the model of individual trauma variables explained between 12% and 40% of the variation within the study children on PTSD, anxiety and depression. The significant trauma variables included: 'Ill health without access to medical care', 'exposure to crossfire', 'witnessed murder or killing', 'witnessed murder of family members or friends', 'forced early child marriage', 'lack of food and water', 'combat situation' and 'confiscation and destruction of personal property'. For more details please see Table 6.15, page 238.

These findings show that the identified variables in the regression models are significant and largely explain an increase of PTSD, anxiety and depression symptoms in the study population. Furthermore they indicate that interventions delivered at the population level designed to reduce these risk factors in the community are likely to be very effective in reducing the proportion of children with high trauma scores. Consequently they must be considered in addressing mental health and psychosocial wellbeing.

7.2.1.2. Age and gender

The majority of the available literature reported significantly higher symptom scores for psychological problems in girls than in boys (Table 2.4, page 42), only a few studies found no such relationships (Bayer et al., 2007; Klasen et al., 2010a; Kane, 2009). The findings from our study showed that gender was not important in influencing mental health outcomes. The association between gender and mental health outcomes was neither strong nor statistically significant. Contrary to our findings, Neugebauer demonstrated in Rwandan child survivors of the Genocide, that while levels of exposure to violence was not associated with gender, the odds of a girl having 'probable PTSD' were 1.8 to 2.6 fold that of a boy (Neugebauer et al., 2009).

Several studies demonstrated a gender difference, with boys typically experiencing a significantly higher amount of trauma than girls (Annan et al., 2007; Annan et al., 2008; Bhui et al., 2003). Yet, we only found significant gender differences in frequencies for 4 of the 7 trauma categories. The category 'bodily

injuries' (48% and 37.3%) and 'forced confinement' (32.5% and 26.4%) was significantly higher in girls than in boys ($p<0.05$). The categories 'witnessed violence' (70.9% and 65.8%) and 'witnessed abduction, death, injuries of loved ones' (66% and 52.7%) was significantly higher in boys than in girls ($p<0.05$).

'Rape' (22.2% in boys and 26.7% in girls) and 'other sexual violence' (18.4% and 19.9%) were experienced to a high degree by boys and girls alike. The findings in girls are nevertheless striking because over 50% of the total reported cases of rape and over 50% of the total cases of 'other sexual violence' was reported by a sub-group of 32 married girls, this may indicate that sexual violence was not only experienced during attacks but that non-consensual sex in marital relationships were perceived as traumatic and reported as sexual abuse and/or rape.

Early child marriage was found to be an important source for trauma exposure in girls in the case study. Also severe beatings, torture and being locked away was reported by girls who refused to marry. This may in part explain the significant difference of reported 'imprisonment, being locked away' between girls and boys in the survey (47.3% in girls and 30% in boys).

There is a controversy in the literature regarding age as a risk factor. The small amount of evidence available on age and mental health outcomes in conflict affected children in Africa seem to suggest a protective effect of younger age (Klasen et al., 2010a; Neugebauer et al., 2009; Schaal & Elbert, 2006). Our study found a weak and not significant association between age and adverse mental health outcomes. Also Kane (2009) and Betancourt (2010a) who conducted their studies among former child soldiers in Northern Uganda and Sierra Leone respectively noted that age was not significantly correlated with any of the investigated mental health outcomes.

While the survey results showed no relationship between age and PTSD, anxiety and depression, children's reports from the case study indicated that age could be a protective factor in favour of younger children. Children's reports from interview's, FGD's and workshops led to the conclusion that younger children were better off than older ones because they could often not fully capture the whole meaning of what was happening. While for example small children witnessed that people jumped in the river to get away from the 'enemy', they often did not realise that only few of them were able to swim and would possibly drown. In addition younger children tended to feel better protected by their parents and counted on

older siblings for protection. They felt safe as long as they remained with their parents and/or with older siblings and were not separated during attacks. Older children relied much less on their parents for protection and also dreaded the day they had to return to Nyandit. The younger children were more comfortable with the idea of returning as long as they had their family with them.

Associations between age and mental health outcomes following trauma are extensively discussed in the literature. Keppel-Benson & Ollendick (1993) conclude that younger children do not have the cognitive functioning of older ones and are therefore protected from events because they cannot fully grasp or interpret their meaning or consequences. This appeared to be the case in our study children. The opposite view that small children were more vulnerable than older ones because they lacked the emotional capacity to handle traumatic events and that this would interrupt their development at a critical stage (Smith et al., 2002) was not supported in our findings.

7.2.1.3. Revenge and forgiveness

Klasen and colleagues found among Ugandan former child soldiers that post-traumatic resilience, which was defined as the absence of PTSD, was associated with lower exposure to domestic violence, lower guilt cognition, less motivation to seek revenge, and more perceived spiritual support (Klasen et al., 2010b). The concepts of revenge and forgiveness are not new and studies have shown their public health significance. While most studies have been conducted among adults, Bayer (2007) found that formerly abducted children who harbour feelings of hatred and desires for revenge were more likely to suffer from mental health morbidities than children who had no such feelings. Mollica (2006) found that feelings of revenge would often lead to an obsession with violence leaving little space for positive experiences and positive thoughts to enter the mind. He found in his study that all individuals (adults and children) who desired revenge had high PTSD scores with no improvement over time. The majority of his respondents described having even more trauma memories and related nightmares three years later than immediately after the events that caused their distress. Mollica further highlighted the destructive force of humiliation which often went along with trauma experiences. He found in survivors of violence and torture that humiliation rapidly transformed itself either into anger, grief, despair and depression or into strong desires for revenge. He further noted that feelings of hatred and the desire for revenge were

particularly strong if people felt permanently deprived of their pride (Mollica, 2006:79).

Our data showed a very high prevalence of 'strong' and 'very strong' feelings of revenge particularly in boys (59.9%) but also in girls (35.6%). All of them had witnessed the killing of loved ones. In the case study children indicated that witnessing the killing of family members and friends were the most important reason for their feelings of hatred and their need to avenge their loved ones.

Unlike the findings of Mollica, the emotional spectrum that seemed to connect 'witnessed violence' with strong desire for revenge was not humiliation but betrayal. Children who desired revenge felt that they had betrayed their loved ones because they had not been able to save them from being slain or tortured to death. Children's reports from the case study indicate that there is a possibility that feelings of having betrayed family members or friends might deter children from overcoming hatred and contribute to the belief that avenging loved ones was an appropriate mechanism to recover from the feelings of betrayal.

The literature has shown that the relationship between mental health morbidities and the inability to forgive can perpetuate violence for generations (Vinck et al., 2007; Bayer et al., 2007). Further evidence suggests that desire for revenge may seriously hamper the psychological healing process after experienced trauma. This appeared to be even more the case when hatred turns into an obsession for violence (Mollica, 2006).

7.2.1.4. Post-traumatic growth

The survey demonstrated a high prevalence of post-traumatic growth (PTG) in children in all the five categories investigated: spiritual change (73%), relating to others (67%), personal strength (60%), appreciation of life (54%) and new possibilities (52.1%). The regression analysis showed a significant positive association ($p<0.001$) between PTG and symptom scores for PTSD (worse health).

While some studies found that PTG was accompanied by a reduction in distress, the PTG model does not predict such a relation. Calhoun & Tedeschi (2004) describe PTG and distress as essentially separate dimensions, so that growth experiences cannot put an end to distress. Although a high level of PTG was shown to be correlated with reduced levels of psychological distress in some studies in

adults, this was not always the case (Calhoun & Tedeschi, 1998; Tedeschi & Calhoun, 1995).

Similar to our findings, all four studies investigating the relationship between post-traumatic stress and PTG among children affected by conflict reported a positive correlation between the two variables (Laufer & Solomon, 2006; The Psychosocial Working Group, 2003; Levine et al., 2008; Laufer et al., 2010).

Our findings support the small but growing number of studies suggesting that growth and symptom severity may be independent of each other (Calhoun & Tedeschi, 2004; Lehmann et al., 1993; Cordova et al., 2001; Wild & Paivio, 2003). That is, both growth and psychological distress can co-exist. Regression analysis showed a significant positive correlation between PTSD and post-traumatic growth. Adjusted R squared values indicate that 44% of the variation in post-traumatic growth in girls and 15% of the variation in boys was explained by post-traumatic stress. Therefore the data indicate that posttraumatic stress and PTG can go hand in hand and that a certain amount of posttraumatic stress may be a necessary precondition for growth to develop. Several studies have reported that PTG is more likely to occur when the traumatic events are highly disruptive to the individual and report greater amounts of growth for individuals who report higher levels of stress associated with the crisis (Wild & Paivio, 2003; Calhoun & Tedeschi, 2004; Weiss, 2004; Linley & Joseph, 2004; Stanton et al., 2006).

The existence of positive emotional and cognitive reminders became most obvious in children's trauma stories which were usually as much about what children had gained as what they had lost. While it is hard to tell to what extent PTG has helped children to process trauma, our findings indicated that PTG was crucial for children to overcome their worst moments and to move on with their lives. The great majority of children had been able to maintain a life-affirming attitude despite high levels of distress. With respect to orphans, their resilience and high hopes for the future can neither be explained by strong family relationships nor by social support structures, as both had ceased to exist for the majority of them. Thus PTG was not only important for children to counterbalance mental distress; it may be the most plausible explanation for children's resilience. These findings further raise the question whether or to what extent children who survive massacres represent stronger and more resourceful children as a possible precondition for their survival.

None of the PTG studies conducted among children affected by armed violence addressed the type of trauma in relation to PTG. The findings from this study

showed four trauma categories that significantly increased PTG in boys and in girls. These categories were ‘witnessed violence’ and ‘witnessed death of loved ones’ in girls and ‘witnessed violence’, ‘bodily injuries’ and ‘warlike conditions’ in boys. 7% of the variation in PTG is explained by the relevant categories in boys and 8% in girls (Table 6. 20, page 247).

The individual trauma variables significantly associated with growth in girls were: ‘witnessed murder or killing’, ‘witnessed physical injuries of family members or friends’, ‘witnessed body beatings’ and ‘being forced to hide’. In boys the following variables were found to be significant: ‘witnessed murder or killing’, ‘knifing, axing, and spearing’, ‘body beating’, ‘witnessed attacks or battle’ and being ‘used as human shield. The adjusted R^2 values indicate that 20% of the variation in PTG is explained by the relevant individual trauma variables in girls and 15% in boys (Table 6.21, page 249).

According to the theory that PTG results from the struggle with highly challenging life circumstances (Joseph, 2006; Calhoun & Tedeschi, 2004), these findings indicate that the above mentioned trauma categories/variables have threatened children’s pre-trauma view about themselves and the world around them in a significant way, thus fostering post-traumatic growth in the individuals attempt to assimilate the traumatic event/s into a new, modified, more complex cognitive world view.

7.2.2. Risk and protection: family factors

Prior research on child soldiers has indicated that acceptance from family members, peers and the community were important post-conflict determinants for the psychological adjustment in children and adolescents (Betancourt, 2008; Betancourt & Williams, 2008; Annan et al., 2006; Kane, 2009). Annan (2006) found that former child soldiers reporting higher levels of family connectedness were more likely to have lower levels of psychological distress and higher levels of social functioning. Derluyn and colleagues (2004) showed that the availability of a parent, particularly the mother, was a protective factor against stress reaction in former Ugandan child soldiers. Supportive parenting was strongly associated with better mental health outcomes.

Also our results demonstrated a protective effect of parental support. Children living with both parents showed better mental health outcomes for PTSD, anxiety and depression compared to the children who lived with one parent only. The

children who lived with other relatives and with caregivers not related to them showed the highest mean symptom scores for PTSD, anxiety and depression (Figure 6.8, page 220).

The massacres, attacks and counter attacks in Akobo further challenged family relationships through the many lives lost. Only 14.7% of the children in the quantitative study had not lost one or several family members as a result of fighting so that 'family' had become a highly unstable entity, providing little safety for children to rely on. 67% of the children from the case study and 41% of the children participating in the survey had lost one or both parents. Although 43% of the children reported strong family relationships, the definition for family no longer implied that the parents were still alive and the term 'family' was also used in child headed households, as soon as two or more siblings lived together. Whenever somebody was killed, children spoke about 'their new family' referring to a new composition and new dynamics within their family. As a result the vast majority of the Lou Nuer children counted on their own strength and on God's help rather than on parental and adult support.

The high level of mental health morbidity in our study was partly explained by the high proportion of orphans within the survey population and the fact that their symptom scores for PTSD, anxiety and depression were higher than those of children who still had one or both parents. The high proportion of orphans (19.3%) and half-orphans (22.1%) also reflects the high intensity of violence[10]. A similarly high proportion of orphans was only found in a survey conducted in 1999-2001 after the genocide in Rwanda in which an estimated 800,000 people (10% of the total population) were killed within three months in 1994. This study found 18.4% orphans and 33.2% half-orphans (including AIDS orphans) among children aged 7-15 (Siaens et al., 2003).

7.2.2.1. Raising children to be strong and resilient

Interviews and FGD's conducted among adults in the case study indicated that raising children to be strong fighters was believed to have a protective as well as a harmful effect. On the one hand most adults had little doubt that exposing children to

[10] All except one death were the result of violence within the sample population. Southern Sudan experiences a relatively low incidence of HIV & AIDS with prevalence rates estimated at around 2.6% of the adult population. The second civil war in Southern Sudan is believed to have been a factor in the limited spread of HIV & AIDS, as the country was closed off from extensive interaction with other countries (UNDP, 2011).

dangerous situations, teaching them how to fight and having them accomplish a tremendous workload was not conducive to good health. On the other hand, they believed that it was the only way for children to be able to cope with the adversity of their environment and that it would prevent them from further harm. Also children's reports concurred with the views of adults so that it remained unclear to what extent the way children were raised resulted in resilient mental health outcomes and to what extent it contributed to trauma exposure.

In Nuer culture children have always been raised to be strong. Evans-Pritchard indicated that the Lou Nuer had always been prone to fighting and their children had always been trained to be strong and resistant. He observed that children were encouraged by their elders to settle all disputes by fighting (Evans-Pritchard, 1940:51).

Fifty years later, Hutchinson described how mothers provoked fights among children over food in order to test their relative tenacity and courage in 'battle'. In fact little has changed since Hutchinson's observations.

> *"I arrived at dusk, just as the women were preparing the evening's porridge. Upon first seeing me, a small boy about the age of four was completely overwhelmed by fear. He, like so many young children before him, ran off screaming to his mother's knees. She, however, responded curtly, publicly chiding him for his cowardice and pushing him away. Moments later, his half-sister, who appeared to be just a bit younger than he, received a hefty spoonful of porridge from the boy's mother. Approaching his sister silently, the boy eyed the spoonful of porridge hungrily. The women encouraged the girl to share her porridge. "Go ahead, give your brother some," she prodded, "I will give you more." Reluctantly the little girl held out her shell spoon. However, just as the boy drew close enough to get a taste, she grabbed it back and bit him hard on the hand, whereupon he immediately burst into tears. For a moment all that could be heard were the boy's piercing shrieks. His mother then flew into a rage, picking up a stick and threatening the boy with a beating if he did not cease his cowardly crying immediately. The boy, once again overwhelmed by fear, ran, of all places, straight into my lap. At that point, he clearly feared his mother's threats more than a pale-faced, wild-haired monster who had sat in quietly by the fire. "Look at that coward," the exasperated woman railed on: "I've had it with him! He's nothing but a cry baby; he can't even stand up to his younger sister!" She then threatened him with abandonment, a common motherly ploy [ ]. Not a word of reprimand was uttered about his sister's unwillingness to share food. On the*

contrary, the little girl's behaviour was explicitly praised by her mother. "Unlike her brother, that girl really knows how to fight!" (Hutchinson, 1996:166).

Children in our study confirmed that how they were raised, although at times traumatic in itself, was an important reason for their inner strength, pride, self reliance and self control. Even more importantly, it was seen as the main reason for having survived the most recent massacres or, as some of the girls reported, their marriage.

Two thirds of the children reported in an open ended question in the mental health survey that their personal strength was a source of pride. Many of them related their personal strength to the way they were raised. Personal strength was understood as being hard-working, resistant, smart, able to run fast, able to survive massacres, able to survive without food and shelter, not to worry about things, still being happy despite horrifying events, and not to give up easily.

7.2.3. Risk and protection: community factors

In the African context, research on community and societal predictors for resilient mental health outcomes has prioritised child soldiers and their reintegration after the conflict. Little information is available on non-combatant children remaining in their society. Overall, social support and community acceptance is described as an important protective factor for children's psychosocial well-being. Research conducted among conflict-affected, non-combatant children and adolescents in Bosnia and Herzegovina indicate that an increased connection with the school and with the child neighbourhood were associated with a reduction in internalising difficulties (Hasanovic et al., 2005; Sujoldzic et al., 2006).

7.2.3.1. Social support and community acceptance

Previous research on the post-war reintegration of former child soldiers agrees that those children and adolescents who had a high family connectedness and community support were more likely to have lower levels of psychological distress and a better social functioning (Allen & Schomerus, 2006; Boyden, 2004; Kane, 2009; Annan et al., 2006; Luthar et al., 2000). Betancourt (2010a) concluded in her research with former child soldiers in Sierra Leone, that community acceptance was a strong predictor of reduced depression over time as well as improvements in prosocial attitudes and self-confidence.

Although the research focus on child soldiers has resulted in a neglect of 'non-combatant' children, we discovered that the findings are equally relevant for non-combatants remaining in their communities. Although we were not able to accurately measure community acceptance as a mediator for resilient mental health outcomes, the findings from children's narrative reports reveal that community acceptance was of great importance for the great majority of the children and even more so for the children who had lost their parents. To be accepted and respected by the community was described as crucial for children's development and well-being; education and child participation were largely seen by children as a means to that end.

7.2.3.2. Stigma and daily hardship

The findings from the case study indicated that orphans represented a particularly vulnerable group of children. The lack of protection, supervision and the

high community threshold for tolerating violence toward these children opened the door for neglect, abuse and exploitation. The case study further indicated that fostering households favoured their biological children over fostered children and often denied the latter access to health care, shelter, nutrition and education. These findings may have resulted in a higher cumulative traumas exposure of children who had lost their parents, explaining the significant relationship between orphan hood and higher symptom scores for PTSD ($p<0.01$), anxiety ($p<0.01$) and depression ($p<0.001$) in the multivariate analysis.

The negative impact of stigma and perceived discrimination on child mental health were demonstrated in two studies conducted in Sierra Leone (Betancourt et al., 2010b; Betancourt et al., 2010c). In the follow up study, perceived discrimination due to being a child soldiers was found to be a strong predictor of increase in depression over time, even after adjusting for all other factors (Betancourt et al., 2010b). The longitudinal data collected over a six year period indicated that stigma predicted a higher and/or an increasing level of hostility and externalising problems as well as deficits in prosocial behaviours over time. These deficits remained significant even after adjusting for war exposure (Betancourt et al., 2010c).

The random sample from the survey showed an extremely high proportion of orphans (19.3%) and half-orphans (22.1%) in our study population so that the sheer number of orphans and the magnitude of the problem threatened the care-giving capacity of the community and the households who had taken children in. In addition, such households were already suffering from extreme poverty.

Case and colleagues (2002) argued that the African tradition of placing orphans either in extended families or in fostering households would often come at the cost of a consumption shock to such households, translating itself into deeper poverty. The evidence indicated that orphans in Africa lived on average in poorer households than non-orphans (Case et al., 2002).

The stigmatisation of orphans reported in our study was rooted in the belief that such children could not contribute anything to the household and that they were disrespectful because without parents nobody taught them how to behave. A lot of blame was directed towards these children in some cases even the death of parents was blamed on them, which was particularly devastating and an important reason for ‘crying a lot’.

All orphans interviewed wanted to escape their current situation and opted for institutional care in a safe place outside the community. The centre should cover

their basic needs and provide a good education, allowing them 'to heal mentally' and to return to the community when they were educated and strong enough to fight for their cause. Orphans were convinced that nobody could do this for them; they had to prove that orphans' could achieve as much as children with parents.

While it was assumed in the 1990s that the needs of orphans could be met through traditional means, mainly extended families taking orphans in, it became increasingly clear that institutionalised care was neither socially nor psychologically and economically desirable (Mac Lean, 2003; Drew et al., 1998; Tolfree, 1995; Tolfree, 2005).

However, the effects of a growing population of AIDS orphans, which heavily impacted on entire economies and civil structures in many countries, challenged this paradigm. It became evident that the traditional support system for orphans was failing and that significant numbers of children were raised by an elderly grandparent, a blind or severely handicapped relative, or without any adult supervision and support (Foster, 1997; Salaam, 2005; UNAIDS, 2006; UNICEF, 2006).

The magnitude of children's suffering in our study also depended on the original motivation of individuals for fostering a child. The vast majority of the children were taken in by relatives who had lost their own children and/or their spouse. The children were expected to compensate for the great loss and often carried the main workload in their fostering households. At the same time, many of them had to take care of their younger siblings without any adult assistance. Blind or severely handicapped relatives also tended to take in orphans to have somebody to care for them. These children were generally better treated. The stigmatisation of orphans by the community and the level of reported physical and mental abuse of such children suggested that the traditional support system had failed and had become the opposite of support for children who had lost their parents.

Several studies reported that violence experienced in orphanages had a greater impact on children's development and well-being than violence experienced in the community (Mac Lean, 2003; Drew et al., 1998; Tolfree, 2005). But another view emerged which strongly supported the assumption that, although living in an orphanage could increase the risk of mental ill health in children, good quality of caretaking could buffer such negative effects. Hermenau and colleagues (2011) found that the different forms of violence experienced in children's original families (mean=5.42), at school and in the neighbourhood (mean=2.30) before being taken

into institutionalised orphan care was on average significantly higher than later experienced in their orphanage in rural Tanzania (mean=4.03). The follow-up study reported a further reduction of experienced violence (mean=2.57) after a new instruction system had been introduced which fostered a positive relationship between caretaker and child in order to reduce violent punishment and promote a secure bonding (Hermenau et al., 2011).

The vast majority of orphans in our study shared the view that orphanages could become a safe place for them to recover from violence, abuse, stigmatisation and social isolation. This is also supported by previous studies describing a decline in violent acts and an improvement in mental health outcomes in institutionalised orphan care. In all studies the caretaking strategies determined mental health outcomes (Schenk, 2009; Wolff & Fesseha, 1998; 1999; Hermenau et al., 2011; Wallis et al., 2010).

The little research available on the impact of institutional care systems on war affected youth confirms the importance of caring relationships between caregivers and the children for positive mental health outcomes. Wolff and Fesseha (1998; 1999) compared measures of adjustment of Eritrean orphans in two institutional settings that were only different in their management style. In one orphanage, the staff focused on meeting children's basic needs but remained emotionally distant. In the second orphanage, the staff were encouraged to take an active role in decisions affecting the children and to develop a close relationship with them. This research found significantly lower levels of psychological distress among children in the second orphanage where close and caring relationships between staff and orphans were encouraged and supported.

While the debates on whether orphanages are part of the problem or part of the solution are likely to continue, our study argues that in situations where the traditional support system for orphans has failed, alternative caretaking structures have to be considered and supported so that orphans do not grow into adulthood with permanent problems of mental ill health and aggressive behaviour.

7.2.4. Risk and Protection: societal factors

Only a few studies from the retrieved primary studies on conflict affected children in Africa discussed the effects of social cohesion within a society on child mental health. Morgos and colleagues pointed out that the nature of the war in Southern Darfur, resulting in extensive loss and mass displacement, had severely affected the whole society. They concluded that the fragmentation of the society may not only have compromised traditional coping mechanisms available to children but also the adult's ability to attend to the children's needs (Morgos et al., 2007). Dyregrov et al. (2000) supported this notion and stated that the extremely high level of experienced trauma in Rwanda had affected all levels of the society rendering the traditional coping mechanisms and social support for children less viable and the adult society less receptive for children's needs.

7.2.4.1. Social, economic and cultural context

The evidence from our case study indicate that death and poverty caused by chronic violence has stretched social networks to their limits, with many child and adult community members describing how social roles have changed and how mistrust and the lack of resources caused tensions among relatives and the wider community. The introduction of guns, the two civil wars and the new paradigm of inter-ethnic warfare that regards women and children as legitimate targets has shattered the collectiveness of a pastoralist society whose livelihood strategies depended on strong relationships.

Firearms have 'depersonalised' the act of killing or injuring another person, and have contributed to the dehumanisation of others which made it easier for combatants to target women and children (Hutchinson & Jock, 2002).

The men's most vital role in society, namely as the protector of homestead and livestock has been greatly challenged, resulting in a latent hostility between husband and wife. Also women and children had lost considerable ground. Nuer women have traditionally been 'agents of peace' and not the targets of violence. In the early times, a women's ethnicity was not as rigidly defined as it is today. Women were permitted to marry men from other tribes and adopt that tribal identity without becoming a 'tribal enemy'. Women who married into other tribes represented "*points*

through which adversarial relations among men could be potentially defused and transformed into relations of affinity through marriage" (Hutchinson & Jock, 2002).

For the children, the lasting conflict represented a fundamental alteration of the social environment which added importantly to the risk of physical endangerment and psychological distress. While children's responsibilities had steadily increased as a result of conflict and displacement, their social support system through which children had been able to exercise power over adults and claim their rights was no longer functioning. The more recent development of forced early child marriage in Lou Nuer society represented such an alteration.

7.2.4.2. Early child marriage

Forced early child marriage was an important health issue for girls in our study, and was associated with anxiety disorder in the multivariate analysis ($p<0.05$). In contrast to other cultural settings, where early child marriage has existed for centuries, in Nuer culture early child marriage was found to be a more recent phenomenon.

Adult respondents confirmed that in the earlier times, before the north–south war, it had been important for a girl to be mature enough for marriage so that she knew her duties well and was no embarrassment to her in-laws. But this had changed and marriage had become an economic survival strategy and no longer had the purpose of forming strong bonds between people; adult community members reported that marriage had become nothing more than 'handing over a girl for cattle'.

Child brides, often as young as fourteen, feared death during delivery. Adult and child respondents reported in the case study that a young girl was not able to serve her husband and his kin in the manner expected; in addition most girls dropped out of school and were forced into submission, both of which they described as equally depressing. The high level of abuse and trauma exposure attributed to child marriage was also evidenced in children's narratives in the high reporting of being beaten, tortured and locked away as a result of children's refusal to marry.

Several reports of older respondents confirmed that relationships between people had dramatically changed over the last decades and marriage was no

exception – 'in the old times', marriage appeared to be neither forced nor early and girls usually married between the age of eighteen and twenty. If marriage arrangements were made at a younger age, bridewealth negotiations and the wedding and consummation ceremonies were delayed so that a girl would be mature enough to deliver her first baby[11]. In addition she should be mature enough to cope with the workload and to 'handle' her in-laws in her new home so as not to embarrass her own family. She remained at the house of her parents until she had delivered her first baby. As a result, a woman was generally older than eighteen before she gave birth to her first child (Evans-Pritchard, 1951:57).

Historically, the stability of Nuer marriages did not only depend on the payment of bridewealth. Other foundations such as affection between the spouses, the good reputation of the husband and strong relationships between the families of husband and wife showed themselves to be equally important. The girl had plenty of time between her engagement and the consummation ceremony to withdraw if she was reluctant to complete her marriage. By the time a girl was fully married, she knew her husband well. Marriage was not a single act, it was a succession of interconnected acts leading from courtship to the birth of the first child, and bridewealth was not a single payment, but a succession of payments in response to the changing status of the bride and the increased maturity of the union (Evans-Pritchard, 1951:95-97).

It remained crucial for husband and wife that power was equally distributed between the 'wife-givers' and the 'wife-takers'. Even if she moved to the family of her husband, the relationships with her own family never ceased to exist. She still belonged to her own family and lineage and also remained under the protection of their ghosts and spirits. If she was in trouble or ill treated by her husband, she could ask her father, brothers and uncles to help her. On the other hand, Evans-Pritchard pointed out:

> *"Should she in a quarrel with her husband disfigure him – knock a tooth out, for example – her father must pay him compensation. I have myself on two occasions seen a father pay a heifer to his son-in-law to atone for insults hurled*

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[11] Marriage was only completed with the first born child. Until then the wife's parents and kin could not dispose of the bridewealth cattle as they had to be returned if she failed to deliver a healthy child. A girl entered womanhood 'naturally' through the delivery of her first child. Although all 'women with blood' were believed to be able to conceive and bear children, her maturity was considered an important factor (Evans-Pritchard, 1951).

> *at the husband's head by his wife when irritated by accusations of adultery"* (Evans-Pritchard, 1951:104).

Such reports indicate that marriage had once fostered the mutual interest for the kin of both sides to get along with each other and behave in the manner expected of them.

The description of marriage and kinship among the Nuer by Evans-Pritchard in the 1930s and our findings have little in common. There had to be a point at which the balance of power began to shift rapidly in favour of the husband and at which the age of the girls started to drop. While our data do not explain the former, adult respondents saw the age drop first and foremost as the result of decades of warfare which had killed so many people at a young age that procreation had to start earlier.

Other important reasons mentioned were poverty and the depletion of livestock. Parents felt that they had to act soon so that girls would not run off with cattle-less boys. If there was a man offering cattle for a girl, it did not matter anymore who he was and how old the girl was; she was handed over to him. Few families still possessed cattle and the chances were slim that a second opportunity would arise to marry a girl off at an older age.

The Lou Nuer did not expect a bride to be a virgin and girls passed through a succession of love affairs. In the past families possessed more cattle and if a girl became pregnant, the young man was expected to marry her. If he had not enough cattle, which was rarely the case in the 1930s, he could not do so and another man would take her. Physical paternity was not a necessity of fatherhood. The transfer of cattle assured a man heirs who would carry on his name and lineage. The genitor of the child was in this case of little importance because children were attached by payment of bridewealth to the lineage of the father. All children of his wife were 'children of the cattle' and therefore of the man in whose name they were paid (Evans-Pritchard, 1951:98).

At the time our study was conducted, the social definition had only slightly changed. Although all children delivered by a wife were still 'children of the cattle' the association between 'the blood' of the genitor and the child had become stronger. A more significant change was the great loss of cattle while bride prices remained high so that the chances of marrying off a pregnant girl before she delivered her 'illegitimate' child were slim. Although a marriage could still be arranged, she was more likely to run off with her lover, even if he had no cattle to

offer. This may have resulted in a further decline in the age at which girls were married off to best avoid 'illegitimate' pregnancy and may have increased the severity of punishment if a girl refused such a marriage.

These findings together with past ethnographic research on the subject of early marriage provide important insight into the mechanisms through which decades of conflict resulted in a fundamental alteration of the social environment which added importantly to the risk of physical endangerment and psychological distress.

7.2.4.3. Ideological and religious context

The literature recognises the role of cultural aspects in healing and dealing with the hardship of war. Stark (2006) describes the role of community led traditional cleansing ceremonies for female survivors of war related rape in Sierra Leone. Such spiritual ceremonies rid young women of 'spiritual pollution' and facilitated a greater self-esteem in these women, as well as community acceptance. Also in Acholi culture (North Uganda), mental health and psychosocial well-being are inseparable from their spiritual world (Harlacher et al., 2006). Annan (2006) reported that about half of the formerly abducted youth in their study had undergone a cleansing ritual to be freed of spirits. The spirit of 'cen' was particularly important because of the capacity to spread from one person to another, polluting the family or the community so that people were frightened to be polluted by 'cen'. Cleansing ceremonies are often the key to reintegration of children into their family and community (Annan, 2006).

In Nuer culture, prayers to God for healing were found to be much more important than rituals. This is not explained by Christianity alone but rather by the fact that the ancient Nuer religion is very unlike other African religions with stronger affinities to the religion of the Hebrews of the Old Testament than to other Nilotic religions (Evans-Pritchard, 1956:vii). Thus God (the spirit of the sky) has always played a central role as the creator and mover of all things. God is everywhere; he shines with the sun and the moon, blows in the wind, lives in the sky and falls in the rain. These divine manifestations are seen as the mode of God and not as his essence, which is spirit. God is close to men and accessible through prayers. As he had the power to direct the 'lesser' spirits of the sky (the above) as well as the 'lesser' spirits of the earth (the below) prayers have always played a central role in Lou Nuer society (Evans-Pritchard, 1956:3).

Children's spiritual experiences were often expressed with great emotions and the conviction that without God's help they would never have escaped the 'enemy' during the horrible attacks. Children indicated that their faith had not only helped them to survive their toughest moments; the fact that God had cared so much for them made their life precious because God wanted them to live.

The few studies investigating the effect of 'religion' and 'spirituality' on post-traumatic stress, growth and resilience in children and adolescents demonstrated a protective or mediating effect. (Klasen et al., 2010b; Kane, 2009; Laufer et al., 2010). Klasen found that children's perceived spiritual support was the strongest protective factor that almost doubled the odds of resilience as defined in the study (Klasen et al., 2010b). Laufer and colleagues, who explored the role of religion and political ideology with respect to positive growth among youth exposed to terror found that both, political ideology and religiosity operated similarly by mediating the effects of exposure to traumatic events (Laufer et al., 2010).

Findings from our research indicate a significant and a lasting positive effect resulting from children's profound, instantaneous spiritual experiences during massacres and other hardships. The highly 'personal' experiences with God during the most difficult times were lasting, which was also reflected in the survey findings where 71% of the boys and 76% of the girls indicated in the PTGI interviews that they had a stronger religious faith and a better understanding in spiritual matters as a direct result of the traumatic events.

Religion as a protective process is largely discussed in the literature and is not only found to be important in Christianity but also in other religions (Mollica, 2006; Fernando, 2006; Betancourt et al., 2010a). Rituals and religious practice can provide a sense of belonging and can offer structure and a sense of community. However, these attributes are not unique to religion. Laufer and colleagues (2010) argue that these associations are also found in other cultural worldviews, including political ideologies so that the faith in a shared idea, of which religion is only one example, is the driving force behind the positive outcomes for children and adults affected by war and violence.

According to Koenig (1995) traumatic events challenge existing cognitive schemas regarding the self and the world. While the world previous to the traumatic event seem to be predictable, structured and benevolent, following tragedy the world

is often perceived as unpredictable, chaotic and hostile. The goal of the survivor is to build new and often more complex assumptions that can assimilate the traumatic event into the modified cognitive world view. Cultural worldviews, religion and spirituality may assist this process by making the traumatic event become more comprehensible and the fears more manageable (McIntosh et al., 1993; Overcash et al., 1996).

The positive and lasting effect of the spiritual experiences described by the children in our study seemed to depend less on religious rituals than on a powerful creator of the universe who revealed himself in nature with the capacity to decide over life and death.

Mollica (2006) found that survivors from different parts of the world told strikingly similar stories of the role played by the sun, the moon and the stars in their survival. Looking up at the heavens they found something that was eternally unaffected by human action. The creation, fixed in nature, represented the permanence of life, a force that could not be dimmed by human cruelty and reminded them that they had survived another day. Mollica concluded that when the traumatised inner self is thrown into chaos by violence, spirituality can prevent a total disintegration of the person (Mollica, 2006).

The findings from our study provide some evidence that such individual spiritual experiences are unique to religion and cannot be replaced by other held cultural world views, including political ideology. Mollica pointed out that human beings exposed to armed conflict and atrocities took great comfort in the aid of their God, whether Allah, Buddha, Christ, Yahweh or the Spirit in traditional religion, and concluded that only Divine beings were able to protect and assist survivors during their moments of greatest need in such a way (Mollica, 2006).

7.2.4.4. Education and livelihood opportunities

Findings from the qualitative and the quantitative data in this research indicate that education was not only important for children’s development but also for their ability in dealing with trauma. Multivariate analysis showed a significant relationship between an increase in years of education and lower symptom scores (better health) for PTSD ($p<0.05$), anxiety ($p<0.05$) and depression ($p<0.01$). This was supported by many reports of children stating that being able to go to school had helped them most to deal with trauma. For many children education was perceived

as the most effective intervention to reduce psychological distress and improve child mental health in the case study.

The benefit of education for conflict affected children as well as for children affected by natural disaster has remained unchallenged (Betancourt & Khan, 2008). However, most children have their education interrupted as a result of conflict and little attention is paid to restoring a sense of normality for children through education (Betancourt & Khan, 2008). Our findings show that with the introduction of adult learning programs, competition has been created between adults and children for education. Although the findings also indicated that children are likely to benefit from educated and informed adults, the immediate outcome was an increase in children's workload if parents attended school. The importance of schools in mitigating trauma effects in children affected by war is undeniable and supported by previous research (Betancourt et al., 2008; 2010a; Kane, 2009; Kryger & Lindgren, 2011; Annan et al., 2006; Case et al., 2004).

However, in conflict settings, education does not occupy a prominent place in humanitarian thinking and the more life threatening needs such as food, water, shelter and health care are often considered as more pressing. For the child participants in our research, education was as a matter of urgency since only a proper education would allow them to become knowledgeable, provide for their family, be respected in the community and restore family and community relationships.

The early provision of education activities in emergencies among displaced and refugee populations has been argued as an important means of restoring a sense of predictability, security and social supports amidst the chaos of displacement and loss (Betancourt, 2005; 2008; Aguillar & Retamal, 1998). However, schooling in such settings has generally been described as especially challenging in the context of violence, destruction, displacement and poverty. The struggle to pay school fees, the difficulty to liberate children from their chores, and the poor quality of education provided are the key issues.

With an estimated 124,000 displaced people in Jonglei state alone, an illiteracy rate of 84% and 51% of the population below the age of 18 (International Crisis Group, 2010), education remains an important and challenging subject.

In Akobo town the primary school system up to the eighth grade was effective, at least in the most basic sense, in achieving high enrolment and literacy among

children. Outside the town, education was, if at all, only available up to primary level four. Overall schooling was frequently interrupted as parents struggled to pay school fees; girls struggled to remain in school as their workload increased steadily and as attacks chased families from one place to the other. All this resulted in a pattern of widespread episodic schooling with repetitions of the same grade so that many children were not able to write their name despite several years of education.

While some schools were functioning, the school system as such was not functioning well. Few children and classrooms had even basic materials such as textbooks, notebooks, pens and chalk. Most children were sitting on the ground in the absence of furniture in their classrooms and some classes were held under trees, even in the rainy season. The high enrolment of children (and the increasing number of IDP children arriving in Akobo town) resulted in a very high teacher student ratio of 1:100 or more.

These challenges and the often low quality of teaching had in no way altered children's perception of the great value of education for their life, health and development in any way, suggesting that education has a much broader purpose in conflict settings than providing knowledge and skills. School was also the place where children could interact and build relationships among peers; where teachers became important role models for children. Most teachers were well educated returnees from bordering countries who were greatly respected by the community for their education. This was something that most children wanted to achieve. The children agreed that if parents could be convinced to 'release' traumatised children to school, they were less likely to withdraw from society and more likely to interact with other children who would help them to recover.

Previous research has also portrayed a much broader effect of school on children than simply education, particularly in conflict settings (Thomson, 2006; Betancourt & Khan, 2008; Case et al., 2004; Masten & Naraya, 2012). It appears that education is an important protective process that fosters resilient mental health outcomes. This should not divert efforts to improve the quality of teaching, to train and support teachers, to pay appropriate salaries and to foster a more interactive and participatory teaching approach. Not only because previous research has demonstrated that the quality of teaching can contribute to the reduction of anxiety, depression and hostility in children affected by conflict (Betancourt et al., 2010a) but also because the quality of education will be crucial for the children's economic future.

7.3. Limitations

The study has a number of limitations which may have affected the results presented for both, the case study and the cross-sectional mental health survey.

7.3.1. Limitations: qualitative study

Generalisability commonly refers to the extent to which the findings from a study can be generalised from a study sample to the entire population (Polit & Hungler, 1991). In a sample survey, random sampling allows generalisability through the principle that the study sample is likely to be statistically representative of the larger population of interest, and findings can be extrapolated to that population. In qualitative research, study participants are selected on purpose by means of theoretical sampling, i.e. for their ability to provide information about the subjects under investigation. Such findings do not allow generalisation from the study sample to the entire population. This was also the case in this study. So that it is not possible to provide explanations to what extent theories developed within this particular Lou Nuer study sample are relevant for the entire population or other populations in comparable situations.

Data collection and analysis took place in *'tandem'* so that subsequent interviews and discussions were built on previous ones. This approach was also important in order to define the point at which no new information was provided and 'saturation' was reached for particular topics or by particular sub-groups. It showed that 'saturation' was not possible for 'hard to reach' sub-groups so that their views may be under-represented within the sample population of adult community members and the children. Saturation was not reached for: families who had moved to cattle camps, members of the White Army (adults and children) and for married girls and teen mothers. The volatile security situation and the time constraints made it impossible to increase the sample and continue until 'saturation' was reached for these groups of respondents.

The decision to follow up on what was learned during the qualitative study and to conduct a complementary mental health survey clearly added to the complexity of this research. The broad nature of this research and the time constraints may have

resulted in less depth with respect to the subjects of child participation and general health needs in conflict settings (other than mental health).

The research team was not perceived as independent but as part of SCiSS by some respondents. Thus, expectations to directly benefit from services provided by SCiSS through this research may have influenced the manner in which respondents answered the questions.

Berger and Luckmann (1966) suggest that language provides the means for making sense of everyday life and that the reality of everyday life presents itself as something that is comprehensible and can be shared with others in conversations. Translations into other languages are often not helpful to convey people's realities since verbatim transcripts may miss the true meaning of what has been said in a different language and may result in misinterpretations of what an individual meant to say. Although it was possible in this research to capture the concept of *'blood strength'* and the different meanings of the word translated as *'change'* from Nuer into English, other important concepts and meanings may have been lost as a result of the translation process.

7.3.2. Limitation: mental health survey

The locations where the survey was conducted remained largely unaffected by inter-tribal fighting at the time the survey was conducted. A community based random sample strategy was chosen because the schools in Akobo County were closed until the end of May and all children remained with their families. The population movements, however, increase, as some IDP's started to return to Nyandit at the beginning of the rainy season and it was noted that several families who lived under trees or in makeshift shelters in Akobo town returned to Nyandit. Such movements, even if they were not on a large scale may have reduced the accuracy of the sampling process. The harsh weather conditions at the beginning of the rainy season, the walking distances and the fact that the children and their caregivers were often not found in the same location to provide consent almost doubled the anticipated time of data collection (from four to seven weeks). The decision to extend the time of data collection instead of increasing the number of investigators to maintain the quality of the data collected may have influenced the accuracy of the sampling process.

The official guideline of the Harvard Program in Refugee Trauma (HPRT) suggests that ideally the questionnaire should be administered by health care professionals under the supervision of a psychiatrist or a psychiatric nurse. Health professionals in general and mental health professionals in particular are very limited in Southern Sudan. It was therefore not possible to find and recruit mental health professionals to conduct and supervise this project. Thus the potential bias could not be assessed which is seen as a limitation.

Another limitation was that the cut-off points for PTSD, anxiety, depression and PTG, which would accurately reveal children as checklist positive, could not be established for this particular population. HPRT has designed an easy to implement methodology for determining the psychometric property of the HTQ and the HSCL-25 which involves a random sample of the population to identify 50 cases. The cases are then clustered according to the scores into low, medium and high. All persons with high scores are scheduled for an interview with a psychiatrist using the Standard Clinical Interview for DSM-IV (SCID) in order to establish criterion validity. However, such a trained psychiatrist conversant in Nuer could not be recruited. In settings where cut-off points are used but cannot be established for a particular population HPRT recommends, based upon its extensive validation of the psychometric properties of the HSCL-25 and HTQ, cut-off points of ≥1.75 for the HSCL-25 and ≥2.00 for the HTQ will accurately reveal checklist positive persons for major depression, anxiety disorders and PTSD, respectively (Mollica et al., 2004b).

There is however no universal cut-off for any psychiatric scale so that the use of the suggested rather conservative cut-off points may have resulted in an overestimation of the problem.

The fact that the R^2 values reported in this dissertation are generally small does limit the kind of conclusions than can be drawn from the study findings. The factors that emerged as being statistically significant in the regression analyses are population risk factors – in a population where these factors are very prevalent, there will be more children with high trauma scores than in a population where the factors have low prevalence. But the R^2 values are too small to allow defining exactly which children will have the high trauma scores to be identified. So any intervention cannot easily be delivered effectively at the individual child level. Thus this research was restricted to making population-based rather than individual child-based conclusions. The relatively small R2 values also indicate that there are many

other factors affecting trauma scores in children affected by armed conflict than those investigated in this study.

The quantitative study was unable to match the gender of the respondent with the gender of the investigator so that the vast majority of the boys and the girls were interviewed by male investigators. It is therefore possible that girls may not have been willing to report on sensitive issues such as sexual violence if interviewed by a male investigator. Although both genders reported a high level of rape and sexual abuse, it was not assessed whether and to what extent the gender mismatch resulted in a response bias in girls.

The HTQ allows investigating how many traumatic events out of the 43 events mentioned have ever been experienced as traumatic with a 'yes' or 'no' answer providing no information about the frequency with which these events have occurred. This may result in an underestimation of the problem particularly for events which may have occurred more frequently such as, for example, severe beatings, being locked up, forced labour or ill health without access to medical care. The same accounts for the children in this study who had survived more than one attack. They may have experienced the traumatic events to which they answered 'yes' more than once. The use of a severity scale instead of 'yes' and 'no' answers may have provided a better estimate of the severity or magnitude of experienced trauma.

No two individuals experience trauma the same way (Joseph, 2006). Therefore it seems problematic to pre-define trauma in general and even more so cross-culturally. At this point this research deviated from the guideline which suggests that the answer 'yes' is given if an event pre-defined as traumatic has been experienced. The children in this research were asked to answer with 'yes' only if they experienced a particular event as traumatic as opposed to 'just normal'. This information stemmed from the qualitative part of this study which showed children's ability to define 'trauma' as their 'inability to control' or 'stop' symptoms resulting from an event such as 'extreme fear', 'aggressiveness', 'crying a lot' 'not being able to concentrate', 'thinking day and night about the event', 'not being able to sleep' etc. The children who felt 'controlled by the symptoms' reported that they were 'traumatised' as a result of the event and this event was considered 'traumatic'.

The different approach may result in an underreporting of experienced traumatic events when compared with other studies using the instrument according to the HPRT guideline since several children in this research did not report an event as traumatic even if they had experienced it.

8. Conclusions and recommendations

8.1. Conclusions

The word 'thesis' is derived from the Greek 'to set forth'. In 'setting forth' on this journey I hoped to give voice to the voiceless whose only experience of childhood is savaged by violent conflict in South Sudan. I was prepared for the intellectual and physical demands that lay ahead. It is impossible to prepare for the emotional challenges that I and my research team experienced. I have deliberately excluded the documentation of such experiences from this account in the interests of remaining resolutely objective in the presentation of my research.

This study aimed to explore children's health needs from a child perspective and to determine potential and existing opportunities and challenges for children to participate in health decision making, in a context of interethnic violence. The exploratory nature of this study resulted in a recognition that mental health problems were a major issue for the children studied. Thus, mental health became the core focus of the research.

An extensive review of the literature provided a profound insight into the social and cultural history of the study population and a crucial understanding of their current predicament. The mixed methodological, participatory approach to our field-based research provided a unique perspective on the hardships endured by the children and their capacity to respond to and overcome the challenges they face on a daily basis.

The findings in this study illustrate children's suffering, but also the resilience and adaptability of children affected by armed conflict and their capacity and motivation to contribute and take action to improve their everyday life. This was also true for children living in the most difficult circumstances affected by parental loss, stigma, abuse and rejection.

The combined qualitative and quantitative approach of this research determined factors that predispose children to risk behaviour as well as factors enabling children to be resilient and resourceful. Multiple regression analysis showed important relationships between demographic and trauma variables with mental health morbidity which must be addressed.

The direct impact of armed violence has significantly contributed to extremely high levels of trauma exposure while the long term consequences of conflict and displacement such as poverty and the destruction of existing social networks and family relationships has deprived children of their support system, to the detriment of children's physical and psychological wellbeing. Ending violence is not only a precondition for people to return to their land and rebuild their livelihoods; it is also a precondition for the reduction of children's suffering.

The high levels of post-traumatic growth (PTG) demonstrated that positive experiences as a result of the most traumatic events are possible and can help children to overcome their worst moments and to move on with their lives. Post-traumatic growth co-existed with post-traumatic stress and did not reduce children's suffering. These findings suggest that armed violence and trauma exposure need to be reduced, so that the restoration of child friendly schools, psychosocial and child targeted mental health interventions, the protection of orphans and the integration of child, family and community participation in existing humanitarian programs can have the desired effect.

Children have lost considerable ground in their society when social networks through which children had been able to exercise some 'influence' over adults in order to achieve their goals, started to crumble. Yet, in striking contrast to adult community members, children were less likely to surrender to the manifold challenges and constraints they encountered in their daily life. Children saw themselves as active survivors who counted on their own strength and on God's help. They wanted to become protagonists in order to change their current reality for a better one.

Adults described how the decades of violence had resulted in a cultural shift from 'being united' to 'being isolated' and from a state of 'equilibrium' to a state of 'confusion and conflict' which had deeply penetrated into their communities and families affecting the parent-child relationship. The creation of a strong and educated society was seen by adults as a precondition for escaping the situation of violence, poverty, and dependence. However, unlike the children, adults had little confidence in their ability to mitigate or improve the situation. Despite adults' great trust in children's strength and abilities to take action, their fear to lose control over them if they were given more rights undermined rather than strengthened the

children's position. In this light, if children are trained to know their rights within a community that has equally undergone a process of self-reflection and re-definition, they may be able to assert these rights within their community and assume a greater control over their lives within their society.

The importance of child participation is manifold: as a means to make projects more effective and relevant, to promote children's protection and wellbeing, and ultimately to help build a more participatory society which strengthens its long term political and developmental trajectory (Newman, 2005). It is evident that children and their communities must ultimately take responsibility for recreating a strong society. Such a process is not exclusive of service providers who can act as catalysts for children and their communities. Children are able to take a lead but depend on adults with whom they wish to participate.

This study has contributed to enhancing the scientific understanding of the processes linking experienced trauma related to armed violence, material and social stressors to the development of PTSD, depression and anxiety symptoms and the psychological functioning in conflict affected children. Furthermore, it has added substantially to the existing research on post-traumatic growth in conflict affected children and the knowledge of the relationships between risk factors, protective factors and adjustment in 'non-combatant' children.

The study confirms previous findings on children's remarkable capacity and motivation to actively participate in decision making and provides important additional information on children's ability to participate despite high levels of trauma exposure and psychological distress. Issues of concern for adult community members, children and service providers with respect to children's participation have been identified which may contribute to the recognition and/or creation of enabling environments to strengthen children's participation. The study has highlighted the important role that adults have in promoting children's participation.

The study has also demonstrated the value of using combined qualitative and quantitative methods in identifying and describing mental and physical health needs of conflict affected children.

It is hoped that this thesis can raise awareness of the importance of investing in effective and sustainable responses and can stimulate further research in this field.

8.2. Recommendations for practice and policy

Cessation of violence in Jonglei and other States in Southern Sudan is a precondition for a sustainable solution that will enable children and their families to return to their land and rebuild livelihoods. The large youth cohort in Jonglei state relative to the adult population and the poor economic performance of South Sudan represents a highly explosive mix. If young people are left with no alternative but unemployment and poverty, they are likely to join armed groups as an alternative way to generate income. The development of a diversified, flexible economy capable of absorbing young job seekers with various levels of education will not only provide employment, it can become a mediator for peace. Given the wide range of possible interventions, the recommendations here will focus on those that are most evident from our research.

Mental health of conflict affected children has largely been recognised as a key public health issue, yet such knowledge is often not translated into humanitarian action and children are left to deal with psychological distress on their own. A comprehensive set of guidelines published in 2007 by the Inter-agency Standing Committee is available to guide the implementation of mental health and psychosocial support in Emergencies (Inter-Agency Standing Committee, 2007). However, on the ground, humanitarian organisations remain divided on the importance of mental health interventions in conflict settings and prioritise what are perceived as more immediate needs. An even greater confusion prevails about what psychosocial interventions are and what they are not.

The term 'psychosocial' emphasises the close connection between psychological aspects of human experiences (thoughts, emotions and behaviour) and social experiences (relationships, tradition and culture). In settings of conflict and displacement the two are closely inter-twined. The term psychosocial intervention has come to refer to any program that aims at improving psychological and social well-being of people; from conflict resolution, peace-building and advocacy projects for human rights, to material assistance and more targeted psychological interventions and counselling (The Psychosocial Working Group, 2003).

The findings presented in this research indicate the need for a child participatory approach to address child mental health. Child participation is a process associated with resilient mental health outcomes, even among the most disadvantaged children. Children can only show their potential if adults choose to involve children in what they do, and participate in what children define as important. Children's knowledge and their wish to 'overcome' trauma in order to help other children who still suffer should be recognised, respected and embraced.

Child mental health programs must be designed to influence all aspects of children's lives, including child protection. Psychosocial programming must be more targeted and specific for children in greatest need of support and protection such as orphans, married girls, and other particularly vulnerable children. This will require more specialised and different types of interventions than those provided for children who still have a family network. The community must also accept responsibility in addressing such issues and seek appropriate support from service providers and children's organisations.

Services must be integrated across sectors. To that end, it is important that a strong organisational consensus on ethics, methods and concepts relating to participation is built.

Education, health and child care institutions, and community organisations should become partners working with children incorporating their insights and opinions and encouraging their active participation. Programs with a potential effect on children's well-being must become more inclusive of children at all stages of the project cycle. A shared understanding is needed among organisations regarding the positive effects of child participation as a means of delivering more effective projects and empowering children and their community to assume greater control over their lives.

A holistic approach to mental health includes religion and spirituality and calls for a close collaboration with faith based organisations and religious institutions. The relationship between feelings of hatred and adverse mental health outcomes in boys suggest the importance to address the subject of 'revenge and forgiveness' in children and their communities. This may be crucial for children to move on with their lives toward a more peaceful future and avoid becoming the next generation of

fighters ready to avenge the death of their loved ones. Faith based organisations and churches are well placed to address these issues.

The systematic collection of baseline data, monitoring and evaluation of psychosocial intervention will be crucial in order to assess the program impact, and to determine what works, in what way and for whom.

8.3. Recommendations for further research

The findings presented in this dissertation indicate the need for child targeted interventions that make sense to the community and have an impact on children's well-being. Further research should aim at providing baseline data to determine the effect of program delivery and to explore contextual factors while taking into account children's understanding of the central concepts of risk and resilience. Mental health research and practice have to be linked so that children in greatest need of support and protection can be targeted and interventions can become more effective. Such an approach entails a shift in paradigms which places children in a position of power as researchers instead of as research subjects. At the same time it requires a close collaboration between research and humanitarian agencies with the capacity to implement emergency relief as well as long term development programming.

There are few studies looking at protective factors and psychosocial adjustment in non-combatant children. It would be valuable to carry out further research with a similar approach in order to compare these findings with the situation in other conflict settings, showing different cultural profiles. On the one hand this would complement the findings of this study. On the other hand this would serve to encourage further studies to account for the rapid cultural and economic transition in conflict affected societies often to the detriment of children's development and psychosocial well-being.

This research has shown that children are intimately connected with adults and indicates that children's mental and physical well-being largely depends on those of their caregivers. The findings from the case study demonstrate that mothers are often too overwhelmed by their own situation or 'too sad' to take care of their children resulting in children's neglect and ill-health. A number of studies have observed that the effects of armed conflict on children's mental health were

mediated by maternal mental health (Dybdahl, 2001; Locke et al., 1996). This indicates the importance to further explore this area of research.

The cross-sectional study design used in this research has important limitations in the investigation of processes such as psychological distress and post-traumatic growth. Therefore longitudinal research would be valuable in order to disentangle the processes involved in the psychological adjustment of children affected by conflict, the effects of extreme exposure to violence and their relationship to protective processes over time. From the studies identified in the literature review all except the studies of Betancourt used a cross sectional design (Betancourt et al., 2013a).

The importance attributed to education for adults and children can result in a competition often to the detriment of child education. Further research exploring contextual factors across the family, community and societal level can contribute to finding viable solutions for children's transition from being absorbed by chores to permanent school attendance.

On the cognitive level, an orientation of implementation-focused studies towards more analytical approaches is required. Rather than trying to predict behaviour in conflict settings, emphasis should be placed on understanding the cultural *logics* which provide information on *why* people behave the way they do. The results of this study suggest that such knowledge can considerably contribute to meaningful program implementation that makes sense to the population. Ethnographic fieldwork is well placed to answer these questions.

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10. Appendix

10.1. Mental Health Assessment: survey questionnaire

Demographic data:

We are just going to start with some general questions about you and your family life. Are you ready to begin?

1. What is your age? _______ Years

2. Sex: 1= male 2= female

3. Marital status: 1= never married 2=married 3=separated 4=divorced
5= widowed (please circle the appropriate number!)

4. What was the reason for your last displacement?
1= attack 2=insecurity 3= other __________________ (please circle)

5. How many years of school did you attend? ________ Years

6. How many people do you live with? ___________

7. Has somebody close to you died in the attack? ___________

_____________________________ please note if the person who died was: a friend, mother, father, brother, sister, uncle, nephew etc).

8. Who is the head of the household? _________________

Harvard Trauma Questionnaire: Part A. History of Traumatic Events

We would now like to ask you some questions dealing with your past experiences due to the attack and the general violence you experienced. Some of these questions may be hard to answer and may be upsetting to you. Please feel free to skip any questions that you do not want to answer. We can also take a break at any time you want. Your answers will be kept completely confidential which means everything you tell me will be kept a secret and will be shared ***only with others who need to know in order to provide assistance and intervention****. Are you ready to begin?*

OK, I am going to now read you a list of events. For each event, please tell me "YES" or "NO" if you have ever experienced the event in your life.

No.	Item	Yes	No
1.	Lack of shelter	____	____
2.	Lack of food or water	____	____
3.	Ill health without access to medical care	____	____
4.	Confiscation or destruction of personal property	____	____
5.	Combat situation	____	____
6.	Used by an enemy to protect him and get hurt instead	____	____
7.	Exposure to fire	____	____
8.	Forced evacuation under dangerous conditions	____	____
9.	Beatings to the body	____	____
10.	Rape	____	____
11.	Other sexual abuse or humiliation	____	____
12.	Knifing/axing/machete	____	____
13.	Torture	____	____
14.	Serious physical injury from combat	____	____
15.	Imprisonment	____	____
16.	Forced labour	____	____
17.	Robbery	____	____
18.	Brainwashing	____	____
19.	Forced to hide	____	____
20.	Forced early marriage	____	____
21.	Abducted	____	____
22.	Forced to fight in war-like situations	____	____
23.	Forced to carry out other activities during attack	____	____
24.	Forced separation from family members	____	____
25.	Forced to find and/or bury bodies’	____	____
26.	Forced to flee, leaving everything behind	____	____
27.	Present while someone searched your home for people or things	____	____
28.	Confined to home because of danger outside	____	____
29.	Forcefully Prevented from burying someone	____	____
30.	Forced to harm family member or friend	____	____
31.	Forced to kill family member or friend	____	____
32.	Forced to harm someone who is not family member or friend	____	____
33.	Forced to kill someone who is not family member or friend	____	____
34.	Forced to destroy someone else’s possessions or property	____	____
35.	Forced to betray family member or friend and put them at risk of injury or death	____	____
36.	Witness physical injury of family member or friend during attacks	____	____

		Yes	No
37.	Witness murder or death of family member or friend due to violence or combat situation..…………………………………………………..	____	____
38.	Witness abduction of family member or friend ………………….	____	____
39.	Witness beatings to the body……………………………………....	____	____
40.	Witness torture ……………………………………………………..	____	____
41.	Witness murder or killing……………………..…………………….	____	____
42.	Witness rape or sexual abuse ……..………………………………	____	____
43.	Witness attacks or battles………………………………………….	____	____
44.	Any other situation that was very frightening or in which your life was in danger…………………………………………………..	____	____

Please specify: ____

____

____

Part B. Trauma Symptoms

OK, the following are symptoms that people feel sometimes after experiencing hurtful or terrifying events in their lives. After each symptom, please let me know how much that symptom may have bothered you in the past MONTH. **(Remind throughout that we are focusing on the *past MONTH* only).**

1= Not at all, never 2= A little 3= Quite a bit 4= Extremely

1. Recurrent thoughts of the most terrifying or hurtful event……………………..…______
2. Feeling as though the event was happening again..……………………..…….______
3. Recurring nightmares or frequent nightmares…………………….……………______
4. Feeling detached or withdrawn from people……..………………………………______
5. Unable to feel emotions..………………………………………………………..______
6. Feeling jumpy or easily startled………………………………………………..…..______
7. Difficulty concentrating……………………………………………………...…______
8. Trouble sleeping ..…...…………………………………………………………..______
9. Feeling on guard...……………………………………………………………….______
10. Feeling irritable or having outbursts of anger ………………………………..______
11. Avoiding activities that remind you of the traumatic event……………………..______
12. Unable to remember the event or parts of it…….………………………………..______

1= Not at all, never **2= A little** **3= Quite a bit** **4= Extremely**

13. Less interest in daily activities……………………………………………..…………______
14. Feeling as if you don't have a future……..…………………………………………..______
15. Avoiding thoughts or feelings associated with the event.……………………....______
16. Sudden emotional or physical reaction when reminded of the event.…………______
17. Feeling as if you had less skills than before..……………………………………______
18. Having difficulty dealing with new situations ……………………………….______
19. Feeling exhausted……………………………………………………………….______
20. Bodily pain……………………………………………………………………..______
21. Troubled by physical problems…………………………………………………______
22. Poor memory…………………………………………………………………..______
23. Finding out or being told by other people that you have done something that you cannot remember..……………………………………………………______
24. Difficulty paying attention………………………………………………………..______
25. Feeling as if you are two people and one of you is watching what the other is doing..…………………………………………………………………______
26. Feeling unable to make daily plans………………………………………………______
27. Blaming yourself for things that have happened ………………………………..______
28. Feeling guilty for having survived………………………………………………..______
29. Hopelessness..……………………………………………………………………______
30. Feeling ashamed of the hurtful or terrifying events that have happened to you ………………………………………………………………………______
31. Feeling that people do not understand what happened to you …………….______
32. Feeling others are hostile towards you..…………………………………………______
33. Feeling that you have no one to rely on …………………………………………______
34. Feeling that someone you trusted betrayed you …………………………....______
35. Feeling humiliated by your experience ..…………………………………………______
36. Feeling no trust in others…………………………………………………………..______
37. Feeling powerless to help others…………………………………………………..______
38. Spending time thinking why these events happened to you……………………______
39. Feeling that you are the only one who suffered these events…………………..______
40. Feeling a need for revenge…………………………………………………..…..______

Interview Part III: Hopkins Symptom Checklist-25

I am now going to read you some more symptoms that people sometimes have. After each symptom that I read you, please tell me how much it has bothered you in the past MONTH, including today. We will use the same number scale as before.

1= Not at all 2= A little 3= Quite a bit 4= Extremely

1. Suddenly scared for no reason………………………______
2. Feeling fearful ………………………………..______
3. Faintness, dizziness, or weakness ……………..______
4. Nervousness or shakiness inside ……………..______
5. Heart pounding or racing ……………………….______
6. Trembling /shaking ………………………………..______
7. Feeling tense or keyed up ……………………….______
8. Headaches ……………………………………....______
9. Spells of terror or panic ……………………………….______
10. Feeling restless, can't sit still …………………..….______
11. Feeling low in energy, slowed down ……………______
12. Blaming yourself for things …………………..….______
13. Crying easily …………………………………..…..______
14. Loss of sexual interest or pleasure ………….…...______
15. Poor appetite …………………………………..…..______
16. Difficulty falling asleep and sleeping ……..……______
17. Feeling hopeless about the future ………..…______
18. Feeling blue or sad ………………………………______
19. Feeling lonely ……………………………………...______
20. Thoughts of ending your life ………….………..______
21. Feelings of being trapped or caught ……………______
22. Worrying too much about things……………......…______
23. Feeling no interest in things ……………………..______
24. Feeling like everything is an effort ………......______
25. Feelings of worthlessness ……………….…….…______

Interview Part IV: The Post-traumatic Growth Inventory

Part A. *OK, now I am going to ask you to focus on one specific traumatic or life-altering event that has occurred in your life. This should be the same event as the one you talked about previously. If you did not describe a traumatic event earlier, can you think of a significant life-altering event? (***Have them describe and note the event).**

____
____
____
____

Part B. *How long has it been since this event occurred?*

Probe for specific amount of time since event ________________

Part C. *I am now going to read you a list of statements about ways you may have changed since this event. Using the following number scale, please tell me to what extent each statement is true about your life:*

1=I did not experience this change as a result of this event
2=I experienced this change to a small degree as a result of this event
3=I experienced this change to a moderate degree as a result of this event
4=I experienced this change to a great degree as a result of this event
5=I experienced this change to a very great degree as a result of this event

1. I changed my priorities about what is important in life……………………._________
2. I have a greater appreciation for the value of my own life………………..._________
3. I developed new interests..………………………………………………._________
4. I have a greater feeling of self-reliance……………………………………_________
5. I have a better understanding of spiritual matters……………………………____ _____
6. I more clearly see that I can count on people in times of trouble ……….._________
7. I established a new path for my life ………………………………………._________
8. I have a greater sense of closeness with others………………………….._________
9. I am more willing to express my emotions…………………………………_________
10. I know better that I can handle difficulties…………………………………._________
11. I am able to do better things with my life……………………………………_________
12. I am better able to accept the way things work out………………………._________
13. I can better appreciate each day……………………………………………_________
14. New opportunities are available that wouldn't have been otherwise……._________
15. I have more compassion for others…………………………………………_________
16. I put more effort into my relationships…….………………………………_________
17. I am more likely to try to change things which need changing…………...._________
18. I have a stronger religious faith..………………………………………..……_________
19. I discovered that I am stronger than I thought I ……………………….…._________
20. I learned a great deal about how wonderful people are……………….…._________
21. I better accept needing others……………………………………………..._________

Part D: *I am now going to ask you some general questions about these items we just went over and ask you to explain your answers in a little bit more detail.* **(PLEASE WRITE THE RESPONSE DOWN).**

1. ***Can you describe your current relationship with your family members and loved ones? How have these relationships changed since the event? Can you give an example?***

____

____

2. ***What are you most proud of about yourself? What do you like most about yourself? What do you consider to be your strengths?***

____

____

3. ***What do you think would help you most in the future?***

____

____

COMMENTS / OBSERVATIONS:

INVESTIGATOR:

NAME ______________________________ **SIGNATURE** __________________________

SUPERVISOR:

NAME ______________________________ **SIGNATURE** __________________________

10.2 Glossary of translated variables different to the English version of the survey questionnaire

HTQ: History of traumatic events

Question 3: ‘Ill health’ included both sickness and injuries.

Question 5: ‘Combat’ was described as fighting and shooting

Question 10: ‘Rape’ was translated as forced on your body to have sex. Sex implied penetration.

Question 13: ‘Torture’ was understood as inflicting great pain in order to extract information or change a person’s mind.

Question 15: ‘Imprisonment’ implied being caught behind locked doors or being chained to a tree.

Question 16: ‘Forced labour’ was understood as extremely heavy work while ‘being beaten over the body’ or ‘despite being very ill’.

Question 18: ‘Brainwashing’ close to the word re-education with an emphasis on using force; literally re-education by force to change the way you think or feel.

HTQ: Symptoms PTSD

Question 3: ‘Nightmare’ was translated as a ‘bad and frightening dream’.

Question 4: ‘Feeling detached’ was understood as being separated or isolated from other people

Question 6: ‘Startled’ was back-translated as ‘frightened scared’.

Question 7: ‘Difficulty concentrating’ was understood as ‘difficulty to focus on one thing’ or ‘difficulty to make an idea’.

Question 9: ‘Feeling on guard’ was translated as ‘having a prepared body to react’.

Question 10: ‘Feeling irritable’ implied an ‘easiness to get angry’.

Question 11: ‘Traumatic’ implied a sustained injury inside that is not visible from the outside at the same time it described the feeling of ongoing pain within.

Question 29: ‘Hopelessness’ was expressed as ‘finish hope’.

Question 32: ‘Hostile towards you’ was back-translated as ‘people become enemy with you’.

HSCL-25: Symptoms anxiety 1-10 and depression 11-25

Question 3: ‘Faintness’ was understood as ‘sudden weak legs and darkness’.

Question 5: ‘Heart pounding’ was expressed as ‘the heart jumps a lot’ or as ‘the heart is kicking in the chest’.

Question 7: ‘Feeling tense of keyed up’ was back-translated as ‘overwhelming pressure’ the sensation of ‘a screw that gets tightened’.

Question 8: ‘Headache’ described as ‘the body who speaks through the mind’.

Question 9: ‘Spells of terror or panic was back-translated as ‘being paralysed by great fear’.

Question 11: ‘Feeling low in energy’ was expressed as ‘feeling slowed down’.

Question 14: Loss of sexual interest was back-translated as a ‘lost state of happiness when sharing the hut and sleeping together.

Question 17: ‘Feeling hopeless about the future’ was translated as ‘no more hope left’.

Question 24: ‘Feeling like everything is an effort’ was expressed as ‘the feeling that everything is in a state of difficulty’.

10.3 Question guide for interviews with children

Date: /__/__/__/ Investigator: /________________/ ID Nr: /__/__/__/

Have you been displaced? /___/

How many times did you live in different places? /____/

Faces or "Oucher" Scale

- How happy are you with your life, current situation?
  - What would make your life easier?
  - What would make your life more difficult?

- Definitions:
  - Child participation
  - Adult responsibility. *What daily activities that you do would you consider as adult responsibilities?*
  - At what age will you be considered as an Adult in your culture? Is this different for boys and girls

- Experiences of displacement
  - Roles before and after displacement. *Has your role changed?*
  - Responsibilities before and after displacement. *Have your responsibilities changed? Why?*
  - Support system (family, teachers, health workers, social structures) before and after displacement

- Living condition
  - Housing and living strategies
  - Daily activities. *Can you tell us how a normal day looks like? What do you do from the time you get up in the morning? Do you have spare time?*

  - Education. *Tell me about your education. Do you think education is important?*
  - Livelihoods including employment opportunities.
  - Perceived attitudes of adults towards children? *Do you feel respected by adults? What do you think would happen if a child does not want to get married at a young age? What do you think would happen, if a child wants to participate in the village health committee?*

- Health
  - Own health and the health of peers or other significant people. *Has someone you know (including yourself) been sick or injured in the last months? What happened?*
  - Perceived health threads. *What do you think are the main health problems for older children*? *Food shortage? Environmental health (disease from unsafe water, drowning, floods, storms?) Reproductive health issues for females? Accidents? Malaria, HIV/AIDS, diarrheal disease? Violence, mental health problems? (rank 1-5).*
  - Responses to health threats. *What do you do? Where do you go? Who makes the decision?*
  - Places to go to avoid. *For what reasons? Security?*
  - Safety and protection (people to go to or be with). *Other Children? Clubs?*
  - People to trust or to get good advice.

- Services provided for perceived health threats
  - What would be needed to help children for the health threats you just mentioned. What is already available?
  - Accessibility. *Are you allowed to go there on your own or do you need to ask someone for permission?*
  - Perceived quality of services; staff attitudes.
  - Shortcomings. *What do you think should change?*
  - Capacity and motivation to discuss issues and find solutions. *Would you like to be asked for your opinion? Take part in discussions about issues that concern you?*

- Needs for the future
    - Involvement in decision making. *What do you think is most needed in this place to improve the life of the community? Children of your age?*

Only if violence was mentioned

- Can you tell me about a situation that was very frightening for you or in which your life was in danger?
- Did this event change your life? In what way?
- *Can you tell me how you are feeling emotionally today and over the past few weeks?*

Probe for specifics: depression (how long, how severe, what specific symptoms), same for anxiety. Other symptoms: feeling afraid, nightmares, anger.

Probe for positive symptoms: happiness (how long, when are you happy, who is around when you are happy, what makes you happy).

- *Can you describe your current relationship with your family members and loved ones? How have these relationships changed since the event? Can you give specific examples?*

- *Do you feel like you depend more/less on other people since this event? Can you give some examples?*

Probe: *Do you feel more/less comfortable asking for help when you need it? Examples?*

- *Do you feel stronger/weaker since this event? In what ways? Do you feel like you are capable of overcoming other challenges that you would not have been able to before? Can you give me some examples? Are there some things you feel like you can/can't do after this event?*

Probe: self-confidence, self-esteem, overcoming obstacles, barriers to achieving goals.

- *Can you identify the factors that have helped you get through the times immediately following the event?*

Probe: again probe for familial-friend relations/religion and faith.

- *Do you appreciate certain things in life more since the event? Can you talk about what specifically in your life you appreciate more?*

Probe: family, health, employment, safety, justice, religion, school

- *Have your spiritual beliefs played a part in your life since the event? Is this different from how big a part your beliefs played before the event? How so?*

- *What are you most proud of about yourself? What do you like most about yourself? What do you consider to be your strengths?*

- *What do you think would help you most in the future?*

10.4. Question guide for FGD's with children

- Daily activities
    - Please describe a normal day from the time you get up.
    - Where do you go when you face problems?
    - What are your greatest worries?
    - How could your daily life improve?
    - Main source of income?
    - Do you have spare time, what do you do with your spare time?

- Health hazards
    - Is there anything that can be dangerous for your health?
    - What are the main health problems in the community, family?
    - What is the greatest danger for children age 8-18? What makes children and young adults take risks and expose them to dangerous situations.
    - What health problems did you have? Is there anything you can do to avoid getting sick?

- Which events or developments (positive or negative) in the past years have had an important effect on the area?

    - What signs of these can be seen in the surrounding landscape?
    - What kind of effect did these events have on the population?
    - What kind of effect did these events have on younger and older children?
    - What kind of effect did these events have on your personal life?

10.5. Observation guide children

Date: /__/__/__/ Investigator: /________________/

ID Nr: /__/__/ Location: /_________/

- Observe daily activities of children.
    - Document potential health hazards in relation to:
        - Environment?
        - Household?
        - Violence in the community?
        - Accidents?
        - Stigma?
        - Basic needs (food, shelter, water hygiene, education, health).
        - ………………………………….
        - ………………………………….

- Interaction children – adults.
- Interaction among children

10.6. Question and activity guide for children attending workshops

- Free Listing (individual or group)
    1. Name all health hazards in the community (adults/children)
    2. Name everything that you think can affect children's health
    3. Name reasons for displacement why do people leave?
    4. Reasons for children to take on adult responsibilities.
    5. Reasons for poverty in this place.
    6. Name all places you can go if you feel sick.

7. Name all places you can go if you need help.
8. Name all the things that make life good around here.
9. Name all the things that make life difficult around here.
10. Name all your worries for the future.
11. Name all your hopes for the future?

- Ranking: Each List (1-11) according to importance

- Mapping:

    - How the children see the area in relation to topography (rivers lakes) social organisation (schools, health centres, churches) and economic systems (agricultural land, local market).
    - Places to go, places to avoid, health hazards.

- Community mapping:

    - **Where can unmarried adolescent girls go?**
    - **Where can married adolescent girls go?**
    - **Where can unmarried adolescent boys go?**

Black: where they go.
Red: where they do not go.

Church **River / Pond** **Market / Shops**

Health centre **School**

Food distribution **Water pump**

Charcoal / Firewood **Restaurant / Bar /Teashop**

Playground / Sports

Fields / Harvest

Traditional Healer

Visit peers

Festival / social gathering

- Transect walk: To complement maps
    - Establish a joint understanding of various characteristics of the area: By walking straight across an area with a group of children (walk, ask and generate a discussion). The purpose is to see the area through the eyes of the children.

10.7. Demographic data children: case study

1. Date /__/__/__/ Location /____________/ Ethnic background:/_____________________/ ID /___/___/___/
2. Date /__/__/__/ Location /____________/ Ethnic background:/_____________________/ ID /___/___/___/
3. Date /__/__/__/ Location /____________/ Ethnic background:/_____________________/ ID /___/___/___/

(1) Age	(2) Sex	(3) Reason for displacement	(4) Marital status	(5) Years of school atten-ded	(6) In or out of school	(7) With whom do you live?	(8) Have you worked for pay in the last month	(9) How many people live in the HH?	(10) How happy are you with your life? (11) How happy are you with the security situation?
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced	1=never married 2=married 3=separated 4=divorced 5=widowed		1= In 2= Out	1=both parents 2=mother only 3=father only 4=other relatives 5=no relatives 6=other	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale Faces or "Oucher" Scale
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced	1=never married 2=married 3=separated 4=divorced 5=widowed		1= In 2= Out	1=both parents 2=mother only 3=father only 4=other relatives 5=no relatives 6=other	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale Faces or "Oucher" Scale
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced	1=never married 2=married 3=separated 4=divorced 5=widowed		1= In 2= Out	1=both parents 2=mother only 3=father only 4=other relatives 5=no relatives 6=other	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale Faces or "Oucher" Scale

COMMENTS:

10.8. Question guide adult community members

- How happy are you with your life, current situation?

  - What would make your life easier?
  - What would make your life more difficult?

- How happy are you with the security situation?

  - What would make you happier?
  - What would make it more difficult?

- Definitions:
  - Child participation. *What is your understanding of child participation?*
  - *How are children raised, what do you want them to become? (strong, independent, hardworking, smart, self reliant, obedient, courageous, social, knowledgeable, skilled, to be survivors*
  - Adult responsibility. *What daily activities that children do would you consider as adult responsibilities?*
  - At what age will children be considered as adults in your culture? Is this different for boys and girls? *At what age do children get married? Is it different for boys and girls?*
  - *What do children eat (weaning-5years) 5-18 years?*
  - *What are the problems of the children who have lost their parents? What is the reason that orphans are not perceived by many people as part of the community?*

- Experiences of displacement current situation.
  - What is it like to be (back) in Akobo.
  - Children's roles and responsibilities in the community before and after displacement. *Have the roles changed*? *Why?*

  - Support system (family, health workers, teachers, social structures) before and after displacement. *What are the main support systems in place that help children in their development and prepare them for life?*
  - How do you get through each day, what are your daily activities?
  - What is it like to be dependent on foreign aid? *What services provided are you using, for yourself and your children?*

Faces or "Oucher" Scale

- *How happy are you with the services provided? Including local, traditional.*
  - *What do you miss most?*
  - *What is most helpful?*

- *Social structures, cultural values, local customs, spiritual beliefs (treatment of diseases, nutrition), social status of children (age and gender specific).*
- Perceived capacity of children to raise issues and define needs (age and gender specific). Should children express themselves? Should adults decide what is best for children? *If yes, up to what age?*
- Perception of direct engagement (consultation) of children to respond to children's needs. *How would it make you feel if children were engaged and consulted for the development of health programs by national or foreign organisations? Can you imagine that a child could become a member of a village health committee or other committees? If yes at what age?*

- Living condition
  - Housing and living strategies. *Where do children live? Are there children who live on the streets and have no home? Can children be head of households?*
  - Daily activities. *Can you tell us how a normal day for a child can look like? What are the main activities of a child from the time he/she gets up in the morning? Do children have time for leisure?*

  - Education. *Do you think education is important for a child? Why? Is this the same for boys and girls?*
  - Livelihoods including employment opportunities. *Are there opportunities for children to generate income? What can girls do? What can boys do?*
- Relationship Children Adults:
  - Perceived attitudes of children towards adults? *Do you feel that children respect adults? Do you know of any conflict situation between adults and children? Can you give an example? Do children listen to adults?*
  - *What do you think would happen, if a child does not want to get married at a young age? What do you think would happen, if a child wants to participate in the village health committee?*

- Health:
  - Own health and the health of family members or other significant people. *Has someone you know (including yourself) been sick or injured in the last months? What happened?*
  - Perceived health threads for children. *What do you think are the main health problems for older children*? *Food shortage? Environmental health (disease from unsafe water, drowning, floods, storms?) Reproductive health issues for females? Accidents? Malaria, HIV/AIDS, diarrheal disease? Violence, mental health problems? (rank 1-5).*
  - Responses to health threats. *What do you do if a child gets sick or injured? Where do you go? Who makes the decision where to go?*
  - Places to go to avoid. *Are there places that you consider dangerous for children or for yourself to go? Why? How about the security situation (during the day, after dark?). Are the places to avoid different for boys and girls?*
  - *Where do children find protection and safety? Where can children get good advices for health, security?*
- Services provided for perceived health threats
  - What would be needed to help family members for the health threats you just mentioned. What services are available? *All services including local, traditional services? Are the people who provide the services friendly? Are you happy with the services provided? Should anything be different?*

- *provide the services friendly? Are you happy with the services provided? Should anything be different?*
- *Would you like to be asked for your opinion? Take part in discussions about issues that concern you?*

- Needs for the future
    - Involvement in decision making. *What do you think is most needed in this place to improve the life of the community as a whole and the future of your children?*

10.9. Question guide FGD's adult community members

- Experiences of displacement current situation (adult perspective).
    - Children's roles and responsibilities in the community before and after displacement
    - Support system (family, health workers, teachers, social structures) before and after displacement.
    - Main reasons for disputes in the community and in households?
    - Daily occupation and dependency on foreign aid.
    - Services used in the past 6 months (provided by aid organisations)
    - Perception of community participation in the programming of interventions

Child perception adults:

- Social structures, cultural values, local customs, spiritual beliefs, social status of children (age and gender specific).
- Perceived capacity of children to raise issues and define needs (age and gender specific)
- Perception of direct engagement (consultation) of children to respond to children's needs

- *How are children raised, what do you want them to become? (Strong, smart, independent, hardworking, self-reliant, obedient, courageous, social, knowledgeable, skilled, to be survivors; rank according to importance.*

- *What do children eat (weaning to 5 years) 5-18 years? (Detailed information on what they eat, how many times a day and how mutch.*

- *What are the problems of the children who have lost their parents? Are they considered the same or different than children with parents. Who is taking care of orphans.*

- Living condition of children:
    - Housing and living strategies
    - Daily activities
    - Education
    - Children's attitudes (age and gender specific).

- Health:
    - General health needs, most common diseases, health problems.
    - Factors that predisposes children to take risk.
    - Health seeking behaviour (adults).
    - Perceived health threats for children
    - Safety and protection for children
    - Places for children to go for perceived health threats

- Services provided for perceived health needs of children
    - Perceived involvement of the community in decision making.
    - Availability and accessibility of services
    - Traditional health services (advantages, disadvantages).
    - Perceived quality of services; staff attitudes.

10.10. Activities FGD's adult community members

- Free Listing (individual or group)
    12. Name all health hazards in the community (adults/children)
    13. Name everything that you think can affect children's health
    14. Name reasons for displacement why do people leave?
    15. Reasons for children to take on adult responsibilities.
    16. Reasons for poverty in this place.
    17. Name all places you can go if you feel sick.
    18. Name all places you can go if you need help.
    19. Name all the things that make life good around here.
    20. Name all the things that make life difficult around here.
    21. Name all your worries for the future.
    22. Name all your hopes for the future?

- Ranking: Each List (1-11) according to importance

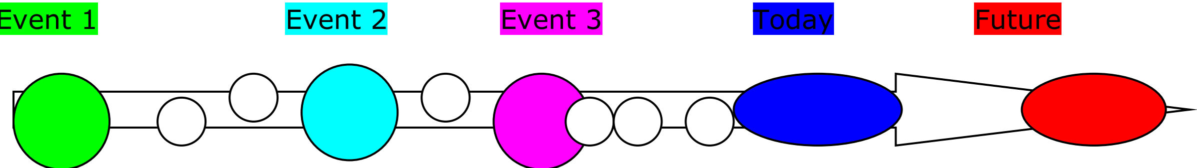
- Mapping:

  - How the children see the area in relation to topography (rivers lakes) social organisation (schools, health centres, churches) and economic systems (agricultural land, local market).
  - Places to go, places to avoid, health hazards.

- Historical timeline Adults:

To understand the recent history of the area and its people by identifying the main events that have impacted on the lives of the affected population and the children.

Draw a line and pinpoint two or three events in the past in chronological order. The goal is to fill the space by the participants with other events that have happened in the time in between. It may be useful to mark the present.



- Which events or developments (positive or negative) in the past years have had an important effect on the area?

10.11. Demographic data adult community members: case study

1:Date /__/__/__/ Location /____________/ Ethnic background/________________________ ID /___/___/__/
2:Date /__/__/__/ Location /____________/ Ethnic background/________________________ ID /___/___/__/
3:Date /__/__/__/ Location /____________/ Ethnic background/________________________ ID /___/___/__/

(1) Age	(2) Sex	(3) Reason for displacement	(4) Marital status	(5) Years of school attended	(6) What is the main source of income-survival?	(7) Have you worked for pay in the last month	(8) How many people live in the HH?	(9) How happy are you with your life? (10) How happy are you with the security situation?
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced.	1=never married 2=married 3=separated 4=divorced 5=widowed		1=livestock 2=agriculture 3=food aid 4=trade 5=exchange 6=social net	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale (9) Faces or "Oucher" Scale (10)
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced	1=never married 2=married 3=separated 4=divorced 5=widowed		1=livestock 2=agriculture 3=food aid 4=trade 5=exchange 6=social net	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale (9) Faces or "Oucher" Scale (10)
	1= M 2= F	1= attack 2= insecurity 3= economic 4= other 5= never displaced	1=never married 2=married 3=separated 4=divorced 5=widowed		1=livestock 2=agriculture 3=food aid 4=trade 5=exchange 6=social net	1=yes 2=no	1= under 5 ( ) 2= 5-18 ( ) 3= >18-45 ( ) 4= over 45 ( )	Faces or "Oucher" Scale (9) Faces or "Oucher" Scale (10)

COMMENTS:

10.12. Question guide service providers

Date: /__/__/__/ Location: /_________/

Organisation in place since /______/ Respondent in place since: /_____/

Position: /__________/ Services provided by the organisation: _______

____

- Experiences of conflict and displacement (current situation).
  - Livelihoods of population, infrastructure, dependency on foreign aide, tension within the population.
  - Children's roles and responsibilities within the communities (local children and returnees).
  - Community involvement in rebuilding livelihood, reconstruction, rehabilitation process.
  - Support system for children (family, health workers, teachers, social structures).

- Knowledge of the community
  - Social structures, cultural values, local customs, spiritual beliefs, social status of children.
  - Factors that predisposes children to risk behaviours and exposures to health hazards.
  - Factors that enable children to be resourceful and resilient.
  - Living conditions of children.
    - Housing and education, vocational training?
    - Main source of income / employment opportunities.
    - Main challenges for adolescents at the moment and for the future.
    - Children's attitudes (age and gender specific).

- Health
  - Main health issues (health treats) for children and adolescents

    - Places for children to go where such needs are addressed
    - How are children's health needs currently addressed
    - Direct engagement with children possible or would there be resistance from the adults.

- Perceived capacity of children/adolescents to raise issues and define their needs.

- Engagement of children by service providers to respond to children's needs

- Ways to facilitate children so that they can express themselves and offer insights for effective interventions.

10.13. Consent forms

Liverpool school of Tropical Medicine / University of Liverpool

Consent Form Mental Health Survey

I am voluntarily WILLING to take part in the interview on mental health as explained to me by the research team. I have understood that if I do not feel comfortable during the interview I can stop at any time and for any reason without any further consequences. If I simply do not want to answer a particular question I can say so and the interviewer will move on to the next question.

Name of young person (capitals) ____

School (optional) ____

Signature of young person ____

For children under 16 years of age, please also obtain parent/carer/guardian's signature:

Signature of parent/carer/guardian

____

Name (capitals)

____

Other details/telephone/village ____

Date: ___/___/20___

All information will be kept strictly confidential in accordance with the data protection guidelines.

CONSENT FORM PARENT/LEGAL GUARDIAN OF A CHILD

My name is Brigitte Muller and I am a student at the Liverpool School of Tropical Medicine. I will be conducting this research as part of my PhD in International Health. This study does take place in collaboration with Save the Children (SCiSS). The finding of this study will help SCiSS in the planning of health activities. I am the study coordinator and this research project is carried out in Akobo. As we are working as a team you are likely to meet other members of the research team collecting information as well.

This study is being conducted to learn more about children's lives, how children's daily activities affect their health and how health service providers can best help them. Many children have been displaced with or without their families and are now trying to rebuild their livelihoods. For many members of the community this can be a difficult situation and children often have to take over more responsibilities. Children's daily activities often expose them to risky situations over which they have limited control.

Therefore we are interviewing children to capture their point of view. We would like to know something about children's roles and responsibilities in the community; something about children's perceived health risks, their responses, motivation and capacity to identify health threats and propose solutions. We also want to know how children think we can help them to improve their environment.

Your child is invited to take part in this research because he/she can give us important insights in his/her daily activities and how this may affect the child's health. This will help us understand, how children carrying many responsibilities can better be supported in difficult environments.

The individual interview or the focus group discussion (interactive group discussion) will last about 30 minutes. The interview will be recorded but no one will be identified by name in the recording. All information will be handled as strictly confidential and only the research team will be able to contact you if deemed necessary. The study does not intend to elicit traumatic experiences.

Participation is entirely voluntary and there is no direct benefit for participation in this study. If your child does not feel comfortable during the interview he/she can stop at any time and for any reason without any further consequences. If your child simply does not want to answer a particular question he/she can say so and the interviewer will move on to the next question.

By signing below, you are agreeing for your child to take part in the study and are showing that you understand what is written on this form.

If you have any questions, please contact me or one of the team members at the SCiSS compound.

Date: ……………Name of child: ……………………………………………Age: …………

Parent's name: …………………………………………………………………Signature/finger print:

Name of legal guardian:…………………………………………………Signature/finger print:

Name of investigator: …….………………………………………………Signature:

CONSENT/ASSENT FORM CHILDRE

My name is Brigitte Muller and I am a student at the Liverpool School of Tropical Medicine. I will be conducting this research as part of my PhD in International Health. The results of this study will help SCiSS in the planning of health activities. I am the study coordinator and this research project is carried out in Akobo. As we are working as a team you are likely to meet other members of the research team collecting information as well.

This study is being conducted to learn more about children's lives, in what way their daily activities affect their health and how health service providers can best help them. There are no direct benefits to you for participating in this study.

As one of these children we would like to invite you to participate in this study. We are convinced that you have a lot to tell about your life and your daily activities. We would like to know something about your responsibilities in the place where you live and we would also like to know in what way your life and your daily

activities affect your health. We would also like to know what you think about the health services provided and if you think that this is what you need most.

If you agree to participate you will either participate in an individual interview or in a focus group discussion (FGD will be explained to the child). Interviews and FGD's will last about 30 minutes. If you prefer one method over the other let me know.

The things you say will be recorded onto a digital recorder and transferred onto a computer, where they will be given a number instead of your name so that it is not possible to recognise you. Information may later be used in the write-up of the research. No person taking part in the study will be identified in any of these documents.

If you have any problems with the study or feel bad about it, please tell me or someone else from the research team. You can stop being in the study at any time without giving a reason, and you can ask me not to use the things you said in my work.

If you have any questions, please contact me or one of the team members. You will find us at the Save the Children compound. If we are not around, please leave a message to one of the SC staff members, indicating where we can find you.

It is your choice whether or not you would like to participate, and no one will be annoyed if you do not want to be in it or if you change your mind later on. By signing below, you are agreeing to take part in the study and are showing that you understand the things written and explained to you on this form.

Date:

Name of participant: ………………………………………………………Age:

Signature/finger print: ……………………………………………….

Name of investigator: ……..…………………………………………Signature:

CONSENT FORM COMMUNITY PARTICIPANTS

My name is Brigitte Muller and I am a student at the Liverpool School of Tropical Medicine. I will be conducting this research as part of my PhD in International Health. The results of this study will help SCiSS in the planning of health activities. I am the study coordinator and this research project will be carried out in Akobo. As we are working as a team you are likely to meet other members of the research team collecting information as well.

The whole community has been affected by the conflict and many people have been displaced with or without their families. Many people have returned to Akobo or have accommodated returnees. For many members of the community this has been a very distressing situation. In such circumstances many children have to take over more responsibilities. Children's daily activities often expose them to risky situations over which they have limited control.

This study is being conducted to learn more about children's lives and in what way children's daily activities affect their health. We would also like to know something about what you think about the capacity of children to propose solutions for identified health needs and how children should react if they want to change things that are important to them. We would like to look at the roles and responsibilities of children from the perspective of the community and how a direct involvement of children in decision making would be perceived by community members.

Therefore we are inviting you to take part in this research because you can give us important insights into traditional and cultural dimensions of the roles and responsibilities of children within the community and whether the displacement has influenced this. There are no direct benefits to you for participating in the study. Individual interview or focus group discussion (interactive group discussion) will be conducted and will last about 60 minutes. The interview will be recorded but no one will be identified by name on the tape. All information will be handled strictly confidential.

Participation is entirely voluntary and if you do not feel comfortable during the interview you can stop at any time and for any reason without any further consequences. If you simply do not want to answer a particular question you can say so and the interviewer will move on to the next question.

By signing below, you are agreeing to take part in the study and are showing that you understand what is written on this form.

If you have any questions, please contact me or one of the team members. You will find us at the Save the Children compound. If we are not around, please leave a message to one of the SC staff members, indicating where we can find you.

Date: ……………….

Participants's name: ……………………………………………Signature/finger print:……………..

Name of investigator: ……..……………………………………Signature: ………………..............

CONSENT FORM STAFF HEALTH SERVICE PROVIDERS

My name is Brigitte Muller and I am a student at the Liverpool School of Tropical Medicine. I will be conducting this research as part of my PhD in International Health. I am the study coordinator and this research project will be carried out in Akobo and Nasir where children had been displaced with or without their families. The situation of most returnees is distressing for several reasons and many children had to take on more responsibilities which may expose them daily to risky situations over which they have limited control.

This study is being conducted to learn more about children's lives, how their daily activities affect their health and children's capacity in health decision making. The study attempts to give insights into the subject of child participation as it relates to public health issues and would like to define the extent to which children will be allowed to participate in decisions affecting them taking into consideration the cultural context and the capacity of aid organisation to facilitate children.

I would therefore like to invite you to participate in this research because your personal and professional experience with children will be important for this study. I am also interested about your personal opinion on the capacity of children to participate in decisions affecting their health and how children's health needs are currently addressed by your organisation.

If you decide to participate in this study, an interview will be held at a location and time decided by you. The interview will last approximately one hour. There are no direct benefits to you for participating in this study.

All information provided will be treated with strict confidentiality. Digital recordings will be immediately uploaded onto a password-protected computer. As soon as the interview is transcribed the recording will be deleted. Information given will be used in the write-up of the research. No person taking part in the study will be identified in any of these documents.

If you have any questions, please contact me or one of the team members. You will find us at the Save the Children compound. If we are not around, please leave a message to one of the SC staff members, indicating where we can find you.

Participation in the study is entirely voluntary. If you do decide to participate, you are free to decline any questions and may withdraw from the research at any time without giving a reason. By signing below, you are agreeing to participate in the study and are indicating that you understand the terms of participation outlined above.

Date:

Name of participant: …………………………………….Signature: …………………………………