

## Objective & Background

The objective of this study was to characterize the interaction between early stressors and protective factors and their impact on the ability of young people in Liberia to cope with ongoing stressors and plan for the future.

The Republic of Liberia lies on the horn of West Africa. From the most recent census conducted in 2008, it has a population of approximately 3.5 million people [1]. Between 1989 and 2003, the country experienced a brutal civil war characterized by ethnic killings, sexual violence and the use of child soldiers. The war displaced a huge proportion of the population, destroyed the productive capacity and physical infrastructure of the country, and eroded family and community ties [2]. In Liberia, where half the population is under 18 years of age, in order for the country to have a productive future, so must its young people.

A review of the literature of resilience in children in post-conflict settings identified five individual characteristics, in addition to family and community factors, linked to resilient outcomes: agency, ability to connect, hope, spirituality, and morality [3]. The Liberia Needs Assessment Survey sought to characterize and quantify the mental health burden of the war on the children of Liberia [4]. Key informants were asked to describe the most emotionally disturbing events or experiences to have affected young Liberians in the past twenty years and how best to help specific vulnerable groups. Youth were perceived to be experiencing significant adverse emotional, behavioral and functional outcomes related to exposure to war and its aftermath. Appropriate treatment settings were identified.

## Methods

Participants were recruited in 2012 from schools and neighborhoods in Monrovia and the surrounding area. All children ages 13-18 were eligible to participate, and an effort was made to recruit both males and females. Primary data was collected using semi-structured interviews averaging one hour in length, with the PI, medical student, and participant speaking together in a private area. Interviews were recorded, and notes were taken by the interviewer. The analysis is centered on several domains, including self-esteem, short-term and long-term goal-setting, and other consequences of loss. Within each domain, the investigator draws comparisons, looking for overlap and differences, themes and trends, as well as newly emerging topics and patterns. The analysis has been conducted using grounded theory, memoing, and coding, with NVivo employed for data management.

## Results

### Demographics

Number of participants	75
Ages	13-18
Females	38
Males	37
Government school	35
Private school	11
Out of school	29

### Caregivers

	In school	Not in school
Parent	28	8
Caregiver	16	8
Alone	2	13

### Financial Resources

Nearly half of the school children interviewed (n=22, 48%) worked after school selling in the market or engaging in other activities to earn money to help their families. While some of the children not in school were working (n=8, 28%), most did not have the resources to purchase items to sell and spent their days at home, or engaged in illicit activities (prostitution, theft, drug use).

### Education

All children interviewed believed they needed education to advance, but they faced uncertainty.

**“Yes, I will like to go to university, if my parents are alive to send me.”**

Many children shared these concerns, although their parents were not ill. Of the children not in school, lack of financial resources was the most common reason. There were a number of concerns expressed about the schools, including insufficient chairs, broken desks, and lack of computers. Students in both government schools (n=12, 34%) and private schools (n=5, 45%) lamented that some teachers did not explain well and frequently missed class. Student in government schools (n=4, 11%) and private schools (n=5, 45%) also complained about teachers asking for bribes to earn passing grades.

## Results Continued

### War

All children interviewed were affected by the war , even if it was by leaving the country to escape the war. They all had to leave school at some point during the war. Despite how common it was for students to be years behind in school, many expressed shame about this. Some children saw neighbors or close friends shot and killed before their eyes and described it in vivid detail, as though they were reliving it. Others never came that close to the fighting; they were very young and were not allowed to go outdoors. One boy complained about disruptive classmates. He explained that they had “brain problems” because of what they experienced during the war as child soldiers. He was asked why he did not have brain problems as a result of his own experiences.

**“I saw those things, but at a distance, not too close.”**

### Drugs

Few of the children attending school (n=3, 6.5%) had tried drugs, whereas nearly half of those not in school (n=12, 41%) were regular users. Many did not know which drugs they were using. They described taking drugs in order to forget about unpleasant things they had seen during the war and to distract from difficult feelings. Some described withdrawal symptoms when they tried to stop using. They believed it was not safe or possible to stop using without treatment.

**“When I don’t take it, I don’t feel fine... I can be sweating, my stomach can be running.”**

**“It is in my blood, and it is part of me now.”**

### Factors Linked to Resilience

All children interviewed faced adversity; resilience was defined by functional status (academic success, abstinence from unsafe behavior, narrative coherence). The following key factors were associated with resilience: agency, ability to connect, hope, and altruism.

◆ Agency and hope were demonstrated by children who recognized the difficulty of their situations but continued to work hard (in school n=23, 50%; out of school n=8, 28%).

**“Liberia isn’t easy, but I can try.”**

◆ Agency and ability to connect were seen together in children who felt they had people to go to for help, rather than keeping to themselves (in school n=34, 74%; out of school n=13, 45%).

◆ Altruism was illustrated by children who wanted to pursue a helping profession, like medicine, because they had suffered a serious illness or lost a family member (in school n=13, 28%; out of school n=6, 21%).

## Conclusion

A number of resilience factors previously identified in the literature were associated with better coping in this population. Individual factors included agency, ability to connect, and altruism. Spirituality and morality have been found to be particularly significant in former child soldiers. Religious faith was reported by all participants but was not used for meaning making, as it has been by former child soldiers. Nearly every child endorsed a sense of hope, but those who had specific and realistic plans for their future appeared to be functioning better.

The interaction between the child’s ability to elicit help and caring and the availability of supports in the environment was critical. While many children were cared for by caregivers other than their biological parents, those who could seek help and comfort from a caregiver, and had a sense that the caregiver was doing her best for them, fared better. They felt protected from the atrocities to which they were exposed. Enrollment in school and involvement in a religious community were also associated with better functioning.

Interestingly, children who were working were more likely to be in school, and many were able to work outside of school hours while attending school, which suggests that children not in school could benefit from a work-study program that would support their education and employment. Given the prevalence of substance use among out of school youth, there is also a need for further research to determine which substances they are using and develop appropriate treatment for both substance use and comorbid mental health issues. As the Ebola outbreak brings further loss and disruption to the lives of Liberian youth, the lessons learned from the war can guide future interventions promoting resilience.

## References

1. Liberia Institute of Statistics and Geo-Information Services, *2008 Population and Housing Census*, 2009.
2. UNDP, *National Human Development Report of Liberia*, 2006.
3. Betancourt, T.S., et al., *Nothing can defeat combined hands (Abashize hamwe ntakibanira): Protective processes and resilience in Rwandan children and families affected by HIV/AIDS*. Soc Sci Med, 2011.
4. Borba, C., et al., *A Key Informant Survey on the Mental Health Needs of Children and Adolescents in Post-Conflict Liberia*, 2011.