

Early Learning and Development in Emergencies: Evidence from South Sudanese refugees in Uganda

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Declaration: 'I, Sweta Shah confirm that the work presented in this thesis is my own. Where information has been derived from other sources, I confirm that this has been indicated in the thesis.'



Abstract: (max 300 words)

The early years of a child's life set his/her life trajectory and investments during this time are more cost effective than remedial services later on. Unfortunately, insufficient funds go to this area in emergencies including in South Sudan. South Sudan has been entrenched in conflict for decades, causing massive displacement within and outside of its borders. Thousands of children have been affected, yet there is little access to early learning services.

The nexus between Early Childhood Care and Development (ECCD), which includes early learning, and emergencies is a burgeoning area of work with a dearth of rigorous research. The overall purpose of this research is therefore 1) to bridge the academic and practitioner divide, and 2) to contribute to a growing evidence base. The research is framed around Vygotsky's Socio-cultural theory and the Capability approach, in a humanitarian context. The mixed methods research investigated culturally relevant ECCD programming, and outcomes and capabilities of children aged 3-5 years and their parents. The research contributes to: 1) developing culturally relevant quantitative data collection tools, 2) a theoretical underpinning for ECCD by integrating Child Development, Human Development and humanitarianism, 3) understanding how a non-emergency model can be adapted for an emergency context, and 4) evidence of the importance of providing ECCD services in humanitarian contexts.

The research results show support for providing early learning services in emergency contexts. Refugee children who received early learning services had higher child development outcomes that were statistically significant, compared to those that did not receive services. A relationship between parents Knowledge, Attitudes and Practice and children's development outcomes was also analysed. This however showed no positive or negative relationship. Lastly, the research illustrates how bringing together Vygotsky's Socio-cultural theory and the Capability Approach provides a stronger theoretical underpinning for ECCD in emergencies.

Table of Contents

Chapter 1: Summary of Research.....	4
Chapter 2: Introduction.....	9
Chapter 3: Problem and Research Justification.....	18
Chapter 4: Research Context.....	60
Chapter 5: Theoretical Framework.....	73
Chapter 6: Research Methodology.....	109
Chapter 7: Data Presentation and Analysis.....	136
Chapter 8: Discussion.....	203
Chapter 9: Conclusion and Recommendations.....	216
Bibliography.....	220
Annex I.....	247
Annex II.....	248
Annex III.....	250
Annex IV.....	251
Annex V.....	252
Annex VI.....	264
Annex VII.....	269
Annex VIII.....	272
Annex IX.....	276
Annex V.....	279

CHAPTER 1: SUMMARY OF RESEARCH

South Sudan has been entrenched in conflict and violence for many years. While South Sudan gained its independence in 2011, it plunged back into crisis in December 2013 due to a power struggle between the president and his deputy (BBC, 2016). Fighting between government troops and rebel factions erupted, killing and injuring thousands of people, and pushing more than 800,000 people to flee their homes. As of April 2016, more than 200,000 South Sudanese fled to Uganda and are currently in five refugee camps (UNHCR, 2016).

Young children in emergencies are at great risk of separation from families, injury, psychological distress, disease and death. Early Childhood Care and Development (ECCD) programming, which focuses on a child's development after conception up to his/her eight year of life, can help children survive and protect their futures during emergencies. It is a multi-sectoral approach that includes education and early stimulation, health, nutrition and child protection services for children, lactating mothers and pregnant women. Parents are key to ensuring children's survival and optimal development and so ECCD services include them as a target beneficiary as well.

An emergency is a situation that causes widespread human, material, or environmental losses which exceeds the ability of affected society to cope using only its own resources. It can be the result of a natural hazard (ie. flooding, landslides, tsunamis, earthquakes), conflict and war or a combination of both (United Nations Office for Disaster Risk Reduction, 2009; Johns Hopkins University, 2008). It is a unique situation where the severity of what has happened (ie. conflict or earthquake) along with the vulnerability of the society or community is higher than its capacity to protect its people and environment (Ibid). An emergency can be a short term situation lasting a few months or it can last many years. This research defines emergencies as the whole cycle of preparedness, acute response and recovery/reconstruction and particularly looks at conflict related emergencies.

Unfortunately, insufficient funding goes to ECCD programming, especially in humanitarian contexts, as policy makers tend to invest more in food and water distribution, shelter, and treatment of illnesses rather than a multi-sectoral approach to ensure children's immediate and long-term well-being. Many donors and governments do not fully understand what ECCD is and do not see how crucial these services are for children and families.

Humanitarian donors tend to favour supporting food distribution, provision of water and health over multi-sectoral ECCD services, which also includes early learning. Part of this

stems from a weak evidence base on the effects of ECCD programming on children's capabilities in emergency contexts. While there have been evaluations on ECCD models implemented in nonemergency contexts, not many have been implemented or evaluated in emergency contexts. Further, many frameworks and theories used in non-emergency contexts, such as the Human Capital theory, Capability approach and Vygotsky's Socio-cultural theory, have not been applied and tested in an emergency context.

Plan International Uganda is implementing an ECCD in emergencies program in support of South Sudanese refugees in Ugandan refugee camps. The agency has been implementing community based ECCD services in other parts of Uganda for a few years. Their model called the "Community Lead Action for Children" or CLAC has four pillars which include early learning opportunities, parental education, advocacy and partnership with government and other policy makers and support for children to transition to primary school (Plan International, 2013). This model is based on Vygotsky's Socio-cultural theory which places a great importance on children's external environment, including the culture in which he/she grows up in and the quality of his/her relationships with parents and caregivers. Further, Vygotsky's Socio-cultural theory also places importance on children's own role in their development (Vygotsky, L.S., 1978). While evaluations and research have been conducted on the CLAC approach in non-emergencies, this model has not been tested in humanitarian situations.

Purpose of the research

The nexus between ECCD and emergencies is a burgeoning area of work. Therefore, the overall purpose of this research is 1) to bridge the academic and practitioner divide and deepen the understanding of this area of work and 2) to contribute to the growing evidence base, dialogue and interest. The research specifically did the following: 1) developed culturally relevant tools that can be used for quantitative data collection, 2) brought together the fields of Child Development, Human Development and humanitarianism to provide a different underpinning for ECCD in emergencies, 3) developed a case study of how a community based ECCD model used in non-emergencies can be adapted to an emergency context, and 4) provided evidence of the importance of providing ECCD services.

A mixed methods approach was used for this research. The key research questions include:

1. What are the outcomes and capabilities of young children 3-5 years old from the South Sudanese cultural perspective? How can this cultural perspective help us better understand and apply the Human Capability Approach?
2. How has the Community Led Action for Children (CLAC) model been adapted for a humanitarian and South Sudanese cultural context?
3. What are the outcomes seen in children and parents through the implementation of the CLAC model? Are these outcomes and capabilities different and better among refugees participating in the CLAC programme?

The research provides evidence for providing early learning services in emergency contexts. Children who received early learning services had higher child development outcomes compared to those that did not receive services. Unfortunately, a relationship between parents' knowledge, attitudes and practice and children's development outcomes was not found. It was also clear that Vygotsky's Socio-cultural theory and the Capability approach, which come from child development and human development respectively, are compatible and together provide a stronger underpinning and understanding for ECCD in emergencies. The research also illustrates that the Community-Led Action for Children (CLAC), one type of community ECCD model developed for non-emergency contexts, can be adapted for an emergency situation even if all components are not implemented in the same manner.

Key Contributions of this research

The qualitative and quantitative data from this research illustrate new contributions to academia. Firstly, the research brought together the the areas of Human Development and Child Development and particularly the Capability Approach and Vygotsky's Socio-cultural theory and applied this to a refugee context with people from South Sudan. This was an important step to embark upon because the merging of these two different theoretical perspectives for a humanitarian context has not been done before. This process took a step forward and contributed to the discourses on the Capability Approach, first developed by Amartya Sen (1999), by doing a few new things: 1) looking at capabilities from an early childhood lens, 2) looking at capabilities from a South Sudanese perspective, and 3) applying culturally relevant capabilities to a refugee context (Sen, A.K., 1999).

Secondly, through the process of developing a capability framework that was culturally appropriate for the South Sudanese context, young children and humanitarian situations, I developed a culturally relevant quantitative tool that can be used again for the South Sudanese population. The process of developing culturally relevant capabilities and adapting a quantitative tool can be built upon by future researchers for other contexts or used by practitioners among the South Sudanese population.

Thirdly, this research used qualitative data to present an in-depth case study of how a community based ECCD model has been implemented in a non-emergency and how it can be adapted to an emergency situation. This can be important both for practitioners and academics. For practitioners, the case studies provide a process by which they can adapt other models or implement the model used in the Adjumani refugee camps in Uganda. For academia, it provides a stronger theoretical grounding that can be the basis of further case studies on this topic.

Fourthly, through the mixed methods, the research provides evidence for implementing ECCD services in humanitarian situations and in particular the impact that these services can have on children's development outcomes.

Summary of the Research chapters

The thesis, through Chapter 2, first lays out the introduction and general global context of the research. Next, Chapter 3 includes the Problem and Research justification, highlighting the challenges with definitions, deep rooted theoretical frameworks that underpin humanitarian work, and arguments from neuroscience, cost benefit studies, and other fields that challenge the de-prioritisation of early learning in emergencies. Chapter 4 defines what an emergency is and describes the conflict and current situations in South Sudan and Uganda. Theoretical frameworks from child development and human development are explored and critiqued in Chapter 5 to show the gaps in research and opportunities for bringing these two areas together to provide a stronger underpinning and understanding of this area of work. Once the context, justification and theoretical frameworks are critically presented, Chapters 6 and 7 provide the methodology for the research, and the results of the qualitative and quantitative investigation. Within Chapter 7, there is a description of the CLAC model and case studies for its implementation in a post-conflict context in Lira, Uganda and refugee situation in Adjumani, Uganda. Chapter 7 then also describes the data pertaining to refugee children and parents that was collected through descriptive statistics.

This data is then analysed using a variety of inferential statistics. Chapter 8 analyses and discusses the findings of the research. Chapter 9 concludes the research and provides recommendations to key stakeholders.

CHAPTER 2: INTRODUCTION

Humanitarian contexts: conflict and natural hazard emergencies

Globally, there is growing recognition of the human and financial impacts of humanitarian situations. UN OCHA (United Nations Office for the Coordination of Humanitarian Affairs) found in 2013 that 148.2 million people were affected by conflict and natural disasters (UN OCHA, 2015). Out of this, 97 million people were affected by natural disasters in China, Philippines, India, Vietnam and Thailand. An additional 51.2 million people were affected by conflict which included 1.2 million asylum seekers, 33.3 million internally displaced persons (IDPs) and 16.7 million refugees (Ibid). These numbers increased in 2014 where 59.5 million people were forcibly displaced from war and conflict (UNHCR, 2015). UNHCR (United Nations High Commission for Refugees) has identified 19.5 million of these people as refugees and 38.2 million as IDPs (Ibid). The majority of the conflict has been in the African continent, including East and West Africa, with South Sudan being the fifth major source of refugees (Ibid). Uganda is in the top ten among countries currently hosting refugees (Ibid). The Syria conflict alone, which has now lasted more than 5 years and is the first major source of refugees, has 13.5 million people in need of humanitarian assistance (UNHCR, 2015). The 13.5 million Syrians includes more than 4 million who are refugees in neighbouring countries of Turkey, Jordan, Lebanon, and Iraq and more than 7.6 million people who are internally displaced (Ibid). Currently, the displacement of Syrians is followed by Afghans, Sudanese, Somalis, and South Sudanese (UNHCR, 2015).

UNHCR has further found that 51% of all refugees worldwide are under 18 years. Of the approximately 67 million primary aged children who are out of school, about 40 million of them live in countries affected by armed conflict (UNHCR, 2015). UNHCR estimates that 45% of refugees today live in protracted crisis settings, being displaced for 5 years or more (Ibid). The average period of displacement has been found to be 20 years. Further, UNHCR has found that 86% of refugees are hosted in developing countries, who themselves struggle to fully support their own population (Ibid).

The damage that this mass displacement due to conflict and war and other natural hazard emergencies, such as typhoon and earthquakes, has created is tremendous. Over the last 12 years, disasters have resulted in \$1.3 trillion in damage, 2.7 billion people affected and 1.1 million people killed, setting back development and increasing people's likelihood of staying in or falling into poverty (Moensch, M. 2007). Between 2002 and 2006, 1.5 billion

children in 42 countries were affected by crisis caused by conflict and natural hazards (UNICEF, 2007). In 2011, there were 11 massive emergencies with losses of over \$360 billion (Ferris, E. and Solis, M., 2013). 2012 fell below a 10-year average with losses of about \$160 billion (Ibid). At any given time, it is estimated that more than 200 million children under the age of five in developing countries are not reaching their potential due to poverty, malnutrition, poor health and lack of early years support (Engle, P. et al, 2007; GranthamMcGregor, S. et al., 2007).

The number of emergencies due to conflict, impact of climate change etc... are increasing, they are lasting longer, becoming more expensive and affecting more children and families (UN OCHA, 2014). However, the funding to support this has not followed (Ibid). In 2014, the funding requirement for the myriad humanitarian situations around the world was \$17.9 billion while a decade earlier in 2004, it was \$3 billion. The average humanitarian funding for all sectors in 2014 was 65% of the need with food and health receiving the largest percentages (Swithern, S., 2015). Education received the smallest percentage of the total humanitarian funding (UNESCO, 2015). In 2014, the food sector received \$2.905 billion, health received \$1.025 billion and education received \$186 million (Ibid). On average, education has received 2% of all humanitarian funding despite the fact that last year 75 million children had their education disrupted by conflict and natural hazards (Education Cluster, 2016).

Early Childhood Care and Development (ECCD) in emergencies

Emergencies, whether they are due to natural hazards (ie. earthquakes, typhoons) or due to conflict, pose the greatest risks to the youngest - those between 0-8 years. Early Childhood Care and Development (ECCD) is a multi-sectoral area of work that supports young children from the prenatal period through their entry into school (8 years). The youngest children are extremely vulnerable as they depend on a strong protective environment – namely their parents, extended family and community – to ensure their safety, development and well-being - especially in emergencies. Therefore, ECCD programs also support their parents and/or caregivers and communities so they can help their children through their developmental potential. ECCD also includes all types of education and learning - formal, non-formal and informal through play to promote strong connections in the brain and readiness for attending and succeeding in school. It also includes health, nutrition, and protection and social services.

During emergencies, a child's protective environment, that support and influence their learning and development, can break down making it more difficult for parents and caregivers to care for them in the same ways as they did before (Bryce, J. et al, 2008; Victora, C. et al, 2008; Williams, J. R.A. et al., 2005). Parents could be separated from their children, psychologically distressed, or injured. They may struggle to find a safe place for their families to live and food and water to keep them alive. Some may lose their lives. Children can also be injured or lose their lives, become psychologically distressed and scared, not receive sufficient nutrition and health care or the early learning and stimulation needed to help build a strong brain circuitry and foundation for life (Ibid). Neuroscience research indicates that 90% of brain development occurs in the first five years of life and 80% in the first three years of life (Conel, JL, 1959). Developmental damage that can occur without support during emergencies may never be fully reversed (Bryce, J. et al, 2008; Victora, C. et al, 2008).

There is increasing recognition of the importance of the early years of a child's life. ECCD is included in the Sustainable Development Goals (SDGs), Education for All Dakar Declaration (UNESCO, 2000) and more. According to data collected by UNICEF in 2009, more than 30 governments around the world have established national early childhood policies and 70 countries have some type of national mechanism for the various sectoral ministries to coordinate (Shonkoff, J., 2010). However, despite these positive trends, ECCD is still not getting sufficient attention in international and national policies. While the 2000 Education for All Dakar Declaration calls for "expanding and improving comprehensive early childhood care and education", it is the only goal without a quantifiable indicator or target (UNESCO, 2000). There is no agreed upon measurement to track the progress of this statement. More than half of the world's countries have no policy on ECCD or a mechanism through which the various departments related to early childhood (ie. Education, health, social services/protection) can coordinate to provide holistic services for young children. Where such policies or mechanisms exist, they remain statements of intent rather than enforceable or implementable plans with a government budget (Shonkoff, J., 2010). Recent information gathered by the Global Education Monitoring Report (GEM), only Kenya said ECCD is their first priority among other education issues and Australia is the only other country who has even prioritised ECCD (GEM, 29 Feb. 2016). ECCD in emergencies is even less likely prioritised as few countries have specific policies, plans and budgets in place to respond to emergencies (UNESCO, 2006).

Greater Professionalisation

Within this backdrop, humanitarian work and within that Education, including early childhood education, in emergencies is becoming increasingly professionalised and is gaining increasing attention (Ade., W., 1982; Kagawa, F., 2005; Martin, S., 2006; O'Flaherty, M. and Ulrich, G., 2010; Rey Marcos, F., 2010; Sim, H., 1995; Walker, P., 2003; Willemse, J., 2010). Emergency education, which falls within general humanitarian aid, emerged in the 1960s as missionaries and volunteers from western countries went to poorer countries to help with little or no compensation for their time and work (Willemse, J. 2010). It first emerged as education provided for refugees in conflict situations, but has since evolved to include myriad humanitarian contexts including earthquakes, floods, tsunamis and cyclones (Kagawa, F., 2005; Sinclair, M., 2002). Emergency education, which includes formal and non-formal education from pre-school through secondary school, takes place when a country's national and community education systems are weakened or destroyed to the point where governments can no longer guarantee children's right to education (Kagawa, F., 2005; Sinclair, M., 2002). Thirty years ago, it was not difficult to secure a post doing emergency education in a developing country because there were few people doing this work (Kagawa, F., 2005). The number of workers was fewer than the overall need for staff. Many people who entered the humanitarian field twenty to thirty years ago, before there was a recognised education in emergencies profession, said that they did not need any specific credentials such as a Masters degree or a particular number of years of experience to get a job. They just needed a desire to help others and be willing to live in often difficult conditions (Ibid).

During the 1990s, there was an increase in the international activities of humanitarian agencies (Sinclair, M. 2002). This was particularly the case for the Rwandan genocide in 1994 and the conflict in the Great Lakes region of Africa (Ibid). Unsatisfied with the response, humanitarian practitioners from various technical sectors including health, water, sanitation and nutrition came together in 1996 to develop a set of minimum standards for emergency response (Gostelow, L., 2009). This collaboration resulted in the creation of the Sphere handbook that includes the Humanitarian Charter and Minimum Standards in Disaster Response (The Sphere Project, 2011). At this time education was not included as a core lifesaving response. Further the specific needs of young children were not explicitly addressed. The 2000 Dakar World Education Forum committed to meeting the education needs of people affected by armed conflict and natural disasters (Anderson, A. and Roberts,

B., 2005). In 2001, the Inter-agency Network for Education in Emergencies was established to address the gap of education in emergencies in the Sphere handbook (www.ineesite.org). Soon after, the INEE Minimum Standards handbook, which also includes early learning, was developed through a multi-country, inter-agency process. It set up global minimum standards for education in emergencies which are still used today. INEE is now a network of more than 12,000 individual members and 130 partner organizations in 170 countries. INEE members are practitioners working for national and international NGOs and UN agencies, ministry of education and other government personnel, donors, students, teachers, and researchers (Ibid). This network has also set up an Early Childhood Development task force which coordinates with the Global Consultative Group on ECCD (Ibid). While it is now inactive, it brought together practitioners working on this area together to spearhead ECCD in emergencies work (Ibid). Since then, education and over time early learning has been increasingly recognised as a 'fourth pillar' of humanitarian aid that saves and sustains lives alongside food and water, shelter and health care (Kagawa, F., 2005).

As the provision of education became increasingly recognised as crucial to humanitarian response, both education in emergency practitioners and those outside of the field started to professionalise this area of work.

Greater Global Attention

Recent high level events on the Syria crisis in London in February 2016, the Oslo Summit on Education in Emergencies in July 2015, and the UN General Assembly events in September 2015, have continued to spotlight humanitarian situations and in particular the lack of education and early learning opportunities. In May 2016, a new global fund for education in emergencies (including early education for 3-5 year olds) was launched at the World Humanitarian Summit in Istanbul, Turkey called "Education Cannot Wait" (Coughlan, S., 2016, <http://www.bbc.com/news/education-36361630>). There are five core functions of the Education Cannot Wait Fund which includes:

1. Inspire political commitment so that education is viewed by both governments and funders as a top priority during crises.
2. Plan and respond collaboratively, with a particular emphasis on enabling humanitarian and development actors to work together on shared objectives.

3. Generate and disburse additional funding to close the \$8.5 billion funding gap needed to reach 75 million children and youth.
4. Strengthen capacity to respond to crises, nationally and globally, including the ability to coordinate emergency support.
5. Improve accountability by developing and sharing knowledge, including collection of more robust data in order to make better-informed investment decisions, and knowledge of what works and does not.

Source: Education Cannot Wait, <http://www.educationcannotwait.org/the-fund/>

The aim is to raise \$3.85bn (£2.66bn) over the next five years which could support the education of more than 13 million young people (Coughlan, S., <http://www.bbc.com/news/education-36361630>). Donors, including non-traditional ones such as the business sector, are recognising this and there has been an overall increase in funding for humanitarian situations. The Global Business Coalition – Education has raised \$75 million from its various members and partners in support of one million Syrian refugee children’s education in Jordan, Turkey and Lebanon (Simone, O. and Lichtman, L., 2016). The fund launched with commitments of around \$100 million from the Norwegian, Netherlands, UK, US governments, the European Union and Dubai Cares (UNICEF, http://www.unicef.org/media/media_91132.html). The establishment of this fund has been led by Gordon Brown, former Prime Minister of the UK and current Special Envoy for Global Education, Julia Gillard, former Prime Minister of Australia and the current Chair of the Global Partnership for Education, Anthony Lake, CEO of UNICEF, and other high profile global leaders (Education Cannot Wait, <http://www.educationcannotwait.org/the-fund/>).

Sustainable Development Goals

These global trends which include 1) the exponential increase in number and severity of humanitarian situations, 2) the professionalisation of this area of work, and 3) greater investment and donor interest, all have huge implications to achieving the Sustainable Development Goals (SDGs). The SDGs have recognised the importance of various contexts, including emergencies, and have set goals related to Early Childhood Care and Development (ECCD) through the education, maternal and child health and nutrition, and protection sectors. A summary of these goals and targets are below.

Goal 4 is focused on education, but frames a commitment to ECCD

Target 4.2. By 2030, ensure that all girls and boys have access to quality early childhood development, care and pre-primary education so that they are ready for primary education.

Goal 2 refers to maternal and child nutrition:

Target 2.1 By 2030, end hunger and ensure access by all people, in particular the poor and people in vulnerable situations, including infants, to safe, nutritious and sufficient food all year round.

Target 2.2 By 2030, end all forms of malnutrition, including achieving, by 2025, the internationally agreed targets on stunting and wasting in children under 5 years of age, and address the nutritional needs of ...pregnant and lactating women....

Goal 3 refers to Maternal Nutrition and Child Health (MNCH) and infectious diseases that are major killers of under-fives:

3.1 By 2030, reduce the global maternal mortality ratio to less than 70 per 100,000 live births

3.2 By 2030, end preventable deaths of newborns and children under 5 years of age, with all countries aiming to reduce neonatal mortality to at least as low as 12 per 1,000 live births and under-5 mortality to at least as low as 25 per 1,000 live births.

3.3 By 2030, end the epidemics of AIDS, tuberculosis, malaria and neglected tropical diseases and combat hepatitis, water-borne diseases and other communicable diseases.

3.9 By 2030, substantially reduce the number of deaths and illnesses from hazardous chemicals and air, water and soil pollution and contamination.

Goal 16 refers to protection against violence of all children:

16.2 End abuse, exploitation, trafficking and all forms of violence against and torture of children

Furthermore, several major actors, including the UN Secretary General, UNICEF and other member organisations of the Consultative Group on ECCD (CG-ECCD) have acknowledged that **holistic ECCD programming represents one of the most cost-effective approaches for achieving commitments that are at the heart of the SDGs, while ensuring that *no-one is left behind***: building peaceful and inclusive societies (goal 16); addressing poverty and inequality (goals 1 and 10) and achieving gender equality (goal 5).

Achieving the SDGs will be the next global challenge and it is inextricably linked to humanitarian and ECCD in emergency work. As a humanitarian practitioner who has been working on education and early childhood care and development (ECCD) issues for over fifteen years in Africa, Asia, the Middle East and Latin America, I have seen a gap between practice and academia which if filled could positively contribute to achieving the SDGs. It would do this by strengthening the design and implementation of programmes and therefore outcomes on children and families. While the evidence base in this area has been increasing, it is still not enough to best support programs for children and families. In 2010, INEE published the Early Childhood Care and Development in Emergency Situations Annotated Bibliography which includes a summary of 274 entries related broadly to this topic (Hayden, J., Dunn, R. and Cologon, K., 2010). This bibliography includes peer reviewed academic articles and non-peer reviewed organisation reports and guides (Ibid). While the bibliography has some articles relevant and useful for this research, much of it encompasses articles and papers beyond the global definition of ECCD. Many articles focus on adolescents or children of primary school age (past 6 years). A number of articles use qualitative measures or are theoretical pieces. Fourthly, many articles focus on emergencies in developed countries such as the impact of the September 11, 2001 terrorist attacks in the United States. Lastly, many articles focus on stress and psychosocial issues alone without investigating early learning and broader development of young children (Ibid). There is now an academic journal called the Journal on Education in Emergencies, established with a focus on education in emergencies (which can include academic articles focused on ECCD in emergencies). This journal is double blind peer reviewed journal which is being coordinated by the Interagency Network for Education in Emergencies and currently housed at New York University in the USA (<http://www.ineesite.org/en/journal>). Additionally, the Bernard van Leer Foundation publishes two issues of a journal called Early Childhood Matters every year with the latest research and evidence about ECCD (Bernard Van Leer Foundation, <https://bernardvanleer.org/publications-reports/>). Increasingly, there is more being published about ECCD in emergencies, however there are still huge gaps in knowledge and understanding. Much of the evidence currently around ECCD in emergencies is anecdotal or only with the use of qualitative methods. Due to this, there is also a weak theoretical framework that underpins this work. Developing stronger academic evidence and a stronger theoretical framework for ECCD in emergencies work can result in higher outcomes for children and families that are cost effective and can help countries meet the SDGs.

With the current attention to education and humanitarian issues, including early childhood education, there is a unique opportunity for academics, practitioners and policy makers to come together and contribute. The inter-section of ECCD and humanitarian work is an emerging area of work and research. The overall purpose of this research is therefore to bridge the academic and practitioner divide, increase understanding of ECCD in emergencies and contribute to a growing evidence base and global interest.

CHAPTER 3: PROBLEM AND RESEARCH JUSTIFICATION

WHY EARLY CHILDHOOD CARE AND DEVELOPMENT (ECCD) IN EMERGENCIES?

I. What is Early Childhood Care and Development (ECCD)?

Early Childhood Care and Development (ECCD) focuses on the development of a person before birth and up to his/her eighth year of life (Consultative Group on ECCD, ND; UNICEF; ND; World Bank, ND; WHO, 2007). ECCD is more than just childcare. It is a multi-sectoral programmatic approach that helps children develop physically, cognitively, socio-emotionally and linguistically. It therefore includes the following support for young children: health, nutrition, early education and stimulation, recreational and psychosocial support activities and opportunities to learn one or more languages. Programmatically, this can include early childcare, pre-school education, early health check-ups, neighbourhood playgroups and more. In addition to supporting young children, ECCD programmes strengthen children's protective environment by educating parents, caregivers and communities. For adults and other caregivers that take care of small children, ECCD helps them strengthen their knowledge and capabilities on prenatal care and developmentally appropriate health, nutrition, early stimulation and learning in order to support their children's development. Some ECCD programmes include savings and loans, vocational training and literacy activities for parents because if they have knowledge and capabilities, this will extend to their children. By providing opportunities for parents to come together to talk and exchange ideas about child care, learning and development, they not only learn from each other, but can help each other psychologically and emotionally. It can help families communicate better and help communities understand and respect their differences. So, ECCD can also contribute to social cohesion, peace and economic prosperity. Additionally, ECCD programmes support the establishment of government policies for young children (Ibid).

II. ECCD not prioritised: Limited Understanding

1. Varying definitions

However, there is a lack of understanding and varying definitions of what ECCD is, especially among humanitarians. Many people, especially humanitarians, see ECCD as part of education and therefore not a priority, especially in humanitarian situations.

However, as mentioned above, ECCD is multi-sectoral support for children from conception to 8 years. While the general types of activities for ECCD in emergencies are similar to non-emergency situations, the objectives and manner of implementation may be different.

Where objectives of working in non-emergency contexts focus on longer term institutionalisation, policies and support, ECCD in emergencies programming focuses on the immediate and unique needs of children in disaster situations. Sometimes this can last 3-6 months if it is a small scale landslide, flooding, earthquake or last over a generation in the case of chronic crisis and war. Short term ECCD in emergency programmes' objectives may focus on saving lives through nutritious food, water, health care and shelter, creating an environment where children can feel a sense of normality, where they can begin to reduce their levels of distress, and where they can continue normal development and learning. So understanding ECCD is critical to understanding how it can be implemented in a short term or long term emergency context. Even when the focus is on short term goals, ECCD in emergencies can begin to tackle longer term aspects of children's development that will help them reach their full potential.

In practice, programming for young children are not always labelled 'ECCD in Emergencies' and sometimes go under different names, including preschool education, child friendly spaces, health and nutrition for young children etc... (Kamel, H. 2006). ECCD in emergencies activities can be implemented in temporary classrooms, child friendly spaces, community buildings, under a tree, in nutrition centres, at a health post, while a mother is waiting in line for food distribution or in a child's home or shelter – in fact in any safe space where services are provided. Various sectors and government departments can implement these activities. During the initial stages of a disaster, it may not be practical to implement all aspects of support young children need. Instead, various sectors can implement different aspects of what is a comprehensive approach for young children in emergencies over a period of time.

2. Limited knowledge of the science and evidence for early years' intervention

Additionally, limited understanding of ECCD in general and especially in humanitarian contexts is also because donors and other decision makers may not fully understand the science and evidence for early years' intervention and investment (Ibid). Empirical evidence of the benefits of ECCD in humanitarian situations is virtually non-existent, however the evidence from non-humanitarian contexts provides a strong understanding of the science behind the importance of investing in children's early years. Grantham-McGregor et al. (1991) looked at the impact of nutrition and early stimulation work for malnourished young children in Jamaica (Grantham-McGregor, S. et al., 1991). They looked at the impact of nutritional supplements only, early stimulation only, a combination of nutritional supplements

and early stimulation, a control and children that were not malnourished (Ibid). They found that the children who were not malnourished and not stunted had the best development outcomes, indicating that ECCD interventions need to start before a child is born during the stage of pregnancy. However, the malnourished stunted children who have both nutritional supplements and early stimulation had higher child development outcomes than early stimulation alone, nutritional supplements alone or no intervention (control group) (Ibid). Further, children who had early stimulation support alone had better development outcomes than those that had nutritional supplements only (Ibid). There is also growing evidence that children who grow up skilled with the ability to empathise with those from different religions, race and ethnic backgrounds, to listen and see the others' perspective and solve problems are more likely to grow up with non-violent behaviors and approaches to life (Leckman, J. et al., 2014; Sunar, D. et al., 2013; UNICEF, 2015). This can contribute to a peaceful society (Ibid).

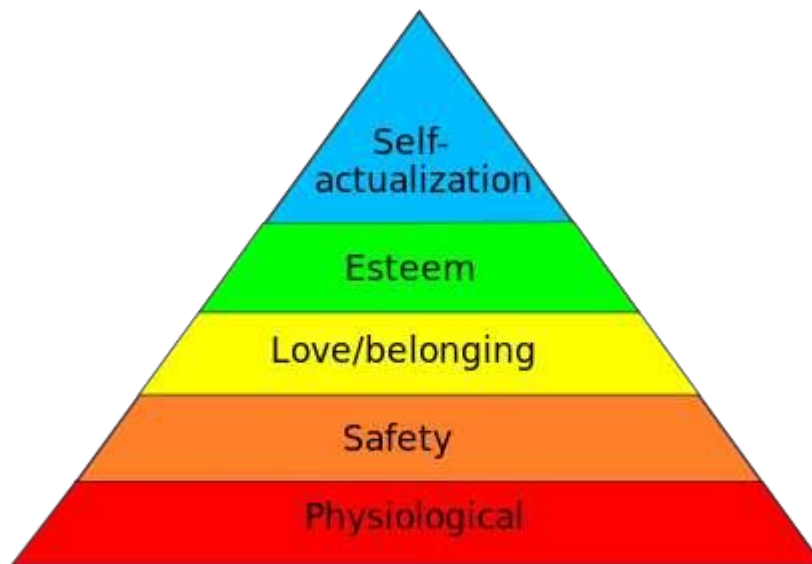
Where ECCD interventions exist, they tend to be confined to a particular sector such as education (ie. pre-school education), health and nutrition (child survival, malnutrition, maternal health), or child protection/social services (abuse, exploitation, neglect) rather than working synergistically to obtain the best outcomes for children (Ibid). Science now provides evidence for the inter-relatedness of the various sectors and greater positive outcomes of programs that have a multi-sectoral lens rather than through one sector (Shonkoff, J., 2010).

3. Acceptance of Maslow's Hierarchy of Needs

There is also limited understanding of ECCD and ECCD in emergencies because of the overwhelming acceptance among humanitarian and development workers, including donor agencies, of Abraham Maslow's Hierarchy of Needs (Maslow, A.H., 1943). In fact there is an acceptance of Maslow's theory in other sectors as well (Wahba, M. and Bridwell, L., 1976; Pearson, E. and Podeschi, R., 1997). Maslow's Hierarchy of Needs has underpinned humanitarian work and other sectors for decades (Maslow, A.H., 1943; Williamson, J. and Robinson, M., 2006; Sinclair, M., 2002). Maslow identified a pyramid (below in Figure 3.1) which outlines five important aspects of a person's life, broadly divided into basic and growth needs. Basic needs include the bottom two levels of Maslow's pyramid: physiological and safety/security. Physiological needs include the need for food, and water, health care for survival, whereas safety and security needs include shelter, basic clothing, a safe and nonthreatening environment free from violence, abuse, neglect) (Henniger, M., 2009). Only once these needs are met, Maslow believed a person would need growth needs which

include love and belonging (feeling loved, having friends, being part of a group), self-esteem and finally self-actualisation. A person that reaches self-actualisation would be able to reach his/her potential (Ibid).

Figure 3.1: Maslow's Hierarchy of Needs



Source: Maslow, A. H., 1954

While Maslow does not explicitly say that education and early learning are not basic needs, he does say that physiological and safety and security needs must be met first before an individual can meet his/her other needs (Maslow, A.H., 1943; Henniger, M., 2009). Hagerty (1999) places primary, secondary and tertiary education enrollment within the self actualisation area based on the idea that higher education, in particular, encourages creativity and knowledge-generation. While Hagerty also feels that some aspects of primary education could meet basic needs, it does not fit Maslow's categories. Many humanitarians also do not consider education and early learning as life-saving and part of the bottom parts of Maslow's pyramid of needs. Rather, education for many humanitarian workers, would be one of the last things a person needs and something that can wait.

The whole humanitarian field has been built on the idea of prioritising physical and life-saving needs such as food, health and shelter over what are considered not life-saving such as education (Sinclair, M., 2002). In 1997, the Sphere humanitarian standards were launched solidifying this perspective of the importance of physical needs over other needs.

Education and early learning were not a part of the Sphere humanitarian standards. The Inter-agency Network for Education in Emergencies (INEE) was thus set up in 2003 to counteract this approach to humanitarian work and Maslow's Hierarchy of Needs framework.

While prior to INEE and the practitioners working on education in emergencies disagreeing with Maslow's theory, there were those in other fields who were already critiquing his work (Buchanan and Huczynski 1985; Davis and Filley 1963; Dye, K., Mills, A.J. and Weatherbee, T.G. (2005); Hitt, Black, and Porter 2005). Firstly, while many fields widely accept the 'Hierarchy of Needs', there is the lack of empirical evidence (Wahba, M. and Bridwell, L., 1976). Wahba and Bridwell reviewed over a dozen research studies and found only partial support for the concept of the need hierarchy (Wahba, M. and Bridwell, L., 1976). While some researchers and academics agree with categorising human needs, they do not necessarily believe they should be set up in a hierarchy as Maslow indicates in his framework (Ibid).

However, practical experience and recent research capturing voices of affected communities shows that people can manage to strive for the higher levels even when their lower level needs are only partly fulfilled (Plan International, 2010; Save the Children, 2015; Save the Children, 2015). These affected communities in fact want education and early learning; the majority of these studies found that education was either prioritised above other services or at same level as other services (Ibid). Evidence from sixteen studies covering seventeen different emergencies (including short term disasters to longer term conflict and protracted crises), and reflecting the voices of 8,749 children, 99% of them highlighted education as a priority (Save the Children, 2015). Save the Children in South Sudan found that 52% of the respondents for the study thought education should be provided immediately after the onset of an emergency because it provides psychosocial support for children, protects them from recruitment and other dangers during conflict and because it increases their likelihood of a successful future (Save the Children, 2015). Rather than seeing the various sectors as separate, the majority of families surveyed in South Sudan wanted all services at the same time (Save the Children, 2015). In South Sudan, when affected children and communities were asked to rank the importance of various social services including education, health, water, food, shelter and play, 28% of children and 25% of community members ranked education as their top priority; this was a larger percent than the other options provided (Save the Children, 2015). Additionally, in South Sudan, an affected man said, "The family

is improved when there is everything together - education, health, water, food and the others.” (Save the Children, 2015, p. 5). A displaced father in in Mingkaman, Lakes state (who is originally from Jonglei state) said, “The only thing we want is for our children to learn. I am not educated and this makes me vulnerable. We do not want them to be vulnerable like us.” (Save the Children, 2015, p. 24). Further, a 15 year old displaced South Sudanese girl said, “...education is more important than food. If you are educated, you can get your own food” (Save the Children, 2015, p. 12).

New research is contradicting the traditional approach to humanitarian work and Maslow’s Hierarchy of Needs. Despite all of this, many non-educationalists are still not convinced about the importance of education and early learning immediately following an emergency. The impact of Maslow’s Hierarchy of Needs on the humanitarian field is deep rooted and has resulted in significantly less funding going to education and early learning services. Many humanitarian training programmes and funding decisions are sometimes unconsciously based on Maslow’s Hierarchy of Needs, which is one of the main reasons why education receives such little funding in relation to other sectors such as food, water and sanitation and health, in humanitarian crisis (Williamson, J. and Robinson, M., 2006). Further, when education is funded, the majority of investment goes to primary education and little to early years support when evidence indicates greater rates of return (Heckman, J., 2006; Carneiro, P. and Heckman, J., 2003) and secondary education (as this is seen as a luxury). Slowly additional funding is coming to education and early learning as indicated earlier with the establishment of the “Education Cannot Wait” global fund for education in emergencies. A similar global platform that encompasses all aspects of Early Childhood Care and Development and priorities multi-sectoral support for the youngest children is still a huge gap.

4. No programmatic models for ECCD in emergencies

Lastly, there are no programmatic models for ECCD work in humanitarian contexts. The Global Consultative Group on Early Childhood Care and Development (www.ecdgroup.com), which aims to generate and disseminate knowledge on ECCD for advocacy and policy change, conducted an inter-agency process in 2006. During this process, the various participating organisations agreed upon the Four Cornerstones framework (<http://www.ecdgroup.com/about-eccd-2/4-cornerstones/>, accessed 22 May 2016). The Four Cornerstones look at 4 areas: start at the beginning (which looks at pre-

natal to age 2 and support for parents), provide new opportunities for discovery and learning (which focuses on pre-school aged children 3-5 years), make schools ready for children (which focuses on the transition of children from early childhood and pre-school types of activities to formal primary school) and address the development of policies on early childhood (which emphasizes change at a national policy level that can support young children) (Ibid). This framework is being used by many agencies in many countries to guide the design and implementation of programmes, but the adaptability of these four cornerstones have not been tested in a humanitarian context when projects are often short term and have different aims.

III. Why Early Childhood Care and Development (ECCD)?

I have begun to present some of the reasons why ECCD is important. In this section, I highlight six key reasons why ECCD is critical and delve more deeply into the science and evidence behind these reasons. These six key reasons include that ECCD is 1) critical for brain development; 2) can help tackle poverty, gender inequality; 3) can help promote peace, disaster risk reduction and environmental protection; 4) cost effective; 5) can be crucial for children with disabilities; and 6) recognised as a human right.

1. Critical Window of Opportunity for Brain Development

The first eight years of a child's life are the most formative, with the greatest rapid cognitive, physical, social and emotional development (Fox, S. et al., 2012). Some of the earliest neuroscience research found that on average 700 new neural connections are made in a child's brain every second (Conel, JL, 1959). The rapid growth of neurons peaks during the period of early childhood; those that are not used consistently disappear, thereby decreasing the overall neural connections in the brain as we age (Ibid). The image below from Conel's 1959 book, which has been cited by many modern neuroscientists and researchers looking at brain development during early childhood, illustrates this point.

Figure 3.2: Neural connections in the brain over time

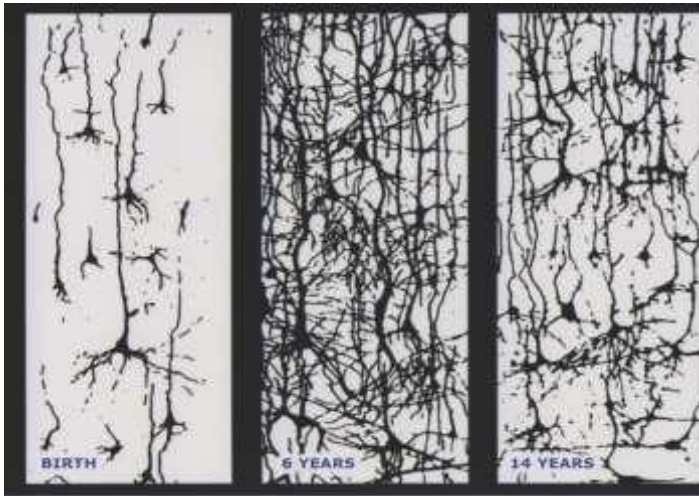


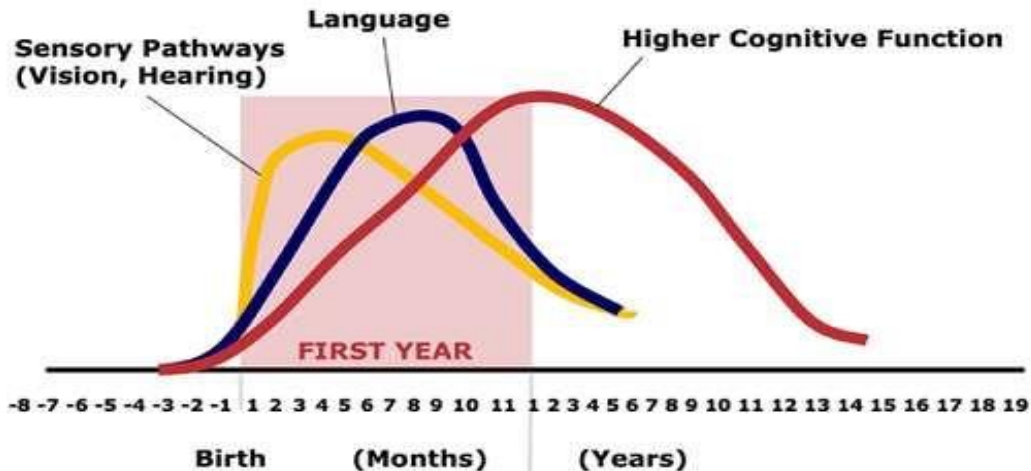
Image source: Conel, J.L. (1959) *The postnatal development of the human cerebral cortex*. Cambridge, Mass: Harvard University Press.

Early childhood is a time when the brain is most flexible and a time when external inputs can have positive or negative effects on children’s development and influence a child’s life trajectory (Fox, S. et al., 2012). The brain’s architecture is built from conception through adulthood, but there are certain “sensitive periods” where brain development is accelerated. Early childhood is one of the key “sensitive periods” which builds the foundation for future growth and development. A strong foundation during a child’s earliest years increases the likelihood of positive outcomes and development while a weak foundation increases the probability of future physical, mental and other difficulties (National Scientific Council on the Developing Child, 2007). The image below from Harvard University illustrates how the brain develops over the span of a lifetime and how the first five years have the greatest growth.

Figure 3.3: Human Brain Development, Neural Connections over time

Human Brain Development

Neural Connections for Different Functions Develop Sequentially



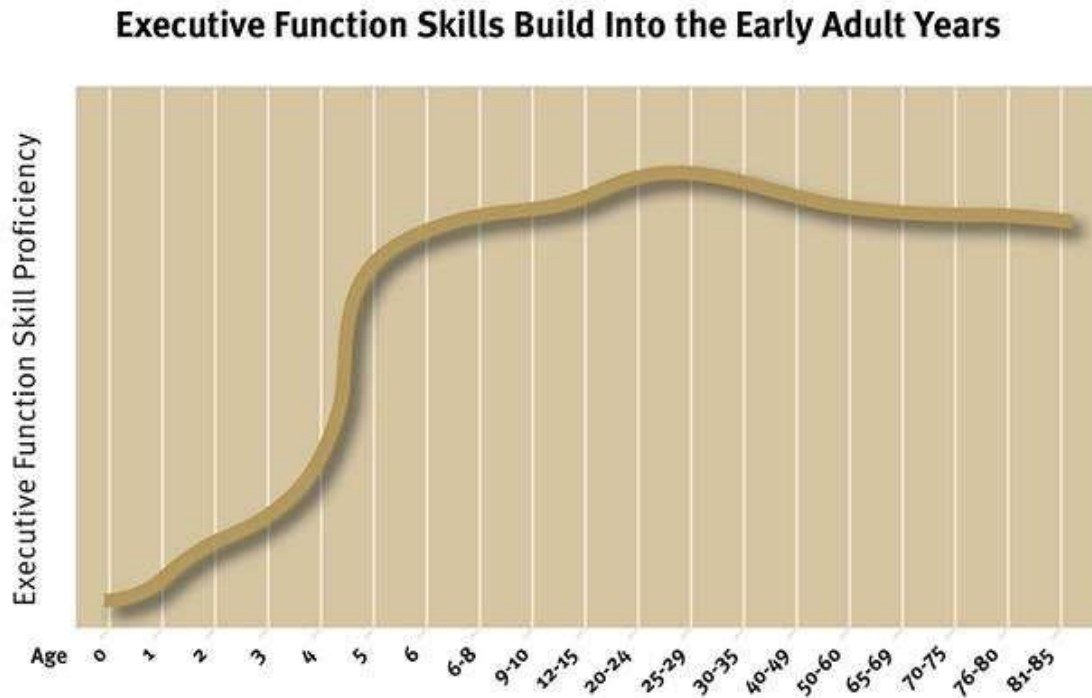
Source: In Brief: The Science of Early Childhood Development. Center on the Developing Child, Harvard University.

The growth of the neural connections in the brain depends on a few key things: sufficient nutrition in the first 1,000 days after conception and stimulation of the brain through human interaction called “serve and return” (National Scientific Council on the Developing Child, 2007). When a child interacts with the world and especially with his/her parents and family members, he/she learns a lot about how humans act, behave, and communicate. He/she begins to understand how to be a social being in his/her cultural context. A child whose parents and family members look him/her in the eyes, smile, hug, kiss and talk to him/her makes a child feel safe, loved and important. It is during this time that a child develops attachment with primary caregivers, which is an important part of his/her development (Gordon, I. et al., 2011; Masten, A.S., 2014; Bowlby J., 1988). Hormones such as oxytocin are released during early attachment between parents and their babies (Gordon, I. et al., 2011). This feeling of safety, love, and lack of anxiety is what propels a child to explore the world around him/her, which allows for even greater neural connections (Gordon, I. et al., 2011; Masten, A.S., 2014; Bowlby J., 1988). Contrastingly, children’s nervous system can be negatively impacted when children do not have regular, secure and loving relationships and an attachment with parents or other caregivers, or when there is neglect or exposure to violence and severe stress (Teicher, M., 2000). This can in turn affect the child’s ability to

trust, bond, relate with others and his/her interest in exploring the world around (Ibid). Without these critical inputs and a child not exploring his/her world, a child's brain development and physical growth could be stunted and the effects of this can last a lifetime (Bryce, J. et al. 2008; Victora, C. et al., 2008; Teicher, M., 2000). Evidence from many developing countries points to investing in the early years as even more critical for the most vulnerable children as they can provide inputs that families may not be able to provide (Mignat, A., 2006; Sen, A., 1999). Early years support has shown tremendous benefits on all children, but in particular those from lower socio-economic classes, those with disabilities and those that face other vulnerabilities (including those impacted by humanitarian crises) (Hertzman, C., 2010).

While there is overwhelming scientific evidence that the greatest brain development occurs in the early years, additional evidence from neuroscience over the last ten years on adolescent brain development has shown that this period might be a second window of opportunity (Blakemore, S.J. and Choudhury, S., 2006; Dahl, R., 2004; Harvard University, <http://developingchild.harvard.edu/resources/using-brain-science-build-new-2gen-intervention/>). Children's brains grow the most during the early years, but pruning and maturing of the brain continues throughout life (Ibid). The development of the pre-frontal cortex, where executive function and self-regulation occur, keep developing through adolescence and early adulthood (Ibid). Executive function, which includes higher order thinking such as planning, decision making, setting goals, multi-tasking, reflection, emotional control and metacognition, are seen as critical to success in adulthood (Diamond, A., 2006; Harvard University, <http://developingchild.harvard.edu/resources/using-brain-science-build-new-2gen-intervention/>). Harvard University's Center on the Developing Child is now promoting a two generation approach which focuses on children and their parents and caregivers because they have found evidence of the window of opportunity during this adolescence and transition to adulthood period (Harvard University, <http://developingchild.harvard.edu/resources/usingbrain-science-build-new-2gen-intervention/>). Figure 3.4 illustrates another bump that happens between adolescence and early adulthood. From the mid to late twenties there seems to be a decline which means that if interventions are not provided early on, it does not give the child the best start in life, but something might be done during the period of adolescence and early adulthood. It will not have the same results, but it seems to be another opportunity to intervene and make a difference.

Figure 3.4: Development of Executive function over a lifetime



Source: Harvard University, Center on the Developing Child,
<http://developingchild.harvard.edu/resources/inbrief-executive-function/>

2. Tackle Poverty, Gender Inequality

The early years are also a critical time when identities and stereotypes are formed and when services for children and families can help tackle socio-economic and gender inequality (Irwin, L. et al., 2007). There is evidence that ECCD services can be a great equaliser, helping the most vulnerable children (whether they be poor, ethnic or religious minorities or children affected by conflict and emergencies) get to similar levels as more well off children (Ibid).

Today, 836 million people live on less than \$1.25 per day, which is considered extreme poverty (MDG report, 2015). Children experience poverty differently from adults: while an adult may fall into poverty temporarily, a girl or boy who falls into poverty – particularly in early childhood - may be poor for a lifetime, given that even short periods of lack of access to essential services or appropriate care during this period can be detrimental to children's

longterm development. Children will often feel the effects of poverty directly, when they may be forced to go hungry or leave school to work and generate income for their families. Children living in poverty are almost twice as likely to die before the age of five compared to children from wealthier families. Early years' interventions has also been seen as critical to breaking the cycle of poverty for the most socio-economically disadvantaged children as they can catch up to their more advantaged peers and be ready for formal learning starting at the same level (Mignat, A., 2006; Sen, A., 1999). Gertler, Heckman and others led a 20 year follow up study in Jamaica that looked at the impact of a health and education intervention during children's early years of life (Gertler, P. et al., 2013). They found that children who received both the health and education inputs during early childhood had increased earnings of 25% as adults (Ibid). ECCD can therefore help break the cycle of poverty for children. Additional evidence indicates that children from higher socio-economic classes have higher vocabularies because they are used more in their families, they are read to more etc... (Hackman, D. and Farah, M., 2009; Hoff, E., 2003). This is all part of the school readiness that richer children get at home and poorer children do not. These same advantaged children start formal learning way ahead of their peers that come from disadvantaged homes. ECCD, and in particular pre-school education, can level the playing field for all children, no matter what their socio-economic background is (Irwin, L. et al., 2007).

Girls are often particularly at risk; research has shown that family poverty has more impact on the survival of young girls than it has on boys. A fall of 1 percent in GDP increases infant mortality by 1.5 deaths per 1 000 births for boys but with 7.4 deaths per 1 000 births for girls (Stavropoulou, M. and Jones, N., 2013). In families facing economic constraints, girls and women eat last and eat less well (Ibid). There is a clear link between stunting in early childhood and impaired cognitive development and poor school achievement, with implications for the rest of the life-course (Ibid).

Poverty is also particularly likely to impact negatively on girls' right to early childhood care and education, with girls from the poorest quintile of households making up 43 percent of out of school children (UNESCO and UNICEF, 2012). The challenge for girls in accessing ECCD services continues throughout her life. Economic downturns also have a disproportionate impact on primary school completion rates for girls, which are estimated to decline by 29 percent – compared to 22 percent for boys (World Bank, 2010). Boys' education is often prioritised if poor families are forced to choose where to invest their

limited resources. A lack of employment opportunities for girls once they complete their education can mean that poor parents struggle to see the long-term benefit of educating their daughters. This then increases girls' vulnerability to child marriage and other types of abuse and discrimination (UNFPA, 2012). Other barriers, including the burden of unpaid care and domestic work, and discriminatory social norms deny girls and young women access to training and to decent jobs, and this can be compounded by other factors, such as ethnicity, disability, religion, caste and sexual orientation, thus perpetuating cycles of poverty which often start in early childhood.

In humanitarian situations, the situation for girls can be worse. Humanitarian agencies often do not sufficiently address girls' needs and therefore specific support to them is missing from project planning (UNICEF, 2012). The London School of Economics analysed emergencies in 141 countries and found that boys received preferential treatment over girls in rescue efforts and less access to basic services (Neumayer, E. and Plumper, T., 2007). During the 1991 cyclone near Bangladesh's coastal areas, a father who was unable to stop both his son and daughter from being swept away by a tidal surge, let go of his daughter and held onto his son as he believed his son would carry on the family line (WHO, 2002).

The development of a gender identity, gendered attitudes, expectations and behaviours are both influenced by biological factors (the influence of sex hormones on the brain before birth) as well as gender socialisation (Honig, A., 1983; UNICEF, 2011). Cumulative disparities, that can start prenatally and in the first years of life, result in lifetime consequences (Walker, S. et al, 2011). Gender socialisation, a process that starts before birth, is how children learn about the social expectations, attitudes and behaviours associated with one's gender (Honig, A., 1983; UNICEF, 2011). It is in the first years of life that children are gender socialised through the influence of their external environment: their parents, caregivers, teachers, other children and media and other things in a culture. They become gender aware and quickly assimilate a wide range of culturally-determined stereotypical beliefs about gender and learn about society's expectations and norms for them - as boys and girls - with respect to their behaviours, roles and status. In this way, gender stereotypes and discrimination are transmitted from one generation to the next. By the age of three, children have a sense of gender identity (i.e. an understanding of whether they are a boy or girl) and by the age of 6-7 years they understand that gender is (relatively) permanent (i.e. a boy becomes a man, a girl is still a girl even if she wears boy's clothes). Once they understand their own gender identity, they begin to pay much more attention to

“models” of the same sex and to evaluate their own gender group more favorably than the other gender group. They also begin to learn, and rigidly stick to, gender stereotypes.

Multiple actors are involved in this process of gender socialisation:

- Parents/primary caregivers: who 1) “model” different roles and behaviors inside and outside the home in ways that may be gender stereotypical or not; 2) May show more preference for one sex over the other (more usually son preference) and therefore treat them differently in terms of the care, services and support offered; 3) encourage gender stereotyped toys/play activities; 4) communicate to children their understandings of gender such as giving girls only dolls to play with and telling boys that they should not cry (Honig, A., 1983; UNICEF, 2011; Witt, S., 1997).
- Teachers/ECCD facilitators: influence gender development when they use curricula/reading materials that reinforce gender stereotypes and promote specific toys and play activities for girls vs boys; interact and teach in ways that reflect their different expectations about the way boys and girls learn and what each sex will learn better; allow gender segregated play as the norm rather than the exception (Honig, A., 1983; UNICEF, 2011; Cahill, B. and Adams, E., 1997)
- Children: influence other children’s gender development. Children prefer to play with peers that are similar. From the age of about three, a process of “gender segregation” occurs: boys and girls will chose to spend more time playing with same sex peers and much less with the other sex. As children spend time with other children, they become more alike; they begin to develop the same interests, learn the same skills and learn also the same gendered behaviour and prejudices. They influence each other, modeling, creating norms, encouraging or discouraging certain behaviors. In the process, they do not learn to the same extent to understand, respect and appreciate the other sex, nor how to interact with them, and gender stereotypical beliefs, attitudes and biases about and towards the other sex are strengthened (Honig, A., 1983; UNICEF, 2011)
- Government policies: Government policies that are gender blind and do not consider the societal level biases against females and the specific needs they need addressed in order to be on equal footing with their men, can perpetuate gender inequality from generation to generation (UNICEF, 2011)

There are also other factors in a child’s environment that shapes this gender identity. ECCD programmes can help children understand that girls and boys have the same rights and

potential in life; that they can do the same things. As the child grows, this can help in the long run, tackle gender inequality which is present in many societies.

While there have been longitudinal studies looking at ECCD and poverty alleviation, there have been few of them. Further, there have been virtually no longitudinal studies looking at ECCD and gender equality. When looking at these issues in a humanitarian context, there has been no rigorous research, only a few qualitative evaluations, policy papers and anecdotal evidence presented in unpublished documents and programme reports (Shah, S., 2013).

3. Promote Peace, Disaster Risk Reduction, and Environmental protection

As young children's brains are shaped during the years of early childhood (0-8 years), there is tremendous opportunity to teach children about peace, preparing for future disasters and protecting the environment. These types of programmes can develop children's knowledge, skills and appreciation for tolerance, empathy, diversity, non-violent ways to solve problems, preparing for future disasters and environmental protection. Starting young means using the unique window of opportunity when a child's brain is growing and changing the most to influence it by helping children gain important knowledge, skills and experiences that can break cycles of violent conflict, prepare for future calamities and preserve the environment.

While the role of ECCD in promoting peace is an emerging area of research, it has been slowly documented over the last decade (Ang, L. and Oliver, S., 2015; Leckman, J. et al., 2014; Sunar, D. et al., 2013; UNICEF, 2015; Smith, 2015). There is new research coming from neuroscience and other fields from Yale University and other institutions; this has been giving ECCD and peace building greater global level attention over the last decade (Ang, L. and Oliver, S., 2015; Leckman, J. et al., 2014; Sunar, D. et al., 2013; UNICEF, 2015; Smith, 2015). In 2012, UNICEF received a four year grant from the Dutch government focused on education and peace building called "Learning for Peace" in 14 conflict affected fragile states (UNICEF, <http://learningforpeace.unicef.org>; Ang, L. and Oliver, S., 2015). This project includes ECCD, particularly pre-school education (Ibid). This multi-year project has raised the profile of ECCD and peace building and allowed for the gathering of more empirical knowledge based on implemented programmes. UNICEF is currently leading the establishment of the Early Childhood Peace Consortium (launched in 2013), which brings together key stakeholders from the UN, International NGOs, national NGOs, business

sector, foundations etc... (UNICEF, http://www.unicef.org/earlychildhood/index_70959.html). This group is working toward a common goal of identifying and analysing the links between ECCD and peace building through supporting and disseminating scientific research and advocating for better policies that support the way for sustainable peace (Ibid).

Johan Galtung first coined the term 'peace building' in 1976 when he discussed three approaches to peace: peacekeeping, peacemaking and peace building (Galtung, J., 1976). John Paul Lederach, a key scholar in the area of peace studies, took this initial concept and developed it further. Lederach defined peace building as a "...comprehensive concept that encompasses, generates, and sustains the full area of processes, approaches, and stages needed to transform conflict toward more sustainable, peaceful relationships" (Lederach, J.P., 1997, p. 20). UNICEF adds to this definition by stating that peace building cuts across all sectors and should occur at local and national levels, and with the participation of governments, civil society, the UN system, international and national actors, communities and children themselves (UNICEF, <http://learningforpeace.unicef.org/cat-about/key-peacebuildingconcepts-and-terminology/>, Accessed 24 May 2016). It addressed both the causes and consequences of conflict and aims to change negative approaches to dealing with conflict into positive ones (Ibid). Lederach further adds that peace building is a social construct meaning that it can be shaped (Lederach, J.P., 1997).

Many contemporary theories acknowledge that childhood itself is also socially constructed and children not only are active agents in shaping their own lives, but in the social world around them (Ang, L. and Oliver, S., 2015). Ang and Oliver (2015) in their systematic review of ECCD and peace building programmes put together a new conceptual framework that looks at the connection between ECCD and peace building. Like Bronfenbrenner's Ecological Systems theory and Vygotsky's Socio-cultural theory, they see the child at the center that is surrounded by the family, community, civil society, and the society's culture, history, social, political and economic situations (Ang, L. and Oliver, S., 2015). Ang and Oliver place the child at the center of policy because children are active agents in constructing their own lives and worlds (Ibid). The macro level is where early childhood development policy, social sector education policy and peace building policy can interact (if they are separate policies). The child's world, which is represented through the various concentric circles interacts with conflict on one side and sustainable peace on another side (Ibid). The framework highlights the complexities of moving from conflict to peace (Ibid).

ECCD programmes can therefore engage children and influence the shaping of one's childhood and peace in society. These programmes can promote peace at various levels: individual, community and societal levels. At the individual level, ECCD programmes can help children develop skills such as cooperation, managing conflict, regulating emotions, showing appreciation for diversity, being empathetic and understanding others' perspectives (UNICEF, 2015). Well-designed programmes can help children's interaction and willingness to play with others (including those different from cultural, socio-economic and ethnic backgrounds), ability to understand how being excluded makes one feel, and ability to recognise instances of exclusion without prompting (Ibid). At the community level, ECCD programmes that bring parents and community members together through parenting groups and neighborhood play groups can promote understanding others' perspectives and cultures thereby promoting social cohesion. Further, parenting groups can help strengthen relationships between couples within a family. At the societal level, ECCD programs can influence global level policies that promote peace and social cohesion. While there is growing evidence linking ECCD and peace building and a growing recognition of the complexity and links between these two areas, it is still not clear exactly what from ECCD programmes are the most influential factors that influence a person to be tolerant, empathetic and use nonviolent ways to solve problems etc... (Ang, L. and Oliver, S., 2015). There is still no clear evidence whether peaceful behaviours are more innate and biologically motivated or whether they are more learned (Ibid).

UNICEF supported ECCD services in rural areas of Uganda that have little access to social services as part of the 4 year peace building project (UNICEF, 2015). The project was implemented near the border with eastern Democratic Republic of Congo where Congolese people crossed the border into Uganda for safety in refugee camps. The emphasis for the project was on Ugandan and Congolese pre-school aged children 3-5 years who received support for community-based ECCD activities. The project supported children and parents/caregivers in 424 ECCD centres. While there were activities for children, the centres also provided the platform for parents and family members to interact with others. Some key changes that this programme achieved include: keeping inter-ethnic lines of communication open and re-starting inter-ethnic dialogue, promoting tolerance and respect between the groups which prevented the triggering of additional conflict, protecting children when conflict broke out in 2014, an increasing sense of security, and the establishment of a dedicated community management committee that provided a platform for community peace building (Ibid).

A longitudinal study conducted over ten years in Turkey called the Turkish Early Enrichment project (TEEP) also showed some links between ECCD interventions and peace building (Leckman, J.F., Panter-Brick, C., Salah, R., 2014). TEEP included two elements: centrebased pre-school activities and home based training for mothers. During the first follow up on children and mothers, there were positive benefits seen in terms of children's cognitive abilities, school adjustment and performance, social acceptance and the decrease in aggressive behaviour (Ibid). Secondary benefits seen during the first follow up indicated that mothers and families benefited from better family relations and the intra-family status of women increased (Ibid). The same families were followed up again. Benefits for children in terms of cognitive skills etc... were sustained. Additionally, the interaction between parents promoted the creation of social bonds across ethnic, cultural and religious boundaries (Ibid). There have been a few other pieces of research and in particular case studies that looked at ECCD and peace building issues (Connolly, P., Hayden, J. and Levin, D., 2007). Moreover, there are few longitudinal studies such as this one. Additional empirical evidence would strengthen this point.

In addition to peace, the early years can also be critical to develop a care for the environment, develop the skills to preserve it and to prepare for different types of potential emergencies (disaster risk reduction) (UNESCO, 2007; UNICEF, 2011; Shah, S., 2013). Research focused on young children's role in caring for the environment, preparing for future calamities, can similarly be integrated into early years' work and has shown positive results (UNESCO, 2007; UNICEF, 2011). Such programmes emphasise the role of children themselves in developing practical, context specific plans to keep schools and other important places for children safe from natural hazards, and support efforts that promote environmental preservation (Ibid). It is widely believed that young children cannot understand the risks of different types of hazards, would not understand environmental protection and would not be able to lead change. However, Boyden and Mann (2005) maintain that children possess inner resources which when combined with positive interpersonal relationships help to increase their resilience (Boyden, J. and Mann, G., 2005). Further, child development theorist Lev Vygotsky believed that children are active agents in their own environment and can help shape it (Vygotsky, L., 1981). Research has indicated that children from about the age of three can play a key role in building their own resilience and that of their peers (Cairns, E., 1996; Kamel, H., 2006; UNICEF, 2011). They can be agents of change when given the opportunity to learn about the environment, the risks of

various types of hazards and the change to solve their own problems with others (Wisner, B.P., 2006). Just as parents may explain, even to very young children, the risks around sharp objects, hot stoves, electricity sockets etc... teaching children about disaster risk reduction (DRR) and environmental conservation can have similar effects (UNICEF, 2011). Integrating DRR and environmental awareness into early childhood programmes can have many gains starting from increased knowledge and skills for children. This knowledge and skills learned at a young age can likely be sustained through their lives and could be transferred to the next generation (Ibid).

A number of such projects, especially in Asia, have shown positive results (UNESCO, 2007; UNICEF, 2011). Plan International Bangladesh after floods in 2012, engaged pre-school children, aged three to five years, in learning about hazards, risks and disaster risk reduction (DRR) in their communities and how to deal with them (Shah, S., 2013). These activities were facilitated through play and allowed children and their parents think about ways to prepare for future calamities. Often in early childhood programmes, parents participate so the learning easily extends to them (Ibid). Based on this experience of integrating DRR into ECCD in emergencies programmes, DRR related activities are now integrated into longerterm ECCD programmes which include a wider community group, including local government officials (Ibid). Small children, along with older ones in primary schools, were supported to be change agents in their communities by raising awareness among other family and community members (Ibid). Children created drawings, comic books, magazines and household discussions. Additionally, community-based organisations with children of mixed ages are formed which work together to develop community DRR and contingency plans (Ibid). After this project, one hundred children's organisations were actively contributing to disaster risk reduction and environmental awareness in the Barguna district of Bangladesh (Ibid).

Another successful project that integrates ECCD with Disaster Risk Reduction is in the Philippines. The Philippines is at high risk of natural hazard and conflict emergencies. For more than five years, Plan International has been working with the Philippines' Department of Education (DepEd) on disaster risk reduction and environmental awareness; one way of doing this has been through early childhood programmes (Shah, S., 2013). Plan, in collaboration with DepEd, developed a film series and puppetry activity called "Tales of Disaster". Tales of Disaster introduces key concepts of disaster risk reduction, climate change adaptation, environmental awareness and conflict resolution for the various types of

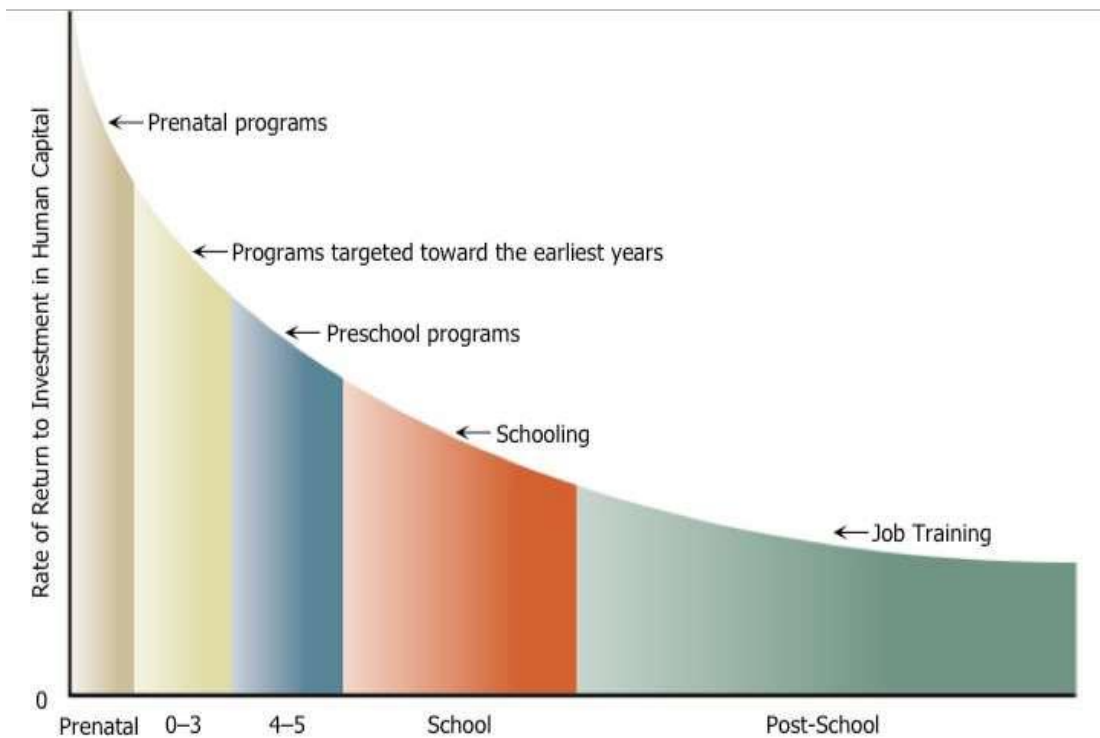
risks that the Philippines faces, which include typhoons, landslides, earthquakes, floods, tsunamis and conflict (Ibid).

As young children's brains are shaped during the years of early childhood (0-8 years), there is tremendous opportunity to teach children about tolerance, peace, diversity, problem solving, gender equality, preparing for future disasters and environmental protection. While no longitudinal studies exist looking at the long term impact of ECCD and Disaster Risk Reduction and more rigorous research is needed to strengthen this point, research done thus far has shown promising results.

4. Cost Effective

The importance of intervening early has been documented in several research studies (Shonkoff, J., 2009). Research, and in particular, cost benefit analyses, have shown high returns on investment (Carneiro, P. and Heckman, J., 2003; Heckman, J., 2006). These studies have also found that later interventions are likely to be less successful and in some case ineffective (Shonkoff, J., 2009; Carneiro, P. and Heckman, J., 2003). Nobel Prize winning Economist Dr. James Heckman found in his research that the greatest returns on investment were found with preschool programmes over primary and secondary school and remedial programmes for older children (Heckman, J., 2006). Further, he found returns on investment in savings and benefits up to US \$13 for every US \$1 invested, with the greatest returns to the most disadvantaged children (Ibid). The image below (Figure 3.5) illustrates Dr. James Heckmans's myriad cost benefit research studies. His work shows that the highest return was during the prenatal period while the lowest rate of return is after a child finishes school.

Figure 3.5: Rates of Returns by Age



Source: Heckman, J. (2008). "Schools, Skills and Synapses," *Economic Inquiry*, 46(3): 289-324.

Another major longitudinal ECCD study that focused on disadvantaged African American children in the US called the High Scope Perry study showed significant positive results of the programme. The High-Scope Perry Study after 40 years showed a return on investment up to 13:1. This means that for every \$1 invested for ECCD programming, there has been \$13 worth of savings and benefits to society (Belfield, C. et al., 2006). Cost-benefit analyses have further shown that the benefits of ECCD programmes have been greatest among the most disadvantaged groups (Ibid). Multi-sectoral services that integrate education, health, nutrition, child protection can be more efficient and support more domains of children's development (Ibid). Some studies have also included cost-effectiveness of education interventions and even included parenting education as a particular variable. However, these issues have not been investigated in humanitarian situations. The argument of ECCD as cost effective is widely accepted, but there have been studies that showed lower rates of return and a fade out effect where the benefits lasted up to early primary years, but not beyond (Barnett, S., 1995; Lee, V. and Loeb, S., 1994).

5. Early interventions can help children with disabilities

WHO and the World Bank estimate that there are more than a billion people in the world with some type of disability, which is about 15% of the total world population (WHO and UNICEF, 2012). Within this 15%, about 110 million people (2.2%) and 190 million people (3.8%) have significant disabilities which severely affects their normal functioning (Ibid). Approximately 80% of these people live in low income countries in Africa and Asia (Lata, D., 2015). Most of these people do not gain access to the critical support they need to help them improve their functioning and ability to contribute to society because of discrimination prevalent in the culture, and lack of knowledge about how to help people with disabilities (WHO and UNICEF, 2012; Lata, D., 2015). Out of an estimated 1.6 million children with disabilities in Ethiopia, only 2.1% are supported by special schools. This pattern is seen in other countries with similar levels of access to educational opportunities in Nicaragua (2.4%), El Salvador (less than 1%) and other countries (Lata, D., 2015). An estimation of the cost of disability in Bangladesh is 1.7% of the GDP or US \$1.2 billion annually (WHO, 2011). This estimated loss to the country's GDP is due to people with disabilities' lack of schooling from childhood and subsequent inability to contribute to the labour market (Ibid).

The early years, however, are a vital time to help children with disabilities access crucial interventions that can help them reach their full potential in life. The Convention on the Rights of Persons with Disabilities (CRPD) defines disability as having long term physical, mental, intellectual or sensory impairments which in interaction with other barriers can inhibit a person's ability to fully participate in society on an equal basis (United Nations, 2008, <http://www.un.org/disabilities/documents/convention/convoptprot-e.pdf>). Persons with disabilities can have delays in their development in relation to age mates or an impairment that restricts their functioning (Vargas-Baron et al., 2009). Disability is neither purely biological nor only social, but occurs during the interaction of the two as is the case for all types of child development (WHO and UNICEF, 2012; Lata, D., 2015). A child can be born with some genetic disposition that delays his/her development or functioning in comparison with other children of a similar age and this is where ECCD interventions are critical (Lata, D., 2015). Inequalities that affect the likelihood of a child having a disability can also begin prenatally before a child is born (Walker, S. et al, 2011).

Walker et al. (2007; 2011) narrowed down key risk factors that influence child development outcomes in resource-poor locations (Walker, S., et al, 2007; Walker, S. et al, 2011). These

include stunting (due to chronic malnutrition), micronutrient deficiencies, especially iodine and iron, and insufficient cognitive stimulation (Ibid). These ailments affects about 20-25% of young children in developing countries (Ibid). These conditions are worsened by low birth weight (due to mothers' malnutrition or lack of micronutrients), infectious diseases, environmental toxins and exposure to violence and other humanitarian conditions (Ibid). There are many preventable maternal risks including poor nutrition, infections during pregnancy, exposure to drugs and alcohol; all of these have been found to be associated with intrauterine growth restriction (which can cause low birth weight in babies), birth defects, low IQ, learning difficulties and increased risks of developmental difficulties (Tofail, F. et al., 2008; Noland, J.S. et al., 2003; Klebanov, P. and Brooks-Gunn, J., 2006).

Research has also found a bidirectional link between humanitarian situations and disability (WHO and UNICEF, 2012). While all children are vulnerable during an emergency, those with disabilities face additional adversities. The heightened stress, injury or death of parents and/or primary caregivers in an emergency situations can further affect the parent-child interaction and therefore a disabled child's ability to progress along a positive development path. In certain situations like earthquakes, children may experience additional disabilities like losing limbs etc... (Ibid). There may be fewer services catering to disabled children's needs due to a combination of discrimination and lack of awareness, lack of knowledge of how to help such children and limited resources to be able to support disabled children in the way they need.

However, there is also evidence that early intervention can make a real difference - both from prenatal support of pregnant women to early support for infants and toddlers (Lata, D., 2015). Interventions such as maternal education, exclusive breastfeeding along with responsive and stimulating care have seen positive cognitive and non-cognitive gains in children at risk of developmental delay (Walker, S. et al., 2007). Iron supplementation to tackle anaemia has been found to have the greatest benefit on children's IQ's when addressed within the first six months of life (Ibid). Yoshinaga-Itano et al. (2010) found that deaf and hard of hearing infants had significantly better language development if this was addressed before the age of 6 months (Yoshinaga-Itano, C. et al., 2010). This is because babies absorb a lot of sounds and language during this time and if they can hear they can better develop language skills. Further, Yoshinaga-Itano (2010) found that children who received cochlear implants before 24 months, could achieve similar language abilities as their normal hearing peers (Ibid). Contrastingly, children who received cochlear implants

after seven years showed poorer language abilities than their normally developing peers because the critical window when the greatest auditory development occurs has passed (Sharma, A. et al., 2005). Dawson (2008) further found that when social engagement through parent-child interactions were enhanced before the full expression of autistic symptoms, this could affect genetic expression, brain development and behavioural manifestation of autism (Dawson, G., 2008).

6. Recognised as a Human Right

The importance of children's earliest years is included as a child's right in the Convention on the Rights of the Child (CRC) and through Articles 6, 7, 19, 24, 28 and General Comment 7. General Comment 7 emphasises that early childhood is a critical period for the realisation of the rights mentioned in the UN CRC articles. General Comment 7 clarifies that every child's right to education begins at birth. It is closely tied to the right to development. Moreover, it supports a vision for comprehensive community services through early and middle childhood, both for children and parents as their key educators and caregivers. General Comment 7 also acknowledges that activities in the family and home settings provide the foundation for children's development, well-being and progression into primary education. Clause 36 in particular highlights the additional support young children require during emergency situations.

IV. Why ECCD in Emergencies?: Impact of emergencies on young children

Emergencies, whether they are due to natural hazards (ie. earthquakes, typhoons) or due to conflict, pose great risks for all people, and especially for the youngest and most disadvantaged. The youngest children are extremely vulnerable as they depend on a strong protective environment – namely their parents, extended family and community – to ensure their safety, development and well-being.

During emergencies, the protective environment or the layers of the child's ecology, that support and influence children's development, can be weakened and unbalanced thereby affecting his/her normal development. In these situations children could become separated from their families, injured or displaced from their homes. Parents may not be able to care for their children in the same way as they may be injured, distressed or too busy searching

for food or a safe place to live. Without this layer of protection that parents and caregivers provide, young children can face risks to their physical safety and security. They could experience the most dangerous type of stress - toxic stress - and a weak immune system, which can affect the body's ability to ward off disease. They could lose out on proper nutrition, immunisations and regular health check ups. All of this could increase the chance of death from preventable illness and long-term psychological difficulties (Bryce, J. et al, 2008; Victora, C. et al, 2008). Young children could additionally lose out on the safety of their daily routines, early cognitive stimulation and learning which could impair their brain development and therefore their abilities to succeed in school and later life (Ibid). Without key services, children who may have already been in a vulnerable position prior to an emergency face increasing risks when a disaster strikes (Williams, J.R.A., et al., 2005). Developmental damage that can occur without support during emergencies may never be fully reversed (Bryce, J. et al, 2008; Victora, C. et al, 2008).

This section explains four key impacts of emergencies on young children: 1) increase in toxic stress, 2) weakened protective and caring environment, 3) missing a critical time for brain development, and 4) losing important nutrition and health support.

1. Increase Toxic Stress

Stress, which is often elevated during emergencies, has been found to have significant impacts on young children's brain architecture, chemical makeup, and overall development over a lifetime (Shonkoff, J. et al., 2011). This in turn increases the chance of death from preventable illnesses and long-term psychological difficulties as well as impaired abilities to succeed in school and later life. Stress includes the internal or external influences that disrupt a person's normal state of well-being by causing emotional distress and physiological changes (Middlebrooks JS, Audage NC, 2008). Physiological changes that occur when a person is stressed include increased heart rate, increased blood pressure, and a dramatic rise in hormone levels, especially the hormone cortisol (Ibid). Some symptoms of severe distress among children (including those affected by emergencies) include thumb sucking, bed wetting, clinging to parents, sleep disturbances, loss of appetite, fear of the dark, withdraw from friends and routines and regression in behavior (ISSA, 2010).

One major risk during emergencies is when severe stress becomes “toxic stress” which can cause physiological and chemical changes in the body that may never be fully reversed (Bryce, J. et al. 2008; Victora C. et al., 2008). There are three types of stress a person can experience: positive, tolerable and toxic (Shonkoff, J. et al., 2011). A protective environment is key to helping children, especially the youngest, bounce back and be resilient. For infants and young children, parents and/or other caretakers are central to a strong protective environment.

Positive Stress

Positive stress is brief and mild to moderate in magnitude (Ibid). A person’s heart rate and stress hormone (cortisol) levels increase briefly. The presence of a caring and responsive adult provides the protection for children to deal with the challenge and quickly overcome it with no damage to the actual brain (Ibid). Positive stress can also help a child learn and grow if it occurs in a stable and supportive environment.

Tolerable Stress

Tolerable stress occurs when a child experiences a situation which is not normal such as a death in the family, serious illness or injury, divorce of his/her parents or an emergency situation. A person’s heart rate and cortisol (stress hormone) levels increase to a greater degree. Tolerable stress can be dangerous and could turn toxic. The key to tolerable stress is that it does not occur often and that the child has a strong protective environment of parents and/or caretakers to help him/her return to normal physiological and mental state. If a child has these supports, tolerable stress will not turn toxic.

Toxic Stress

The third and most insidious type of stress is toxic stress. This occurs when there is strong, frequent or prolonged stress and multiple adversities combined with the absence or weakening of a protective and supportive parent or caretaker. Harvard University’s research indicates that a significant increase in toxic stress, which often happens in humanitarian situations, **even when temporary**, has shown to negatively influence children’s brain development, learning and well-being (National Scientific Council on the Developing Children, 2007). Toxic stress can affect a person physically - through increased blood pressure, levels of stress hormones (cortisol) and cytokines which are proteins associated with inflammation in the body. The nervous system can be negatively affected. The ability

of the body to increase these is important to respond to threat or what is called “fight or flight”. Just as it is important that the body can turn on its ability to “fight or flight”, it is important that the body can return to its normal levels. When stress becomes toxic, it becomes difficult for the body to return to normal levels of blood pressure, stress hormone and cytokine levels (Ibid).

When stress becomes toxic, especially during sensitive periods of development, such as early childhood, it can affect brain circuitry and organ and metabolic functioning (Shonkoff, J. et al., 2012). Such disruptions increase the likelihood of developmental delays, health problems, such as alcoholism, depression, heart disease and diabetes (Shonkoff, J. et al., 2012; National Scientific Council on the Developing Children, 2007; National Scientific Council on the Developing Child, 2010). Further, it can impair all aspects of child’s development: cognitive (ie. learning, executive function, working memory, decision-making), linguistic, socio-emotional (ie. behavior, impulse control, mood and self-regulation problems) and physical (ie. physical and mental illness) (Ibid). In addition to short term changes in observable behaviour, the chemicals that toxic stress produces can lead to permanent changes in brain structure and function and even be passed on from one generation to the next (Shonkoff, J. et al., 2011).

Some risk factors found in the Adverse Childhood Experiences Study capable of causing toxic stress include child abuse, neglect, parental substance abuse and maternal depression (Felitti, V. et al, 1998). Harvard University’s Center on the Developing Child adds to the possible risk factors and includes poverty, exposure to violence, and mental illness (National Scientific Council on the Developing Children, 2007).

In humanitarian situations, the difficult circumstances mentioned in the adverse childhood experiences study and those mentioned by Harvard University, Center on the Developing Child, do not go away, but are compounded by additional risks that can cause more stress. During emergencies, the likelihood of children being separated from their parents, being displaced from their homes, not having enough food to eat, being injured or falling ill is higher thereby increasing a child’s likelihood of experiencing toxic stress (National Scientific Council on the Developing child, 2010; UNICEF, 2014). Research shows that the more risk factors a child has in his/her life, the more likely he/she is to experience toxic stress (Shonkoff, J., 2011; Shonkoff, J. et al, 2012).

The loss of a parent in particular has been highlighted as one of the most stressful events for children. This stress has been linked with future psychiatric disorders such as

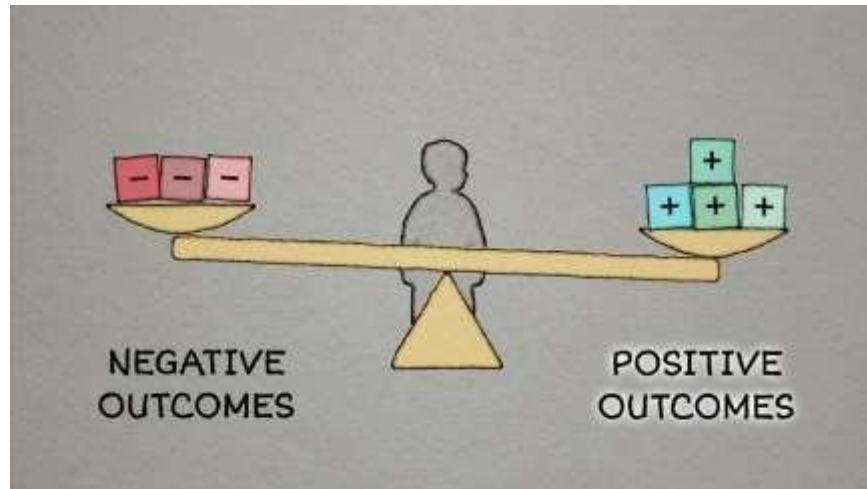
depression (Boyden, J., 2005). Studies from the National Scientific Council on the Developing Child has found that young children who have secure, trusting relationships with parents and other caregivers and their constant support experienced minimal stress hormone activation when scared by a strange or abnormal event and are better able to fight against the damaging effects of stress (Shonkoff, J., 2009). Contrastingly, young children who did not have secure relationships with parents or other caregivers and inconsistent support had greater activation of the stress response system (Shonkoff, J., 2009). Myriad scientific research conclude that by helping young children develop strong, supportive and constant relationships with parents or other caregivers as early in life as possible can prevent or reverse the negative effects of toxic stress (Ibid).

All children have some level of resiliency or the ability to bounce back from difficult situations (Center on the Developing Child, 2015). However, for poor countries where children are already under stress due to poverty and other risks mentioned above, may already have a low level of resiliency. When stress is frequent and prolonged, the child's own resiliency can further weaken.

Resilience

However, children are **resilient** and science tells us that a child's experience can shift the scale from negative outcomes to more positive ones (Center on the Developing Child, 2015). ECCD in emergencies programmes can support children's resilience and tip that balance when they have a combination of the following types of activities (which are not exhaustive): a stable, responsive and nurturing caregiver, access to early learning and stimulation through play, availability of nutritious food, and immunisations. The more positive inputs a child receives, especially in emergencies, the higher the likelihood that they will follow a positive development trajectory. Figure 3.6 below illustrates how positive and negative aspects in a child's environment can shift the balance.

Figure 3.6: The Balance of Resilience



Source: Harvard University, Center on the Developing Child,
<http://developingchild.harvard.edu/science/key-concepts/resilience/>

Duncan and Arnston (2004) and Donahue-Colletta (1992) highlight some characteristics of resilient children (Duncan, J., Arnston, L., 2004; Donahue-Colletta, N., 1992). Some of these characteristics include a strong attachment to a parent or primary caregiver, socially competent and able to interact with adults and children, independent and requests help when needed (not clingy to an adult), curious and explores and plays actively in his/her environment, able to adapt to change (Ibid). Further, when parental stress levels are not elevated, this can help children keep their stress levels in balance (Ibid).

Stress and malnutrition were major factors in children's survival rates in the study mentioned previously in Ethiopia during the 2008 food crisis. The programme taught parents how to provide early stimulation for their young children. This helped parents reduce their own stress, but with the outcomes of increased weight and higher survival rates, it seems to have reduced young children's stress as well (Play Therapy Africa, 2009).

Research from humanitarian situations indicates that in most emergencies a majority of children are resilient to the effects of stress and not in need of mental health services (IASC, 2007; Pine, D. et al., 2005). The Inter-agency Standing Committee in their IASC Guidelines on Mental Health and Psychosocial support in Emergencies, highlight the psychosocial intervention pyramid to help humanitarian staff implementing programmes (Ibid). Figure 3.7 shows the intervention pyramid.

Figure 3.7: Psychosocial Pyramid



Source: Inter-agency Standing Committee (IASC), 2007.

At the bottom are basic services and security which includes the (re)establishment of security, and services to address basic physical needs (ie. food, shelter, water, basic health care). The second level of interventions are the community and family support activities. This level includes family tracing and reunification (which is especially critical for young children), parenting programmes, formal and non-formal education activities, mourning and communal healing ceremonies, livelihoods activities and the activation of social networks (ie. women's groups, youth clubs). These two bottom layers are able to help the majority of people during a humanitarian crisis. About 10% of the affected population may need focused, non-specialised support, which is the third layer up from the bottom. This includes focused individual, family or group interventions by trained and supervised workers. These workers would not be psychologists or psychiatrists and would not have had the myriad years of training to treat mental illness. Activities in this level would include psychological first aid which is a person to person conversation that helps people express their feelings and emotions with a person who can listen and support them through the healing process. Approximately 1-3% of the affected population in a humanitarian crisis would need mental health services that only a psychologist or psychiatrist can provide. This is not the type of work that any agency can do as it requires people with the right professional license and expertise (Ibid).

Normal Reactions to Stress among Children during Emergencies

As mentioned previously, everyone experiences stress and some of it is healthy for positive development. The psychosocial intervention pyramid from the IASC provides general guidance for the types of supports that can be given to an affected population. Many children would only need level 1 or level 2 support as indicated on the bottom two levels of the psychosocial intervention pyramid. Each child reacts differently to stressors in his/her life in humanitarian situations. This all depends on the child's past experiences and adversities such as poverty, abuse, exploitation, family violence, neglect etc... (Save the Children, 2013; Dunan, J. and Arnston, L., 2004; Donahue-Coletta, N., 1992; Save the Children, 1995). Children who have experienced long term stress may also react and express themselves differently than children who have been in safe and nurturing environments (Ibid). Many children will temporarily regress in their own development (Ibid). Here is a summary of children of different ages' normal reactions to stress (Ibid).

1. *Babies and Toddlers: 0-2 years*

Babies and toddlers depend on their family and parents for a sense of safety and security (Save the Children, 2013; Dunan, J. and Arnston, L., 2004; Donahue-Coletta, N., 1992; Save the Children, 1995). They need emotional nurturing, through loving and reassuring interactions, and help with coping in an ongoing and consistent way. This is how babies and toddlers develop and grow. During their early months and years, children are very sensitive. They are affected easily by problems and stress affecting their parents or main caregivers. Separation from their parents or primary caregiver, sharp noise, parental distress or a very mixed-up routine can cause distress in a young child. Routine helps young children feel safe and secure.

Some common normal reactions of babies (0-2 years) to stress may include:

- Increased clinginess to parents and/or primary caregivers

Unusually high levels of distress when separated from their parents or primary caregiver; being more unsettled and much more difficult to soothe. Children during this time could experience separation anxiety and express that.

- Changes in sleep patterns
- Cry more or are more irritable
- Afraid of things that did not frighten them before
- Poor concentration or hyperactivity
- Avoid eye contact
- Loss of playful and engaging smiles and 'cooing' behaviour
- Loss of appetite or desire to eat. This could affect a child's ability to gain weight and could result in "failure to thrive" which a pediatrician would be concerned with.
- Regression in gross motor skills such as sitting, crawling or walking and appearing clumsy.
- There are changes in their play activity: Less or no interest in playing or only playing
 - More sensitive to how others react

2. Children: 2-5 years

Children between 2-5 years are considered pre-schoolers. At this stage they are vulnerable to distressing events such as emergencies like that of the South Sudan crisis, life-threatening accidents or illness, crime, violence or abuse. However, they may not yet be able to use words to fully describe how they feel. Their distress will show through changes in behaviour and functioning. Preschool age children still need the assistance of parents and caregivers to feel safe, understand the experience and recover. A child's response to a distressing or frightening experience will depend on their age, stage of development and personality, as well as the impact of the crisis on their parents, primary caregivers or significant others. A child may react based on his/her parents' reactions. Children may not react in the way caregivers/parents expect.

Children's responses to high stress can vary, but could include the following:

- New or increased clingy behaviour, such as following the parent around the house.
- Regression with basic skills like sleeping, eating, going to the toilet, bed-wetting or paying attention.

Mood changes – the child might not seem to enjoy daily routines or activities they used to like or may seem more inactive and withdrawn.

- Changed behaviour – some children might be more aggressive to parents or playmates.
- Increased fear – for example, the child may be more jumpy or startle easily, develop new fears, have more nightmares, talk about the frightening event more or have it in their play or drawings, not seem to be reassured when talking about the scary event and ask about it again and again and be scared that the trauma will happen again.
- More physical complaints for which no cause can be found, such as stomach ache or headache, being tired and other problems.
- Blaming themselves – small children are likely to misunderstand the events of the trauma and somehow think it was their fault.

3. Children: 5-8 years

Children in this age group begin to understand what has happened in an emergency better, but will still follow the lead of his/her parents/primary caregivers. If the parents/primary caregivers are calm, the child will behave based on that. Children still need the safety and security of their parents and families. They may express their feelings more through language. However, sometimes fears or impacts of a stressful event may not surface immediately and could be seen even months after an event. Some normal reactions can include the following:

- Physical reactions – Children often react to distressing or frightening events in physical ways such as by biting their nails, being aggressive with other children or caregivers, regressing in their behaviour, seeking attention, being clingy to their caregiver or bullying other children. Some children change their eating habits, have headaches or stomach aches.
- Sleep problems - Children may not want to go to bed at night or have difficulties falling asleep, staying asleep. Some children might experience nightmares.
- Fear at being separated from their parents or caregivers, changes in their relationships with siblings, such as becoming more competitive or aggressive.

Needing to express their experience through drawing, acting out some of what they experienced through pretend play.

- Behavioral problems at school, not wanting to go, or drop in academic performance
- Withdrawal – for example, the child may not want to discuss their thoughts or feelings in case it upsets their parents or caregivers. They may not want to play with other children.
- Unable to concentrate

While each child will react differently to stress they experience during an emergency situation, a key buffer to help them through their experience is a strong protective and caring environment.

2. Weakening of a Caring and Protective Environment

Emergencies, whether they are due to natural hazards such as earthquakes, floods, landslides, or due to conflict, pose great risks for all people, and especially for the youngest and most disadvantaged. The youngest children are more vulnerable than other groups as they depend on others to protect and care for them. Children's survival, growth and development requires a strong protective and caring environment. However, this protective and caring environment can be weakened or break down in humanitarian situations, as children could become separated from their families, could become orphaned, neglected, abused, injured, psychologically distressed, displaced from their homes, or trafficked (Barbarin, O.A. et al., 2001; Attanayake, V. et al., 2009). Parents or primary caregivers may not be able to care for their children in the same way as before the emergency as they may themselves be injured, distressed or too busy searching for food or a safe place to live (Evans, J., 2006). The impact of emergencies on parents can expose children to emotional neglect, violence of conflict within the home (Barbarin, O.A. et al., 2001; Betancourt, T.S., 2015). Young children could therefore lose out on the safety and security of their daily routines, early stimulation and nurturing, learning, nutrition, immunisations and other support that is essential for their healthy development and well-being.

There is evidence that even in utero, maternal stress and depression can affect how a child develops (Thabet, A. et al., 2009). Stress that pregnant women can experience has been associated with childhood under-nutrition, stunting, cognitive and socio-emotional

development (Thabet, A. et al., 2009; Feldman, R., et al, 2013). While exactly how maternal stress affects a child's development while the child is still in the womb is still being investigated, but there is some evidence pointing to a mother's elevated levels of stress hormones (cortisol) crossing the placenta to the baby and causing similar effects as tolerable or toxic stress (Van den Bergh, B.R. et al, 2005). Further, there are also links between postnatal stress and anxiety of mothers and their abilities to provide appropriate care for their children and the ability of the child to form a secure attachment (MacMahon, C.A. et al., 2006; Field, T., 2010). Research also points to exposure to violence affecting marital tension, discipline styles being harsher than normal which in turn can affect a child's own anxiety and behaviours in a negative manner (Betancourt, T.S., 2015; Dybdhal, R., 2001). Without a caring and protective environment with stable parents/caregivers, children who may have already been in a vulnerable position prior to an emergency face increasing risks when a disaster strikes (Williams, J.R.A. et al, 2005).

Key to establishing a strong protective and caring environment are strong parents and caregivers with the knowledge and capabilities of protecting, caring for and ensuring their children's optimal development. This idea is underpinned by Bronfenbrenner's ecological systems theory and Vygotsky's belief of a strong influence from the external environment on children's development (Vygotsky, L.V., 1978; Bronfenbrenner, U., 1979). Parents can physically protect and care for children and provide the nurturing and emotional support children need to survive and grow. (Shonkoff, J., 2010; Shonkoff, J., 2009; Shonkoff, J. et al., 2012; Masten, A.S. and Monn, A.R., 2015). Child Protection is defined as the 'prevention of and response to abuse, neglect, exploitation and violence against children (Child Protection working group, 2012). According to "UN Convention on the Child's Right", children need special protection until they have reached a level of physical, mental and emotional maturity to take on the duties and responsibilities of an adult (UN CRC, <http://www.ohchr.org/en/professionalinterest/pages/crc.aspx>). Care of a child goes beyond simply protecting them from harm and exploitation. Care is an interactive process between the child and the parent/caregiver. This interaction determines the quality of the care the child receives and the ways in which a child can take in the stimulation it receives; this all ultimately affects a child's development (Evans, J., 2006). When children receive appropriate care from an adult, with whom they have a safe and secure attachment, children can make remarkable gains in physical and motor, social and emotional, linguistic and cognitive development (Evans, J., 2006; Bowlby, J., 1988). Having at least one strong relationship or attachment to a caring adult who values the child's well-being is critical to

his/her survival, growth and development (Evans, J., 2006). Harvard University's Center on the Developing Child has developed a theory for change which focuses on strengthening adult capabilities to improve children's outcomes (Harvard University, 2013). The theory of change looks at ways to strengthen the capabilities of parents and other adult community members because if these are strong, they can support the healthy and optimal development of children (Ibid).

Parenting education in numerous evaluations in developing countries including Uganda, Bangladesh, and Pakistan, has shown positive results on parents' knowledge and skills and children's development outcomes in fragile contexts (Singla, D. et al, 2014; Aboud, F., 2007; Yousafzai, A.K., et al., 2014). A randomised control trial conducted in Romania that compared abandoned children in institutions and those in institutions that were moved to responsive and caring foster care before age 2, revealed how early interventions can reverse the negative effects of extreme neglect and lack of a safe and secure protective environment and early stimulation (Nelson, CA et al., 2007). At a 54 month follow-up assessment, the children in foster care were more likely to form safe and secure attachments to their foster families, greater protection from stressors in their environment, and greater cognitive stimulation. This in turn led to more children having increased IQs and brain activities in comparison to children who remained in institutional care (Ibid).

One of the most thoroughly researched parent programme is the Nurse-Family Partnership (NFP) in the US. This programme began in 1977 at three sites and included 2,000 families. An experimental design was used with a control and treatment group. The programme included parenting education and support prior to their baby's birth and during its first year of life. Longitudinal follow ups of the participating mothers and children showed 56% fewer arrests and 81% fewer convictions among the children and families who participated in the program than among the control group (Evans, J., 2006).

Care and protection of young children is often thought of as a mother's job. However, fathers and other caregivers are equally critical in their children's protection, care and development. A study of fathers in South Africa estimated that over 50% of fathers did not have daily contact with their children (Evans, J., 2006). This trend is common in many countries, however there is also research that the active involvement of fathers is important for their child's development (Spielberger, J. et al, 2015). One study found that fathers' active involvement reduced mothers' stress levels which in turn created a more positive family

environment where children can better flourish (Nomaguchi, K. et al, 2012). Parents who are unable to care for their children due to various stressors in their lives also need support from extended family members, the community and government (Evans, J., 2006). Therefore, in addition to parents, other relatives and community members are also important for children's protective environment, especially as in many cultures the concept of family extends beyond biological parents and includes multi-generational and multi-family households.

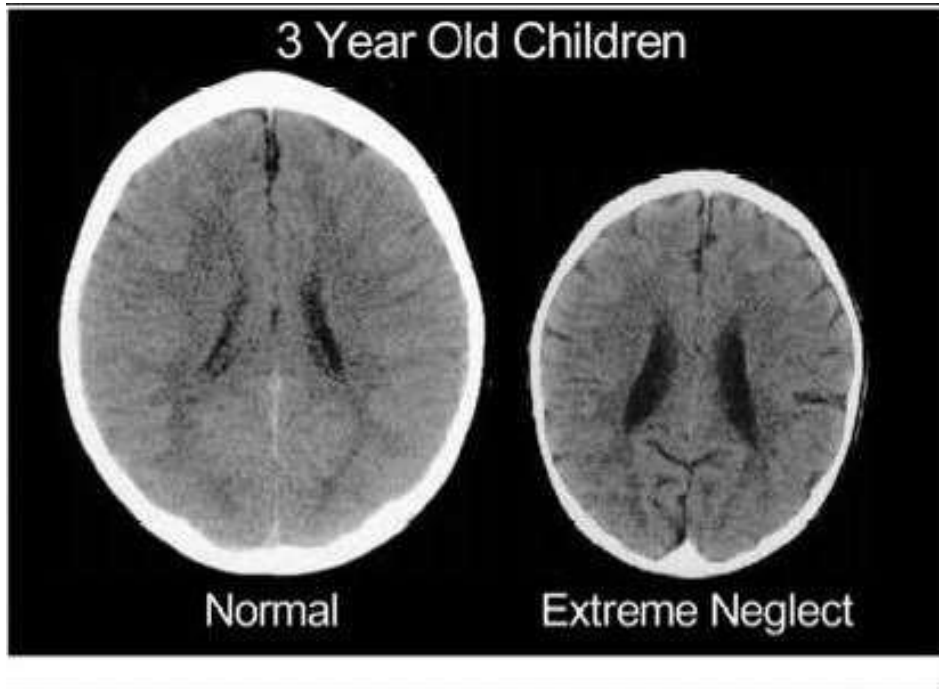
3. Lose Early Stimulation and Learning Opportunities during a Critical Period of Brain development

As mentioned previously, early childhood is a critical "sensitive" period for brain development. It is the period where the brain grows the most and when the foundation for future learning and development is set. The lack of early stimulation and learning can have tremendous influence on a brain's initial development and architecture, more so than insufficient food as revealed in studies (Grantham-McGregor, S. et al., 1991; Yousafzai, A. et al., 2014). Early stimulation refers to the "extent that the environment provides physical stimulation through sensory input (e.g. visual, auditory, tactile), as well as emotional stimulation provided through an affectionate caregiver-child bond." (WHO, 2006). The environment in which a child grows shapes his/her brain and creates the foundation for future learning and capacities. Deficiencies in early stimulation and learning during the earliest years of a child's life can delay their cognitive, linguistic, socio-emotional, and physical development (Heckman, J., 2006). These delays can affect returns on financial investment (Ibid).

The picture below illustrates the effect on brain growth and development when there is neglect or deprivation of multiple areas such as the lack of stimulation including language, physical contact such as hugging, and interaction with others. Humanitarian situations can mirror this type of neglect and deprivation as parents may not be able to or may not understand the importance of talking to their child, hugging, playing, looking, and smiling at them. They may also be distressed or injured and unable to support their children. Emergencies increases the likelihood of this type of brain development if support is not provided. These are the ways children begin learning about the world (Arnold, C. 2004). The image on the left shows the brain of a healthy three-year old child. However, the image on the right shows the brain of a three-year old child who was suffering from prolonged adversity and had little to no stimulation as described above. Not only is the brain on the left

larger in size, there are few black spaces, which indicate greater brain density (Perry, B. and Pollard, R., 1997).

Figure 3.8: Effects of Severe Neglect on Brain Development



Source: Perry, B. and Pollard, R (1997)

Additionally, a randomised trial conducted in Bangladesh that looked at the impact of psychosocial stimulation and food supplementation of severely malnourished children showed significant effects of psychosocial stimulation and not the same types of effects from food supplementation (Nahar, B. et al, 2012). Children that received psychosocial stimulation had higher cognitive skills and higher weight for age scores in comparison to those that received no stimulation (Ibid).

4. Lose important Nutrition and Health services

Malnutrition and preventable diseases are major threats to young children's lives during disaster situations. The mortality rate for children below the age of five is considerably higher than for other age groups. Proper nutrition and health support the formation of a

child's brain and therefore his/her development. Numerous studies have found that malnutrition in the first five years of life has significant long-lasting negative effects on cognitive, physical, social and emotional development. Malnourished children, when compared to well-nourished ones were more likely to start school late, concentrate less in school and have lower academic outcomes (Sanchez, A., 2009). A study conducted by the University of Sussex in Zimbabwe explored the impacts of preschool malnutrition on subsequent human capital formation in Zimbabwe. The study found that even temporary malnutrition and lack of health services during drought and conflict times resulted in lower development indicators including lower height and weight and fewer years of schooling. The researchers estimated a loss of lifetime earnings of around 14 percent. Results from the longitudinal data of the multi-country Young Lives Survey, led by the University of Oxford, showed a strong positive association between stunted height during the first two years of life and cognitive achievement four years later (Sanchez, A., 2009). Another study from the Lancet provides evidence from multiple countries of the effects of maternal and child under-nutrition on adult health and reduced economic productivity (Victora, C. et al., 2008).

While nutrition and health support for young children can have significant benefits, this in combination with early stimulation can have an even greater effect. A landmark study of Jamaican stunted malnourished children found evidence to support the combination of early stimulation and nutritional supplementation (Grantham-McGregor, S. et al., 1991). In this study, the researchers had five groups of children they followed over time. Two groups of children did not receive any intervention as they were either healthy, normally developing children or assigned to a control group. One intervention group received nutritional supplements only, another received early stimulation only and a third that received both early stimulation and nutritional supplements. The healthy children had the best child development outcomes, but after them, were the children who had both the early stimulation and nutritional supplements, followed by the children who had only early stimulation. The children with the lowest development scores were those with nutritional supplementation only and those that received no support (the control group). This indicates a few things; firstly ECCD interventions need to start before a child is born so they can develop normally. Once a child is born and then is malnourished and stunted, a combination of early stimulation and nutritional supplements would be important to help these children get close to the normally developing children. However, this research found that no interventions helped children get to the same development level as those that were never stunted and malnourished in the first place (Ibid). Evidence from Ethiopia during the 2008 food crisis shows that children's

weight and survival rates increased when nutrition and health services were provided with early stimulation and parenting education (Play Therapy Africa, 2009). They found that the combination helped children recover faster from acute malnutrition than nutrition support alone (Ibid). Additional research from Bangladesh, Pakistan and other countries has also found that children who receive nutritional supplements along with early stimulation and learning that promotes brain development, had higher survival rates, healed faster and returned to a more normal development trajectory (Ibid, Hamadani, J. et al, 2006; Gowani, S., 2014; Yousafzai, A. et al, 2014; Nahar, B. et al., 2009; Nahar, B. et al., 2012).

Quality programming on Early Childhood Care and Development in emergencies can address challenges young children face and positively influence communities' resilience to future calamities.

V. Why Early Childhood Care and Development Now: Progress yet Little Political Will or Investment

Over the past decade, there has been increasing interest and attention to children's early years through high profile international documents and reports. This has included the Education for All Dakar Declaration (UNESCO, 2000), UN Millennium Development Goals (United Nations, 2000), the WHO Commission on Social Determinants of Health (Commission on Social Determinants of Health, 2008), and the Lancet journal's 2007 and 2011 series on child development in low-income countries. According to data collected by UNICEF in 2009, more than 30 governments around the world have established national early childhood policies and 70 countries have some type of national mechanism for the various sectoral ministries to coordinate (Shonkoff, J., 2010).

However, despite these positive trends, ECCD is still not getting sufficient attention in international and national policies. While the 2000 Education for All Dakar Declaration calls for "expanding and improving comprehensive early childhood care and education", it is the only goal without a quantifiable indicator or target (UNESCO, 2000). There is no agreed upon measurement to track the progress of this statement. More than half of the world's countries have no policy on ECCD or a mechanism through which the various departments related to early childhood (ie. Education, health, social services/protection) can coordinate to provide holistic services to young children. Where such policies or mechanisms exist, they remain statements of intent rather than enforceable or implementable plans with a government budget (Shonkoff, J., 2010).

There is low investment in ECCD in emergency programming despite evidence, which suggests that children require support and commitments to their education, psychosocial, nutrition, health, and protection needs during disasters and the evidence of the cost-benefit of investing in this age group. The work of James Heckman, 2000 Nobel Prize Winner in Economics, presented earlier in this chapter in section III, 4 of this thesis found that it costs less to get things right from the start than to remedy the consequences of inaction later (Heckman, J., 2006). He went further to say that investing in disadvantaged children during early childhood makes sense on an economic basis because early learning is the foundation for later learning and that is critical for success and the ability to contribute to society (Ibid).

Limited understanding of the evidence base and lack of sufficient quantitative data in humanitarian contexts has resulted in under-investment by donor governments, the United Nations and international NGOs (Arnold, C., 2004). Few major international donors prioritise ECCD and most allocate less than 2% of their overall development assistance to pre-primary education (UNESCO, 2006). For example, the US Agency for International Development (USAID) has three main goals in its global education strategy (USAID, 2011). The first is about early grade reading. The second is about employment of youth and the third is focused on access to basic primary education in conflict and fragile states (Ibid). Within these three goals, USAID usually does not fund ECCD. Sometimes as part of goal 1 of early grade reading, some activities related to emergent literacy that can happen between 3-5 years of age can be included. In most countries, less than 1% of the total education budget is allocated to ECCD. In many African countries, allocation for ECCD in Ministry of Education budgets is less than 0.01% (Arnold, C., 2004). While expenditures for the education of young children are low, they are slightly higher in the health sector. Unfortunately, even this spending is insufficient to meet the needs of the youngest children (Arnold, C., 2004). Education and Child Protection, two sectors that often implement ECCD programmes, are two of the least funded in humanitarian situations (Brannelly, L. et al., 2009; Lilley et al., 2009; Save the Children, 2008; Turrent and Oketch, 2009;).

The result of low investment in the earliest years has been documented in several research studies. In one study, the World Bank has estimated that in West African nations, the funds that would be saved by reducing grade repetition would be sufficient to pay for quality parenting education and preschool programmes for young children in each nation (Jaramillo, A and Mingat, A., 2003). Investments in young children can also help older siblings and mothers who may have been caring for children (Lokshin, M., Glinskaya, E. and Garcia, M.,

2000). In many countries while boys are able to continue with their education, girls often drop out due to child-care or house-hold duties, the family's financial situation which necessitates that children work. Young children in ECCD programmes can take away one of the barriers girls face in continuing their education as it can change perceptions on the importance of girls education by providing them access early on in life. It can also ensure that an older girl that may previously had to care for younger siblings can go to school while her younger siblings are cared for in ECCD programmes. Likewise, mothers who have a safe and nurturing place for their young children can work and support the economic health of the family (Ibid). Interviews with refugee mothers from Ivory Coast who crossed the border into Liberia told Plan International that the ECCD in emergency programmes allowed them to return to their farms in Ivory Coast to get food for their families and keep their harvest growing (Plan International, 2012).

CHAPTER 4: RESEARCH CONTEXT: SOUTH SUDANESE REFUGEES IN UGANDA

This research focuses on South Sudanese refugees who fled armed conflict in their country to Uganda. This chapter therefore sets the context of this research by defining what is an “emergency”, the history and situation in South Sudan that led to the refugee crisis, the current education and early childhood development/education status in South Sudan and the context of Uganda where these people are now residing.

I. What is an “Emergency” in the context of this research?

An emergency can be defined in many ways. It can be defined as a sudden, serious, unexpected, often dangerous and overwhelming event that requires immediate action (Oxford English dictionary; Burnham, G., 2008). An emergency can affect all the various levels: the individual, household, community, country or multi-country level or beyond (Burnham, G., 2008). While this is the general definition of an emergency, in the international development and humanitarian fields, an emergency goes beyond a single individual or family. For the purposes of this research, an emergency, disaster or humanitarian crisis would not include situations such as car accidents, house fires or injury that affects an individual or a family. The term refers to a serious event that affects multiple countries, a whole society or a large part of a population. It can be caused by internal or cross-border armed conflict that results in internal displacement, creating internally displaced persons (IDPs) or external displacement, creating refugees (United Nations Disaster Management Training Programme, 2005; United Nations Office for Disaster Risk Reduction, 2009; Burnham, G., 2008). An emergency can also be caused by a natural hazard (ie. flooding, typhoon, hurricane, landslides, tsunamis, earthquakes) (Ibid). The term ‘emergency’ is often used alongside ‘disaster’, and ‘humanitarian crisis’. While some agencies define these terms differently, many use them inter-changeably to mean the same thing. In this research, we will inter-changeably use the term ‘emergency’, ‘disaster’ and ‘humanitarian crisis’ to mean the same thing.

An emergency often exceeds a country’s ability to cope with the human, material or environmental losses solely on its own and usually requires some outside assistance from a humanitarian agency or another country. In many countries when there is humanitarian support, there is a combination of some natural hazard and some tension that puts a country at risk of war. A humanitarian response can provide aid to one aspect or all challenges in the country.

The severity of an emergency and whether outside assistance is required is measured according to the widely agreed upon formula:

$$\text{Risk} = \text{Hazard} \times \text{Vulnerability} / \text{Capacity}$$

A situation would be considered a humanitarian crisis or emergency generally when the hazard (ie. Earthquake, conflict, flood) is very severe, the vulnerability is equally high in the country and the capacity to deal with this is low.

In cases of conflict and refugee situations, as is the case for the South Sudan crisis, the conflict is severe, has been long lasting which would give it a high number on the hazard scale. At the same time, South Sudan has many vulnerabilities from the long standing poverty, low education and literacy levels, and a fragile new government, giving it a high number for vulnerability. Additionally, the high vulnerabilities that South Sudanese people face contributes to the overall low capacity of the country to handle large scale challenges.

An emergency can be a short term situation lasting a few months or it can last over a year. The entire emergency or disaster cycle (as pictured below) process begins before an actual life threatening event occurs such as an earthquake, beginning of fighting etc...

Figure 4.1: Disaster Cycle



Source: UNESCO (2010)

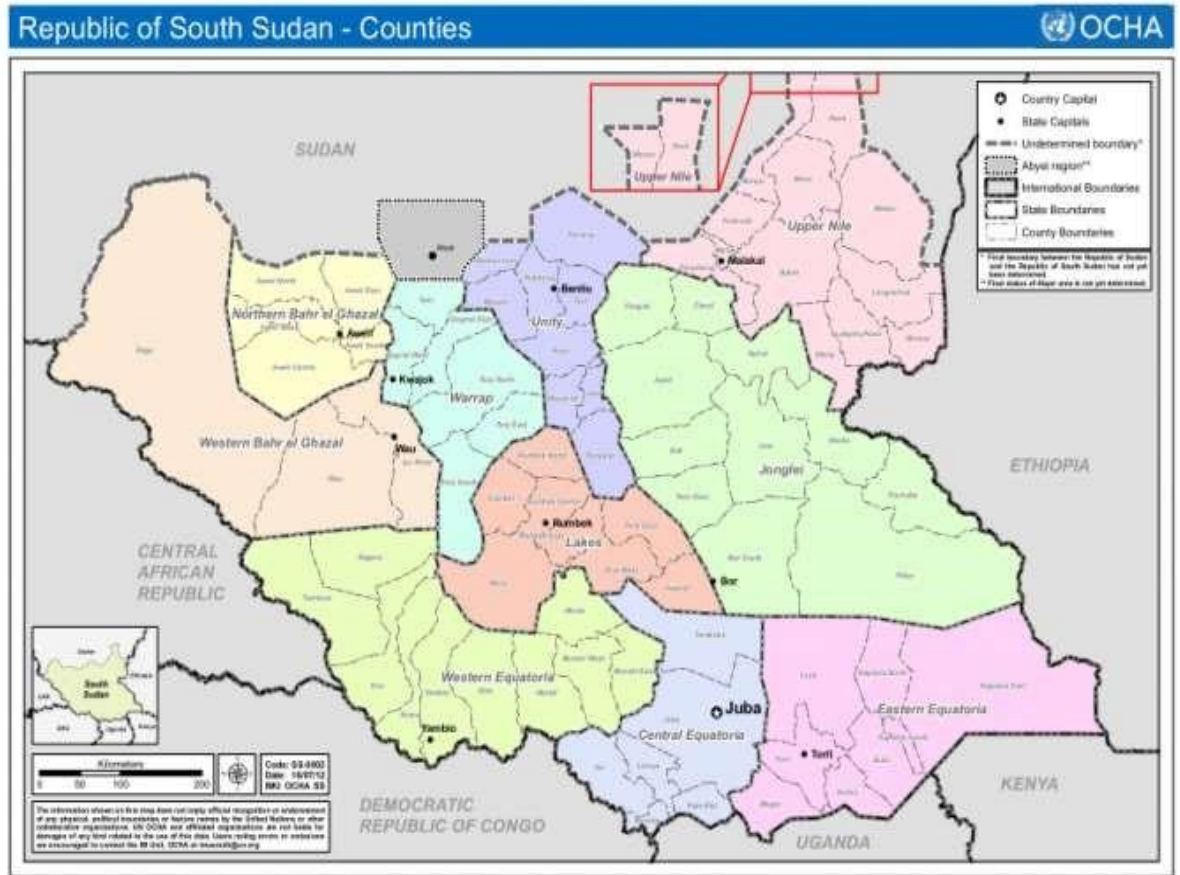
This aspect of the emergency cycle is called preparedness. When something occurs such as escalation of fighting, increased displacement of people, an earthquake or typhoon, we move to the next stage which is called relief. This is immediately after a life threatening event occurs to affect a large percentage of a country's population. Often this stage could include search and rescue and the provision of important life-saving and protective services. When the situation stabilises, this is called the rehabilitation, reconstruction and recovery phase (United Nations Office for Disaster Risk Reduction, 2013; Johns Hopkins University, 2008; Joyce, K. et al, 2009). In this research I consider the whole cycle of emergency preparedness, acute relief/response and recovery/rehabilitation/reconstruction. While there are stages illustrated in Figure 4.1 and by humanitarian agencies, when one stage ends and another begins is not very clear, especially with chronic conflict situations with mass displacement. History of conflict has shown that refugee situations can last a long time.

A large population of South Sudan is still displaced and fighting continues. While at this stage there is not a need for search and rescue, the emergency phase is prolonged. People are still in refugee and internally displaced persons (IDP) camps. People are still struggling to meet their basic needs and wants, including early education.

II. South Sudan history and conflict

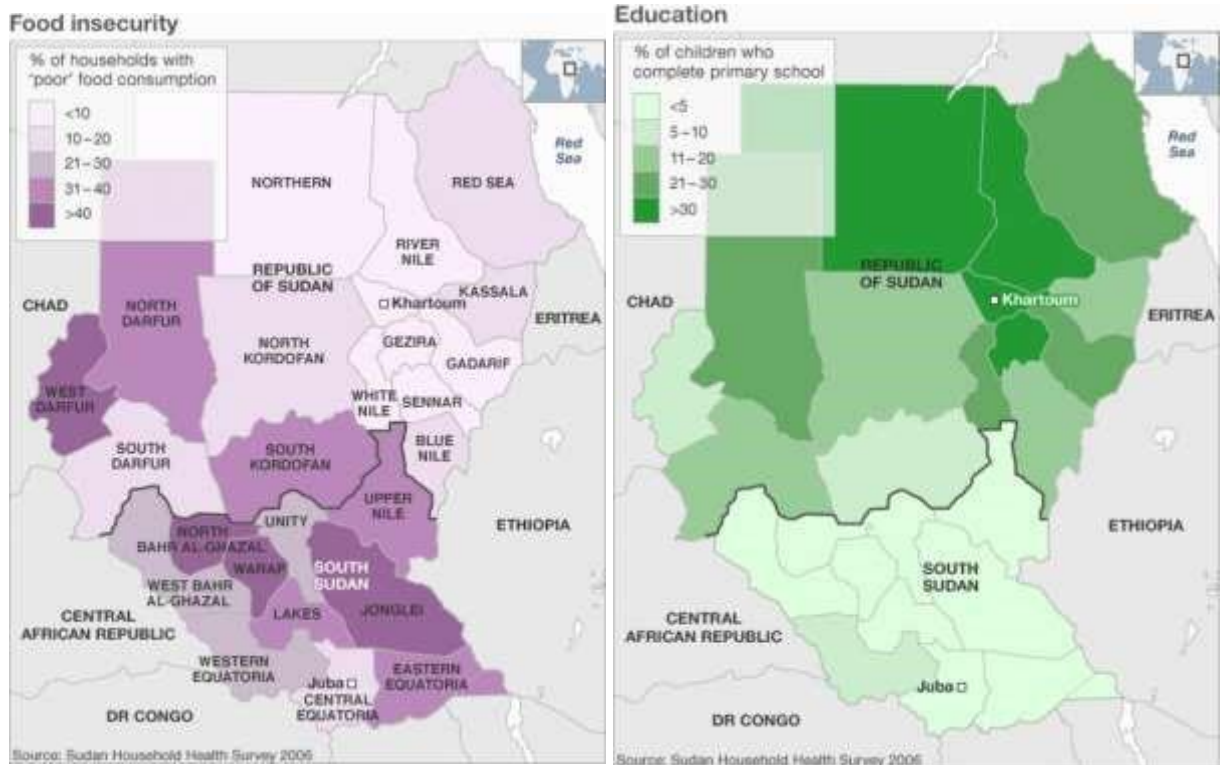
South Sudan has been entrenched in conflict and violence since the 1950s when it was first a part of Anglo-Egyptian Sudan under joint British-Egyptian rule (BBC, 2016; Jok, J.M., 2011; lyob, R. and Khadiagala, G., 2006). In 1956 Sudan gained independence from the joint British-Egyptian rule and made Khartoum the new capital of Sudan. Khartoum, being in the northern part of the country, did not represent those in the southern part of the country (now South Sudan) or those in the Western part (Darfur). There were many disparities between those in Arab tribe who lived primarily in and around Khartoum in the northern part of the country and other tribes that were in Darfur in the western part of the country and in the southern part of the country (Ibid). These two maps in Figure 4.3 below which were retrieved from the BBC show how both the western and southern parts of the country had greater food insecurity and lower education levels, which underpinned the rationale for rebel groups to start a war with the north (BBC, 2013).

Figure 4.2: Map of South Sudan



Source: UNOCHA, 2012

Figure 4.3: South Sudan maps for Food insecurity and Education



Source: BBC (2013), <http://www.bbc.com/news/world-africa-25459615>

However soon after in 1962 a civil war led by the southern separatist Anya Nya movement started in the northern part of the country (BBC, 2016; Iyob, R. and Khadiagala, G., 2006; Jok, J.M., 2011). Tribes from the northern and southern parts of the country have different cultures and generally different religions (many tribes in the north being Muslim and often with lighter skin and the tribes in the south being mostly Christian or Animist and often with darker skin) (Iyob, R. and Khadiagala, G., 2006).

This was the beginning of many years of war between the northern and southern parts of Sudan. In 1972, a peace agreement is signed in Addis Ababa where the President of Sudan gave some autonomy to the southern part of the country (BBC, 2016; Iyob, R. and Khadiagala, G., 2006; Jok, J.M., 2011). However, in 1978 oil was discovered in Unity State which is part of the southern part of Sudan (and which is currently a part of the country of South Sudan). Sudanese President Jaafar Numeiri then abolished South Sudan's autonomy, prompting the eruption of violence and another civil war between the northern and

southern parts of the country under the leadership of John Garang and the Sudanese People's Liberation Movement (SPLM) and the armed wing Sudanese People's Liberation Army (SPLA). This second civil war in Sudan between the north and the south lasted between 1983 - 2005 (BBC, 2016; Jok, J.M., 2011).

Autonomy for the south

A Comprehensive Peace Agreement (CPA) was signed in January 2005 which included a permanent ceasefire, autonomy for the south, a power-sharing government involving representatives from the SPLM in Khartoum and a South Sudanese referendum on independence in six years (BBC, 2016; Jok, J.M., 2011). In July of that year, a new constitution gave the south a large degree of autonomy. Further, John Garang, the former rebel leader of the SPLA was sworn in as Vice-President of Sudan. Soon after being sworn in as Vice-President, John Garang was killed in a plane crash, which sparked violent clashes in Khartoum between supporters of Garang from the south and those from the north that did not support Garang. Salva Kiir Mayardit succeeded Garang as the leader of the SPLAM. In September 2005, violence abated and a power-sharing government was formed in Khartoum. Soon after in October, an autonomous government, dominated by former rebels from SPLM/SPLA, was formed in South Sudan, in line with the January 2005 peace agreement. Even with this agreement and power sharing deal, smaller scale violence continued between Arab militias from the northern part of the country and those from the southern part of the country - SPLA. This occurred mostly in the southern towns of Malakal and Abyei, which have important resources such as oil. The northern and southern parts of the country continued with fighting and cease fires until 2011 when a referendum about the future of the southern part of the country was held (BBC, 2016).

Independence Yet Conflict Continues

In 2010 then President Omar Bashir said he would accept any result of the referendum even if the south voted for full independence (BBC, 2016). On July 9, 2011, 99% of Sudanese in the southern part of Sudan voted for full independence. The new border between the north and the south put the oil rich town of Abyei right in the middle, which has continued to cause tensions and fighting as both countries want the economic benefits of the oil. Further, tensions and violence have continued all along the border areas and in Unity, Upper Nile and Jonglei states. In January 2012, South Sudan declared a humanitarian emergency for Jonglei State after approximately 100,000 fled due to clashes between rival ethnic groups -

mostly the Dinka and Nuer tribes. Some of these people crossed into other countries while some remained internally displaced in South Sudan, settling in states such as neighboring Lakes. In February 2012, Sudan and South Sudan signed a non-aggression pact while also dealing with remaining secession issues. The oil rich town of Abyei is part of the disputes between Sudan and South Sudan; oil is drilled out of South Sudan while pipes to export it go through Sudan. Sudan shut down the oil pipes saying South Sudan had not paid their fees for transporting the oil through Sudan. In August of that year, another 200,000 people from the disputed areas in Sudan near the borders with South Sudan fled into South Sudan to escape fighting. Discussions aiming to resolve these disputes ended in March 2013 so oil could continue to be pumped and both countries could continue to profit. All troops from Sudan and South Sudan were withdrawn and the area was made into a demilitarised zone (Ibid).

2013 South Sudan Internal Crisis

While South Sudan gained its independence in 2011 and disputes between Sudan and South Sudan continued for two years, South Sudan faced another crisis, but this time within its borders (Ibid). Due to a power struggle within the government, President Salva Kiir Mayardit (who is from the Dinka tribe and leader of the SPLM) dismissed the cabinet and Vice President Reik Machar (who is from the Nuer tribe). Civil war erupted in mid-December 2013 when President Kiir accused ex-Vice President Machar of plotting to overthrow him. Machar and the rebels seized control of several regional towns in South Sudan. Fighting between government troops and rebel factions erupted, killing and injuring thousands of people, and pushing more than 2.5 million people to leave their homes. It is estimated that more than 5 million South Sudanese are in need of humanitarian aid. While in August 2015, President Salva Kiir signed an internationally mediated peace deal where Riek Machar was re-instated as Vice President, thousands of people have already been displaced, and violence has not abated (Ibid).

Before independence, there were few representatives from the south in the Khartoum government. Informal conversations I had while in South Sudan for this research with South Sudanese and westerners that work for Plan International mentioned that because South Sudanese did not have many opportunities to be a part of the Khartoum government, few people in an independent South Sudan know how to run a country. This, from their perspective, has contributed to the challenges that South Sudan has faced in building a strong and independent government and has contributed to internal conflict in 2013.

Figure 4.4: Location of Nuer and Dinka ethnic groups



Source: BBC News, <http://www.bbc.com/news/world-africa-25459615> Accessed 30 September 2015

According to UN High Commission for Refugees (UNHCR)'s latest statistics, by February 2016, they registered 792,082 South Sudanese refugees in Uganda, Ethiopia, Kenya, and Sudan (UNHCR, 2016). In South Sudan itself, it estimated that there are approximately 1.7 million Internally Displaced persons (IDPs) and 263,000 refugees, mostly from South Kordofan and Blue Nile regions of Sudan (Ibid). UNHCR's statistics indicate that between 212,000 - 275,000 South Sudanese refugees are in the camps in Uganda (Ibid; UNHCR, 2015). The UNHCR map below illustrates the various locations of official UNHCR refugee camps, official IDP camps in South Sudan and refugees not in camps, but in other areas.

The majority of South Sudanese refugees in Uganda, Ethiopia and Kenya come from Jonglei, Unity and Upper Nile states. However, the majority of the South Sudanese refugees in Uganda are from the Dinka tribe and come from the areas where there is a rebel stronghold - Jonglei state. The rebel group comes from the Nuer tribe. Seventy one percent of refugees are from Jonglei state and in particular from the town of Bor, which is the capital of Jonglei state, and Pibor another large town in the state. A smaller percentage of South Sudanese refugees in Uganda come from Upper Nile and Unity states in the northern part of the country and from Central Equatoria where the capital Juba is located. According to

UNHCR's registration records from February 2016, 85% of the refugees are women and children under 18 years (UNHCR, 2016). Influx of refugees continues with an average of 315 newcomers per day into the Adjumani camps (Ibid). In Uganda, South Sudanese refugees have gone to four main areas - in and around the town of Adjumani (near the border), Arua, Kiryandongo and Kampala. The vast majority of refugees and 5 UNHCR camps are around Adjumani (Ibid).

III. Context of Uganda

Uganda itself has its own history of conflict and displacement, which has also influenced the conflict in South Sudan. During the mid-1980s, many Acholi people in northern Uganda felt marginalised, abused and excluded from Uganda's development (Berber, B. and Blattman, C., 2013). For two decades following independence, the Acholi people had political dominance, but this changed when Yoweri Museveni came into power (Ibid). A 'Holy Spirit Movement', rebellion led by Alice Lakwena started during this time to fight the oppression of the northern part of Uganda (which has majority from the Acholi tribe) (Invisible Children website, accessed 2015). When Alice Lakwena was exiled from Uganda, Joseph Kony took over and changed the name of the group to the Lord's Resistance Army or LRA (Ibid).

The LRA fought a low scale war against President Museveni and his government however civilian support for the LRA was meager (Berber, B. and Blattman, C., 2013). Kony had only a few hundred fighters in his ranks so these people raided people's homes, taking food, medicine and forcibly recruiting youth along the way at night (Ibid). From 1988 to 1994, the LRA kidnapped and forcibly recruited several thousand children and youth to be child soldiers in their ranks. They forced these young people to kill and mutilate their own family members and neighbors (Ibid). This rebellion might have died out on its own if it had not been for the Sudanese government, who in 1994 began arming the LRA. Further they gave them territory in Sudan where they could build bases. The Sudanese government did this in retaliation for President Museveni's support of the southern Sudanese rebels – Sudan People's Liberation Army (SPLA). The Khartoum government's support for the LRA reinvigorated the group and as a result attacks and abductions of children escalated. Over this period of war between the LRA and the Ugandan government, it is estimated that 60,000-80,000 children, mostly adolescent boys, were abducted and forced to be soldiers in the LRA. Adolescent girls were taken as well to become fighters, servants and "wives". Estimates indicate that when fighting ceased about 82% of these abductees escaped and survived. The LRA's fighting peaked in 2002 when the Ugandan army drove them from their

base in Sudan into Uganda. Intense fighting continued through 2004 when they were defeated. Since 2004, the LRA, while still in existence, is small and mobile. The LRA are thought to be moving through the western parts of South Sudan, eastern parts of Central African Republic and principally in eastern Democratic Republic of Congo (Berber, B. and Blattman, C, 2013; Raghavan, S. and Whitlock, C., 2013). Abductions in Uganda stopped in 2005 where there was peace (Berber, B. and Blattman, C, 2013).

Adjumani, Uganda: research location

While the LRA's terror was mostly confined to northern Uganda, Adjumani, where South Sudanese refugees are currently staying, was not untouched. It still remains a conflict affected and poor part of Uganda. This is the context that the more recent refugees from South Sudan have gone into and the context in which this research was conducted.

Adjumani is located in Uganda's Western Nile region, west of Gulu, Lira and Kitgum, where much of the LRA fighting occurred. It also borders what is now South Sudan; the porous border has meant that people go back and forth between the two countries. The majority ethnic group in Adjumani is the Madi tribe, which also live in the southern part of South Sudan (Okello, M.C. and Ng, J., 2006).

Adjumani district is home to one of the largest refugee populations in Uganda, being affected by the LRA fighting and war between the Sudan People's Liberation Army (SPLA) and the Khartoum government in Sudan (UNCHR, 2002; Okello, M.C. and Ng, J., 2006). While some camps were set up for Sudanese displaced during the SPLA's war with the Khartoum government, IDPs affected by fighting between the LRA and the Ugandan army received little humanitarian support. Most displaced families were not registered and placed in camps. There are many reasons for Adjumani being overlooked by humanitarian actors, especially those displaced during the LRA fighting. Firstly, while Adjumani is a part of the greater northern Uganda region, it is administratively part of the West Nile region. The LRA war was thought to be an "Acholi" problem and because Adjumani's ethnic majority is "Madi", there was not much focus given. Because the government did not move the displaced Ugandans into camp, they were not visible by humanitarian actors. Lastly, the scale of the internal displacement was not comparable to other parts of Uganda including Gulu, Lira and Kitgum (East of Adjumani) (Ibid).

Further, Adjumani borders South Sudan and has many people from the Madi tribe, who also live in southern South Sudan near the border. As the border between Sudan and Uganda was and continues to be porous, Sudan People's Liberation Army (SPLA) regularly went into Adjumani and operated from there (Ibid).

Plan International Uganda supporting South Sudanese refugees

Plan Uganda is supporting South Sudanese refugees in 6 camps in Adjumani - Ayillo 1, Ayillo 2, Nyumanzi and Maaji. This research was thus conducted within this backdrop of years of violence where a whole generation of people had few opportunities for education and even fewer chances of succeeding economically. Some of their children have only seen war, displacement and refugee camps. According to Key Informant Interviews I conducted as part of this research among refugee leaders and ECCD caregivers, many of those interviewed said that they were happy to at least have basic services in Uganda, even if they are not sufficient. Their children have a chance to obtain education, which many did not have in South Sudan, especially not for 3-5 year olds.

Status of Early Childhood Care and Development (ECCD) in South Sudan

Early Childhood Care and Development (ECCD), or Early Childhood Development and Education (ECDE) as it is referred to by the South Sudanese government, is a new concept and still requires a lot sensitisation among the general population about its importance (UNESCO, 2015). In the past, availability of early learning classes and opportunities have been limited and dominated by the private sector. This was because the Sudanese government and then the South Sudanese government did not have the resources or capacities to tackle this issue when they could not meet the needs of primary education. During these years, those children that accessed pre-primary or ECDE activities were in urban areas and ones whose families could afford to pay the required fees (Ibid).

In 2012, in order to combat this and support greater access to early learning throughout South Sudan, the government passed the Education Act 2012, which in chapter 2, sub-section 9a includes a mention of two years of early learning as an introduction to the schooling experience for children between 3-5 years. Additionally, the General Education Strategic Plan (GESP) 2012-2017 also prioritises the access and quality of ECDE. The national government has now also established a national curriculum for ECDE. These classrooms, as is stipulated in the Education Act 2012 and GESP, have to be part of existing primary schools as nursery or kindergarten classrooms.

The most recent 2013 statistics indicate that there are currently 652 schools with ECDE classrooms and 1774 ECDE classrooms nationally. These spaces, which are now mostly government or community owned and operated, provide 77,312 children 3-5 years access to early learning activities. Community owned and operated classrooms are often supported by faith based groups or the private sector. ECDE currently in comparison with primary, secondary and other types of education, has among the highest gender parities. Among the total enrolled children, 52.2% are boys and 47.6% are girls. There are 2,286 ECDE teachers nationally.

While there are policies, legislation and a national curriculum in place, and while there has been an expansion of early learning services in South Sudan, the government continues to struggle in providing early learning opportunities, especially outside urban areas and for the most marginalised children. ECDE has not been allocated enough funding from the government in its annual national education budget. In places where fighting has been on and off (including Jonglei state), the access to education overall is small and access to ECDE is even smaller. The Education Cluster in South Sudan found that over 70% of the 1200 schools in Jonglei, Unity and Upper Nile states, where the conflict has been most severe, have been closed since the onset of the crisis (Education Cluster, 2015). Further, the Education Cluster found that at least 91 schools in the three states have been occupied by armed groups or used as shelters (Ibid). Many parts of Jonglei state have virtually no ECDE services (Plan International Education Assessment, 2015). Though there are policies and legislation for ECDE, there is no policy framework to guide the establishment and management of ECDE centres. Further, there are no policy guidelines to assist in raising more funds.

In addition to issues of access, especially for the rural parts of South Sudan and especially the conflict affected states of Jonglei, Unity and Upper Nile, quality is also low. Textbooks and other teaching and learning materials are in short supply. Often 25 children share 1 textbook. As ECDE is still a new concept in South Sudan, there is little support from local governments and the systems they manage (Education Management Information System – EMIS) and communities. Out of the existing 2,286 ECDE teachers only about 37% of them have received training on the national curriculum and how to work with young children to promote their learning. Some of the existing teachers only speak Arabic and now the curriculum is changing over to promoting English in schools. The government has plans to

establish short and long courses for strengthening the capacity of ECDE teachers through teacher training institutes in the country. However, implementing this has been challenging due to insufficient funds and continued insecurity in the country.

CHAPTER 5: THEORETICAL FRAMEWORK - VYGOTSKY AND HUMAN CAPABILITY

This research looks at the intersection of two theoretical areas: child development and human development, within a humanitarian context. These two theoretical areas of work have traditionally been separate and not considered as overlapping. The human development camp has focused on broader issues of human development in developing countries while those working on child development/learning have focused on children. Further, the exploration of these theories in a humanitarian context, which focuses on the broader socio-political aspects of a country, is also new. While practically in the implementation of early learning and development programmes in humanitarian contexts may sometimes have these theoretical underpinnings, there is not a clear recognition and understanding of them and how they together can strengthen programmes on the ground. By clearly bringing these two theoretical frameworks together in a humanitarian context, academics, and practitioners alike, can better understand how to further conduct research in this area and how to improve the quality of programmes on the ground. Through the exploration and analysis of the various theories within the child and human development paradigms, I frame the research around two key theories: Vygotsky's Socio-cultural theory and the Human Capability Approach. I will argue that both of these theories together best help to explain the situation of South Sudanese refugees in Uganda and early learning and development programming in emergencies.

I. CHILD DEVELOPMENT

Child development is the first theoretical area of exploration in this research. I frame the research around Lev Vygotsky's Socio-cultural theory. However, this section starts with an investigation of the foundations, debates and critiques which have allowed the Socio-cultural theory to gain more recognition and prominence today. It provides a clear link to why the Socio-cultural theory is best positioned to frame this research.

Child development is defined as a continuous process of change where a child slowly masters more complex levels of moving, thinking, feeling and interacting with and in the world (Gray, C. and Mac Blain, S., 2015). Learning can be defined as an acquisition of knowledge or skill (Ibid). The first conceptualisation and theorisation of child development and learning is unclear, but the roots have links to the 17th and 18th century thinking and writings of philosophers John Locke (1632-1704) and Jean-Jacques Rousseau (1712-1778) (Das Gupta, P., 1994; Thomas, M., 2005; Gray, C. and Mac Blain, S., 2015). While Locke

and Rousseau were influenced by others before them such as Aristotle and Socrates, their writings are some of the earliest that bring up the issue of children's development and learning from very different points of view. Locke proposed that children at birth were blank slates or "tabula rasa" and what they became and how they developed and learned was based on their experiences and the external environment (Ibid). Locke believed that while each child was different with varying temperaments and personalities, they were not born with knowledge (Das Gupta, P., 1994). Interaction with parents and the world through a "serve and return" interaction, which is now widely acknowledged as critical to young children's development and learning, was important for children's learning (National Scientific Council on the Developing Child, 2004; Center on the Developing Child at Harvard University, 2009). He saw parents as key to moulding children and helping them gain knowledge (Das Gupta, P., 1994). Nurture or external forces were more crucial to children's development, according to Locke, and the driving force in development (Ibid). While Locke believed that children had varying capabilities and these could be influenced by the external environment, and particularly parents, he did not deny that there are limits to what the influence could be (Cole, M. and Cole, S., 1997). So, while Locke believed that two children at age 6 months could develop differently and that their external environment can help them accelerate or slow down their development, he did not deny that a small child of this age could do the same as a child of 5 years (Ibid).

Locke's contribution to the thinking around the importance of a child's external environment influenced Ivan Pavlov (1849-1936) and John Watson (1878-1958) which resulted in a new school of thinking called behaviourism where life experiences and the external environment were critical to influence children who were blank slates (Gray, C. and Mac Blain, S., 2015). This translated into teaching in the classroom that was based on rote learning, drill and memorisation, a practice that continues today in many classrooms around the world (Ibid).

Like Locke, Jean-Jacques Rousseau also argued that the differences among people generally were primary due to their varying life experiences, but he disagreed with Locke in his view of children and the role of adults in influencing children's development (Cole, M. and Cole, S., 1997). Rousseau emphasised the role of nature or internal influences and genetics as key drivers of children's development (Das Gupta, P., 1994; Thomas, M., 2005). Rousseau's thinking and writing has also been foundational for modern developmental theories that focus on maturation, evolutionary stages of development (Das Gupta, P., 1994). In the maturation/evolutionary perspective, a child develops according to an innate biological

timetable. They can develop independently from environmental influences and not simply moulded by adults or others in their environment. Stages of development identifies specific periods when these innate, biological things occur over time that drive a child's development (Ibid). Marilyn Flear (2006) points out that before the 1800s, age was not a criterion for organising people, often because people were not aware of their age (Flear, M., 2006). However, many modern child development theorists, based on Rousseau's emphasis on biological maturation, use chronological age as boundaries for children's capacities and place greater emphasis on heredity and biology (O'Neill, S., Flear, M. et al., 2013). Age is used as the criterion for measuring or benchmarking what might be the expected level of biological development of the child; what a child is physically and mentally capable of doing. Children's capabilities fall within confines of heredity and biology.

The debate whether nature or nurture have a greater impact on a child's development and learning has influenced many to investigate and expand upon these ideas and develop modern child development and learning theories. Even strong supporters of the nature or nurture perspective agree that both have influences on children's development, but where child development theories differ is to what extent nature or nurture affect children's development (Das Gupta, P., 1994). Two ways this has been considered in the nineteenth century and first half of the twentieth century include hereditary establishing the boundaries of potential development and environment determining where, within those boundaries, a child's actual development occurs. Another perspective says that while both heredity and environment influence children's development, the extent to which this does will differ by characteristic. For traits such as eye color, the influence of environment factors, such as nutrition, may not be as strong as for cognitive ability (Das Gupta, P., 1994).

Four Broad Frameworks

Four broad frameworks indicate the contributing factors of nature and nurture and have been the basis of child development theories (Cole, M. and Cole, S., 1997). These are not always named in the same manner in the literature, but the ideas presented in them are generally the same. There is the Biological-maturation or evolutionary framework (based on Jean-Jacques Rousseau's work) which places significantly greater emphasis on the contribution of biology and heredity. As children mature internally and grow older by age, development will slowly unfold and allow children to have the capacity to do more. The environment plays a secondary role in shaping a child's development (Cole, M. and Cole, S., 1997).

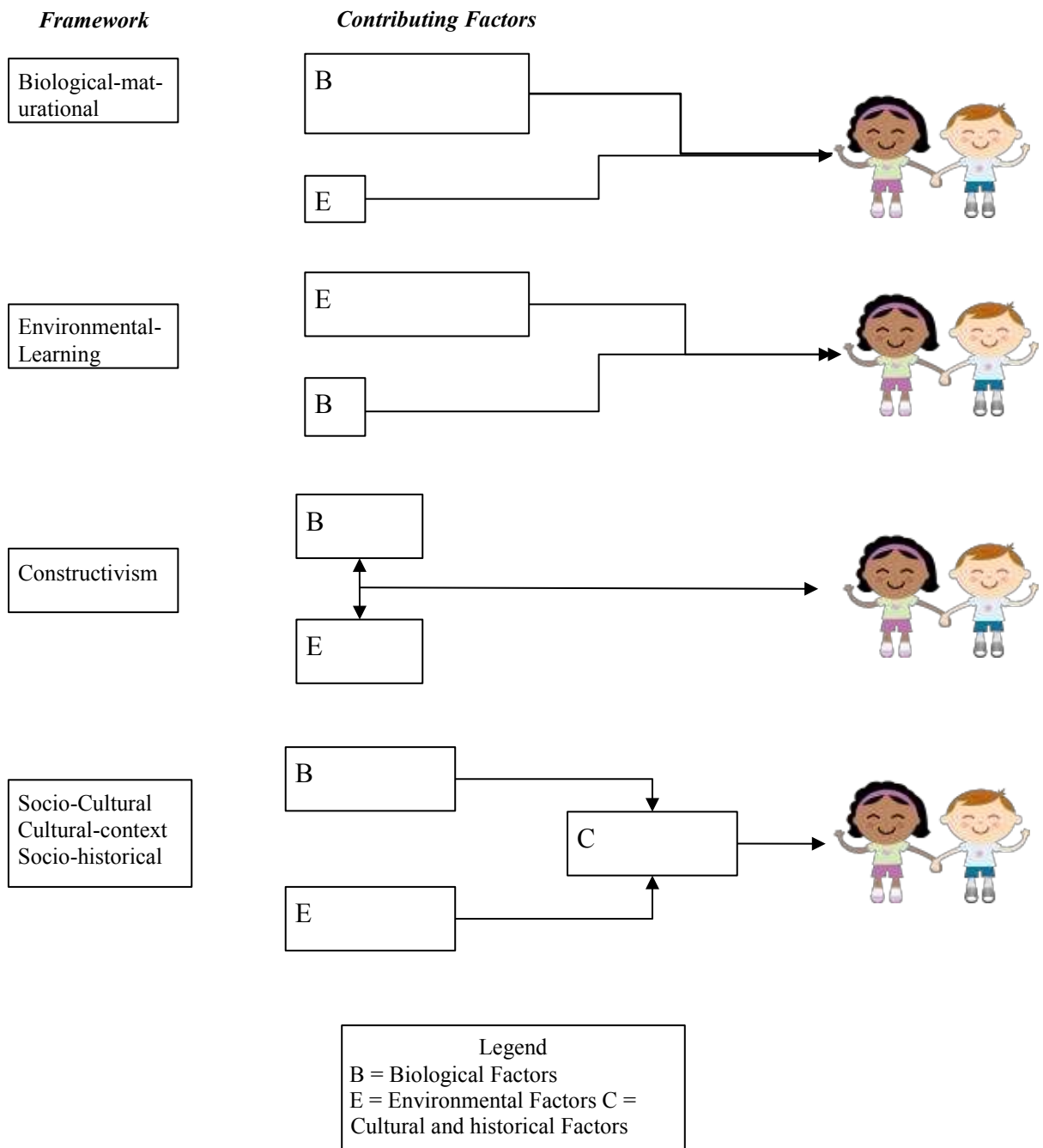
The second major framework is Environmental-Learning (based on John Locke's work) which attributes greater contribution of the child's environment over his/her biology, heredity, and internal maturation (Cole, M. and Cole, S., 1997). These two frameworks were the earliest perspectives which then moved the thinking towards Constructivist and Socio-cultural perspectives. The Constructivist framework takes a middle ground, understanding the great importance of both biology, heredity and internal maturation and the child's external environment. While nature and nurture are not necessarily equal in the child development theories that follow the Constructivist framework, there is greater balance between the two. A constructivist view provides children with a greater role in shaping their own development than do the Biological-maturational and Environmental-learning frameworks (Cole, M. and Cole, S., 1997). The fourth main framework for child development theories is the Socio-Cultural framework (also known as Cultural-Context and Socio-historical). This framework includes biological and environmental factors, but also adds a third variable – the culture in which the child is born and how it has been passed down through previous generations (Cole, M. and Cole, S., 1997; Smidt, S., 2009). This framework evolved from Constructivism and has many similarities. Similar to the Constructivists, those that follow the Cultural-Context or Socio-historical framework believe that children influence their own development by actively engaging with the world. However, they differ from other perspectives in that they believe that the culture and history of the place a child lives, affects the biological and environmental factors that influence children's development. Activities, patterns and cultural beliefs passed down from earlier generations affect how children interact with their current environment and how their biological and heredity potential comes out or does not come out when a child is developing (Ibid). For example, research in New Guinea found that children have the same universal ability to grasp basic number concepts as children in France or the United States (Saxe, G.B., 1981; Saxe, G. 1994). However, due to the requirements of their culture, they learn these concepts in a very different way and use numerical concepts for different things. In New Guinea, the research found that children learned numerical concepts by counting body parts (Ibid). Research in Brazil indicated that street children that did not attend school also developed mathematical skills based on their every-day life of buying and selling, but these children had difficulties when the concepts and problems are presented in a school like format (Nunes, T. et al, 1993). In these examples, culture has influenced the conditions under which biological and environmental factors interact.

Humanitarian situations such as the South Sudan conflict and displacement in Ugandan refugee camps presents a similar situation where children's culture and their situation means

that there are different cultural expectations and opportunities. These cultural and contextual differences affect a child's development. Understanding this as it is articulated in Vygotsky's socio-cultural theory is critical to designing, monitoring, and evaluating early learning and development programs in emergencies.

See Figure 5.1 for a summary of the four broad child development frameworks.

Figure 5.1: Four Broad Child Development Frameworks



Source: Adapted from Cole, M. and Cole, S., 1997; Gray, C. and Mac Blain, S., 2015

For many years, the Biological-Maturation and Environmental perspectives dominated child development until Jean Piaget challenged these ideas.

Jean Piaget's Constructivist Approach to Child Development

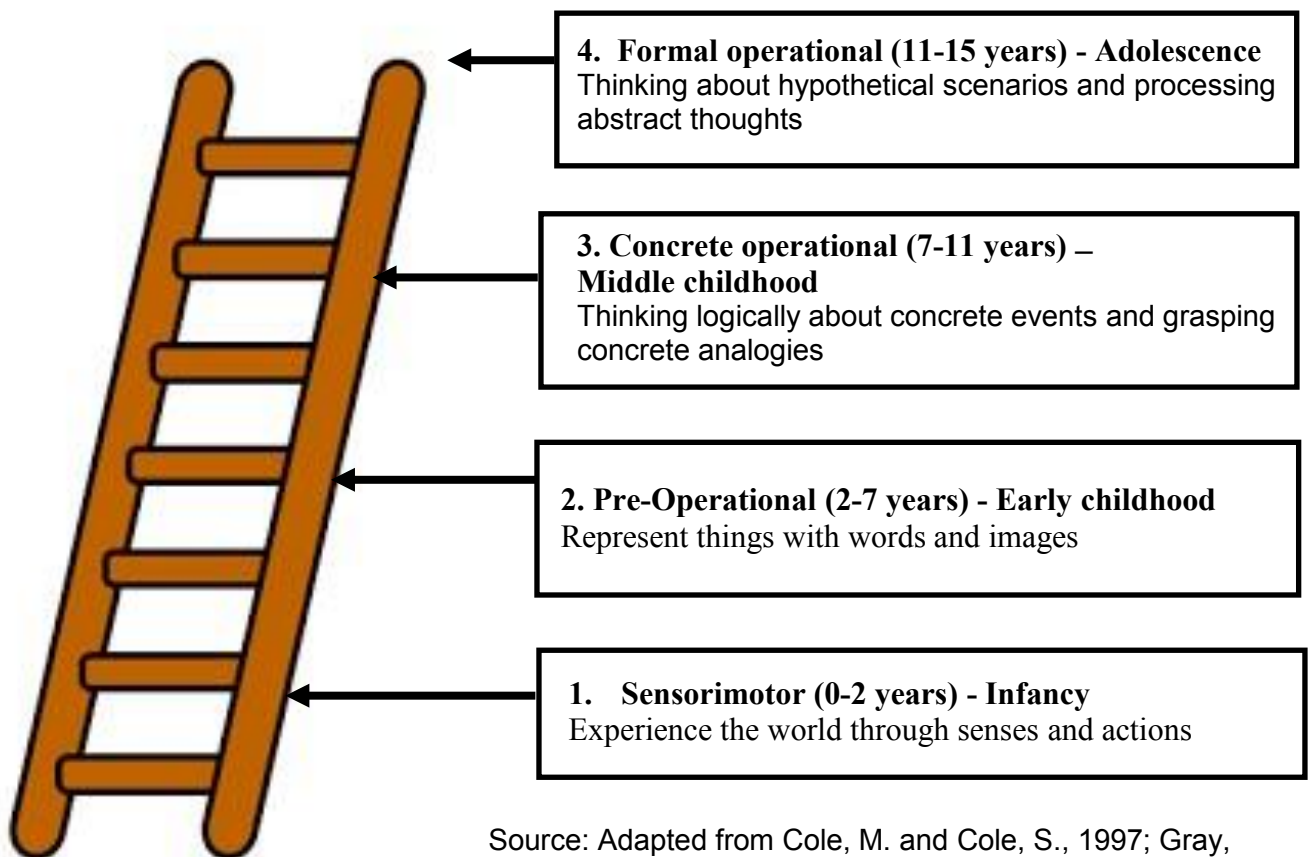
Jean Piaget (1896-1980), a Swiss scientist, was the first to be critical of earlier approaches to child development saying especially that repetition and memorisation did not mean a child actually understood what he/she was learning (Gray, C. and Mac Blain, S., 2015). He believed that children were not passive recipients of learning based on their external environments, but the interaction between the child as active in his/her learning and the inputs to the child from the external environment is what helped children learn (Ibid). Piaget offered one of the first theories about the emergence and development of children's thinking - cognitive development. He was the first to introduce the idea of discovery learning through practical activities (Gray, C. and Mac Blain, S., 2015). His theory termed *constructivism* which stated that humans generate or "construct" knowledge and meaning from an interaction between their experiences and their ideas, was the first major challenge to behaviourist theories because it placed importance on the child as integral to his/her learning. Further, he believed that the construction of knowledge was through a step-by-step process of actions rather than an inventory of information (Thomas, M., 2005). Piaget maintains that the environment does not influence children in the same way at all ages. The influences of the environment, rather, depends on the child's current stage of development (Cole, M. and Cole, S., 1997). Through this research, Piaget engaged in child centered experiments and used observation and testing of real children which was also not done so much during his time. Rather than working in a laboratory as many other scientists did during this time, he observed children in their natural environment and listened to what they said (Gray, C. and Mac Blain, S., 2015). He believed that he could better understand children and how they are developing by listening to them (Ibid). This concept of children's voices and active participation and involvement in their own learning and development has endured and is integrated in many child development and early learning programmes. His work led him to conclude that children's thinking is different from adults' and that younger children think differently from older children (Gray, C. and Mac Blain, S., 2015). From birth, children's thinking evolves and changes with age and experience as the brain grows and creates more connections. Their thinking begins before they have the language to express their thoughts.

Language, Piaget believed, was a tool used to develop and enhance thinking (Ibid).

These claims were considered revolutionary in Piaget's time. Many of Piaget's contemporaries did not accept his ideas about children's evolving thinking and cognitive

development. Despite this, Piaget continued his work to further refine and develop his theory over fifty years. Through his work, he offered a model of how children's thinking develops. Piaget thought that the process of cognitive development followed specific phases from birth until adolescence (Gray, C. and Mac Blain, S., 2015; Huitt, W. and Hummel, J., 2009; Cole, M. and Cole, S., 1997). He was a staged theorist who believed that one had to go through certain phases: infancy, early childhood, middle childhood and adolescence and that each phase builds on the other (Cole, M. and Cole, S., 1997). As a child develops, he/she cannot go back to an earlier stage (Gray, C. and Mac Blain, S., 2015; Huitt, W. and Hummel, J., 2009). The image below illustrates Piaget's four key stages of cognitive development: sensorimotor, pre-operational, concrete operational and formal operational.

Figure 5.3: Piaget's Stages of Cognitive Development



Source: Adapted from Cole, M. and Cole, S., 1997; Gray, C. and Mac Blain, S., 2015; Huitt, W. and Hummel, J., 2009

Criticisms of Piaget

Piaget advanced the growth of a new area of study called “child development” (Gray, C. and Mac Blain, S., 2015). He was the first theorist to explain, through research, the internal processes of children’s thinking at different ages. Additionally, he offered researchers new tools to examine different aspects of a child’s development. Further, he also was one of the first scientists to place the child at the centre of his studies where their voices were critical to his research, understanding, and ultimately the development of this theory.

While Piaget’s contribution advanced the study of child development, there were many critiques of his work. Piaget did extensive research to formulate this theory, but they were based primarily on case studies and were therefore descriptive (Huitt, W. and Hummel, J., 2009). While he did correlations and used experimental methods, they did not always support the claims that underpin his theory (Ibid). Further, some people said that there was a lack of clarity in some of his concepts. Research scientist Sutherland and others claimed that Piaget’s role of equilibrium in children’s learning lacked clarity and was impossible to either prove or disprove (Gray, C. and Mac Blain, S., 2015). Other critiques of Piaget’s work include the fact that it focused more on what children could not do rather than what they could do (Gray, C. and Mac Blain, S., 2015). Meadows (1993) argued that the language Piaget used in his tests on children were too complicated for young children and tested what they could not do rather than what they could do. She claimed that the wording was deliberate and chosen to make it difficult for children, thereby underestimating children’s ability to complete the task (Meadows, M., 1993). Other researchers argue that the small sample sizes of most of Piaget’s research studies and the fact that most of the samples included white, middle class children with university-educated parents was a limitation (Gray, C. and Mac Blain, S., 2015). This is especially an argument that comes from those that believe in a stronger role of culture in shaping a child’s cognitive development (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997).

Another major critique of Piaget’s work was his claim that cognitive development happens in discrete stages (Gray, C. and Mac Blain, S., 2015). A child had to go through the various stages so it did not explain why some children are delayed in reaching these stages or advanced and surpassed these stages faster, especially in non-western contexts (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997). Piaget also believed that once a child progressed to a higher part of the ladder or the next stage, he/she could not go back down

to a lower stage. Evidence of children in adverse situations such as emergencies has disproved this. Children in these situations can temporarily regress developmentally and this is normal (IASC, 2007; Pine, D. et al, 2005; Duncan, J. and Arnston, L., 2004; Donahue-Coletta, N., 1992). Piaget believed that because children had to go through various stages based partially on their biological maturation, learning could never be accelerated which does not account for why some children do learn things faster than others, especially when they have exposure and stimulation (Gray, C. and Mac Blain, S., 2015). Meadows (1993) disagreed with this claim and through her research found that it was possible to teach pre-school children who were three and four-year-old to perform concrete operational tasks, which according to Piaget occurs between 7-11 years old (Meadows, M., 1993). Shayer and Adey (2002) found further evidence that it was possible to accelerate a child's cognitive development and learning through their research with 5 year olds (Shayer, M. and Adey, P., 2002).

Over the years, Piaget shifted his thinking around the universality of the stages and in particular formal operational thinking (Piaget, J., 1972; Cole, M. and Cole, S., 1997). He did say that in "extremely disadvantaged conditions, [formal operational thought] will never really take shape" (Piaget, J., 1972, p.7). Goodenough (1953) conducted research to provide evidence that formal operational thought *can* occur even in non-literate communities (Goodenough, W.H., 1953). His research focused on Polynesia and Micronesia. Formal tests that Piaget would have used would have concluded that these people had not developed formal operational thought, but Goodenough found that they could solve complex problems in a non-scientific manner when they developed a compass for navigation based on the stars (Ibid). Further, Piaget considered that children progress through the stages at different speeds, depending on the quality and frequency of intellectual stimulation available in their environment (Piaget, J., 1972; Cole, M. and Cole, S., 1997). The conclusion he came to toward the end of his life was that most people do get to the last stage of formal concrete operations, but they reach this stage in different areas depending on their aptitudes and professional specialisations such as advanced studies or apprenticeship for various trades (Cole, M. and Cole, S., 1997; Piaget, J., 1972).

Further, Piaget believed that all children, irrespective of the culture, race etc... would follow the same stages as illustrated above (Gray, C. and Mac Blain, S., 2015). This aspect of his theory that did not consider potential variations in culture, context, and history and how that could affect a child's development. Other than providing the child with a stimulating environment, Piaget's theory places little emphasis on the role of the teacher (Ibid). This

was another major criticism of Piaget's work and brings us to the fourth major child development framework which was pioneered by the work of Lev Vygotsky.

Lev Vygotsky's Socio-Cultural Theory for Children's Development

Lev Vygotsky (1896-1934) was a Russian psychologist and a contemporary of Jean Piaget. He too critiqued the Biological-Maturation and Environmental perspectives of child development. He knew of Piaget's work and agreed with aspects of it. However, a critical difference between Vygotsky and Piaget is the importance Vygotsky placed on the influence of culture on a child's development. Vygotsky was one of the first researchers to delve more deeply into the influence of a child's external environment, including his/her culture, the role of the teacher, and how that affects a child's thinking and overall development (Gray, C. and Mac Blain, S., 2015). Vygotsky and Piaget both put children at the centre and as active constructors of their own knowledge and development so both fall under the umbrella of constructivism (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997; Smidt, S., 2009). However, Vygotsky was a social constructivist who believed that it was important to consider the quality and nature of a child's environment, his/her age, culture, and life experiences before drawing any conclusions about a his/her development (Gray, C. and Mac Blain, S., 2015). Culture and the beliefs and values that come from it, shaped a child's development in addition to his/her biology and the general external environment (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997; Smidt, S., 2009). Each culture, he believed, had its own values and beliefs, which affect a child's development from the beginning as the baby interacts and grows within an environment (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). For example, a child that is talked to a lot as an infant will learn to talk faster and have a higher vocabulary whereas a child who is not talked to, as is the case in some cultures, may not learn to talk as quickly or have as high of a vocabulary. Piaget was a constructivist who believed that the development of cognition was the results of mental construction (Ibid). He saw development of thought and cognition occurring in the child and as he/she interacted with the environment (Ibid). Piaget did not consider the potential impact that culture could have on a child's development (Ibid). Piaget had a single logic underlying adult thought, whereas Vygotsky and others in the socio-cultural camp believe there are variations in the contexts of adult activity and so there is not homogeneity in adult thought processes (Cole, M. and Cole, S., 1997).

Vygotsky believed that development was essentially a social process hugely influenced by the culture in which a child lived (Gray, C. and Mac Blain, S., 2015). While he and Piaget

agreed that children were born with the basic building blocks of cognition, visual recognition, memory, attention and speed of processing, Vygotsky believed a child's development is a result of interactions between children and their social environment (Gray, C. and Mac Blain, S., 2015). The quality of the environment and the values in the culture shaped what a child learned, how he/she developed and therefore his/her capabilities (Ibid). Further, Vygotsky believed that children's cultural development appears at the social level (between people) and at the individual level (within the child) (Vygotsky, 1978). Piaget also believed in the influence of the external environment, but believed that children go through certain steps in their development. He believed children needed to mature over time in order to reach certain capabilities (Cole, M. and Cole, S., 1997; Smidt, S., 2009). Further, Piaget believed development to be unidirectional whereas Vygotsky saw it as being bi-directional. Piaget's stages of development follow a chronological order and it is essentially the same in every child no matter where he/she is from and what culture or situation he/she lives in (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997). Vygotsky rejected what he believed to be Piaget's biological and individualistic reductionism (Ageyev, V.S., 2003). He did believe that children go through stages, but he was not as rigid as Piaget was in his stages (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997; Smidt, S., 2009). While children normally move forward in their development, they could move backwards when they face something new or difficult (Gray, C. and Mac Blain, S., 2015). Once a child gains experience he/she can then progress forward again (Ibid). In humanitarian situations, there are often cases of children regressing in their development due to high levels of stress and difficulties they face (IASC, 2007; Pine, D. et al, 2005; Duncan, J. and Arnston, L., 2004; Donahue-Coletta, N., 1992). This regression is considered a normal reaction to severe stress that can be experienced in an emergency situation (Ibid).

Vygotsky's Socio-cultural theory has three core assumptions (Cole, M. and Cole, S., 1997). The first assumption is that activity generates thinking (Ibid). Children's activities help construct the contents of their minds. Action and interaction within a culture creates thought. Mental development is a process of children's internalizing the results of their transactions with their environment. Katherine Nelson (1981) suggests that as a result of children's participation in various activities that are valued by the culture, children acquire generalised event representations or "scripts" (Nelson, K., 1981). Scripts are guides to different activities in a child's world. They help children understand who participates in this type of activity, their role, the objects used for this activity, and the sequence of actions that make up the event (Ibid). For example, a baby learns about bath time by taking a bath, experiencing what

happens, who is involved, what you do during a bath etc... This process allows a child to make mental representations and figure out what is likely to happen next time they are in familiar circumstances (Ibid). Vygotsky believed that humans rarely experience their environment without the lens of their culture (Cole, M. and Cole, S., 1997). The second assumption is that development advances by dialectical exchanges (Cole, M. and Cole, S., 1997). The influence of Marx and Hegel in this aspect of his thinking is evident. Hegel's dialectical formula for logical thought includes an assertion (thesis) and opposite (antithesis) which when they interact result in a revised conclusion (synthesis). Marx applied this to the development of societies while Vygotsky applied this to the development of children (Ibid). The third assumption in Vygotsky's Socio-cultural theory is that development is a historical process within cultural contexts (Cole, M. and Cole, S., 1997). He believed that understanding how and why children develop requires the society's cultural background within history so this means that it can be different even from society to society and generation to generation (Ibid). A culture during a particular time in history provides unique opportunities and demands. A child's own past dialectical confrontations determine how prepared he/she is to resolve upcoming problem situations (Ibid).

Vygotsky believed that the unevenness of development that comes from this exchange within a culture and within a period of time that have unique values and expectations are influenced by culture in five ways (Cole, M. and Cole, S., 1997). Firstly, one's culture arranges the occurrence and non-occurrence of certain activities (Ibid). This means that a child cannot learn about and develop capabilities in something you have not observed, heard about or been able to interact with in your life. For example, children in South Sudan usually do not wear clothes with buttons or zippers. While the ability to use buttons and zippers is a part of western child development tests that look at fine motor skill development, this is not something that South Sudanese children should be expected to do since they rarely if ever interact with buttons or zippers. Additionally, South Sudanese children from villages most likely will not have stairs in their homes so requiring them to be able to walk up stairs in a child development test is not culturally relevant. Further, a one year old child in Nepal may be potty trained early as there is a dearth of disposable diapers in that country, whereas in the US, a child may not learn this fully until he/she is 3-4 years old. Secondly, one's culture determines the frequency of basic activities (Cole, M. and Cole, S., 1997). For example, Balinese children may be skilled dancers by age 4 whereas Norwegian children may be skilled skaters or skiers. If a particular activity and skill are valued in the culture and the child has many opportunities to practice it, he/she will develop that capability earlier and/or better

than children in other cultures where it is not valued in the same way (Ibid). There is also evidence that children who have more exposure to and practice in reading books or having books read to them will be more capable and proficient readers (Fountas, I. and Pinnell, G., 1996; Graves, M. and Juel, C., Graves, B., 2006). Culture can also impact a child's development through the connections and associations they make between activities (Cole, M. and Cole, S., 1997). For example, a child moulding clay in a nursery in the UK could be developing the muscles in his/her fingers and hands, using his/her imagination to create something, and associating the activity with fun and play. A child moulding clay in another society may associate that activity with making pottery, digging in a quarry, firing the clay and selling it in a market. The child may not necessarily see this as fun and play as the child from the US does (Ibid). Culture can also decide on the difficulty of children's roles and this can affect their development and their capabilities (Ibid). For example, in many African countries, children as young as 5 years are expected to care for their baby and toddler siblings or girls as young as ten are expected to make meals, carry heavy buckets of water, search for firewood. In many western contexts, five-year-old children would not be expected to do this. Lastly, culture can shape a child's development by emphasising activities that promote widely held cultural values (Ibid). In Indonesia, it is very important for children to know their morning prayers. Through an unpublished Plan International report based on qualitative data collected, many children who went through their ECCD programmes could recite their morning prayers and this was something families were very happy about (Plan International, unpublished). They associated the programme with their child's ability to know their morning prayers.

Humanitarian situations add an additional layer of complexity to the interaction of culture, time and children's development. In these situations, culture, access, and opportunities may change, thereby impacting children's development. For example, while conflict, war and displacement are generally not thought of as positive, good things can come from them such as access to early learning services. Among the child participants for this research, a very small percentage ever had access to early learning in their village in South Sudan. Through an informal conversation I had with a Plan International South Sudan staff, he sent his family to Uganda for safety, but also because he knew they would receive services they would never receive in their village in South Sudan. While funding for ECCD in emergencies is very low in comparison to the need and in comparison, to other sectors such as food, water, shelter, and health, it is still often more than refugees ever got in their home countries (Arnold, C., 2004; UNESCO, 2006). From my professional experience of implementing

education and early learning programmes in emergencies, there are many instances when girls access early learning and education services for the first time. Further, as there are often fewer competing obstacles for girls, they sometimes attend in higher numbers than boys. These differences in context can change cultural views and therefore expectations and opportunities for children. This all contributes to children's development and capabilities. The Socio-cultural theory provides an appropriate framework to understand and apply this to ECCD in emergency programmes.

Parents, siblings, peers, teachers, and significant objects such as favourite books or toys are the 'cultural tools' necessary to help a child develop his/her thinking in his/her cultural environment and time in history (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). Cultural tools are things or the signs or symbols that humans within groups have developed over time in order to help them think about and reflect on their values, ideas, principles and practice (Smidt, S., 2009). They influence our perceptions, understandings, and experiences of the world (Gray, C. and Mac Blain, S., 2015). Language is a key cultural tool (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). For example, there are huge differences between English and Spanish in that Spanish has many more verb forms and ways of expressing emotion and experience. This affects a child's development, thinking and manner of expressing him/herself. Nursery rhymes, fairy tale stories, folklore, music, and art are also cultural tools (Gray, C. and Mac Blain, S., 2015). In emergency situations, new cultural tools may be introduced from other countries. As children interact and use cultural tools, slowly they become internalised, natural, and normal (Smidt, S., 2009).

Initially a child will have 'lower order thinking' that involves unconscious biological functions such as memory, attention, and intelligence (Gray, C. and Mac Blain, S., 2015). These processes are not value free and are influenced by our feelings and emotions, in the context of a particular culture (Ibid). Higher order thinking, which involves conscious deliberate intentions and action such as problem solving and logical reasoning, is where children should get to as they develop (Ibid). The way for children to get to that, Vygotsky believed, was through mediated social collaborative activity. He said that this type of activity can be thought of as the bridge that can help children get from one type of thinking to another. Cultural tools, as mentioned above, can be part of the mediated, social collaborative activity (Ibid).

Zone of Proximal Development

A key concept in Vygotsky's theory that is used a lot among teachers and early childhood educators in pre-school and primary schools in many countries is the 'Zone of Proximal Development' (ZPD) (Vygotsky, L.S., 1978; Ageyev, V.S., 2003; Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009; Cole, M. and Cole, S., 1997). This concept brings together the use of 'cultural tools' and using mediated social collaborative activities (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). Vygotsky said that ZPD is "those functions which have yet to mature but are in the process of maturing... 'buds' or 'flowers' of development rather than 'fruits' of development" (Vygotsky, L.S., 1978, p.86). The ZPD is the belief that a child at any point in their development is at a point where he/she has capabilities of doing something on his/her own without any support. This could be something that he/she internalised from the use of cultural tools and through the participation of mediated social collaborative activities. However, in order for a child to get to the next level of learning, teaching with support or 'scaffolding' (a term coined by those building on Vygotsky's work) needs to occur in the Zone of Proximal development. Scaffolding methods help teachers and early childhood educators provide a safe and protective structure in which children can extend their capabilities (Wood, D. et al., 1976). ZPD is an area where a child can be capable of doing something with support of a teacher, peers or some expert 'other' because it puts a child a little bit out of his/her comfort zone (Gray, C. and Mac Blain, S., 2015). Real learning happens when a child is outside of his/her comfort zone, but in a safe space where he/she can begin to extend his/her capabilities (Ibid). Beyond the ZPD is an area that a child at a particular point in his/her development does not have the capabilities of doing even with support from a teacher or an expert 'other' such as parents or peers (Ibid). In many classrooms in the US, the activity of 'guided reading' which usually occurs between Kindergarten and second grade is aimed at exactly what Vygotsky said – to help a child become more capable readers (Fountas, I. and Pinnell, G., 1996; Graves, M. and Juel, C., Graves, B., 2006). The image below illustrates how Vygotsky saw the ZPD.

Figure 5.4: Vygotsky's Zone of Proximal Development



Source: Adapted from Vygotsky, L. S. (1978)

Play was critical in all of these processes according to both Vygotsky and Piaget, because this was the way children could interact with the real world, learn about it in a safe space (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009; Cole, M. and Cole, S., 1997). For Vygotsky, imaginary play is a precursor to abstract thinking (Gray, C. and Mac Blain, S., 2015). Whereas Piaget believed that the development of play occurs naturally, Vygotsky believed that there is an influence of adults and the culture in how children play, which therefore affects their thinking and development (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997). Play creates a ZPD for a child and allows him/her to act and behave in ways they do not normally do, more like adults (Cole, M. and Cole, S., 1997). Freund (1990) in her research of 3-4 year olds revealed that children who had support in doing their activity had greater understanding and capability than doing it alone (Freund, L.S., 1990). Freund gave the children a doll house and furniture and asked them to place the furniture throughout the doll house. Some children did the task on their own, which is in line with Piaget's

approach of discovery learning, whereas other children had an adult helping them. There were children from both groups that were capable of doing the task, but those that had adult support came away with a stronger understanding of a house, furniture, where things go, their functions and why certain things go in certain locations (Ibid). In play or in other activities, Vygotsky believed that having an asymmetric relationship between children and other children or children and adults fosters a transfer of knowledge from the more knowledgeable one to the less experienced one (Gray, C. and Mac Blain, S., 2015). Having a symmetrical relationship, Vygotsky believed, was like solving the problem alone where there would not be as much learning (Ibid). In modern classrooms in the US, teachers and early childhood educators often form groups of children of mixed capabilities. The aim of this is exactly what Vygotsky mentions; it creates asymmetrical relationships which allows all children to rise to a higher level.

Criticisms of Vygotsky's work

While Vygotsky changed understanding of child development by including the influence of culture and values, there are many criticisms of his work. Vygotsky was alive during Piaget's time, but he died young, and so did not have a chance to expand fully on his theories nor conduct many experiments. The experiments he did conduct, specifically about the Zone of Proximal Development, had small samples where the data was ambiguous, where advanced statistics were missing and where there was not clarity on how he controlled for individual variables (Ageyev, V.S., 2003). Vygotsky's work was influenced by Marxism and much of it was kept hidden by the Soviet Union, which means that it was not available to other parts of the world, especially the English speaking world until after his death. It was not until the 1960s that Vygotsky's work started to be translated into English and was read by those outside of the Soviet Union (Smidt, S., 2009). Vygotsky assumed that social and cultural experiences are always positive for children's development when there is evidence that social and cultural experiences can also be negative (Gray, C. and Mac Blain, S., 2015). Additionally, Vygotsky believed that thought cannot fully exist without spoken language (Ibid). If this was the case, then a child is devoid of thought until he/she can speak. Children usually begin saying their first words around age 1, but brain science provides evidence of infants having an exponential explosion of thinking and understanding of the world (Conel, J.L., 1959; Fox, S. et al., 2012). They may not be able to speak, but they can express themselves in other ways (Ibid). Vygotsky does not consider children with disabilities who

are deaf and therefore cannot speak. He does not consider the role of other types of expression of thought such as sign language (Ibid). There is also criticism that some aspects of Vygotsky's messages were lost in translation and so do not fully capture the essence of his ideas or misconstrue some of them (Smidt, S., 2009).

By the mid-1980s, Vygotsky's theoretical approach and key ideas about the role of the environment and in particular culture, began to become more popular than Piaget's theories (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). Since then, many modern approaches to education, including early childhood education, are underpinned by Vygotsky's initial ideas. In the area of international development and education, Vygotsky's ideas of the central role of one's culture shaping and influencing how a child develops and learns has become integral to practice and programmes in developing countries.

Despite these criticisms, it has not prevented contemporary academics and practitioners to base their work on the central tenets of his theory. The next section lays out some of the adaptations of Vygotsky's socio-cultural theory and how some academics have taken forward and further developed some key aspects of his work.

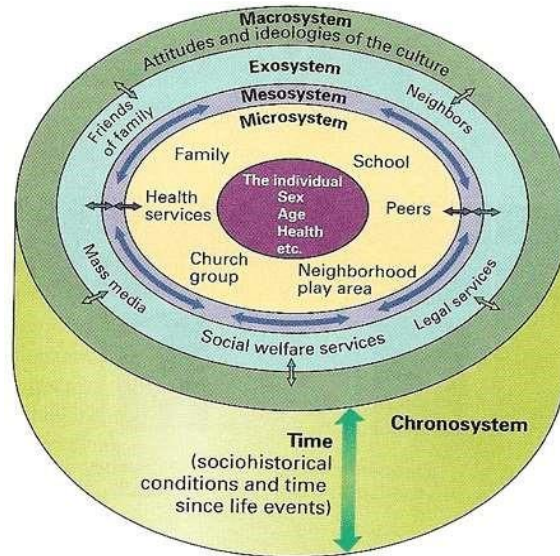
Child Development Perspectives Based on Vygotsky

Vygotsky has influenced many people to reflect upon, critique and expand upon his work. Some theorists, researchers and educationalists include Urie Bronfenbrenner, Barbara Rogoff, Marianne Hedegaard, Marilyn Freer, John Dewey and Maria Montessori (Gray, C. and Mac Blain, S., 2015; Cole, M. and Cole, S., 1997). In this section, I highlight the contributions of some of the key perspectives that build part of the theoretical foundation for my own research.

Urie Bronfenbrenner has been one of the most influential and most widely cited in development and humanitarian work as he expanded Vygotsky's Socio-cultural theory to develop his Ecological Systems theory. Bronfenbrenner's Ecological systems theory is known by many practitioners and used to understand children's development and well-being in emergency contexts. He was heavily influenced by Lev Vygotsky and took the role of nurture and the child's external environment further than Vygotsky (Bronfenbrenner, U., 1979; Gray, C. and Mac Blain, S., 2015). In Bronfenbrenner's perspective, there is a relationship and influence between the child and his/her external environment that goes beyond the parents and teachers as Vygotsky mentioned (Ibid). Bronfenbrenner identified five levels that interact with the influence how a child develops. This includes the

microsystem, mesosystem, exosystem, macrosystem and chronosystem. As seen below in adapted image of Bronfenbrenner's Ecological Systems Theory, the child is in the middle. Surrounding him or her is the microsystem, which includes his/her parents, friends, school, and other groups within the immediate vicinity of the child. The microsystem is where the child has his/her regular daily interactions with the social world. The meso-system is one layer away from the child and includes the interactions between the microsystem and the exo-system. The exo-system includes friends of the family, neighbours, and other services. Beyond the exo-system is another layer that influences children's development; this is the macro-system which includes the major attitudes and ideologies of a culture. For example, a culture where girls education is not prioritised can affect how a girl develops and the types of opportunities she has to increase her skills and capabilities. The last layer in the Ecological Systems Theory is the chrono-system. This layer includes socio-historical conditions and time since life events. As Vygotsky mentioned, the values of a culture can change from society to society and from generation to generation (Gray, C. and Mac Blain, S., 2015; Smidt, S., 2009). This could include the historical memory of war or natural hazard that destroyed the child's village etc... and because these types of events can affect a whole society, it can affect the child's overall development. What Bronfenbrenner includes, as seen below in Figure 5.5, is the interaction between the various layers and how they can all continuously influence each other. Vygotsky did not explicitly include the continuous interaction of the child with his/her external environment or culture.

Figure 5.5: Bronfenbrenner's Ecological Systems Theory



Source: Bronfenbrenner, Urie (1979). *The Ecology of Human Development: Experiments by Nature and Design*. Harvard College, USA.

In many countries that have been inflicted with war and conflict for decades such as Sudan, South Sudan, Uganda, Liberia, Sierra Leone, Democratic Republic of Congo, Afghanistan, Iraq, Syria, children are being born during these times which is affecting their opportunities, the values that culture places on children's education and therefore their capabilities. For example, a 2015 report published by Save the Children, American Institutes of Research and CfBT Education trust, found that literacy rates in Syria before the large scale conflict used to be at 95% with almost all Syrian children enrolled in primary school (Save the Children, CfBT, American Institutes of Research, 2015). However, four years later, almost three million children are no longer in school and Syria is now estimated to have one of the lowest enrollment rates in the world (Ibid). In the city of Aleppo, where there has been a great deal of fighting, enrollment rates in education are at around 6% while a majority of children currently living in neighbouring Jordan and Turkey have no access to education (Ibid). This change in the external environment of conflict affected children are already having huge impacts on their capabilities. As this is happening on a large scale in the Syrian society, it will affect this and the next generation of Syrians and their capabilities.

While Bronfenbrenner expanded the cultural and societal influences on a child's development through the conceptualisation of the Ecological Systems theory, Barbara

Rogoff, Marilyn Flear and Marianne Hedegaard began investigating the applicability of these theoretical frameworks on children's development. They have critiqued the long held evolutionary perspective of child development that looked at capabilities developed by chronological age and without the influence of culture.

Barbara Rogoff, an educator (2003), bridges the fields of psychology and anthropology and has been heavily influenced by Vygotsky. She investigates cultural variation in learning processes and settings, with a particular interest in investigating learning, collaboration and shared problem solving in communities where children do not have lot of access to school (Rogoff, B., 2003; Gray, C. and Mac Blain, S., 2015). She believes that individuals develop as participants in their cultural communities, engaging with others in shared endeavors that build on cultural practices of many generations (Rogoff, B., 2003). Children attempt to acquire culturally defined ideals of mature thought and action through this interaction with their culture (Ibid). Culture structures the child while a child's individual actions redefine the culture so Rogoff sees development as a two-way dynamic process and the reason why culture in one society can change from one generation to another (Ibid). Rogoff (2003) further believes that cultural differences go to the family level which accounts for differences among people in the same community (Ibid). Her research has focused on finding the common patterns and variations in different communities and finds evidence for that fact that there is not just one way for children to develop (Ibid). However, at the same time, she has found that there are some regularities in children's development (Ibid).

Rogoff studied children in Oceania, UK, Zaire and other countries (Rogoff, B., 2003). For example, three year old Kwara'ae children in Oceania can be caregivers to younger siblings, but in the UK it is illegal to leave a child under 14 years without adult supervision (Ibid). Infants in the Efe community in Zaire use machetes with safety and some skill while in the U.S. middle class adults often do not trust young children with knives (Ibid). Rogoff also found differences between European-American heritage children and Indigenous-heritage children of North and Central America, specifically with how they pay attention to and learn from events around them, and how they collaborate in ongoing endeavours. She concluded that children's attention and learning were connected to the extent of their families' familiarity with learning traditions that seem to be common in their cultures, especially customs related to western type of schooling. Rogoff also found that when children were integrated into everyday activities with their parents and given opportunities to observe and try to do things, they were able to more quickly learn those activities and therefore increase their capabilities (Ibid).

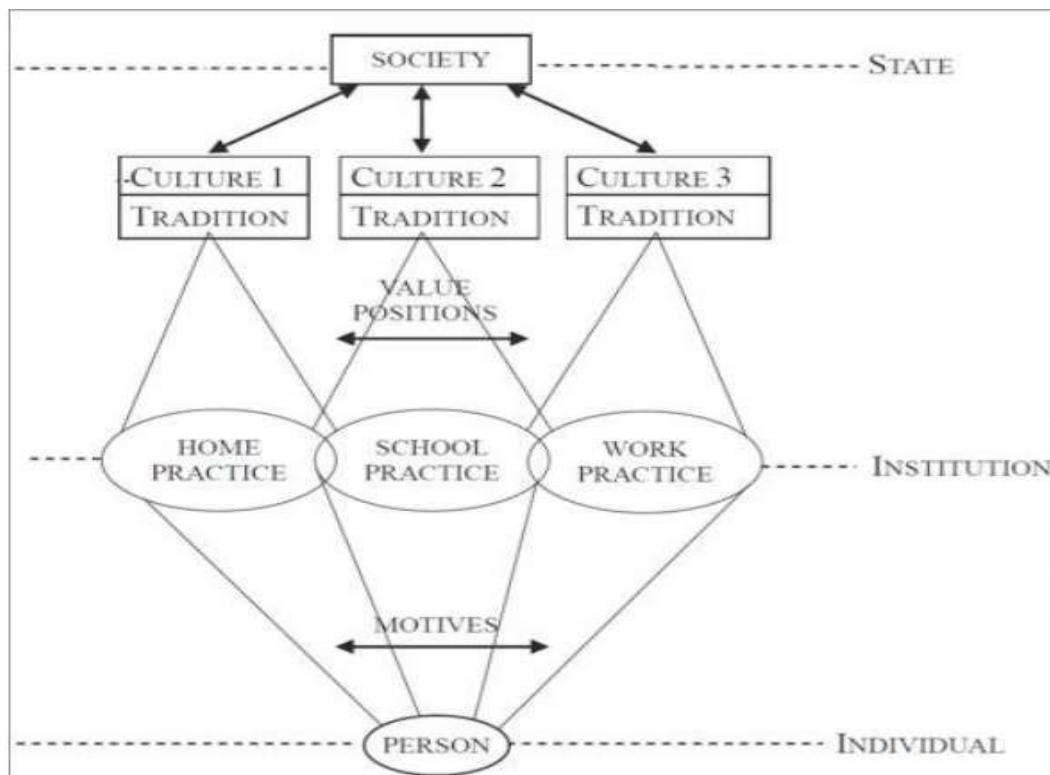
Rogoff (1990; 1995; 2003) sees three levels of the socio-cultural context: 1) apprenticeship, 2) guided participation and 3) participatory appropriation (Rogoff, B., 1990; Rogoff, B., 1995; Rogoff, B., 2003). These three planes of analysis are inseparable and mutually occurring at once as a child learns. While one of the planes may be the focus at a specific time, the others would always be present in the background (Rogoff., B., 1995). Apprenticeships allow a child to be a novice and through practical experience learn a new skill (Ibid). Guided participation is the means by which adults shape young children's development through collaboration build upon shared understanding in routine problem-solving situations (Rogoff, B. et al., 1998; Cole, M. and Cole, S., 1997; Smidt, S., 2009). The role of parents as guides or as instructors, and the extent to which they allow children's participation in various types of cultural activities can affect the child's development and capabilities (Rogoff, B. et al., 1998). Children learn and develop through both observation and hands on participation in activities in their culture (Ibid; Rogoff believed that guided participation as a process may be universal, but there are variations in the expectations and the goals communities have for their children's development (Rogoff, B. et al., 1998). Participatory appropriation is the process by which individuals change through their involvement in an activity within their culture, in the process of becoming prepared for subsequent involvement in related activities (Rogoff, B., 1995).

Rogoff rejected Piaget's stages of development and the placing of children in age specific grades (Rogoff, B., 2003). Organising children by ages is a new relatively new phenomenon as this was not the case in the United States and other countries until the last half of the 1800s (Ibid). Children used to be organized around level of understanding rather than agebatches. She said ages and onsets of capabilities are a cultural product. Children who are able to engage in more mature activities can more quickly gain those capabilities than those who are excluded from activities that adults or older children engage in. Maria Montessori's approach draws on this idea and in the Montessori learning model and schools, children of multiple ages are put together in one class so younger students can observe, participate in the same activities as older children, and learn from them (Gray, C. and Mac Blain, S., 2015).

Marilyn Fleer also investigated the applicability of the Socio-cultural theory in various cultural contexts (Ibid). Learning by doing is often the assumption in most western early childhood programs, but Marilyn Fleer in her research in 2002 found that for indigenous Australian children learning by observation without explanation is also very important (Edwards, 2005). Mariane Hedegaard (2010) took Vygotsky and Rogoff's work a step further by relating

society and community with the concept of institutional practice (Fleer, M. and Hedegaard, M., 2010; Ridgway, A., 2010). She explores the role of those institutions, children’s participation in them and how this can shape children’s development and capabilities (Fleer, M. and Hedegaard, M., 2010; Ridgway, A., 2010). The image 5.6 below illustrates Hedegaard’s thinking and conceptualisation of the role of institutions in a dynamic development process.

Figure 5.6: Hedegaard’s view of the Development of Children’s Capabilities

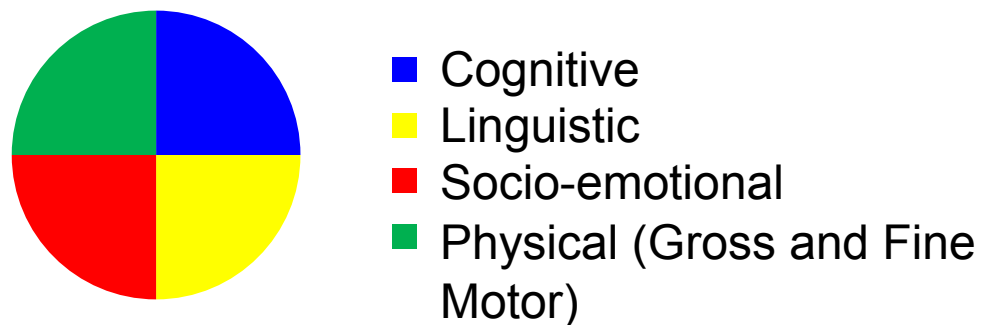


Source: Adapted from Fleer, M. and Hedegaard, M. (2010). “Children’s Development as Participation in Everyday Practices across Different Institutions”, *Mind, Culture, and Activity*, 17: 149-168.

For all three of them, culture, whether it be the broader societal culture as Bronfenbrenner highlights or the level of the institution the child is in or the family or the generation, it is a critical element in a child's development and is key to determining children's capabilities (Rogoff, B., 2003; Bronfenbrenner, U., 1979). Their work shows the influence of different types of cultures on children's development. It also shows that Piaget's perspective of chronological age determining a child's development and capabilities is not quite correct when one investigates other cultures. This research therefore builds on this previous work and applies a Socio-cultural theory to early years programming in the context in Uganda with South Sudanese refugees. The key focus on "culture" in this theoretical perspective is what makes it the most appropriate theoretical framework for this research. The next section will go deeper into what aspects of a child are developed when we say child development.

Child Development Domains

Figure 5.7: Child Development Domains



Source: Adapted from Fernald, L. et al, 2009; Williamson, J. and Robinson, M., 2006

The theories presented provide a macro level picture of how a child develops. In this section, I present the domains of child development as this will be part of the data collection for this research. There are many ideas of the domains of child development. The four key areas that are often adopted and considered are: Physical, Socio-emotional/Psycho-social, Cognitive, and Language/Communication. The image below shows the interconnectedness of these domains and how each can influence the other (Fernald, L. et al, 2009; Williamson, J. and Robinson, M., 2006). These domains are also context specific and in some cultures

spiritual development or other aspects may be equally important to the four mentioned here (Williamson, J. and Robinson, M., 2006)

Physical development includes the change in physical appearance of the body, change in movement patterns and brain's growths. It means the progress of a child's control over his/her body. There are two types of motor skills:

- Gross (or large) motor skills involve the larger muscles including the arms and legs. Actions requiring gross motor skills include walking, running, balance and coordination.
- Fine (or small) motor skills involve the smaller muscles in the fingers, toes, eyes and other areas. The actions require fine motor skills include drawing, writing, grasping objects, throwing, waving, and catching.

Large muscles develop before small muscles. Muscles of legs and arms develop before those in the fingers and hands. Children learn how to perform gross (or large) motor skills such as walking before they learn to perform fine (or small) motor skills such as drawing.

Cognitive development abilities associated with memory, reasoning, problem-solving thinking and expressing. The capabilities through which a child expresses his/her thoughts and feelings through language.

Language Development means the abilities of talking/expressing and understanding of words and sentences. Initially babies produce different sounds then begin to produce their first real words. At the age of 18 months, children begin to use two words sentences.

Around the age of two, children begin to produce short, multi-word sentences.

Social and emotional/psycho-social development means social interactions and the ability to show the emotions. The ability to show empathy, express feelings, sharing, expressing gratitude, being helpful, express and control anger express happy and sad feelings all are the part of social and emotional development.

These domains of child development will be considered, adapted, and then applied in this research.

II. HUMAN DEVELOPMENT

In addition to framing this research around child development, the research also includes perspectives from human development. Specifically, the Capability Approach is used in

combination with the Socio-cultural theory to frame this research on early learning and development among South Sudanese refugees in Uganda. This is another contribution of this research as these two theories have never been brought together in a humanitarian context.

Within the human development camp, there are two key theoretical approaches which will be examined in this section: Human Capital Theory and the Human Capability Approach.

Whereas Human Capital theory focuses more on people's capabilities as they contribute to economic growth, the Human Capability Approach looks at people developing capabilities and functionings based on their own context as an end in itself. It does not have the goal of economic growth. While both of these theoretical approaches have their merits and limitations, the Human Capability Approach is used to frame the questions of this research.

Human Capital Theory

For many years, development of a country and its people has been centred on its economic growth – on the human capital that people have. Human capital refers to the capabilities of human beings that contribute to economic growth (Eide, E.R. and Showalter, M.H., 2010). These capabilities can be developed in people through investments in areas such as education, health, nutrition, and on-the-job training (Eide, E.R. and Showalter, M.H., 2010; Sweetland, S., 1996). Early concepts of human capital were explored by economists, including Adam Smith, John Stuart Mill, Alfred Marshall and Irving Fisher (Eide, E.R. and Showalter, M.H., 2010; Sweetland, S., 1996; Reynolds, A. et al, 2010).

Economists from the University of Chicago, led by Gary Becker and Theodore Schultz, further developed these early concepts, and pioneered the Human Capital Theory (Becker, G., 1962; Schultz, T., 1961; Robeyns, I., 2006; Unterhalter, E., 2007). Human Capital theory is about how investments in people can lead to economic benefits for individuals and countries (Sweetland, S., 1996). These investments can increase individuals' future ability to earn income and drive economic growth and therefore increase people's well-being (Eide, E.R. and Showalter, M.H., 2010). Because the focus of the Human Capital theory is on economic returns, policy makers would choose between different types of investments and select the ones with the greatest rate of return.

Education, whether it is through formal pre-school, primary or secondary education at school, informal education and early stimulation at home, on-the-job training and apprenticeships or

vocational education and training, it is consistently considered a main investment for increasing human capital (Becker, G., 1962; Becker, G., 1993; Schultz, T., 1961; Sweetland, S., 1996; Unterhalter, E., 2007). In education, this theory recognises its main role in increasing human capital (Robeyns, I., 2006; Unterhalter, E., 2007). Education is important in creating and strengthening skills and acquiring knowledge that will allow a person to be economically productive in society (Ibid). This framework considers the access to educational opportunities as key to increased economic output, but does not consider that education must be of high quality in order to have results in children's capabilities (Unterhalter, E., 2007). All children that enter education will not necessarily exit it with the same skills (Ibid). Further, education is thought to contribute to health, nutrition, and other improvements as someone who understands which healthy foods to eat, how to prevent or treat certain diseases can improve their ability to work and generate economic benefits (Sweetland, S., 1996). This notion of education for the building of human capital provided attention to people as central to development efforts when previously the focus was only on macro-level economic development (Robeyns, I., 2006).

Novel Prize winning Economist, James Heckman and other economists broadened the Human Capital theory to include applications to early childhood education, psychology, and public health (Reynolds, A. et al., 2010). James Heckman was one of the first economists to investigate human capabilities developed during early childhood. His research found that capabilities could be developed during this period of a child's life and that the greatest returns on investment were found with pre-school programmes over primary and secondary school and remedial programmes for older children (Carneiro, P. and Heckman, J. 2003; Heckman, J. 2006; Heckman, J. et al, 2006). Even one extra year of pre-school can increase a person's future productivity by 10 to 30 percent, depending on the country and context (Van der Graag, J. and Tan, J.P., 1998). Children who are ready to enter school due to preparations made during ECCD programmes have been shown to be less likely to drop out or repeat a year (Arnold, C., 2004). Evidence from numerous long-term studies indicate that children who complete primary and secondary school are less likely to be involved in crime, drugs, or other destructive behaviour and more likely to succeed in finding work (Arnold, C., 2004; Van der Graag, J. and Tan, J.P., 1998). Further, Heckman et al. (2006) found that investing in positive early educational experiences costs less than remedial programs or treatment for children later in life (Heckman, J. et al., 2006)

A seminal longitudinal study on the cost benefit of ECCD programming was conducted with the High Scope Perry Preschool programme in the United States. It targeted economically disadvantaged African American children. The study found a cost-benefit ratio of 7:1 when the participants were 27 years old and 13:1 when they were 40 years old (Barnett, W.S., 1996; Belfield, C. et al., 2006). This means that for every \$1 invested for ECCD programming, there was a \$7 or \$13 worth of savings and benefit to society (Ibid). When compared to people who had no early childhood experience, graduates of the High Scope Perry Preschool had higher levels of education, higher earning potential and in many cases salaries, higher likelihood of stable family lives, better health, and lower rates of criminality (Arnold, C., 2004). The evaluations also indicated greater benefits for girls (Ibid). Cost benefit studies in developing countries have similar returns. A study in Bolivia and Colombia had a rate of return of 3:1 while one in Egypt had a return of 5.8:1 (Arnold, C., 2004). All of these cost benefit studies found the greatest returns on the most disadvantaged children in the sample. As emergencies cause greater challenges and make children more vulnerable, there are reasons to believe that cost benefit or cost effectiveness studies of high quality ECCD programmes in humanitarian situations would have similar, if not better, returns on investment. Unfortunately, to date, no such analysis has been done to provide that evidence.

While the Human Capital theory has allowed for cost benefit and cost effectiveness studies to be conducted and provide quantitative information for policy makers to base their budgetary decisions on, there are a number of weaknesses to this model (Robeyns, I., 2006). Firstly, this theory sees education only as way to increase knowledge and skills that would increase a worker's productivity, wages, and broader economic development (Ibid). This approach does not consider cultural, social, and non-quantifiable aspects of life and a person's well-being (Ibid). It assumes that the way to a person's well-being and happiness is through economic stability and wealth. The theory further assumes that people act for economic reasons only. The Human Capital framework does not consider that someone may value other things in life over monetary wealth. The theory cannot explain why a person spends time learning a new language when it may not be needed for him/her to obtain a job or higher wages or why a person may prefer a lower paying job if it provides flexibility for a woman to also care for her family.

A second problem with the Human Capital theory is that it values only the quantifiable aspects of education (Robeyns, I., 2006). Knowledge and skills gained through education

that can be measured and quantified for the direct or indirect contribution to economic productivity is considered in this model. Quantifying and measuring investments can be very useful for policy makers deciding where to put their money, however it does not tell the whole story of the importance of ECCD and education programs. While investments in education can have quantitative and economic results, they can also have qualitative improvements that are important for one's life such as an understanding how the political process works and how to participate in it or knowledge that is just for the sake of learning and understanding rather than making money (Sweetland, S., 1996; Robeyns, I., 2006). A child who learns how to live with people with different perspectives would contribute to a more tolerant society (Robeyns, I., 2006). A woman who learns about good nutrition and preventable diseases can help keep her family healthy even if she cannot use this knowledge to make money. The Human Capital theory does not address qualitative and non-economic benefits of ECCD and education and the effects it can have for improving people's well-being. Moreover, the Human Capital theory does not provide any way of measuring these non-economic benefits (Ibid).

A third problem with the Human Capital theory is that because it is focused on economic productivity as an end result, it could deter investments in education and ECCD that may not lead to the highest economic returns (Robeyns, I., 2006). This is particularly relevant for girls' and women's access to educational opportunities. Dreze and Sen (2002) write about how the "gender division of labour" or social and cultural expectations of girls and women affect the perceived benefits of educating them (p.161-162). In many cultural contexts, girls and women are responsible for taking care of the home, family members and domestic duties. They may not be allowed to work outside of the home, so educating them may not bring about the same monetary returns to the family and society as boys and men. And because they are not always perceived to contribute to economic productivity, they are often excluded, from an early age, from important ECCD and education services. Cumulative disparities, that can start prenatally and in the first years of life, result in lifetime consequences (Walker, S. et al., 2011).

Human Capability Approach

The Human Capital theory defines successful development when there are high rates of economic growth, which has merit to answer particular questions. However, it is not sufficient to address the questions of this research. The Human Capability approach widens

the view of development from the Human Capital theory and views development and well-being in a multi-dimensional way (Robeyns, I., 2006; Alkire, S. and Deneulin, S., 2009).

Starting in the 1970's Amartya Sen, Nobel Laureate in Economics challenged the scope of the Human Capital theory and saw it to be too narrow to fully understand development and well-being. Sen does not see economic growth as the end and main purpose of development and well-being, but sees people at the center and the reason for doing any sort of development work (Walker, M. and Unterhalter, E., 2007; Alkire, S. and Deneulin, S., 2009). He believes that economic growth is not the only way to measure a person's quality of life nor can this be illustrated through a single numeric scale (Nussbaum, M., 2005; Nussbaum, M., 2011). Economic growth is a sub-set of development and well-being and one of many aspects that need to be considered when assessing a person's quality of life (Alkire, S. and Deneulin, S., 2009, p.26). This is especially true for those, such as females, who benefit less from a nation's prosperity due to cultural barriers (Nussbaum, M., 2005).

Sen does not deny the Human Capital theory, but goes further and says that a person's well-being is not just about high income or ensuring they have a right to something, but that it is "a person's ability to do valuable acts or reach valuable states of being; [it] represents the alternative combinations of things a person is able to do or be" (Sen, A., 1993, p.30).

A second core aspect of Sen's conceptualisation of the Capability Approach is it is important to base definitions of development, well-being and quality of life on what people themselves value and this could be different in various cultural contexts and among different groups of people (Walker, M. and Unterhalter, E., 2007; Alkire, S. and Deneulin, S., 2009). The idea of capabilities is about a person's freedom and "the range of options a person has in deciding what kind of life to lead" (Dreze and Sen, 1995, p.11). People themselves should be active agents in their own development and that starts with defining what that means (Walker, M. and Unterhalter, E., 2007). Some people may value a capability that is not valued in another culture. According to Sen, people should be able to choose what defines a valuable life (Robeyns, I., 2006; Walker, M. and Unterhalter, E., 2007; Alkire, S. and Deneulin, S., 2009).

A third core concept of the Capability Approach is that of capabilities and functionings. Sen sees capabilities and functionings as different. Functionings are achieved outcomes such as reading and talking while capabilities are the potential to achieve these outcomes (Walker, M. and Unterhalter, E., 2007; Unterhalter, E., 2007). Capabilities would include having been

taught to read, having books or newspapers available to read. It focuses on the process rather than the end result. One may need multiple capabilities in order to have one functioning or outcome (Ibid). For example, in education, a functioning could be passing a test whereas the capability would be about how well the student has understood the concept and how this understanding could be applied to other functionings as well (Ibid).

Sen's conceptualisation of the Capability Approach is incomplete as it does not define what capabilities that should be assessed for well-being, development, and high quality of life (Alkire, S. and Deneulin, S., 2009). He leaves this definition vague as he believes that people themselves should decide this. Unfortunately, there are a few problems with this. Firstly, there are numerous perspectives and possible definitions within one country as different racial, ethnic, or religious group may value different things. Secondly, in many cultural contexts people are not able to voice their viewpoints or they may omit certain capabilities that by society at large are valued. Further, certain groups, if they have the power to define capabilities to value, may push only their views and not others' (Ibid).

Martha Nussbaum confronted these challenges in her work taking the thinking and discourses of the Capability Approach further (Alkire, S. and Deneulin, S., 2009; Nussbaum, M., 2005; Nussbaum, M., 2011). Nussbaum uses a stronger rights-based lens in combination with the Capability Approach to construct a theory of basic social justice by proposing ten central human capabilities (Ibid). These ten include: 1) life, 2) bodily health, 3) bodily integrity, 4) senses, imagination, and thought, 5) emotions, 6) practical reason, 7) affiliation, 8) other species, 9) play, and 10) control over one's environment (Nussbaum, M., 2005; Nussbaum, M., 2011;). While Sen believes that fixing a pre-determined set of capabilities undermines people's agency, Nussbaum believes that existing structures of inequality and discrimination present in all countries will influence and shape what people value and deem relevant (Alkire, S. and Deneulin, S., 2009). She further believes that in order to ensure people's basic rights and freedoms, some central capabilities must be set. These capabilities can be the basis of assessing the quality of life in a country (Nussbaum, M., 2011).

Sen identifies education as central and crucial to well-being and Nussbaum agrees with this (Saito, M., 2003; Walker, M. and Unterhalter, E., 2007; Terzi, L., 2007). However, neither fully investigates education within the Capability Approach. Sen expresses the relevance of education toward well-being in terms of levels of literacy (Terzi, L., 2007). Saito, Unterhalter,

Walker, and Terzi are some who have taken this discussion further. Terzi (2007) considers education as a basic capability in that the absence of being educated would harm or significantly disadvantage the person in society (Terzi, L., 2007, p.30). Further, she states that being educated plays a significant role in developing other capabilities. This is particularly important for children as the lack of education and the foundational informal and formal learning that comes from it cannot be compensated for later in life (Ibid). Terzi (2007), like Nussbaum, puts forward a set of basic capabilities however, Terzi's are specifically for education (Terzi, L., 2007, p.36-37). These include literacy, numeracy, sociality, and participation, learning disposition, physical activity, science and technology and practical reason (Ibid).

A weakness of the Capability Approach is that it usually does not have the quantitative empirical data required for rates of return analyses (Unterhalter, E., 2007, p.217). While the Capability Approach can help establish correlations, many policy makers want the quantitative data and rates of return to help them make decisions (Ibid). Another weakness of the Capability Approach is that Sen developed it as a broad theory that still requires further reflection, investigation, and clarification on its applicability. While Nussbaum, Unterhalter and Walker explored issues of gender and education as it pertains to the Capability Approach and Terzi investigated how the Capability Approach might support children with disabilities (Terzi, L., 2008), very little has been written or explored with respect to early childhood and the Capability Approach.

Saito (2003) critiqued Sen's capability approach and was one of the first to ask how the capability approach could be applied to children, since children needed their parents' help in making decisions (Saito, M., 2003, p.25). Children, she believes, are not mature enough to make their own decisions (Ibid). Sen's response to Saito's reflection was that "when you are considering a child, you have to consider not only the child's freedoms now, but also the child's freedom in the future" (Saito, M., 2003, p.25). Her main argument for compulsory education is that it will give the child more freedom when he/she is older (Saito, M., 2003, p.27).

Mario Biggeri, Jerome Ballet and Flavio Comin (2011) are some of the first researchers to explore the many questions that still remain about children and the applicability of the Capability Approach. They began this pioneering work in 2004 with the establishment of a thematic group as part of the Human Development and Capability Association (Biggeri, M. et

al, 2011). Biggeri, Ballet and Comin ask several questions such as how the Capability Approach can be used to assess policies aimed at children's well-being, how capability can change with age, how does children's ability to participate in their own development and wellbeing change with their age and maturity. They also ask if children are indeed able to define their own capabilities and how can these capabilities then be converted into functionings or outcomes (Ibid). Biggeri, Ballet and Comin conclude that the Capability Approach can theoretically underpin the conceptualisation and measurement of child well-being and can support policy decision making.

Article 12 of the Convention on the Rights of the Child (CRC) highlights the importance of children's participation. This does not have a lower age limit where children can participate based on their capacities and stage of development (Biggeri, M., 2007). There is evidence that even very small children are capable of understanding and to which they can contribute thoughtful opinions (Biggeri, M., 2007; Ballet, J. et al., 2011). However, based on their age and maturity, these capabilities evolve and so children may not be able to reach the highest levels of active participation in early childhood (Ballet, J., et al., 2011). Biggeri (2007) involved children from middle childhood and adolescence in Italy, India, and Uganda in establishing their own models of valued capabilities and child well-being (Biggeri, M., 2007). However, this exercise has not been tested with young children who are below 8 years of age.

Biggeri and Mehrotra (2011) explored how to choose domains of children's well-being and came up with a preliminary list of capabilities relevant for children (Biggeri, M. and Mehrotra, S., 2011). They went through a process with child development experts of first preparing an open-ended discussion about a list of capabilities for children. They then compared this list with others' lists of capabilities, including Nussbaum and Robeyns, and reflected upon the work of UN agencies. Their preliminary list of capabilities includes 14 domains (Ibid). The main limitations of this approach are that they did not include children in the process nor does it align with children's development at different ages.

Tommaso (2006) conceptualises and develops a framework for Indian children's well-being using the capability approach however she focused only on children 6-12 years old (Tommaso, 2006). She follows Robeyns' method to identifying appropriate capabilities. She uses Nussbaum's general list of capabilities, Robeyns' list of capabilities for gender inequality in western countries and Phipps' list of capabilities for Canadian children as a

general guide for establishing a children's capability framework for Indian children. Tommaso then selected relevant capabilities based on economic literature on Indian children. She then pilot tested this draft set of capabilities by engaging academics specialised in the capability approach and development in India. A limitation of this study was that Tommaso did not explore capabilities for children younger than 6 years old. Early childhood includes conception to 8 years and children younger than 6 years would have different capabilities. Further, Tommaso did not use any participatory approaches to engage children or community members in India. Engaging academics can provide some insight into Indian culture, but not as it could if community members were actively involved in helping develop this capability framework (Ibid).

Many gaps remain in furthering the investigation of children and the Capability Approach. Firstly, while there are some references to child development theories in some of the work done on children and the Capability Approach, it is weak. Child development theories, and particularly Vygotsky's Socio-cultural theory, can provide insight into how children develop based on their external environment and therefore help create a Capabilities framework that is appropriate for the South Sudanese cultural context. In addition to simply using capabilities set forth in Nussbaum, Robeyns, and other academics writing about the capability approach, the use of Vygotsky's socio-cultural theory can provide added insight into capabilities that could be most appropriate for young South Sudanese children. Secondly, few studies have been done involving children in the establishment of capabilities and no studies that have included young children below 8 years of age. A strong child development lens and the inclusion of children and their parents and other caregivers' views could strengthen the process of establishing a relevant framework for children's capabilities. Further, much more testing and application needs to be done in order to determine whether the Capability Approach can be operationalised for young children. Lastly, no studies have looked at the use of the Capability Approach in emergency situations. Humanitarian situations add levels of complexity and challenges in measuring children's development and well-being that range from the fact that there are short projects to the security situation etc... Therefore, many programmes do not collect rigorous and quantitative data on children's development in emergency situations. The lack of rigorous data and the lack of tools to measure child development in emergency contexts is a huge gap in academic literature, policy papers and practitioner guides and tools. A capability theory of ECCD, based on a child development framework, may help government and donor decision makers invest more financial and human resources in this area. Additionally, it could support non-governmental

organisations and the United Nations in designing and implementing the Capability Approach to ECCD in emergency programmes. This research will therefore take discourses on child development and the Capability Approach further by testing its application to early learning and development in emergencies among South Sudanese refugees in Uganda.

CHAPTER 6: RESEARCH METHODOLOGY

Objectives of the Research:

1. Deepen our understanding of the importance of Early Childhood Care and Development (ECCD), especially in refugee contexts.
2. Contribute to the literature and evidence about ECCD programmes in humanitarian contexts using mixed methods.
3. Evaluate, through quantitative and qualitative data, the results of implementing the Community-Led Action for Children (CLAC) approach in a South Sudanese refugee camp in Uganda.

Key Research Questions:

1. What is ECCD in emergencies from the South Sudanese cultural perspective?
2. How has the Community-Led Action for Children (CLAC) model been adapted for a humanitarian and South Sudanese cultural context?
3. What are the outcomes and capabilities for children and parents through the implementation of the Community-Led Action for Children model (CLAC) in a refugee context? Are these outcomes better, the same or worse than when the CLAC model has not been implemented at all?

Scope of the Research: While ECCD includes the full range of children from prenatal to 8 years and their protective environment, including parents and community members, this research focused on children from 3 to 5 years that have and do not have access to ECCD interventions (focused on early learning and development) in emergencies and their parents. Children that accessed ECCD services were a part of Plan International's Community-Led Action for Children (CLAC) model. Plan International provided partial funding and related logistics for the research and approval to conduct this research on children and parents involved in their programme.

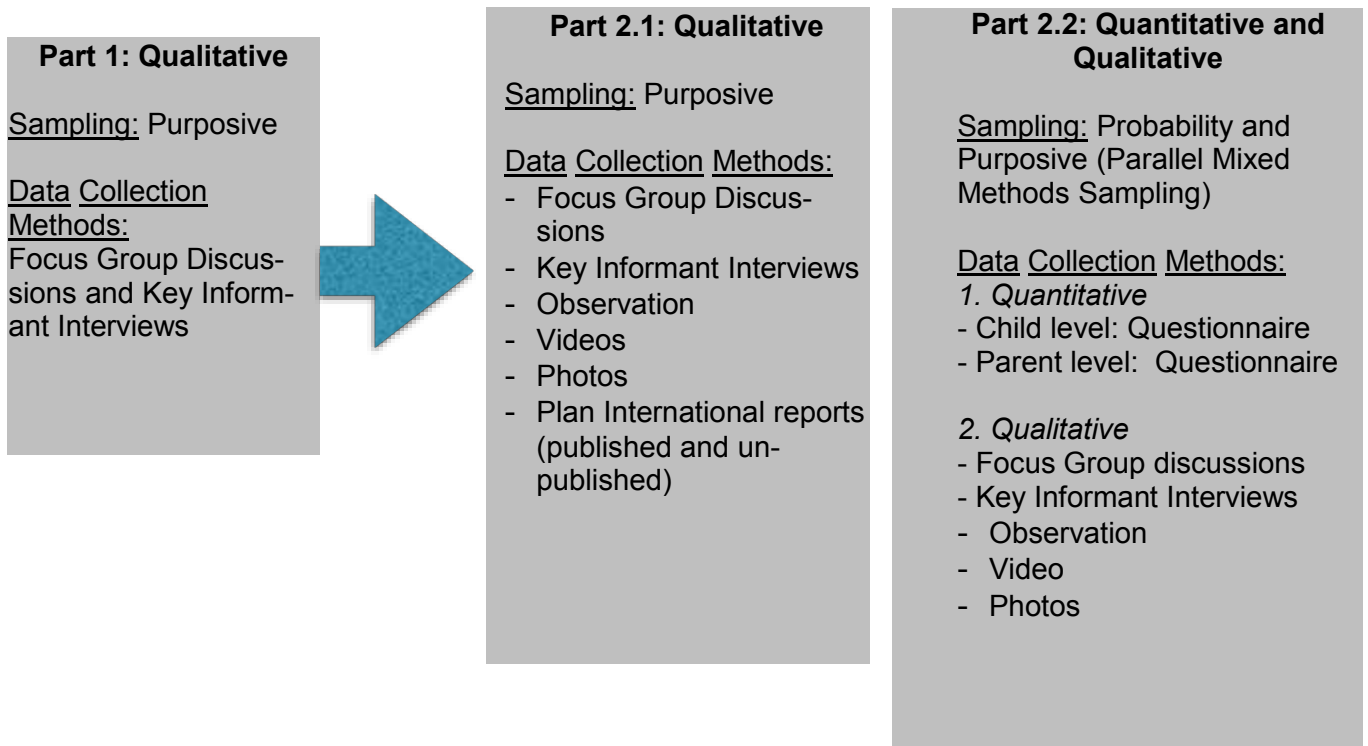
The research looked at the South Sudanese refugee situation in Uganda. The research's main location was in two South Sudanese refugee camps in Uganda, namely Ayillo 2 and Ayillo 1 refugee camps. Other locations included a conflict affected village called Lira in Uganda, which is near the South Sudanese refugee camps, and the town of Mingkamann in

South Sudan which has internally displaced persons (IDPs). The reason for the multiple data collection sites are elucidated below.

Overall Research Design

The overall research design was mixed methods multi-strand which includes sequential mixed design and fully integrated mixed design (Teddlie, C. and Tashakkori, A., 2009). There were three strands of this research (part 1, part 2.1 and part 2.2) - each focusing on the three aforementioned research questions. The first part started with qualitative data. Part 2.1 used qualitative data and part 2.2 used quantitative and qualitative data. Part 1 was conducted first and was an important step before starting part 2.2. Part 2.1 and part 2.2 were conducted simultaneously in Uganda. The purpose of using a mixed methods design was due to the merit and value that each type of data brings to illuminating different aspects of the phenomena being researched. Mixed methods emerged over the last 20 years as an alternative to Quantitative and Qualitative traditions (Ibid). It advocates for using whatever methodological tools will help answer the research questions (Ibid). Tashakkori and Crewell defined mixed methods as “research in which the investigator collects and analy(s)es data, integrates the findings, and draws inferences using both qualitative and quantitative approaches or methods in a single study or program(me) of inquiry” (Tashakkori, A. and Creswell, J.W., 2007). There are different ways of using mixed methods research where the study at every stage uses mixed methods or if one part uses qualitative, another quantitative and another mixed method (Teddlie, C. and Tashakkori, A., 2009). Many different combinations of using qualitative and quantitative methods are possible within mixed methods research based on the research questions being investigated (Ibid). Both methods were important in helping me answer the three key research questions as illustrated in the overall study design.

The images below illustrates the overall research design.



PART 1 OF THE RESEARCH

Key Research Question 1: What is ECCD in emergencies from the South Sudanese cultural perspective?

- a. What are the capabilities and child development outcomes young children can and should achieve with ECCD in emergencies programming from the South Sudanese cultural perspective?

Design and Data Collection methods

The design is the first place where I brought together the Capability Approach and Vygotsky's Socio-cultural theory to deepen our understanding of the mediation between culture and theories of development in the context of a humanitarian emergency. It was important to bring them together because Child development does not outline specific capabilities like the Capability Approach does and the Capability Approach does not frame the capabilities based on a child development framework. The critical purpose of bringing these two perspectives together is because it provided a stronger foundation for understanding the development of young children's capabilities by filling in gaps of both

perspectives. Further, the Capability Approach and Vygotsky's Socio-cultural theories have never been brought together and applied in a refugee context and allowed me to contribute something new to academic literature, early childhood and humanitarian practices. Based on Amartya Sen's assertion that capabilities can only be established and clarified based on the cultural context and should not be imposed from outside (Terzi, L., 2007), the first part of this research used qualitative methods to develop a set of capabilities and outcomes for South Sudanese young children based on child development theories. In particular, Vygotsky's Socio-cultural theory, which also places an emphasis on the child's external environment including his/her cultural context, along with the capabilities approach frames the first research question (Vygotsky, L.S., 1979; Vygotsky, L.S., 1981).

The first part of the research therefore looked at cultural sensitivities and adapted quantitative research tools to the South Sudanese context and a refugee situation. Data was collected in both South Sudan with internally displaced persons (IDPs) and South Sudanese refugees in camps in Uganda. Both of these groups were included in the research to get more data looking at the cultural sensitivities of the South Sudanese population, thereby allowing us to determine culturally appropriate capabilities and child development outcomes to include in the quantitative questionnaire. I used both locations to do this part of the research because 1) I knew the first part of the research would take time, 2) I was going to South Sudan for work and had the opportunity to collect data, and 3) I knew my time in Uganda would be limited so I wanted to start on this part of the research when I had the chance. In both locations, the Dinka ethnic group, one of the largest groups in South Sudan, was the main focus for data collection. While the current conflict is mainly between the Dinka and Nuer ethnic groups and while there are many similarities between the two groups, including only those from the Dinka tribe allowed the research to look deeply into this subgroup's perspectives on child development and what they want for their children. Once the first part of the research was completed and capabilities and child development outcomes that are sensitive to the South Sudanese context and specifically the Dinka ethnic group were determined, the quantitative data collection tools were adapted and refined for the second part of the research.

Through a review of literature, no child development questionnaire or data collection tool that comes from South Sudan or even Africa was found. Most recently Save the Children, another international NGO, has developed a child development tool that looks specifically at 3-5 year old children. It uses continuous data and is called IDELA (Pisani, L., Borisova, I.,

and Dowd, A., 2015). Through a series of tests, Save the Children has begun to validate this tool for global use. While it is a promising tool for developing contexts because it is thought to be easier to use than current existing tools, considers practical aspects of collecting data in developing countries and considers the cultural context of developing countries, it is still a new tool that I was not familiar with. Further, the tool has not been adapted for the South Sudan context. I chose a reliable and valid tool from the western context and adapted it to the South Sudanese cultural context. While there are many data collection tools available from the western context such as the Bayley Child Development Scale, the “Ages and Stages Questionnaire - 3” (ASQ-3) was selected for a number of reasons. Firstly, the ASQ-3 has been found to be reliable and valid based on rigorous research with a sample of over 15,000 diverse children. It has been adapted in other developing countries as well, resulting in a version in Spanish, French, Portuguese, Norwegian and Korean, to name a few (Schonhaut, L. et al. 2013; Tsai, H.A et al, 2006; D’Aprano, A. et al, 2014; Filgueiras, A. et al, 2013; Heo, K.H. et al, 2008). Secondly, the ASQ-3 questionnaire focuses on children between one month to 5 ½ years, which is the age range for this research. Plan International also has approval to use the ASQ-3. While getting approval from IOE to conduct this research, I also obtained approval from Plan International to collect data from Uganda and use the ASQ-3. The Bayley Child Development Scale in comparison only includes children from 1 month to 42 months, which would have left out 4 and 5 year olds, who were key participants of this research (Schonhaut, L. et al., 2013). Thirdly, the ASQ-3 is a questionnaire that can be completed by parents and requires less training and fewer research assistants than other child development tools such as the Bayley Child Development Scale. However, it does require parents to be at a 4th or 5th grade reading level. Luisa Schonhaut et al. (2013) found that the Bayley Child Development Scale had a high cost, required more time and required the test be administered by trained professionals (Schonhaut, L. et al, 2013). Fourthly, the ASQ-3 looks at 5 domains of child development: communication, gross and fine motor skills, problem solving and personal-social skills, which is in line with the domains of child development presented earlier (Schonhaut, L. et al., 2013; Tsai, H.A et al, 2006). While the Bayley Child Development Scale and the ASQ-3 look at child development a little differently, Schonhaut found that there was overall agreement between the two tests, especially as the child’s age increased (Ibid). Lastly the ASQ-3 was easier and less expensive to access than tools such as the Bayley Child Development Scale. I also have experience with the ASQ-3 and felt more comfortable with it than with the Bayley Child Development Scale which is new to me. As this research included a quantitative

element which required a larger sample, having an easy to follow questionnaire that did not require a huge amount of training was more feasible.

In this research, the ASQ-3 was adapted to ensure the inclusion of both capabilities and outcomes (or functionings) as described previously and a consideration of the South Sudanese cultural context. I used Qualitative methods to achieve this. Specifically, I developed a Focus Group Discussion guide (FDG) and Key Informant Interview (KII) guide with semi-structured questions as the basis of the qualitative data collection. Some of the questions included in the semi-structured interviews involved aspects of the ASQ-3 so views on it could be obtained and it could be properly adapted. Aspects of child development and early learning that may be valued in the South Sudanese culture that may not be included in the ASQ3 were then added for the second part of the research.

Sample and Data Analysis

I used purposive sampling for this part of the research in order to get diverse perspectives from different stakeholders including parents, government staff, local leaders, local NGO partners and Plan International staff.

Specifically, the sample included:

1. Two focus group discussions (Each focus group had 12 males and 8 females – 20 parents in total). Most of the male participants spoke English so I did not require as much translation support. For the female FGD, a number of the female participants spoke very little English so I relied on translators provided by Plan International. I used homogenous sampling, as mentioned earlier, to make sure each focus group had similar people. All people included in the FGDs are from the Dinka tribe, from the same part of South Sudan, have similar literacy levels etc... (Teddlie, C. and Tashakkori, A., 2009). All of the FGD participants were from Jonglei where sporadic fighting and violence continues. All of the FGD participants were displaced people, driven from their homes due to the violence. One group included only women, while a second included only men. The reason for separating the sexes in FGDs was to make sure that women felt comfortable speaking. Sometimes in many cultures, women may not feel as free to express themselves when they are in a mixed group with men (Kumar, K., 1987; Khan, M.E., et al., 1991). Further their perspectives and desires for their children may be different from men's.

I initially planned on doing a third focus group discussion with children aged 6 to 10 years (50% girls and 50% boys) as Biggeri et al (2011) mentioned that few research focused on understanding capabilities from a cultural context include children's voices (Biggeri et al, 2011). However, once I got to Mingkamann, South Sudan I found this difficult to organise due to logistical challenges and my limited time in Mingkamann. In future research I would use participatory techniques such as the use of photography, video etc... to understand what was important for children and get their perspectives.

In total 20 people were included in two focus group discussions. All of these people are from the Dinka tribe and from the state of Jonglei which is where the majority of South Sudanese refugees in Uganda are also from.

2. Five Key Informant interviews (ie. government, local leader, NGO partner, Plan international staff – Total of 5 people). I used typical case and reputational purposive sampling for the KII.

In both the FGD and KII, I used semi-structured questions because I wanted to provide a general framework based on child development domains, the ASQ-3 and literature on the subject, but I also wanted to allow for things to come up that I was not expecting.

As there were only 2 FGDs and 5 KII, I decided to code and analyse the data manually. I used editing approaches which included a few a priori codes including gross motor, fine motor, cognitive, language and communication and socio-emotional areas (Robson, C., 2002). I collected the various responses on flip chart paper so the FGD participants could also interact and disagree with each other's' responses if they wanted. Through the process people could tell me if they agreed with a particular point, which I duly noted in my notes, and if they had additional things to add. I then took all of the raw data, looked for patterns and areas where the majority of people said the same thing or agreed with the same points and then put them into key categories based on child development domains: physical development, cognitive development, language and communication and social and emotional development. This process allowed me to develop a capability framework structured around child development for young children in emergencies in the South Sudanese context. The presentation of this will follow in the next section.

PART 2.1 OF THE RESEARCH

Key Research Question 2: How has the Community-Led Action for Children (CLAC) model been adapted for a humanitarian and South Sudanese cultural context?

Design and Data Collection method

Part 2.1 of this research used a case study approach to answering the research question. I used qualitative methods which included focus group discussions (FGD), Key Informant Interviews (KII), observation, videos, photographs, and Plan International reports (published and unpublished). The myriad data sources allowed me to develop a fuller and more in-depth case study comparing the implementation of the CLAC model in a non-emergency setting (Lira, Uganda) and in an emergency setting (refugee camps in Adjumani, Uganda). The non-emergency location selected was Lira, Uganda, which is a post conflict situation and where Plan has been implementing the CLAC model for a few years now. Lira was severely affected by the war in Uganda with people in the area experiencing displacement and violence like the South Sudan population. Many evaluations have also been conducted on the CLAC model implemented in Lira so it provides a good base of comparison. This will help Plan International learn from these experiences and use them to continue refining the model for other countries and contexts. Further, it will provide additional evidence to help researchers advance scholarship on this topic. Academics can build further on the use of mixed methods design of this research, the use of a case study approach to investigate the adaptability of a community-based model for a humanitarian context and the evidence found through mixed methods data collection and analysis on children's development outcomes, parents' knowledge, attitudes and practice and the relationship between children's development outcomes and parents' knowledge and capacities. Researchers can use the data collected and analysed in this research to further investigate the compatibility and applicability of Vygotsky's Socio-cultural theory and the Capability Approach and therefore deepen the understanding of Early Childhood Care and Development in emergencies.

Sample and Data Analysis

I used purposive sampling for this part of the research in order to get diverse perspectives from different stakeholders including parents, local leaders, local NGO partners and Plan International staff. In terms of FGD, I conducted one with parents in Lira, Uganda and one in the South Sudanese refugee camps. The semi-structured questions focused on the model of the CLAC programme and how it was being implemented in each location. Each focus

group had mothers and fathers who were participating in the parents' groups. The KII included Plan International staff that understood the CLAC model and how it was implemented in the emergency context.

Specifically, the sample included:

Two focus group discussions (Each focus group had 10 people – 20 parents in total). I used homogenous sampling to make sure each focus group had similar people - from the same tribe, same part of the country etc... All of the FGD participants from Lira were Ugandan, from the same community, spoke the same mother tongue and were all a part of a parenting group in the community. The FGD participants in the Adjumani refugee camps were from Jonglei where there sporadic fighting and violence continues. Additionally, all of the FGD participants were displaced people, driven from their homes due to the violence. The FGD group in Lira included an already established parenting group that had men and women. The second FGD in the Adjumani refugee camp (Ayillo 2) had a mixed group of women and men. Sometimes, separating the sexes is important to make sure that women in particular feel comfortable speaking. Sometimes in many cultures, women may not feel as free to express themselves when they are in a mixed group with men. However, in this case, women and men did not feel inhibited by the other in expressing their perspectives. I also made an effort to make sure all participants had an opportunity to speak. Plan International provided translators for people that did not speak English. Most of the participants in Lira spoke English, but most in the Adjumani refugee camp did not speak English.

1. Five Key Informant interviews (ie. government, local leader, NGO partner, Plan international staff – Total of 5 people). I used typical case and reputational purposive sampling for the KII (Teddlie, C. and Tashakkori, A., 2009)
2. Observation, Videos and Photos: I collected additional primary data through observation (unstructured), videos and photos during my visits to the various sites. In addition, I used existing videos and photos from Plan Uganda. This additional data allowed me paint a fuller picture of the implementation of the early learning spaces in Lira (non-emergency) and in the Adjumani refugee camps (emergency).

The data collection was supplemented with Plan International's published and unpublished reports about the project and CLAC model.

In both the FGD and KII, I used semi-structured questions because I wanted to provide a general framework based on literature about ECCD and the CLAC model, but I also wanted to allow for things to come up that I was not expecting.

Data analysis during this part of the research was conducted in a similar fashion as in part 1 of the research. Similarly to part 1 of this research, as there were only 2 FGDs and 5 KII, I decided to code and analyse the data manually. I used a combination of editing and template approaches which included a priori codes based on the four key pillars of the CLAC model: parenting, early learning, transition to primary school and working with government on policy (Robosn, C., 2002). I collected the various responses on paper. Because the FGD was done in a circle with the group, participants had the opportunity to listen to others' points and agree or disagree with them and add points that were not previously mentioned. I then read the notes multiple times, highlighting key patterns from the discussions and categorising key patterns based on the CLAC model.

I also used unstructured observation, videos I took while visiting the sites and photos to supplement some the FGD, KII and Plan International unpublished project reports. For the observation, videos, and photos, I similarly looked for patterns and coded what I saw in the videos, photos and unpublished Plan reports based on the CLAC model.

This process allowed me to take key aspects of the raw data and put them under key aspects of the CLAC model to help present the similarities and differences in how this model was adapted for a refugee context.

PART 2.2 OF THE RESEARCH

Key Research Question 3: What are the outcomes and capabilities for children and parents through the implementation of the Community-Led Action for Children model (CLAC) in a refugee context? Are these outcomes better, the same or worse than when the CLAC model has not been implemented at all?

Child level

Null Hypothesis (Ho): The CLAC programme implemented during emergencies has no effect on refugee children's development outcomes.

Alternative Hypothesis (H1): Children in the CLAC programme during emergencies will have the better child development outcomes and capabilities than children in another South Sudanese refugee camp that did not receive the CLAC programme.

Parent level

Null Hypothesis (Ho): There is no relationship between parents' knowledge and children's development outcomes.

Alternative Hypothesis (H1): Parents with higher knowledge of child development have children with higher child development outcomes.

Design and Data Collection methods

In order to answer the **3rd key research question, a quasi-experimental design using quantitative and qualitative data** was used to compare two groups: an intervention and a wait list control group. The intervention group was already receiving early learning opportunities based on Plan Uganda's CLAC model while the control group, at the time of the data collection, was not. All children and families who participated in the research are from the Dinka ethnic group. Further, they are all from the same parts of South Sudan, where war has been the greatest. The intervention group is from Ayillo 2 refugee camp while the wait list control group is from Ayillo 1 refugee camp. Plan and other agencies have been providing education and early learning support for more than 8 months at the time of the data collection in Ayillo 2. While Ayillo 1 has been open for more than a year, it has had more new arrivals from South Sudan. Some services were being provided in Ayillo1, but at the time of the data collection, the block of Ayillo1 where I collected data for this research, did not have early learning or education services. Given how far each block is from the other in the camps, it is safe to say that there should have been minimal spill over to the control group in Ayillo 1. Further, the group of refugees used as the wait list control group arrived in Adjumani, Uganda only a few weeks to a month prior to the data collection. It therefore, provided the perfect control group comparison. In refugee situations, information about services provided spreads quickly, so while at the time of collecting data, there was no early learning services in Ayillo1 refugee camp, Plan International has plans to start services. The selection of the two sites for the research was done very carefully to ensure an appropriate intervention and control group. Variables that I looked at include: ethnic group, where in South Sudan the refugees were from, their socio-economic backgrounds, age (as reported

by parents). Majority of the refugees in both sites and actually overall in all of the South Sudanese camps in Uganda were single parent households as most fathers remained in South Sudan either to work or support the war effort. Doing this background investigation took a lot of time, which Plan Uganda and Plan South Sudan's staff supported prior to my going to Uganda to collect data. In the end, the only difference I could see among the two populations where I collected data was that one group had been in Uganda longer and had a chance to begin early learning services, while the other group was new to Uganda and so did not receive early learning services. Additional areas where the research could have further compared the groups includes physical characteristics such as height, weight and whether the child was malnourished or not. In the data presentation section below, I further elaborate the implications and potential effects of the research not looking at physical characteristics when determining the comparison groups.

1. Quantitative Data

Quantitative data was collected focusing on two target groups: children and parents. There was one data point where I compared children who received the programme in Ayillo 2 and children who were the wait list control in Ayillo 1. Data was further collected with parents of children in Ayillo 2, but was not collected with parents of Ayillo 1 mostly due to logistical challenges in the camps. A limitation of this approach is that the research includes only 1 data point rather than a pre and post. A pre and post would have allowed for deeper understanding of the changes over time for children in the programme and control groups. This approach can help identify the gains due to the intervention (Wiersma, W. and Jurs, S., 2005). Due to various logistical, time and financial reasons, this was not possible. A challenge I would have faced had I collected data among the groups at two points in time is lost to follow up and this was another reason why I decided to only collect data at one point. I saw first-hand in the refugee camps that the movement of the refugees across the border to South Sudan was occurring regularly. I realised that it would be extremely difficult to find the same children again to collect a second data point and I would likely have a much lower post sample.

The first part of collecting quantitative data was the adaption of the ASQ-3 as explained in the first part of the research. After the adaptation of the ASQ-3, it was used in both Ayillo 2 and Ayillo1 to investigate children's capabilities and functioning. This allowed me to compare children who received some early learning services vs. those that did not receive any. This helped answer the question of whether early learning (based on Plan

International's CLAC model) helped children continue on their normal development path and if it made a difference when compared with children who received no services. The approach to collecting data changed multiple times during the pilot and research collection process as we tried different approaches in the field. The initial plan was to create 3 play groups of children aged 3 years, 4 years and 5 years, two times per day, with 20 children per group, reaching 120 children per day per refugee camp. The boxes below illustrate the initial plan. I realised that due to the heat, families and ECCD caregivers (who were research assistants) did not want to participate in the afternoon. So, we were not able to collect data in the afternoon.

Day 1 (Programme group)

morning- Ayillo 2 - 3 year old (20 children)	morning- Ayillo 2 - 4 year old (20 children)	morning- Ayillo 2 - 5 year old (20 children)
afternoon - Ayillo 2 - 3 year old (20 children)	afternoon - Ayillo 2 - 4 year old (20 children)	afternoon - Ayillo 2 - 5 year old (20 children)

Day 2 (Control group)

morning- Ayillo 1 - 3 year old (20 children)	morning- Ayillo 1 - 4 year old (20 children)	morning- Ayillo 1 - 5 year old (20 children)
afternoon - Ayillo 1 - 3 year old (20 children)	afternoon - Ayillo 1 - 4 year old (20 children)	afternoon - Ayillo 1 - 5 year old (20 children)

The idea was that I would have 1 ECCD caregiver and Plan staff (paired together) to support parents to do the activities with their children and fill out the ASQ-3. Even before I started the data collection, the research team and I realised that the majority of the mothers (mothers were more likely to come than fathers) did not have basic literacy skills in English nor any experience doing the activities with their kids. So, I decided that the activities needed to be led by the ECCD caregivers and Plan staff. I decided that it was important to invite mothers and fathers to remain with their children, both so the children felt comfortable and also as a chance for parents to learn how to do the activities with their kids. I also initially thought that one ECCD caregiver/Plan staff leading activities for 20 children at once would work, but in reality I quickly realised that I needed smaller groups of children and more ECCD caregivers.

The final design of the data collection on the first day of collecting data was as illustrated in the boxes below. I relied on the parents and the ECCD caregivers to confirm the age of the children. In the situation of South Sudanese refugees, however, there are many illiterate parents so I used refugee research assistants to fill out the questionnaire.

<p>Ayillo 2 - 3 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 1 - 20 children Day 2 - 20 children</p>	<p>Ayillo 2 - 4 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 1 - 20 children Day 2 - 20 children</p>	<p>Ayillo 2 - 5 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 1 - 20 children Day 2 - 20 children</p>
<p>Ayillo 1 - 3 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 3 - 20 children Day 4 - 20 children</p>	<p>Ayillo 1 - 4 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 3 - 20 children Day 4 - 20 children</p>	<p>Ayillo 1 - 5 year old (40 children) - 4 groups of 5 children conducted over 2 days Day 3 - 20 children Day 4 - 20 children</p>

First, I oriented and trained Plan Uganda toward the purpose of the research and how to collect data using the adapted ASQ-3 and the parents' survey. As the Plan Uganda staff are ECCD Officers and are accustomed to doing the types of activities required in the ASQ-3, it was not hard for them to understand it and collect data. I also recruited and trained 15 ECCD caregivers from the South Sudanese refugee population to be research assistants. The ECCD caregivers had been oriented as to the purpose of the research and their role before the actual training was conducted and Plan Uganda selected the best performing and most active ECCD caregivers to be research assistants. All of the selected research assistants are ECCD caregivers so they have had previous professional development and orientation on child development and how to work with children, they are all South Sudanese refugees from the Dinka tribe, and they all speak Dinka and English and can easily read and write in English and translate from Dinka to English. Some of the selected research assistants were primary school teachers in South Sudan. The training was conducted in 3 hours due to the limited time we had in the camps for data collection. While ideally the research assistants could have benefitted from more practice and training in using the tools, a Plan Uganda staff member stayed with each small group that worked with the children and parents. This allowed for on-the-job training and support to continue. As an additional motivator, I provided a stipend to all research assistants as this work went beyond their normal jobs as ECCD caregivers for the Plan Uganda program. I also purchased snacks (bananas and biscuits) for the participating children, parents and research assistants.

For the first day of the data collection, I planned on collecting data from the intervention group in Ayillo 2. I decided to collect data in a safe location that the refugee children and families know: two ECCD centres in Ayillo 2. I randomly chose two centres in the camp. More details about the sampling is in the next section. Plan Uganda colleagues and I also talked to community leaders about this research prior to starting to get their buy-in. Parents brought their children to the ECCD centre as they normally do in the mornings, but I invited them to stay so they could take part in the parent questionnaire. Each dyad (parent-child pair) that arrived and wanted to participate in the research were given the consent forms; each had an equal chance to be selected for the research. As many dyads arrived at the same time, Plan Uganda staff split up into smaller groups so they could work with each

dyad, explain the purpose of the research and either get their signature or their thumb print. This process took a long time and many more dyads showed up than I had consent forms and questionnaires. In total, I collected data from 90 dyads. As some children saw that those children who came with their parents could do a different activity, they ran home and came back with their parents. Once everyone had a chance to understand the purpose of the research and fill in the informed consent forms, I took the various groups into different locations. I asked the research assistants to take all three year olds and their parents in one ECCD centre/tent, four year olds and their parents in another ECCD centre/tent and the five year olds and their parents into another ECCD centre/tent. This was important as the ASQ3 for each age group has some different activities. Once inside each tent/ECCD centre, the research assistants and Plan Uganda staff made small groups of five children so they could start the activities with the children and assess them. Plan provided developmentally appropriate toys to use for the various activities where we assessed them. In the small groups, the South Sudanese research assistants along with a Plan Uganda staff asked children to do the various activities. During this process, parents were invited to stay and participate. Normally the questionnaire could take between 10-15 minutes for parents to fill out. I thought that since this is a new exercise for research assistants and Plan Uganda staff that we may need 45 minutes to collect data from each small group. In reality, it ended up taking more than 1 hour. This was because there were a lot of disturbances such as other children and parents who came once the small groups were established who wanted to participate, people who simply were interested and wanted to watch etc... It made the spaces crowded and chaotic. During this process, I walked around to support the research assistants and Plan staff as they did the activities with the children and as they slowly filled out the questionnaire. When I found that the research assistant was not doing the activity fully or correctly, I had to show them. This could have had some effect on the data collection if someone did something incorrectly when I was not there.





Quantitative data was also collected to understand parents' knowledge about child development in order to investigate the hypothesis that parents with higher knowledge of child development have children with higher child development outcomes. The parenting component of the CLAC programme had not yet fully started at the time of data collection. Groups had been set up and some groups had gone through 1-2 sessions and some had not gone through any. So this data was collected and used as a baseline for the overall parenting programme and also used to compare parents' starting level knowledge about child development, health and nutrition and how that corresponded with how their child scored on the ASQ-3. A parents' questionnaire was based on a parents' questionnaire developed by Plan International's East African country offices. The original questionnaire, which considered the CLAC model and the culture of East Africa, was developed for non-emergency contexts. While reviewing it with Plan Uganda colleagues, I realised that there were too many questions and it was too long, not all of the content included in the questionnaire were being included in the parenting education that was planned to begin in Ayillo 2 and Ayillo 1 refugee camps. Further, the language in the questionnaire was not simple enough for the refugee research assistants to read and help parents answer. Through a process of revising, testing (with the refugee and Plan Uganda research assistants), we shortened, simplified and adapted this questionnaire. Initially we started off talking to parents while their children were simultaneously doing the various activities. Parents-child dyads were selected so any child that was assessed through the ASQ-3's

parent was targeted with the parent questionnaire). However, I quickly realised that we did not have enough staff to do this as each parent needed one to one attention. Further, I realised that this needed to be done on a one to one basis otherwise parents would answer the question in the same way as a person who might be sitting near them. So, I tasked the research assistants to go house to house to talk to the parents in a more relaxed setting. Some of the parent questionnaires were completed before I left Uganda and the rest came after I left Uganda.

2. Qualitative Data

Qualitative data was collected using focus group discussions and key informant interviews targeting teachers and early learning facilitators, parents and community members. Each focus group discussion or Key Informant Interview was guided with semi-structured questions so the interviewees could provide more information than what was specifically asked. Each FGD or KII took about 1 hour; some discussions took 2 or more hours. I also supplemented this data with unstructured observation, videos and photos of activities in both Ayillo 1 and Ayillo 2.

Sample and Data Analysis

I used Parallel Mixed Methods Sampling for this part of the study (Teddlie, C. and Tashakkori, A., 2009). For the qualitative data, I used purposive sampling while for the quantitative aspect, I used multi-stage cluster sampling (Ibid).

1. *Quantitative methods:* I used multi-cluster sampling of children and their parents for this aspect of the data collection (Teddlie, C. and Tashakkori, A., 2009).

The first step in the multi-cluster sampling process was to randomly select the intervention ECCD centre to include in the research. Plan International has multiple centers in Ayillo 2 and Plan randomly picked the two spaces where the research would be conducted. Each ECCD center in Ayillo 2 had an equal chance of being selected for the study as the intervention group.

During the next step, Plan colleagues and I randomly selected child-parent dyads. Each child-parent dyad had an equal chance of being selected for the study. Plan Uganda had

generally provided a message to the refugee community in Ayillo 2 that this research was taking place for child-parent dyads that were already participating in the ECCD centers. Each child-parent dyad had an equal chance of being selected.

In Ayillo 1, because Plan Uganda was in the preparatory stage of starting early learning activities, they told the whole community that this research was taking place and that some people could participate. Each child from 3-5 years had an equal chance of being selected.

- a. ASQ-3 adapted Questionnaire for children 3-5 years Total: 60 parent/children per location. Total Questionnaires: 120 for the first data point in Ayillo 2 and 120 in Ayillo 1.
 - b. Parents' Survey – 60 parents from the same parent/child pairings for Ayillo 2. Total: 60 parents for Ayillo 2.
2. *Qualitative methods:* I used purposeful sampling of the teachers and parents in order to get a representative sample.
- Total:* 30 ECCD teachers/caregivers, 30 parents, 3 Key Informants, 2 NGO staff implementing the project
- a. Teachers: focus group discussions (1 location X 3 locations X 10 people/location) – Total: 30 people.
 - b. Community leaders: Key Informant Interviews – 1 per location. Total: 3 KII
 - c. NGO staff implementing the project: 2 KII during the first data point
 - d. Observation, Video and Photos - I conducted observation (unstructured) and took videos and photos of the ECCD activities in Ayillo 2. This additional primary data helped triangulate the other qualitative and quantitative data collected.

The computer programmes SPSS and R assisted me in analysing the data from the quantitative elements of the research. I manually analysed the qualitative data that was collected through Key Informant Interviews, Focus Group discussions, pictures, video and my own observation notes as the overall sample was not too large. I conducted the qualitative data analysis using a combination of editing and template approaches which included some a priori codes based on the CLAC model, and child development domains included in the ASQ-3 (Robosn, C., 2002). There were also points brought up that did not fit into these categories and that was kept in a separate category of Other. I collected the

various responses from the FGD and the KII on paper. Because the FGD was done in a circle with the group, participants had the opportunity to listen to others' points and agree or disagree with them and add points that were not previously mentioned. I then read the notes multiple times, highlighting key patterns from the discussions and categorising key patterns.

I also used unstructured observation, videos I took while visiting the sites and photos to supplement some the FGD, KII and quantitative data collected through the adapted ASQ-3 and the parenting questionnaire. For the observation, videos and photos, I similarly looked for patterns and coded what I saw in the videos, and photos.

This process allowed me to use the various types of data to triangulate what I saw in the quantitative data collection.

Research Team and Support:

Throughout the whole research process I had many people support the development of the data collection tools, the informed consent forms and the actual collection of data. In designing the research, I had advisory support from Prof. Moses Oketch, my PhD supervisor, Dr. Jacqui Galinetti, the Director of Research and Knowledge Management from Plan International and some experts in early childhood development, including Ms. Hadijah Nandyose (Regional ECCD Advisor for Plan in East Africa), Ms. Rose Mary Awely (Plan Uganda National ECCD Advisor) and Ms. Mercedes Maddox, Early Childhood Education and Development Specialist and Director of Kid's Corner Day Care Center in Washington, DC. They provided technical advice and input during the development of the tools and design of the research.

Colleagues from Plan Uganda and Plan South Sudan supported in the development of tools, in the collection of data and in helping me with the logistics for my trips to South Sudan and Uganda where I collected data. While in Uganda, Plan Uganda staff and I recruited and trained South Sudanese refugee research assistants who helped in collecting the quantitative data on children and parents for this research. Plan staff did not receive any additional remuneration as this was a collaboration between myself and Plan International, however I provided a remuneration to the South Sudanese refugee research assistants as this work was additional to the normal work they did in the refugee camp. All of the South Sudanese refugee research assistants were already working with Plan Uganda as ECCD

caregivers so they had a minimum education level where they could read, write and communicate in English and Dinka, which was essential to communicating with South Sudanese refugee children and parents in Uganda. Secondly, they were already trained in ECCD so had some knowledge of child development and how to use play, music etc... to promote children's learning and development. Many of the ECCD caregivers were also leaders in their community so they could mobilise children and their families to participate in the research.

Limitations of the Research

There were many limitations to this research.

1. Regular movement of the South Sudanese refugees

Firstly, the conflict and humanitarian situation of the South Sudanese population was a major limitation. While people had fled South Sudan to be in refugee camps in Uganda, they were going back and forth from Uganda and South Sudan due to the porous and close border. This meant that some of the initial South Sudanese refugee caregivers Plan International recruited to be research assistants were not in the camps when I went to begin collecting data. So others had to be recruited at the last minute to replace them. The constant movement of people also meant that if we were able to collect data from children one day, we could not find the parents to take the parent survey a day or few days later.

Regular movements also meant that not all of the programme children had the same amount of time with the programme activities. The activities run similarly to a school year with a specific curriculum and themes for the lesson plans and activities. However, if a child arrived to the camp a few months after the programme's year started, Plan still accepted the child. This means that children did not all get the same amount of input from the programme at the time of data collection. This could impact on the overall child development score and results.

2. Food Distribution and other activities in the camps

While many of the refugees are seen idle, there are many activities in the camp that made it difficult to keep all participants and research assistants focused on the research. During the middle of our data collection, there was a distribution of food. Food distributions in refugee camps can last for days and require refugees to wait in line for full days. This caused

problems because the first set of South Sudanese refugee research assistants I trained and prepared needed to go to food distribution on the 3rd day of the data collection. We dealt with this problem by recruiting other refugees, however they had not gone through the first training. So, Plan Uganda colleagues and I worked with these new research assistants to orient them to what they needed to do. I paired them with other refugees so they were not alone doing the activities, which provided an opportunity for them to learn.

3. Limited Experience

While all of the research assistants, both South Sudanese refugees and Plan Uganda staff, have been working on the ECCD programme in the camps for a number of months, this area of work and the CLAC model are new to them. So, while they could generally understand how to lead the activities with children some of the activities were new to them. They also did not necessarily understand how the activities we did with the children looked at different aspects of child development. So, it required a lot of mentoring and a lot of on the job training. The positive aspect of this was that the Plan Uganda staff and South Sudanese refugee research assistants expressed how much they learned by going through this process. They each wanted copies of the ASQ-3 for multiple years so they could then do the activities with their own children at home and help them where they found their child needed support.

4. Low Literacy Levels

Very low literacy levels among the South Sudanese refugee population created a lot of challenges. While the South Sudanese research assistants could read and write, not all of them had high level literacy skills in English. This was evident because they struggled with reading and understanding the questions and activities they needed to do with the children. This was remedied because I walked around and supported each of them. Plan Uganda staff who have higher literacy and education levels also walked around and often worked with certain research assistants to help them. Many of the parents who participated in the research (majority were women) were illiterate. This is not surprising to me and I expected low literacy levels, however this did cause challenges in filling out the parent survey and the consent forms. The research team had to often work one on one with mothers to ensure they fully understood the purpose of the research and could fully consent to it.

5. Limited Time for Training

I had limited time to conduct training with the research assistants. As this was still a new concept and approach to collecting data (most had never collected data), they needed a lot of support. While I made efforts to provide training and then on the job support, this may have affected the research assistants' ability to do the activities with the children and conduct interviews with parents, thereby affecting the data. The research assistants did not always fill in the forms correctly and ones that were not filled in correctly had to be discarded during the data cleaning process.

6. *Age of children and children's normal development*

Children grow and develop all of the time. While tests such as the ASQ-3 have certain milestones, children's development has a range with some children learning things faster than others. Most children are in the normal range and the ASQ-3 tests for outliers and those children who are far below their peers in the various child development domains. Small children can also change quite a bit in as little as 1-3 months and especially a lot in one year. The ASQ-3 test that was adapted and ultimately used for this research only looks at three milestone periods of a child's life – age 3 (or around 36 months), age 4 (around 48 months) and age 5 (around 60 months). However, the original ASQ-3 has a different test for children who are 42 months or three and a half years or 54 months or four and half years. Children can develop a lot in 6 months. However, in this research we did not further separate children in this way because birth registration is not common in South Sudan so parents may not always remember their child's exact birthday. The research age groupings was done based on parents telling us how old the child was. So within the children that took the 3-year old test, there may have been those that were 36 – 47 months. Similarly for the 4-year old and 5-year old, children could have been closer to 48 or 60 months or within the range. All of this could affect their score on the test.

7. *Challenge of Using Tests for Small Children*

This research has used a quantitative child development test on South Sudanese children. Using a quantitative test is not uncommon; it has been done myriad times by researchers and early childhood practitioners to get a sense of a child's development levels and in particular if there might be some developmental delays that require further attention (Aboud, F., 2007; Nahar, B. et al., 2009; Nahar, B. et al., 2012; Singla, D. et al., 2015; Yousafzai, A.K. and Aboud, F., 2014; Yousafzai, A.K. et al., 2014). However, it has its own limitations. Early years' researchers Gray and MacBlain (2015) mention the challenges of gathering

data from children 5 years and below (Gray, C. and MacBlain, S., 2015). The first five years of a child's life, there is a great deal of brain development, including learning how to communicate, organize thoughts etc..., but that development is not complete (Ibid). When using a quantitative child development tool, one is assuming that the child understands the questions that are being asked and the tasks that he/she needs to do, can organize his/her thoughts and then communicate them back to an adult (Gray, C. and MacBlain, S., 2015). Early years' researchers mention the importance of observing children over a period of time and using other measures to supplement the quantitative test (Ibid). Further, using a quantitative test assumes that children have been asked by adults to perform certain tasks for them or answer certain questions for them. In the South Sudanese population, children may have never had this experience so this needs to be considered while looking at the results of the quantitative data. In order to mitigate potential risks, the research design used mixed methods, quantitative test along with qualitative data. The qualitative data, in the form of focus group discussions, targeted parents and caregivers the children see regularly, along with observations made by the research team to triangulate data on children's development.

8. *Definition of parent*

When speaking with the South Sudanese refugee community, we asked for children to come with their parents so we could set up child-parent dyads. The definition of a parent in western countries could be different from that in South Sudan. So, it is not clear if the childparent dyads are biologically related or just adults who have informally "adopted" a child and considers him/her their child. This could be important because a biological parent might care for a child differently than a non-biological child.

9. *Translation*

Translation is another limitation of this research. While the South Sudanese research assistants all spoke English and Dinka, their levels of English varied so there could have been error in their translation when conducting the activities with the children, when asking parents questions, how they filled in the forms for the parents or children's questionnaires and how they translated the content of the FGDs and KII. Most of the data collection process was conducted in Dinka.

Ethical considerations

As this research is focusing on young children in emergency situations and their families there are a number of ethical issues that might arise. I have consulted the BERA Guidelines to help me think through and find solutions to various ethical issues.

While I am a PhD student at IOE, I am also a staff member at Plan International, an international charity focused on children's rights and well-being. As a staff member, I have had to go through training on child safeguarding and protection and signed necessary forms where I agree to not put children at risk from abuse, exploitation or danger. I also know the mechanism to follow in case I see another person abusing, exploiting or putting children in danger. During the data collection process, I reviewed the purpose of the research with all participants of the research. I worked with colleagues who translated for me into Juba Arabic and Dinka, the two main languages of the participants. I asked the participants if they had any questions to ensure openness and full disclosure.

I obtained voluntary informed consent from the parents to do the research on them and their children. For illiterate parents, research assistants (who were refugees themselves) and Plan staff read the consent forms to participants and worked with them on ensuring they understood the purpose of the research and that they could withdraw their participation at any time.

Further, illiterate parents who could not sign their name used a marker and ink pad to provide their thumb print in lieu of their signature. I also obtained informed consent on other stakeholders that were included in this research – teachers, community members, NGO staff, government staff etc... The consent forms clarified the purpose of the research and ensured that the research did not raise their expectations of continued support in their communities or expectations of payment for their participation. Further, the forms state that participants can withdraw from the research at any point. There has been other research done with children in emergencies focused on other topics and I followed those examples to ensure there was no harm to children and they knew that participation is optional. All questionnaires, Key informant interviews and focus group discussions will not use any person's names. Each participant or group will have a code which will be a combination of letters and numbers based on their location (Ayillo 1 or Ayillo 2 as a code of A1 or A2) and a random number given them starting from 1. However, on all forms and in the research

analysis, no person's name will be used. This is important to ensure confidentiality of the data and protection of the participants.

In addition to my supervisor Prof. Oketch, I shared the research tools and consent forms with Plan Uganda, who is the main sponsor of this research, along with Plan International's research department. Further, once the research is complete and final, Plan Uganda will share with the communities in the three locations, key findings of the research through a community meeting.

CHAPTER 7: DATA PRESENTATION AND ANALYSIS

Part 1:

1.1: PART 1 OF THE RESEARCH

Key Research Question 1: What is ECCD in emergencies from the South Sudanese cultural perspective?

- a. What are the capabilities and child development outcomes young children can and should achieve with ECCD in emergencies programming from the South Sudanese cultural perspective?

While the key research question is about identifying capabilities and child development outcomes for young children from a South Sudanese cultural perspective, this was used to develop a Capability framework for children 3-5 years and also to adapt the ASQ-3 which was used to collect quantitative data. This quantitative data helped to answer question 2.2 in this research about the impact of early childhood programming in emergencies. As mentioned earlier, the capability framework and Vygotsky's Socio-cultural theories have never been brought together in a humanitarian context such as a refugee situation, nor have they ever been applied to a South Sudanese context. Both theories add something different and fill in gaps of the other, thereby providing a fuller and deeper picture and understanding of children's development in a South Sudanese context. Applying both of these together in a refugee context contributes to deepening understanding of early childhood care and development in emergencies and helping to establish stronger theoretical grounding. The applicability of both of these together in a refugee context is one of the contributions of this research.

Therefore, there are no sets of capabilities from a South Sudanese cultural context that also consider the conflict situation and young children between 3-5 years. Developing this through qualitative methods is the first contribution of this research. Through Focus group discussions and Key Informant Interviews, I developed a list of capabilities framed around child development that are relevant to the South Sudanese cultural context and considers the views and values of South Sudanese people. This was then used to adapt the Ages and Stages Questionnaire which was used to collect quantitative data and will help answer the research questions in part 2 of this research.

I used purposive sampling to conduct two focus group discussions (one with 12 male and another with 8 female) in Mingkamann (Lakes state) South Sudan along with 5 Key Informant interviews with South Sudanese and Ugandans in order to understand the capabilities and child development outcomes young children should achieve with ECCD in emergency programming. I used connections that Plan International had with local community leaders and local communities to reach out to potential participants for the FGDs. Each group of males and females had a mixed age range from people in their twenties to those in their sixties or above. I did not ask people their exact age, but Plan International and community leaders asked their age. The mixed age group was important because as Socio-cultural theory and Bronfenbrenner's Ecological Systems theory stated culture and perspectives can also change through generations and time (Ageyev, V., 2003; Bronfenbrenner, U., 1978; Cole, M. and Cole, S., 1997; Rogoff, B., 1998). I therefore thought the different age ranges may have different perspectives that I wanted to capture. Further, culture is an interactive process where generations can influence each other (Ibid). I wanted to give participants an opportunity to interact with each other. I conducted focus group discussions in South Sudan because they are from the Dinka tribe and from the same part of Jonglei state where the majority of the South Sudanese refugees in Adjumani, Uganda. During the war, some people crossed the Nile River and stayed in neighbouring Lakes states as internally displaced persons (IDPs) while others continued their travel crossing the South Sudanese border to find refuge in Uganda. I was also in South Sudan for other work so it made sense time wise and financially to conduct the focus group discussions in South Sudan. I did not have the funding for two trips to Uganda which would have allowed me to do the focus group discussions there rather than in South Sudan. I used purposive sampling to conduct 5 Key informant interviews (KII) which included Plan International staff who are from the Dinka tribe, local Dinka leaders and ECCD experts who have been working with the Dinka population for many years. I felt it was important during the process of establishing capabilities and child development outcomes that allowed me to adapt my quantitative research tool to include people who had knowledge of South Sudanese, and in particular, Dinka culture, but also people who had ECCD experience. The Plan International ECCD staff I interviewed really helped me translate the information I obtained from the South Sudanese to make it work in an ECCD quantitative data collection tool. After the FGDs, I initially put together the capabilities based on the patterns. I used the approach that other researchers used, but I framed it around child development domains. I updated the ASQ-3 based on this. I used Plan International staff and ECCD experts to look at the updated ASQ-3. I made changes based on their suggestions of the

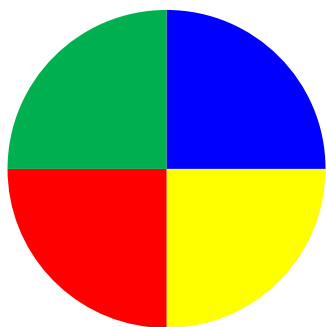
context and feasibility. I did a small pilot in Uganda with five children to test the tool. Plan International staff and one refugee ECCD caregiver supported this process. I made more revisions and then finalized the tool for use in collecting quantitative data for the research.

In this section, I present patterns and a capability framework for young children in emergencies in the South Sudanese context. Some of these patterns are based on codes I included for categorising information based on child development domains, but others such as tolerance and peace, as mentioned below, were new issues that I had not considered and do not currently fit into the original ASQ-3. It must be noted that there was a low understanding of child development as it is discussed in many western countries. So rather than using the terminology of child development as I realised quickly that this term was new to them, I posed the question “What are your hopes and dreams for your children? What do you think they should be able to do at age 1, 2, 3, 4, 5 and before entering primary school?” While I collected data from the FGDs and KIIs about children from 0-5 years, I present the data on children 3-5 years as they are the main focus of this study.

Capabilities Framework for young South Sudanese children and Adaptation of Quantitative Data Collection tool

Based on the qualitative data collected and using Nussbaum and others’ approach to presenting capabilities, here are key capabilities identified through the Focus Group Discussions (FGD) and Key Informant Interviews (KII) that are relevant and important in the South Sudanese context. I use the four child development domains, illustrated below, that includes 1) physical development, 2) cognitive development, 3) language and communication and 4) social and emotional development to frame the capabilities identified.

Child Development



- Cognitive
- Linguistic
- Socio-emotional
- Physical (Gross and Fine Motor)

1. Physical Development

Physical development includes gross and fine motor skills and all aspects of physical health, nutrition etc... The key points brought up by focus groups and KII included the importance of the following capabilities for children 3-5 years.

The majority of the focus group discussion participants and KII included some important physical development capabilities for children 3-5 years. These include the ability to walk, run, skip and jump as important for gross motor skills. Many of the aspects of gross motor skills mentioned by participants are already measured in the ASQ-3 for children 3-5 years such as the ability to walk, run, skip and jump. The original ASQ-3 includes questions to see if children can button and unbutton clothes, zip and unzip clothes, and climb stairs. These three capabilities were taken out of the adapted ASQ-3 because the majority of refugee children do not have clothes with buttons or zippers and there are few stairs for children to climb in villages in South Sudan and also in the refugee camps in Uganda. Participants did not mention much in terms of fine motor skills and actually were not clear on what that meant. Learning how to write was cited as important for participants as one mother said "I want my children to learn to write", but they did not specifically mention holding a pencil using the pincer grasp like the original ASQ-3 mentions. As holding a pencil correctly and practicing writing is something Plan International includes in their CLAC model according to a KII conducted with a Plan International staff, this question was kept in the adapted ASQ-3. The Plan International staff said during the same KII, "We practice writing with the children in the ECCD centre so they are ready for school. With the youngest children we help them learn how to make lines and then circles and then we slowly practice writing letters." As the original ASQ-3 includes questions about drawing horizontal and vertical lines, drawing circles and shapes and writing one's names (capabilities for 3-5 years). Due to the fact that these are all aspects that are encouraged through the CLAC programme (even if not prioritised by research participants), these questions were kept in the adapted ASQ-3.

2. Cognitive Development

Learning and cognitive capabilities were very important to the research participants, but they were not clear on exactly what that meant beyond knowing how to read, write and do math. They all felt that education and learning would help their children succeed in life. Both fathers, and mothers in the FGD and KII mentioned that they wanted their children to get

jobs and earn money. Some parents said they wanted their children to be doctors, teachers. One KII participant said, "I want my son to be educated so he can leave South Sudan and get a good paying job." Based on KII and FGD, cognitive development was brought up as one of the most important things for children. Women, many of whom are illiterate, especially wanted their children to learn how to read, write and succeed in school. One mother said "I do not know how to read, but I want my children to read so they can succeed in life". Parents overwhelmingly felt that it was the teachers' jobs to teach children and fill them with knowledge which is very much in line with the perspective of a child as a 'tabula rasa' or a vessel to be filled. This is not in agreement with Vygotsky's socio-cultural theory, but is in line with long held beliefs in their culture. They never experienced children being part of the process for their own cognitive or overall development so this was not mentioned. - Ability to read, write and do math

3. *Language and Communication*

Research participants mentioned the importance of language and the ability to communicate with others as very important, but this was not seen as too important when children are very young and during the infancy and toddler years (0-2 years). This is because community members felt that children are unable to talk and communicate at this age. Many mother and fathers mentioned that when children are small, they cannot talk so they did not need to talk to them. Virtually all research participants wanted their children to learn English and this was another critical thing they wanted their children to learn. "All children should learn English so they can get good paying jobs and be successful", one father said. Mothers had a similar perspective. One mother said, "I want my child to go to school and learn English, not Dinka. English is more useful for their life." They saw success as having a good paying job and knowing English was a key way for their children to achieve that. It is an important language of the South Sudanese government, but people recognised very well that an ability to speak, read and write in English would help their children later in life. The Plan International CLAC programme uses a bi-lingual model when working with children. While most of the activities are conducted in their mother tongue (especially for the younger years), there is an increasing use of English (especially for the older ages). English is not taught as a formal subject in the CLAC programme as that usually starts in grade 1 of primary school. However, CLAC

teachers and teaching assistants use music, games and poems in English to help children learn basic conversation skills.

The original ASQ-3 did not have specific questions related to a child's ability to speak English as the original is already in English. As part of the adaptation, I added a simple question to test for all three age groups – 3 year olds, 4 year olds, 5 year olds - to see if they could communicate basic greetings in English.

Following directions and respecting elders came up in many of the FGDs and KII. "Children should respect their elders and do as they say", a father and community leader said. This sentiment was echoed by many others, men and women, though the FGDs and KII. A mother in the FGD said, "My children need to listen to me and follow directions. That is important." The original ASQ-3 did have specific questions related to children following directions so I simplified them, but kept them in the tool.

- Follow directions and respect elders
- Speak English along with Dinka

4. *Social and Emotional development*

a. Cleanliness and personal hygiene

This was seen as extremely important in South Sudanese culture. Not only did research participants mention this as a priority, I could observe that this was the case as well. Every morning during ECCD activities, the children participate in a morning welcome circle. Before this, children line up and teachers check their nails, shoes and make sure they are clean. If they are not, children are taught to go to the water point and use soap to clean themselves. A mother and ECCD teacher said, "Every morning the children need to be checked to make sure they are clean. That is the first thing we check every morning."

b. Having relationships with family members and other children

An overwhelming majority of participants, both men and women, said that children needed other children in their lives as friends and support. They were happy to report when their own children had friends. The notion of family is also larger and broader than in many western contexts that just include the biological nuclear family and the words brother, sister, auntie, uncle, mother, were brought up a lot during the FGDs and KII even when research participants were not talking about blood relatives. I was sometimes confused about

whether the participants were talking about blood relatives or part of their broader notion of family, particularly when a few participants mentioned auntie and uncle.

c. Children doing household chores (ie. Cleaning, cooking, collecting firewood) and helping care for younger siblings.

The ability to support the family with household chores and help care for younger siblings was mentioned multiple times during the FGDs and KII by both women and men. These capabilities were particularly important for girls in the family. This was cited as important preparation for girls when they are older and mothers themselves. “My daughter helps me collect firewood. She takes care of her younger siblings. This is important for when she gets married”, one mother said. A father from a FGD agreed and said, “Girls need to do household chores. This is important for when they get married.” One father, who was also an ECCD teacher, did not disagree with the fact that girls need to help with household chores, but he did say, “I want my daughter to be educated. I am glad Plan has set up this school because she has the chance to learn. Girls should have the chance to learn like boys.”

d. Tolerance, cooperation and learning to live together peacefully

These themes came out very strongly in the FGD and KII. All adults that spoke, both men and women, were aware of the violence that has plagued their country for generations and they want to see a better future for their children. A father, who is also an ECCD teacher said, “We want our children to learn about peace and not fight anymore”. A mother in one of the FGDs said, “Our children fight a lot. Our community fights a lot. This is not good.” A KII with Plan International staff said, “Many people in our community fight. They do not know anything else. We grew up seeing this all of the time.” Unfortunately, the Plan International’s CLAC programme does not currently include activities that specifically promote tolerance, cooperation and learning to live together and peacefully so this was not included in the ASQ-3. However, this perspective from families provides good feedback for the modification of the CLAC model for its future implementation among the South Sudanese community.

2.1: Part 2 of the Research

This section presents and analyses qualitative data to answer **key question 2 of the research: How has the Community-Led Action for Children (CLAC) model been**

adapted for a humanitarian and South Sudanese cultural context? It will first start with presenting the model, then looking at how it has been implemented in non-emergency contexts (using the KII, FGDs, observation, videos, photos and unpublished programme documents for its implementation in Lira, Uganda. The analysis will then go looking at how this model has had to change based on a humanitarian context.

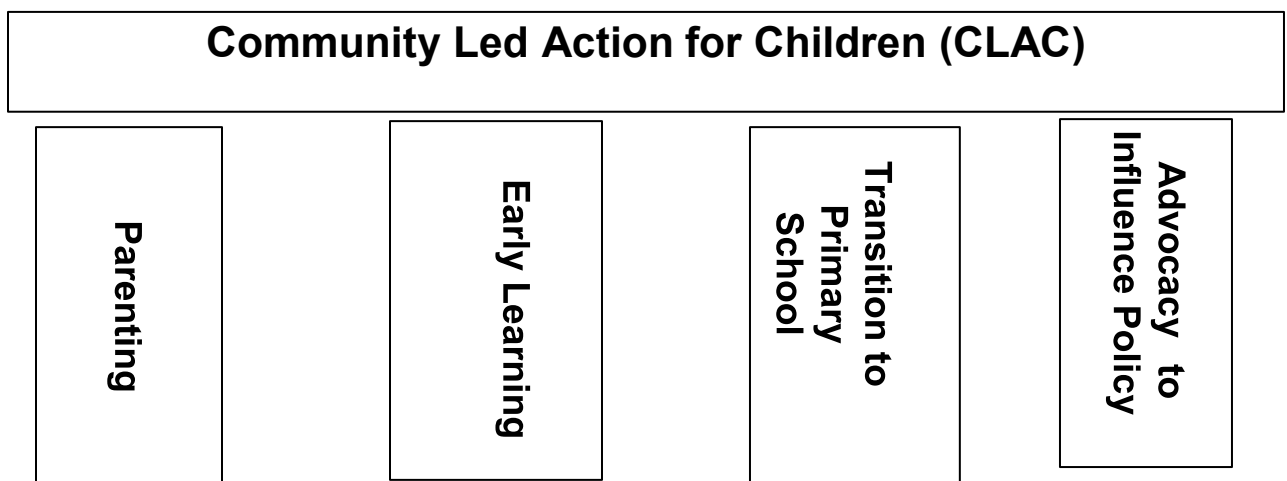
Community Led Action for Children (CLAC) Model

The Community Led Action for Children (CLAC) is a low cost, community-based ECCD model developed by Plan International (Plan International, 2013; Plan International, ND). It started in 2009 in Uganda and then was implemented in Kenya, Ethiopia, Zimbabwe, Mozambique, and Zambia (Ibid). It is now being piloted in other regions such as West Africa and humanitarian contexts like South Sudan, refugee camps in Uganda and Ethiopia, Central African Republic and others. It draws on community expertise about child care and development. It aims to empower communities and help them strengthen their capabilities so they can help their children reach their developmental potential and contribute to society in a positive way. While the groups are open to all parents, Plan targets the most vulnerable families such as single-headed households, those with the lowest levels of education, those from areas with fewer services and those in greatest economic need. This also includes an emphasis on families that have children with disabilities as it has been found that early intervention and support is even more critical for these children (Ibid).

The CLAC approach is underpinned by Vygotsky's Socio-cultural theory and Bronfenbrenner's Ecological systems theory and is in line with the Global Consultative Group on ECCD's Four Cornerstones Approach. Vygotsky's Socio-cultural theory places great importance on the child's external environment, including his/her parents and the culture in which a child lives (Vygotsky, L.V., 1978). Bronfenbrenner's Ecological Systems theory builds on Vygotsky's work and illustrates circles of layers of support for a child, which includes his/her parents as the primary and most important, but also includes the school and community environment, government policies and societal norms, expectations and policies (Bronfenbrenner, U., 1979). The Global Consultative Group on ECCD's Four Cornerstones Approach includes the following four elements: 1) Start at the Beginning which focuses on the period of pregnancy until age three. It includes support for pregnant women, parenting education and support for children 0-3 years; 2) Provide new opportunities for discovery and learning which focuses on early learning opportunities for children 3-6 years; 3) Make schools ready for children which focuses on the transition from early learning to formal

primary schools for children 6-8 years; and 4) ensure the development of policies on early childhood (Global Consultative Group on ECCD, <http://www.ecdgroup.com/pdfs/ECD-4CRNR-draft5-fb.pdf>).

Plan International's Community-Led Action for Children (CLAC) has four key components which include: 1) parenting education; 2) early learning; 3) transition to primary school; 4) advocacy to influence policy. These four components highlight the importance of the external environment and in particular the various levels as the Socio-cultural and Ecological systems theories include. Component 2 which is focused on early learning looks at the individual child and his/her immediate teacher whereas components 1, 3 and 4 look at the external environment and in particular at the level of parents, teachers and community and the broader national context. The broader national context would include society's expectations and milestones for children, cultural definitions and interpretations of various aspects of children's development and learning. These cultural expectations, normal and definitions trickle down to the other components and shape the implementation of a particular activity such as parenting education or early learning spaces and curriculum. The approach in its original form focuses on early stimulation and learning. Plan Uganda staff, through KII, indicated that they and other colleagues in other countries in East Africa also implementing the CLAC approach have recognised that the model needs to strengthen the health/nutrition, prenatal period elements and its implementation in emergencies.

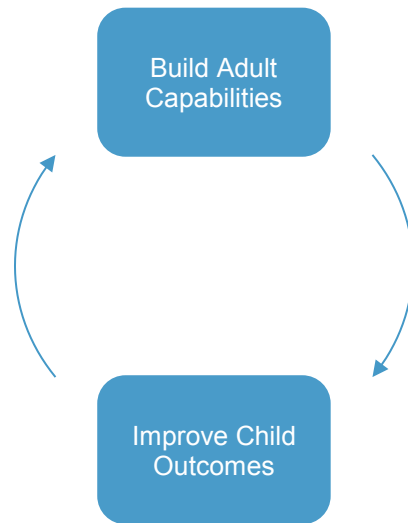


Component 1: Parenting education

In all CLAC programmes, parenting education is a critical component to any support for young children. The underlying belief of the CLAC model is that parents and other primary caregivers are the first and most important teachers in children's lives. Bronfenbrenner includes parents as a child's first layer of protection and support (Bronfenbrenner, U., 1979). This activity aims to improve parents' knowledge and practical skills to improve child health, learning and protection. As Vygotsky outlines, an adult or parent is crucial to helping children in their zone of proximal development (ZPD) and they can provide the scaffolding a child needs as he/she slowly becomes competent and can independently do what is in the higher part of the ZPD (Smidt, S., 2009; Gray, C. and Mac Blain, S., 2015).

Building adults' capabilities can therefore promote children's well-being. This is supportive of a theory of change at Harvard University's Center on the Developing Child, which places support for parents as critical to children's positive development outcomes (Center on the Developing Child, https://www.youtube.com/watch?v=urU-a_FsS5Y). The theory of change called Building Adult Capabilities for Children's Well-being, is based on evidence from brain development that shows that differences in important skills such as focusing attention, self-regulation, delaying gratification, being able to solve problems, being able to work cooperatively in teams and other executive function skills, start in infancy based on the environment in which children live (Center on the Developing Child, 2013). Their research further found that the flexibility and plasticity of this part of the brain accelerates during early childhood, but does not fully mature until a person is 25-30 years old. So continuing work with young adults who may already be parents will still allow practitioners to take advantage of important maturation that occurs in the adult brain; this can then help parents better support their children.

An illustration of this theory of change, which places a large emphasis on parents and building their knowledge, skills and capabilities, is shown below.



Source: Adapted from The Center on the Developing Child (2013). “Building Adult Capabilities to Improve Child Outcomes: A Theory of Change”, Harvard University, video, https://www.youtube.com/watch?v=urU-a_FsS5Y (Accessed 9 February 2016)

Jack Shonkoff and his team at the Center on the Developing Child at Harvard University found through their research that simply giving advice and information to parents is not enough and it is not the best way for them to learn (The Center on the Developing Child, 2013). Active skill building through coaching and practice is critical (Ibid). This is supported by research conducted on the parenting component of the CLAC programme in non-emergency lead by Aboud and Yousafzai in Uganda and Bangladesh (Aboud, F., 2007; Yousafzai, A. and Aboud, F., 2014).

Plan focuses on five key areas related to child development with its parenting education: 1) food and nutrition and in particular the nutrition of local foods and how to prepare nutritious local foods for children; 2) hand washing and hygiene; 3) play and cognitive stimulation; 4) adult interaction and peer to peer support; 5) fostering love and respect within the family unit and among the community. Plan implements parenting education by first facilitating the creation of parenting groups among community members. Key community leaders are important actors that can help parents take the interventions forward and can help parents with the fourth aspect of this model which is explained later – advocating for policy changes. All parenting sessions are co-led by Plan staff and parents themselves. Initially, the

sessions start off with Plan staff leading a bit more, but slowly transition to the parenting groups continuing on their own. In development settings, parenting groups, which have a maximum of 30 people each, generally meet once a month, but this can be flexible based on the group and their needs. While the five topics mentioned above are the entry point, parents can bring up any topic of issue of concern. Peer to peer support and practicing skills they learn about are key aspects of the parenting sessions and promotes parents' own psychosocial well-being. Parents can and are encouraged to bring their children, especially infants, both so the child has continuous care and also so parents can practice activities they learn in the parenting groups with their children. Parents can also bring their older children and there are usually caregivers to play and take care of the children while their parents are in the parenting session. Often mothers are the main participants, but fathers are also encouraged to come. Rather than having formal learning for children from birth to 3 years, the CLAC programme builds capabilities of parents so they can provide the stimulation, learning and support children of this age group need.

Each parenting session lasts 1- 2 hours. It starts with a welcome, local song etc... so people can meet each other and feel comfortable. Attendance is usually taken after the initial welcome. The facilitators proceed with a review of the previous session's key points and parents discuss any challenges they faced in implementing what they previously learned and any additional questions to help them improve the care and support parents provide for their children. A new topic of the day is introduced which includes presentation of key content, but also practice on using the learning of the topic of the day. This could be related to cooking nutritious food or new games to play with children. Parents are encouraged to solve problems related to the new topic and practice they learn. Parents are then provided with homework where they have to practice what they learned in the parenting session. Home visits are used to accompany the parenting sessions so facilitators can further help parents practice the skills they learned. Plan has a Home Visit Observation that they use to help facilitators while helping parents in their homes. Each meeting then wraps up with an ending session. Some parenting groups in the long run have been connected with Village Savings and Loan Associations (VSLA) if those exist in their communities. This would help strengthen families' financial status, thereby benefiting their children.

Community ownership and active participation is critical to ensuring that the parenting groups continue on their own after Plan phases out. The community, therefore, provides the

meeting place, each meeting is co-led by community members. They build on the local culture and existing parenting strengths and achievements.

Component 2: Early Learning

The CLAC model also includes early learning or pre-school education before they enter primary school. This stage supports the transition from the home to a center or place for learning and play. Children from 3-6 years benefit from centre based early learning activities. In some countries this is just one year of pre-school before children entering primary school. In other countries the pre-school education services include two or three years. This component is focused on children learning pre-literacy, pre-numeracy and other school readiness skills. Some of these skills include executive function skills such as the ability to focus and sustain attention, set goals, make plans, follow rules, solve problems, monitor actions, delay gratification and control impulses (Shonkoff, J., 2013). Brain science reveals that the most rapid growth of executive function skills occurs between ages 3-5 years (Ibid). The CLAC model encourages simple, stable structures, community involvement and ownership in establishing the safe spaces. All spaces should be established, when possible, close to where children live and ideally close to primary schools as well.

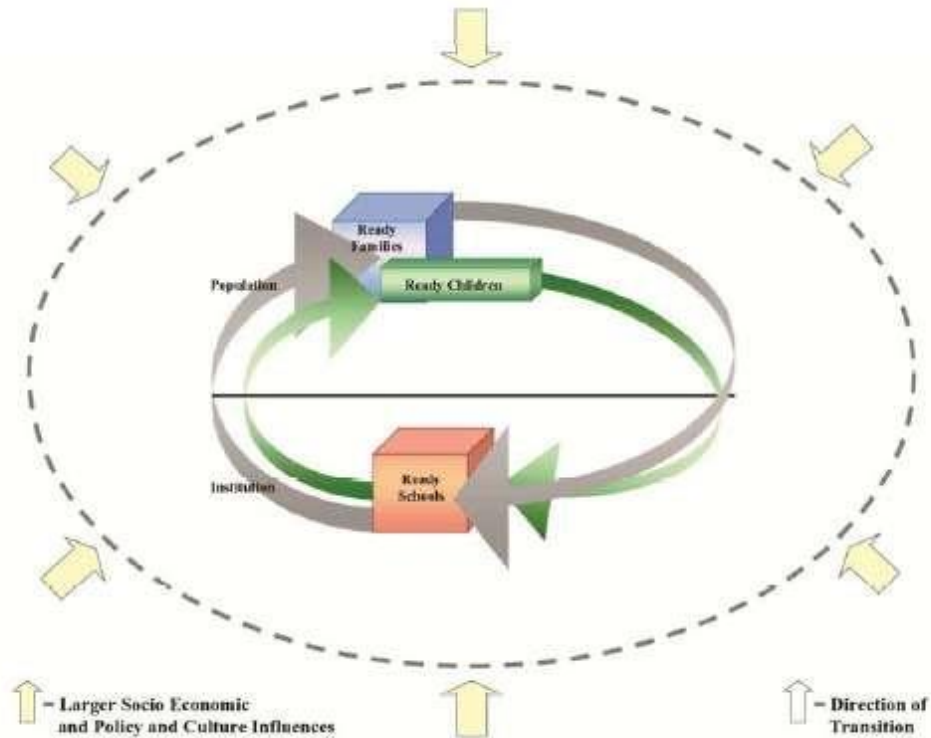
The curriculum used is different in each country. Among Ugandan children, the government has a pre-school curriculum that is used. In Lira, children from 3-6 years participate in early learning activities based on the Ugandan pre-school curriculum. For South Sudanese refugees, the Ugandan government's pre-approved pre-school curriculum is used as one from South Sudan does not exist. There is daily routine in each early learning space. The morning starts with a welcome, usually in a circle and through music. Children greet each other and their teachers, they discuss the weather, news of the day etc... The day goes then to play based structured and unstructured activities that includes songs and rhymes that teach concepts such as the importance of hygiene and washing their hands and body, brushing their teeth, combing their hair, counting to 10 or more etc... Songs are sung in both English and the mother tongue. There are usually four corners set up in the space that addresses different aspects of a child's development - dramatic play corner, sand/water play corner, math corner (with rocks, sticks, leaves etc...) for children to practice emergent math skills such as counting, identifying patterns, sorting etc... Another corner is usually a literacy corner which has books, paper, crayons, and markers so children can look at books, draw and write (thereby developing their fine motor skills). Unstructured outdoor play is also an

important aspect of the day to help children socialize with other children, and develop gross motor skills. The day ends with a closing meeting, usually in a circle. The space is usually covered with pictures, words, colors etc... such as alphabet and number charts, calendars. An early learning program quality checklist is used to monitor the quality of the early learning center and its implementation of the curriculum.

Component 3: Transition to primary school

The third part of the CLAC model uses school and community-based activities to help transition children to primary schools. A 2005 UNESCO study indicates that an estimated 60% of children who do not begin school at the right age will remain out of school throughout their primary years (UNESCO, 2005). It helps disadvantaged children enter primary school on time, stay and learn. It also helps primary schools be ready to take children who may have different capabilities entering primary school than children who did not go through an early learning programme. This component usually focuses on children 6-8 years.

Transition requires school readiness. While different definitions and conceptualisations of school readiness have been used in the past, in the last few years science has helped shape a consensus on its definition (UNICEF, 2013; Woodhead, M., 2014). School readiness is defined by three interlinked dimensions: 1) ready children, 2) ready schools and 3) ready families (Ibid). The image below from Martin Woodhead illustrates how the three dimensions work together and how larger socio-economic, political and cultural aspects influence this process.



Source: Woodhead, M., 2014

The dimension of 'ready children' focuses on children's learning and development (UNICEF, 2013; Woodhead, M., 2014). This includes their ability to work with other children and executive function skills such as being able to follow rules, pay attention, control impulses, delay gratification etc... (UNICEF, 2013; Shonkoff, J., 2013; Woodhead, M., 2014). 'Ready schools' focuses on the school environment and primary school teachers' abilities to welcome and take on children who have been in an early learning environment (UNICEF, 2013; Woodhead, M., 2014). There are often huge differences between early learning and primary schools including location of early learning classrooms and primary schools. In many refugee and emergency contexts, for example, it may not be possible to add a classroom to an existing primary school. Temporary spaces may need to be established and if the space is not available near or a part of a primary school, it will need to be established somewhere else. Secondly, language of instruction (mother tongue instruction vs. national language) and approach to learning (ie. Play based and child centered vs. rote learning and children sitting in rows behind desks) may also be different. Thirdly, the

content of the curriculum may also be different. Where early learning classrooms may focus on integrating subject areas with a goal of supporting various aspects of a child's development (cognitive, physical, socio-emotional, language), primary schools often do not and will teach reading, math, science etc... Lastly, teachers in primary school and those in pre-schools may have only gotten training in a particular approach and so may not understand children's developmental and learning needs in pre-school and primary school. All of these differences can make it difficult for children to smoothly transition to primary schools. This can cause situations where parents prefer sending their older child to the early learning center rather than primary school. In order to avoid these potential problems, the implementation of the CLAC model ensures a connection between early learning center and primary school teachers and other education personnel.

Component 4: Advocacy to influence policy

The fourth pillar of the CLAC model includes advocacy and partnerships with governments and other key actors that could help change national policies and governmental budgets in support of young children. This part of the CLAC model looks at the other layers of protection in Bronfenbrenner's Ecological Systems theory and at the broader environment and cultural influences of Vygotsky's Socio-Cultural theory.

The implementation of this component of the CLAC model prepares the community and other key stakeholders at all levels, to participate, support and own interventions that impact on their children. Influencing key decisions is done at this level and the roles of the stakeholders at all levels are important. At Community level, the community and other leaders participate in community mobilization, awareness raising sessions on parents for nutrition, child protection and care, and other child support. Community Driven Development Plans are drawn and taken forward by the key stakeholders, by laws and enforcements are done in support of the children.

While the CLAC model is Plan International's model for community based ECCD and is underpinned by Vygotsky's socio-cultural theory and Bronfenbrenner's Ecological Systems theory, it is also similar to a globally recognised framework for Early Childhood Care and Development (ECCD) called the Four Cornerstones. The Four Cornerstones were developed through an inter-agency consultative process led by the Global Consultative Group on Early Childhood Care and Development (ECCD). This network has been a functional global network focused on early childhood for over 30 years

(<http://www.ecdgroup.com>). Its framework, called the four cornerstones, includes the following: 1) Start at the beginning (which focuses on parenting education as an entry point for support and services for pregnant women, infants and children from birth to 3 years); 2) Provide new opportunities for discovery and learning (which focuses on early learning and pre-school types of activities using a centre based approach for children 3-6 years); 3) Make schools ready for children (which focuses on the transition of children from ECCD centers to primary school and prepping primary schools so they can fully support children that went through a pre-school programme); 4) Address the development of policies on early childhood. The four cornerstones, like the CLAC model, also look at a child and his or her ecology – parents and immediate caregivers, community members like teachers and society at large that emphasises changes in policies for early childhood.

The CLAC model was developed and first piloted in Uganda specifically for resource poor locations. Its approach is not about telling parents and community members what to do, but empowering them so they can increase their capabilities and therefore provide the best environment, care and support for their children's development and well-being. The implementation of the model does not require fancy buildings or toys or high literacy levels among parents and community members. As it is implemented in each developing country, it uses locally available materials to make developmentally appropriate toys, local safe places (ie. In homes, in local community centers, outside under trees). The language of instruction and discussion among parents is the local language. While Plan International staff help start early learning services and parenting groups, their ultimate goal is to slowly reduce and eventually withdraw their role completely so the community can fully take over the continuation of activities.

CLAC Implemented in Lira, Uganda

The CLAC model is being implemented in many parts of Uganda. Uganda is a low-income country where about 75-80% of children 3-6 years have no access to toys or learning activities (Singla, D. et al, 2015). Additionally, 40% of children are stunted and 14% are underweight (Ibid). South Sudan is also a low income country with similar statistics to Uganda, making a comparison of the implementation of the CLAC model in Uganda similar to its implementation for South Sudanese refugees.

The case study being presented here is from Lira, Uganda, which is east of Adjumani, but still in northern Uganda, like Adjumani. Lira is a conflict affected area and was plagued with

violent conflict for many years. It has a population of approximately 403,000 people and also has poor child development, health and maternal health (Singla, D., et al, 2015). Currently, there is relative peace in Lira, which has made it easier for Plan to implement all four pillars of the CLAC ECCD model.

The CLAC model itself does not have specific outcomes for mothers' well-being, but the implementation of this in Lira, Uganda looked at maternal well-being as a secondary goal along with children's development (Singla, D., et al, 2015).

At the core of the work in Lira is parenting education. As mentioned above, they are critical partners in their children's learning, development and well-being. Going through the CLAC model, this is specifically how the model is being implemented in Lira. This case study is based on Focus Group Discussions with Plan staff and parents, Key Informant Interviews with key community leaders, existing Plan Uganda documentation, published evaluations conducted in Lira and my own personal observation.

CLAC Component 1: Parenting Education

Plan held a community meeting to sensitise the community about child development and establishment of peer to peer parenting groups. Plan identified and worked with local leaders in the areas of implementation to form groups. Both women and men living in the community were invited to join the groups, but a priority was given to families with low maternal education and deemed as more vulnerable (Singla, D. et al, 2015). Each group has approximately 20-35 members (including fathers). Plan Uganda staff made a special effort to actively involve fathers in the parenting groups. One participating father said, "Plan invited us to join. At first I didn't think it would be useful, but I have learned a lot. I see my child learning and it makes me happy." While Plan leads the parenting sessions, there are parent cofacilitators to help co-facilitate and eventually lead the groups without Plan's support. One parent facilitator said, "Plan approached me as I am known in the community and speak the local language. I did not know how to do it, but I thought I would try. The Plan staff helped me lead the sessions." The parent co-facilitators are not professionals, but know the community and have their respect, speak the local language etc... (Singla, D. et al, 2015). Helping parents understand this process and mobilising them to want to be involved took time as the concepts of early childhood education/development and the role of parents was new.



Photo: Parents group in one ECCD centre in Lira, Uganda



Photo: Participating father in the parenting group in Lira, Uganda

According to FGDs and KII, parents in each group decided on the frequency of the parent meetings, how long each one would be and where they would meet. Some in Lira chose monthly meetings, while others chose bi-weekly meetings. This process of parents making their own decisions is important so they can continue the group in the long run without Plan's support. In Lira, a majority of the groups decided to meet for about 60-90 minutes

every month near their pre-school centres (Singla, D. et al, 2015). FGDs, KIs and research conducted by Singla (2015) revealed that in most places one cycle of parenting sessions lasted about 7 months; in other places the parenting groups have continued after the core parenting sessions were complete (Ibid). In order to provide holistic support to families, parents involved in the parenting groups also had their children 3-5 years in the early learning centers. These parents also had children of other ages, both older and younger than the pre-school age, but this approach allowed Plan to strengthen the capabilities of a child and his/her environment based on their own cultural context as Socio-cultural theory and Ecological systems theory indicate. This approach also aligns with recent brain research conducted by Jack Shonkoff et al. (2013) at Harvard University's Center on the Developing Child. Parents were encouraged to bring their children with them to the parenting sessions so they could practice some of the things they learn with their children (ie. games that promote cognitive development). Plan utilised an active learning approach which includes peer support, role play, games, parent-child interactions, practice and problem solving (Singla, D., et al, 2015). For example, during the sessions parents used word and toy games to play with their child, creating and role-playing skits to practice communication and conflict resolution with their spouses. Colorful posters with the key messages connected to the topics of the five key areas is used during the sessions so parents see a visual. Parents were assigned homework to practice between sessions (Ibid). They were to practice the new things they learned in the sessions with their children, spouses and peers (Ibid). Along with the group sessions, Plan conducted home visits on a regular basis to help parents overcome any challenges to implementing the things they learned during the sessions. KIs mentioned that they saw huge differences in the interactions between parents and their children. Based on FGDs and KI, parents were more aware of their children's needs, were more committed to finding additional assistance when certain needs were not met and became strong advocates for their children and children in the community in general. There were also many active fathers in the parenting groups.

As part of the process, Plan established a parenting curriculum which is based on theoretical frameworks of responsive parenting that promote child development (Singla, D. et al, 2015). Responsive parenting includes interaction between the parent and child such as through two-way conversation and play (Ibid). Despite differences in cultural contexts, responsive parenting has been found to enhance cognitive and language development (Ibid). This curriculum has been tried and modified based on experience that Plan has had with its

parenting programmes (Singla, D. et al, 2015; Aboud, F. et al, 2013; Aboud, F., 2007). According to Key Informants, initially the curriculum included myriad sessions and focused more on giving information. Slowly, Plan realised through evaluations and experience implementing that they needed to reduce the breadth of the curriculum and focus on depth and in particular on actively building parents skills. This is line with research presented earlier conducted by Dr. Aisha Yousoufzai and Dr. Frances Aboud (Yousafzai, A. and Aboud, F., 2014). The curriculum currently being implemented includes twelve sessions and five critical skills: child nutrition and diet, hygiene, play for learning, two way communication and family relationships (Singla, D., et al, 2015). Among the twelve sessions, the first is an introductory session where people can get to know each other, to set the rules for the group etc... The next six sessions focus on the child – his/her development, different play activities to promote psychosocial well-being and cognitive development, nutrition, and health. Afterwards, the next four sessions focus on the mother and ensuring her care, psychosocial well-being, and relationship with her spouse. According to the KII and FGDs, there were huge changes in the relationship between spouses in a family. One mother in a parenting group in Lira said, “We talk more now. He helps me with the child care. He comes to the parenting sessions. It has improved our relationship and there is peace in the family.” These sessions focus on combating against maternal depression and promoting harmony and a strong supportive family. The last of the twelve sessions is a concluding session. Where the community wants, they can continue meeting on their own.

CLAC Component 2: Early Learning

Plan has established early learning centres in the same communities where parenting groups have been set up. As indicated earlier, targeting the same family with multiple inputs and services can strengthen the overall family and the child’s environment, thereby increasing the likelihood for positive development and learning outcomes.



Photo: ECCD teacher in a 5 year old classroom in Lira, Uganda

In Lira, Plan worked with community members and local leaders to find a safe space for the establishment of early learning centers. Plan then worked with the community to build these spaces with local materials and furnish the spaces with basic teaching and learning materials (ie. Chalkboards, mats for children to sit on, locally available developmentally appropriate toys, writing materials for children). While Plan contributed to this, the community did as well, supplying some local materials and labour as the picture below shows. In addition to designing and building community early learning spaces, the community generally helps in establishing a safe outdoor play environment as well with local materials. The pictures below show some community early learning spaces in Lira. Community involvement and contribution is an important aspect of the establishment of the early learning centers so the community has a sense of ownership and are ready to maintain early learning activities for children once Plan phases out its support. In many of the community learning spaces, parents use local materials to set up a playground for children.



Photo: Parents helping construct a playground for children next to early learning centres in Lira, Uganda.

In some of the community early learning spaces, Plan includes a classroom for 3, 4 and 5 year olds. In practice, in most places, they are only able to establish rooms for 4 and 5 year olds. Plan gives first priority to 4 and 5 year olds as they need some support before entering primary school and where possible based on availability of resources, Plan establishes a classroom for 3 year olds. This is a similar approach to establishing early learning centers in other locations in Uganda and in other countries where Plan operates this model (ie. Ethiopia, Kenya, Mozambique). Classes are usually for half a day with children attending in the morning and going home at lunch time. Each classroom usually has about 30 children and 1 teacher. It also generally has 4 distinct corners with developmentally appropriate play materials for children ranging from art and crafts to imaginative play to sand, water, rocks and other natural materials. This is in line with Vygotsky's approach to using the external environment to explore and learn about the world (Terzi, L., 2008). Play is central to this interaction with the outside world so children can learn and development cognitively, socio-emotionally, physically and linguistically (Ibid). KII and FGDs indicated that the ECCD staff and parents groups make some of the toys and materials used in the classrooms. One father indicated that they made drums and other musical instruments from local materials for the children's classrooms. All of these local toys and materials are used to develop different

learning for children including counting, sorting and recognising patterns, recognising numbers, cooperation, sharing and problem solving during play, developing fine motor skills, developing gross motor skills through outdoor play, communication and early literacy skills. The approach used in each classroom is slightly different based on the teacher, but is a mix of child centered and teacher centered. Children have a chance for free play, but also have to sit and listen to a teacher teaching sounds of letters on a black board. The approach used for teaching letters and sounds emphasized repetition where the teacher would say the sound and point to the letter and the children would repeat. This is normally the approach used to teach children in Uganda. Children were learning in their mother tongue in the early learning centers, but there was the introduction of English through songs and the teaching of letters and sounds. The environment in each classroom was rich with pictures, words, numbers and key messages about hygiene to reinforce literacy, numeracy skills and good hygiene practices.



Photo: 5 year old girl learning at an early learning centre in Lira, Uganda

KII mentioned that as Uganda has an established early learning curriculum, this was used in the centers in Lira and are usually used throughout Uganda. Teachers were recruited from the community itself and prepared to teach the early learning curriculum as designated by

the Ugandan government. The duration of each cycle of learning is in line with the regular academic school year in Uganda. In essence, the implementation of early learning in Uganda is like a pre-school, pre-kindergarten or kindergarten in other contexts. The focus is on school readiness, which includes early literacy, numeracy and writing skills. Firstly, children of different ages were separated so 4 year olds (as reported by their parents) were separate from 5 year olds. I observed teachers formally teaching the sounds corresponding to letters of the alphabet. Children in the 4 year old class had small slates and chalk where they practiced horizontal and vertical lines, circles as preparation for writing. Five year olds were starting to write actual letters of the alphabet. Because not all children started when they were 3 or 4 year olds, each classroom teacher has to modify her lesson plans and expectations for children based on their starting point. I observed the teachers doing this with some students. The centers also used a combination of play-based learning (ie. counting with rocks and toys, learning about key message through music) and more traditional rote based learning. This combines theoretical underpinnings from the behaviourist approach to learning where children are passive recipients and constructivist approaches where children are actively a part of the learning process and can learn about the world through play and discovery (Smidt, S., 2009; Gray, C. and Mac Blain, S., 2015). Based on my observation, the teaching of letters and corresponding sounds, the beginning of teaching reading, was delivered in a rote style. However, based on discussions with parents and Plan staff, children in the early learning centers therefore are more ready and a bit ahead of children who have not had any input to prepare them for reading, writing and doing math.



Photo: 5 yr. old girl practicing early writing at an early learning centre in Lira, Uganda

CLAC Component 3: Transition to Primary School

The third component of this model is about transitioning to primary school, especially as KII and FGDs indicated that children who have inputs to prepare them for school and academic learning before primary school are more ahead and more ready for continued academic learning and school. According to Key Informant Interviews, when implementing the CLAC programme, Plan usually works with early learning centers at the same time as they work with primary schools, making the transition of children from early learning to primary education smooth. The ideal situation is where early learning spaces can be established in primary schools themselves according to a Plan Uganda ECCD Advisor. According to FGDs and KIIs, the teachers hired for 3, 4 and 5 year olds are often primary school trained so they understand what the small children learned and could help make them make that transition.

Further, these teachers can then help the primary school teachers take in these children. However, this is not always possible to do in the early learning centres in Lira. Based on each community and what is possible and realistic, there are situations in Lira where the early learning centres were established separate from the primary school and in some instances even a bit of a distance away from primary schools. In these situations the

transition aspect was harder to do. When speaking with parents in the FGDs, they mentioned that they wanted their children to continue onto primary school, especially after they learned so much in the Plan early learning centers, but in some cases the nearest primary school was still too far for their young children to walk to. One father during a FGD said, “The primary school is really far and my son cannot go there from our house. Please can Plan International set up a primary school near the center so my son can easily attend.” There was a similar reaction and sentiment among other parents during the FGDs as well. When I asked Plan Uganda staff about this, the ECCD Advisor mentioned that she understood this community concern and shared this view, but that sometimes they could not control this as they need extra funds and permission from the government. Despite this, she mentioned that they try really hard to support children’s transition to primary school.

CLAC Component 4: Advocacy to Influence Policy

Advocacy and working to influence government policy is the fourth component of the CLAC model. According to KIIs, as the implementation of the CLAC model in Lira is a part of a larger project in multiple areas, the advocacy and influencing of policy is generally conducted at the national level in Kampala. This advocacy and influence to policy is a slow process of working with the government to improve their policies in favour of expanding early learning opportunities. In Uganda, as the government already has an early learning curriculum, the focus of the advocacy and policy work is about helping them expand services throughout the country. In some countries where there are little or no early learning services or where the concept is new (ie. Central African Republic, South Sudan), the focus for the advocacy and influence of policy would be different. In addition to the national level advocacy, KII revealed that Plan engages in local level advocacy as well to help the local government to expand early learning services.

CLAC Implemented in Adjumani, Uganda for South Sudanese refugees

In conflict affected emergency contexts such as that of the South Sudanese refugees in Uganda, a model developed in a stable context cannot always be used in the same way. Some reasons for this include the fact that funding for projects is usually short term between 6 - 12 months. According to KII, Plan’s grants in Adjumani are all between 6 months to 1 year. This means that the full programme may not be implemented at the same time as can be done in a more stable context. Short duration projects also mean that expected outcomes for children’s development may be different. In a situation of displacement, the physical space for ECCD activities may also be different - both in the set up and what is

located inside the spaces. In emergency situations, there may not be a building available and there may not be time to fully build something immediately after the crises. Therefore, in stable contexts, there may be physical buildings either donated by the community or built for the project. In emergency contexts, physical spaces may first be tents and then may develop into something more permanent. This section presents a case study of how the CLAC programme is being implemented in the refugee camps in Adjumani, Uganda for South Sudanese refugees.

CLAC Component 1: Parenting Education

At the time of the data collection, Plan was in the early stages of fully implementing this approach in Ayillo 2 so many parents had not participated in many sessions. In Ayillo 1, Plan had not yet started parenting education at all as the refugees had come to the camps only two weeks prior to the data collection. According to the KII and FGDs, the process followed was similar to how the groups were established in Lira with a few modifications. The groups were organised in a similar fashion, but where in Lira the groups were assembled while establishing the early learning centers, in Adjumani, the early learning activities began before parents were mobilised and organised. Plan held a community meeting to let the community know about the start-up of parenting groups. Those that had children in early learning centers were prioritised for inclusion. Plan obtained approval from the refugee leader of the camp.

Whereas in Lira, the parenting groups decided to meet once a month, in Adjumani, the groups decided to meet every two weeks. Eventually, the groups decided to change the frequency to every week. Each session lasts about 2 hours and parents are encouraged to bring their children in order to practice some of the skills they learn. In humanitarian situations where projects are shorter term, this adaptation to greater frequency fits better with the situation.

CLAC Component 2: Early Learning

In refugee camps, the space for a centre may not be a formal space (Shah, S., 2013). It could be in a tent, semi-permanent space constructed with local materials, in a temporary shelter or outside under a tree. Early learning centers in refugee contexts are sometimes part of a humanitarian intervention called child friendly spaces. These are usually tents established in the aftermath of an emergency or crisis where children can first be physically safe and protected from harm. Activities that usually start in child friendly spaces are different types of

play and recreational activities that can help children relieve stress and therefore promote their psychosocial well-being. Messages and activities focused on safety (ie. Mine safety), hygiene, and health concepts are also included. Depending on the type of emergency or refugee situation, a focus on numeracy and literacy would come a little later once children are settled (Ibid).

In Adjumani, Plan has established early learning centres in areas designated by UNHCR, refugee leadership and other authorities. Based on my observations and KII, the designated area is fenced to help keep children safe and there are large sign boards to indicate the purpose of the space. The early learning centers are temporary structures using tents supplied by UNICEF. According to KII, due to the emergency situation, the first priority was on getting some spaces up so there was not community contribution like there was in Lira to establish these spaces. This does affect the community's sense of ownership. During FGD with parents and KII with a few refugee leaders, it was clear that they had high expectations from international organisations and did not expect to contribute to getting services (not just early childhood learning) up and running. This can be seen as a negative aspect of emergencies where communities can become too dependent on other agencies to provide the services they need rather than being resourceful and setting things up themselves.

In the Adjumani refugee camps, three large tents have been set up in each designated area, one for each age group 3, 4 and 5 year olds as seen in the picture below.



Photo: Three early learning classrooms in Ayillo 2 refugee camp, Adjumani, Uganda



Photo: One early learning classrooms in Ayillo 2 refugee camp, Adjumani, Uganda



Photo: One early learning classrooms in Ayillo 2 refugee camp, Adjumani, Uganda

Each tent has mats on the ground so children do not have to sit directly on the ground. Plan has supplied teaching and learning materials which are stored in large tin containers. These were provided for by UNICEF and are UNICEF's ECD kits. These kits include basic play materials and games that are developmentally appropriate for early childhood. Teachers in

the various centers have decorated the spaces with children's art, pictures, numbers, letters, words etc...



Photo: Teacher made teaching and learning aides in ECCD centres



Photo: Community-made playground for children outside of the ECCD centres in Ayillo 2

Some of the spaces have posters that have key messages about washing hands and overall hygiene. Whereas in each early learning classroom in Lira had four corners established with different developmentally appropriate play materials, this was not the case in the Adjumani centers. According to KII, the reason for this was that in Lira, the space served only one purpose so all materials could stay where they were. For Adjumani, the space was used as an early learning centre in the morning and as a child friendly space that had accelerated learning and sports/play activities for adolescents in the afternoon. During KIIs and FGDs with caregivers/teachers and Plan staff, it seemed that the starting capacity of the ECCD caregivers/teachers was lower as many had no formal qualifications and so they did not fully understand how to and why a classroom could be set up this way. They understood the importance of teaching children basic health/hygiene, key messages and learning through music, physical movement and rote learning. Plan staff indicated that this was an area where they needed to work more closely with the ECCD caregivers/teachers to improve their own capacities so they could improve the quality of early learning in each classroom. Further, ECCD caregivers/teachers themselves asked for more capacity development. Most mentioned that they had never had formal training on how to support small children. Those that had teaching backgrounds from South Sudan, which were a small percentage of all of the ECCD caregivers/teachers, their training included a behaviorist approach to teaching where a child is seen as a blank slate and a recipient of learning rather than an active part of the learning process.



Photo: Children in an ECCD centre in Ayillo 2 practicing their ABCs.

One similarity between the early learning centers in Lira and Adjumani were spontaneous production of local toys. In both situations, I saw toys and play materials made of local materials such as mud figurines, instruments made from local materials etc... Plan staff mentioned that they did not actively encourage this, however after seeing the spontaneity of the population to create their own toys, they understood the benefits of this and will now be actively encouraging this in all of their early learning centres.



Photo: Figurines made by children that attend ECCD centres in Ayillo 2

Children were learning in their mother tongue in the early learning centres in Adjumani just like in the centres in Lira, but there was the introduction of English through songs and the teaching of letters and sounds in both locations. Early learning services are for half of a day so children come in the morning and leave around lunch time (usually spending about 3-3.5 hours per day in the centres). Activities run usually five days per week.

In the afternoon, these same tents are used by older children, adolescents and youth as “child friendly spaces”. Norwegian Refugee Council (CRC) conducts accelerated learning classes for adolescents in some of the spaces and the rest of the time, the spaces are available for youth groups and child clubs to meet and for recreation and sports.

In non-emergency contexts, there may not always be a need to use one space for multiple purposes, but during humanitarian situations, when space and resources may not be sufficient to meet all of the affected children's needs, compromises need to be made. While in Lira, it was possible to keep the ratio of teacher to child to 1:30, this was impossible to do in the refugee camp as the demand and need is significantly higher than the resources available. Based on my observation and KII, each classroom tent often had 100 or more children. There was at least 1 lead teacher for each classroom and then a few adult assistants. In some of the early learning centres in Adjumani, Plan saw that parents would bring their children in the morning and then stay to help as parent assistants.

As Uganda has an established early learning curriculum and South Sudan does not, the Ugandan early learning curriculum was used in the centres in Adjumani. The training of refugee teachers/ECCD caregivers revolved around them understanding the basics of this curriculum. Plan staff indicated that building capacity of people who had no formal training in early childhood education, as the teachers in Lira do, has made it difficult to have the highest level of quality in each classroom. However, Plan staff stated that through their continuous mentoring and support, they aim to increase the capacity of these refugee teachers/caregivers in hopes that gaining these new skills will also help them gain employment when they return to South Sudan. The duration of each cycle of learning is in line with the regular academic school year in Uganda so it is the same as with the centres in Lira. The focus is on school readiness, which includes early literacy, numeracy and writing skills. Because of the stress and distress children faced while leaving their country and being displaced, the Adjumani curriculum has a greater focus on supporting children's psychosocial well-being so that means more opportunities to play, build friendships and focus on socioemotional skills.

Firstly, children of different ages were separated so 4 year olds (as reported by their parents) were separate from 5 year olds. I observed teachers formally teaching the sounds corresponding to letters of the alphabet. Children in the 4 year old class had small slates and chalk where they practiced horizontal and vertical lines, circles as preparation for writing. Five year olds were starting to write actual letters of the alphabet. Because not all children started when they were 3 or 4 year olds, each classroom teacher has to modify her lesson plans and expectations for children based on their starting point. The centres also used a combination of play-based learning (ie. Counting with rocks and toys, learning about key message through music) and more traditional rote based learning. This combines

theoretical underpinnings from the behaviourist approach to learning where children are passive recipients and constructivist approaches where children are actively a part of the learning process and can learn about the world through play and discovery (Smidt, S., 2009; Gray, C. and Mac Blain, S., 2015). Based on my observation, the teaching of letters and corresponding sounds, the beginning of teaching reading, was delivered in a rote style. However, based on discussions with parents and Plan staff, children in the early learning centres therefore are more ready and a bit ahead of children who have not had any input to prepare them for reading, writing and doing math.



Photo: A boy in an ECCD centre in Ayillo 2 practicing writing.

CLAC Component 3: Transition to Primary School

As mentioned earlier, the transition to primary school is not only about children in early learning spaces being ready to begin primary school, but it is also about primary schools being ready to accept children, who due to additional early years supports, might have greater capabilities than children who entered primary school with no formal early years' experience. It is also about parents being ready to transition their child to primary school (UNICEF, 2013). Therefore, in the adaptation of this model for the South Sudanese refugees in Uganda, this element was not being fully implemented. FGD and KII participants mentioned that Plan Uganda decided that because they were not implementing in primary schools at the time of the data collection, they could not focus on preparing

schools to accept children from early learning centres. They mentioned that UNHCR divided up the work in the camps between various agencies and Plan's focus was to be ECCD and child protection. Therefore, the Plan team in Adjumani mentioned that they could not implement this aspect of the CLAC model in its entirety. However, the early learning components did focus on preparing children and parents for the transition.

In other refugee and internally displaced persons (IDP) contexts, the transition to primary school has been easier when early learning spaces are established in existing schools or near them. Based on Key Informant Interviews with Plan staff and project documents, Plan has had greater success in Ethiopia (with South Sudanese refugees), Niger (Malian refugees), Central African Republic (internally displaced due to conflict), Nepal (internally displaced due to an earthquake). Further, KII revealed that when primary school teachers also support early learning centres, it allows for the learning to transfer between early learning and primary school, as was the case with early learning centres in Adjumani.

CLAC Component 4: Advocacy to Influence Policy

Advocacy and working to influence government policy is the fourth component of the CLAC model. In refugee and other emergency situations, the first priority for programme implementation is getting services going for children. Advocacy and influencing policy is usually not a priority, especially as many emergency projects are short term of 6 months or so. However, depending on the situation in country (ie. Interest of government and key stakeholders in starting or expanding ECCD or the chronic longer term nature of the crisis), advocacy and influence of priority can be integral.

Within the Adjumani context, as the humanitarian crisis has now been ongoing for a few years and the Ugandan government has an existing policy on early childhood education, Plan's focus on advocacy has been more localised. Plan staff have focused on advocacy among the South Sudanese refugee population and donors to raise awareness about early learning and its importance for children's development and well-being, especially for displaced children. The implementation of early learning services started first and as it became clear to Plan staff that the refugees were not going to return to South Sudan soon as the country remains fragile with continued fighting in Jonglei and other states, they could turn to advocacy and influencing policy.

As Plan has national advisors in Kampala that support the operation in Adjumani, issues related to the crisis and early childhood education needs are also brought to the attention of the Ugandan government so they can make changes to their policies in order to help the South Sudanese refugee population.

2.2: Part 2 of the Research

This section will focus on the 3rd key research question: ***What are the outcomes and capabilities for children and parents through the implementation of the Community-Led Action for Children model (CLAC) in a refugee context? Are these outcomes better, the same or worse than when the CLAC model has not been implemented at all?***

Child level

Null Hypothesis (Ho): The CLAC programme implemented during emergencies has no effect on refugee children's development outcomes.

Alternative Hypothesis (H1): Children in the CLAC programme during emergencies will have the better child development outcomes and capabilities than children in another South Sudanese refugee camp that did not receive the CLAC programme.

Parent level

Null Hypothesis (Ho): There is no relationship between parents' knowledge and children's development outcomes.

Alternative Hypothesis (H1): Parents with higher knowledge of child development have children with higher child development outcomes.

In order to answer these research questions, I used mixed methods including a quantitative child development survey for children, a questionnaire for parents, focus group discussions, and Key Informant Interviews. While the intention was not to put together an observation check list, I was also able to triangulate data through my own observation of children playing and being involved in the various play group activities where we collected data and these children's interactions with parents and caregivers. Additionally, I also took videos and photos in both Ayillo 2 and Ayillo 1 to provide additional qualitative data.

Characteristics of the refugee children and parent research participants:

Homogeneity of Groups

In an emergency situation with refugees in camp settings, it was very difficult to do an experimental research with complete random sampling of the whole South Sudanese refugee population. In general, the child and parent participants of this research all are from the Dinka tribe, which is one of the largest tribes in South Sudan (BBC, 2016). It is also the current South Sudanese President's tribe (Ibid). The majority of the refugees in the Adjumani area of Uganda come from Jonglei state which was one of the most heavily hit areas during intense fighting between the government (led by a Dinka President) and the opposition group (led by the newly re-instated Vice President who is from the Nuer tribe). The majority of South Sudan is rural and there are few primary schools and even fewer secondary schools, especially in Jonglei state (Plan International assessment, 2015; Save the Children, 2015). According to Focus Group Discussions and Key Informant Interviews, the concept of early learning and development is new for many Dinka people, but it is a concept that they have been very supportive of, after they have seen the benefits of early learning and development activities for their children. Among the research participants, most of the children live with their mothers and have fathers who have either died or are currently in South Sudan trying to earn a living for the family. Many South Sudanese men sent their families across the borders into Uganda, Ethiopia and Kenya in order to keep them safe. So, a smaller percentage of men are in the Uganda refugee camps. Most of the children and their siblings live with their mothers. The children and parents speak Dinka; few of them speak English. The only English speakers are those that were teachers in South Sudan or are from Juba. The refugees did not come with much money or possessions. Due to the homogeneity of the child and parent research participants in both the programme group in Ayillo 2 and the wait list control group in Ayillo 1, a comparison between the two can more easily be made. I considered using Propensity Score Matching to reduce the likelihood of observable bias of the research participants. I collected the following data from each child participant and his/her family: 1) ethnic group, 2) mother tongue, 3) parent literate or not, 4) location in South Sudan where they came from, 5) parent completed primary school or not, 6) parent completed secondary school or not, and 7) whether the child lived in a single headed household. However, looking at the raw data, which is summarised in Table 1 below, there was not much variability in the participants which would mean that doing Propensity Score matching would not help us much. Further, doing PSM would have further reduced the overall sample, weakening the ability to do

comparisons between the programme and wait list control groups. The raw data shows a very homogenous group of participants from the programme children and the wait list control.

TABLE 1: Characteristics of Research participants: Frequencies

Location	Ethnic group	Mother tongue	Parent literate?	Location from South Sudan	Parent completed primary school?	Parent completed secondary school?	Single headed household?
Ayillo 2 (Programme)	Dinka: 176	Dinka: 176	Yes: 8	Jonglei: 176	Yes: 9	Yes: 3	Yes: 159
	Non-Dinka: 0	Other: 0	No: 168	Other: 0	No: 167	No: 173	No: 17
Ayillo 1 (wait list control)	Dinka: 74	Dinka: 74	Yes: 5	Jonglei: 74	Yes: 6	Yes: 1	Yes: 62
	Non-Dinka: 0	Other: 0	No: 69	Other: 0	No: 68	No: 73	No: 12

Some conditions that the research did not account for when establishing the comparison groups which could affect the results are physical factors such as height, weight based on the child's reported age. Children should be growing and if a child is reported to be 36 months vs. 46 months, there should be a range in height and weight that correlates with that. Further, if a child was malnourished (as determined through a MUAC, which is a mid-upper arm circumference measurement that looks at the width of the upper arm) and has a very low Body Mass Index and very low weight (where Pediatricians would determine the child's failure to thrive), this could have effects on his/her overall development. Physical factors such as the ones mentioned are important determinants of a child's development and a child who is not reaching his/her potential physically might have lower child development scores. However, measuring this as part of the comparison group determination was logistically difficult due to the size of the sample. Plan Uganda did not have the appropriate materials needed to do these types of measurements and I do not have experience measuring these things in children. If the research had been able to measure these in addition to the factors mentioned above, I could have looked at these as

explanatory factors. It would have helped me more accurately compare the two groups of children.

There could also be non-observable factors such as motivation and interest that could affect the comparability of the two groups, however getting this information and analysing this statistically is not easy. A regression analysis can help with this, but the sample overall is small. Therefore, I used the T test to compare the means of the two groups of children and triangulate that data with qualitative data.

I. Description of the Children's Data Set

The children's survey was first coded. It has three possible answers, yes, sometimes and no. These were coded as 3, 2, 1 respectively. The code "sometimes" also meant "partial" completion of the task. I then added the scores for each sub-section: communication, gross motor skills, fine motor skills, cognitive skills, socio-emotional/personal-social skills, which is in line with the main domains of child development presented earlier. After cleaning and entering all of the completed or mostly completed questionnaires, the total sample of all children for analysis is N= 200. This section presents the data by the total score, sub-groups etc... The breakdown of the sample by gender, age and location are below.

TABLE 1: Gender by Location

	Gender		
	Male	Female	Total
Ayillo 1 (Wait list Control)	41	33	74
Ayillo 2 (Programme)	67	59	126
	108	92	200

This is less than planned total sample of 240 (120 for Ayillo 2 and 120 for Ayillo 1). I planned on having equal number of children in both camps. However, with Ayillo 2, more children and parents than we expected were present at the centre and ready to participate in

the research to the point where we sometimes used the same questionnaire to record scores for two children because we did not have enough forms with us. It was interesting that as we started registering parents/children for the research in Ayillo 2, other children whose parent was not at the centre ran home to bring their parent. They then wanted to participate in the research and we tried our best to include them. This revealed to me the keen interest among children and parents in the early learning activities in Ayillo 2. This is a potential confounding factor, however the same issue was present among the wait list control group in Ayillo 1. During Focus Group Discussions with parents in Ayillo 2, many of them mentioned how happy they were that their child had the chance to participate in the activities that Plan was running. Those with older children sometimes preferred their older child participated in the ECCD/early learning centers rather than the formal schools in the camps because they thought they were more interesting, engaging and because parents said their older children did not have the chance to go through this type of programme. This increased the overall number of children that we obtained data from, however after cleaning and taking out questionnaires that had many missing questions, we came to a total of 126 as seen in Table 1.

Contrastingly, the refugees in Ayillo 1 had arrived between two weeks prior to data collection. We ended up reaching a smaller number of children in Ayillo 1 than the anticipated 120. There are many reasons for this. Firstly, many parents and children had not seen ECCD activities in practice. While many parents were interested in learning more, which is the main reason why they brought their children to participate in the research, they did not understand the purpose of the ECCD centres and the potential benefits for their children. So, while families in Ayillo 1 also had an interest in participating, this was the same as those in Ayillo 2. Additionally, the data was collected by running games and activities for children. Many of these new children were unfamiliar with doing these types of activities, being asked questions by adults they did not know. So, many children, especially 3 year olds, started crying during the games and during data collection. In these cases, I told the research assistants to let the parent take the child home. I did not want to do harm to children by forcing them to do activities they were uncomfortable doing. Based on KII, FGD and my own observation, socialisation and simply being accustomed to doing activities and answering questions with adults children do not know was new to many children in Ayillo 1. While I did not go to the camps with an observation checklist, I could clearly see the difference in the comfort levels of children doing the activities in Ayillo 2 vs Ayillo 1. This was especially the case with the younger children of the group – those around age 3.

I tried as much as possible to have gender balance. It became difficult to manage this in practice as it got a bit chaotic and crowded when registering children and parents for the research. We also felt that if a parent and child came, we did not want to turn them away. So, in the end as Charts 1 and 2 illustrate, we ended up with more boys than girls in the research. However, the difference was not too great. It was actually interesting to see that parents brought their daughters to participate almost as much as their sons.

CHART 1: Gender among Child Participants Per Location

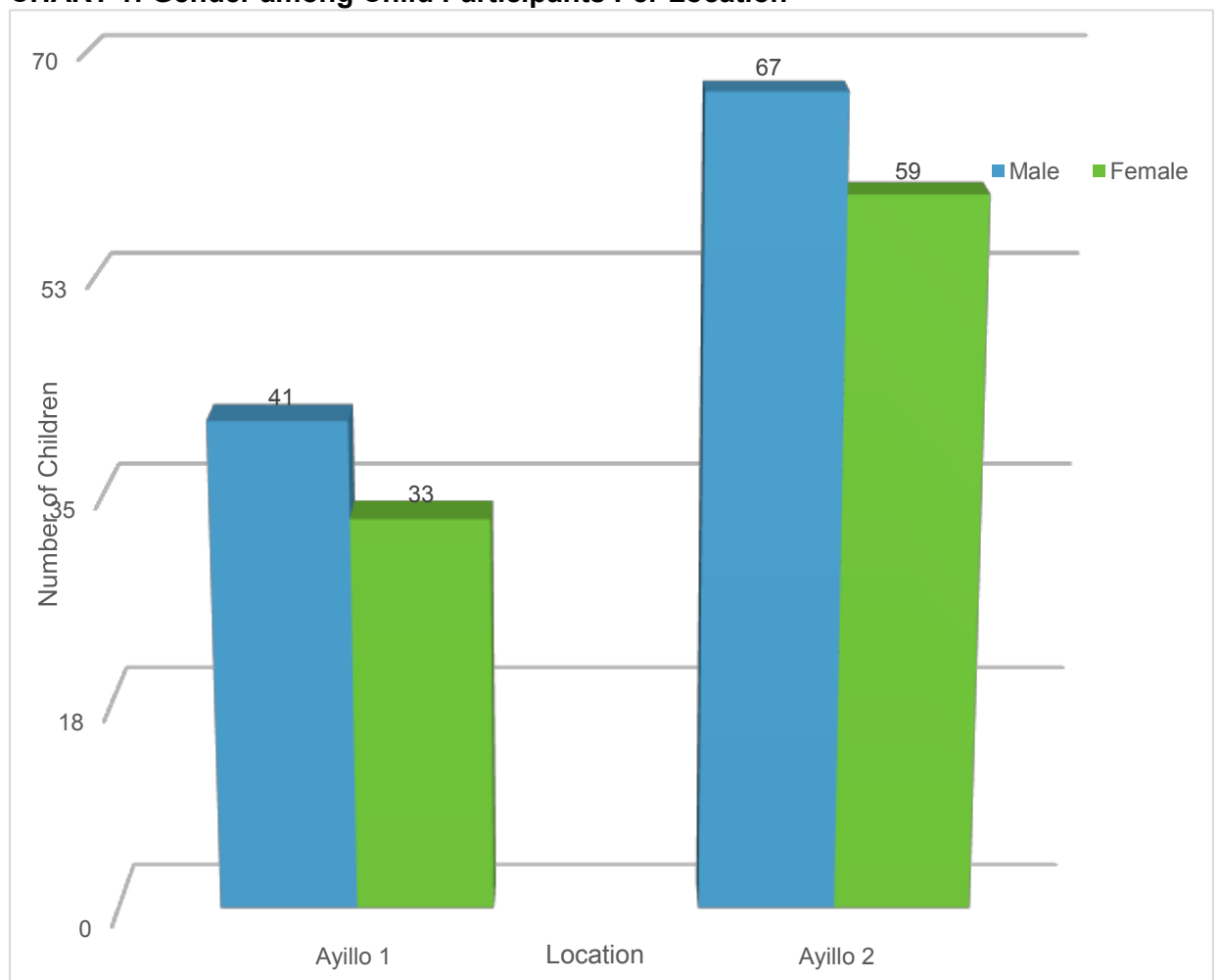


CHART 2: Gender among Child Participants

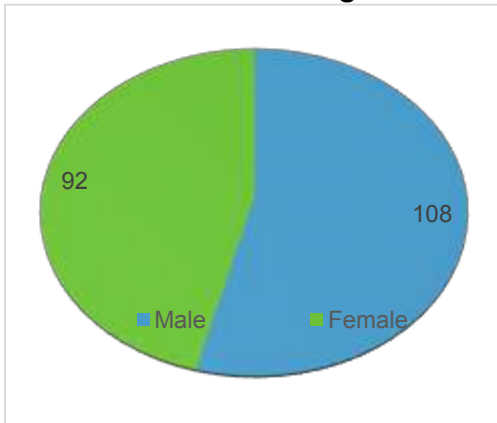


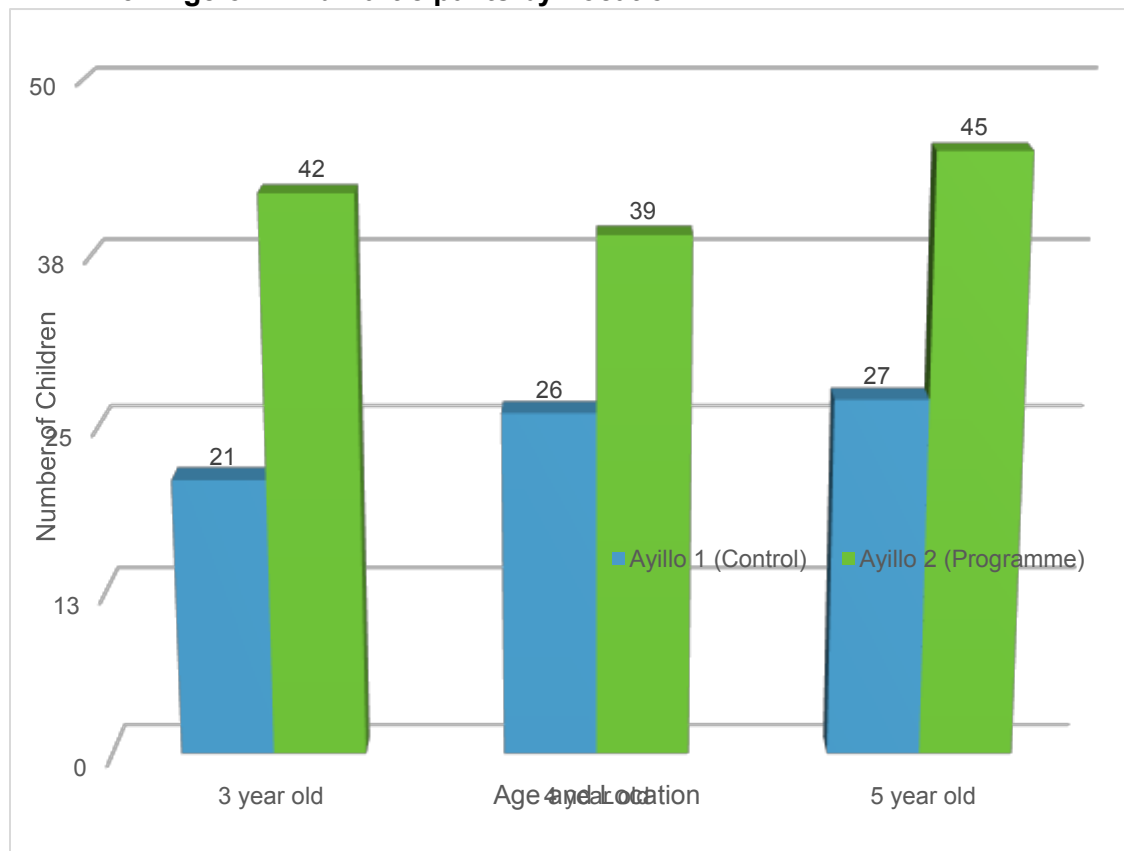
TABLE 2: Age of Total Child Participants

	Number of Children	Percent
3 year old	63	31.5%
4 year old	65	32.5%
5 year old	72	36%
Total	200	100%

TABLE 3: Age by Location

	Age			
	3 year old	4 year old	5 year old	Total
Ayillo 1 (Control)	21	26	27	74
Ayillo 2 (Programme)	42	39	45	126
TOTAL	63	65	72	200

CHART 3: Age of Child Participants by Location



II. Inferential Statistics: Child Development Scores for Programme and Wait List Control

In order to compare the programme (children from Ayillo 2) and wait list control group (children from Ayillo 1) based on their overall child development score, the Independent Samples one-sided T-test was used. A one-sided T-test was used because my hypothesis indicates a direction for the effect of the programme. I used two statistical programmes to do the inferential statistics analyses: SPSS and R. The analysis further includes key information collected through Focus Group Discussions, Key Informant Interviews, observation, photos and videos to triangulate the data.

Independent Samples T- test (one-sided)

This test looked at the total child development scores from the child questionnaire for all children. It compared the children by location: Ayillo 1 being the wait listed control and the Ayillo 2 which was the programme group.

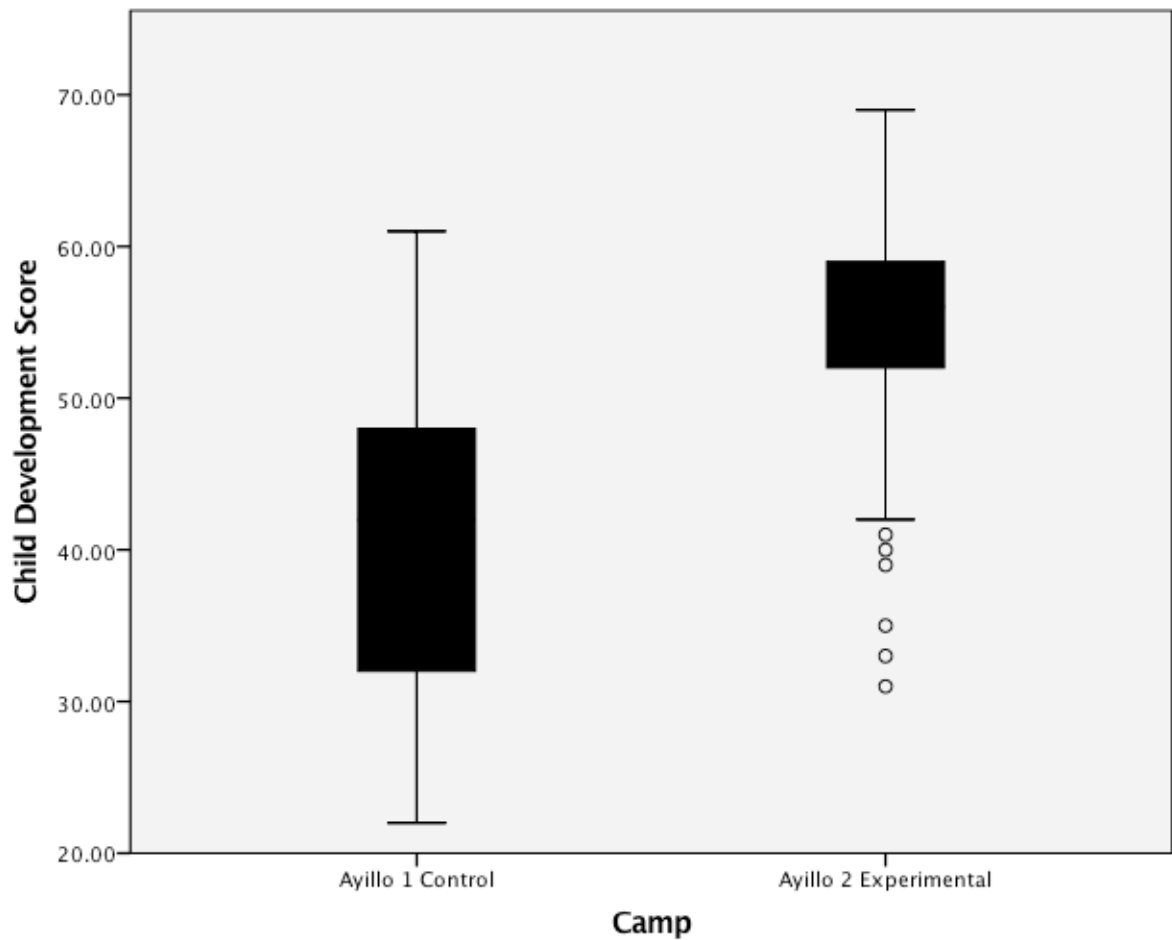
TABLE 4: Total Means for Child Development Score by Group

Ayillo1 (Wait list Control)	N = 74	M = 40.66	Std. Deviation – 10.24	Std. Error Mean – 1.19
Ayillo2 (Programme)	N = 126	M = 55.10	Std. Deviation – 7.28	Std. Error Mean – 0.65

TABLE 5: Total Child Development Score by Group

T-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1-tailed)	Means Difference	95% Confidence Interval of the Difference
-11.604	198	p < 0.0001	14.433	-12.378

CHART 4: Child Development Score Distribution by Camp



Through this test, the t value is -11.604 and our df is 198. Using the T-test for independent samples (one-sided), I found a significant difference between the programme group in Ayillo 2 and the wait list control group in Ayillo 1 ($t = -11.604$, $df = 198$, $p < 0.0001$; 95% confidence interval). Chart 4 above illustrates the difference in the child development scores by camp. It shows that children in Ayillo2 had significantly higher scores than those in Ayillo 1. There was a greater range of scores present in the Ayillo 1 group whereas the children in Ayillo 2 group had less variability in their development scores. Chart 4 does indicate some overlap on child development scores between children in Ayillo 1 and Ayillo 2. This could be as a result of a number of factors such as the interaction and learning that the child has with his/her family outside of any services that could have helped the child do better on the test.

The Ayillo 2 scores show some outlier scores. While all of the children in Ayillo 2 were enrolled in the programme, it is not clear how long each child had been enrolled at the time of the data collection. As mentioned previously in the methodology section, one challenge in this research was the constant movement of people back and forth across the South Sudan border and the constant flow of new South Sudanese to Uganda. According to a KII I conducted with a Plan Uganda staff, they did not turn away children that came to enroll in the programme even after the programme started. So, some of the low scores from Ayillo 2 can be children who recently arrived to the camp, but have not been participating in the program the same length of time as other children.

These results are supported by KII, FGDs, my own observation of the children when they were completing the tasks on the adapted ASQ-3, photos I took and videos I took. During FGDs, many parents said that they saw big differences between children that have gone through ECCD activities. One mother said, “My child has learned some English. He expresses himself more now. He teaches me the songs in English that he learned.” Another mother said of her son, “He has learned so much here. I am happy. I want him to succeed. There are more opportunities here than back home in South Sudan.” I observed that this same mother stayed with her son when the test was being given and at some points even got angry with him when he could not fully do a particular task. A KII with a Plan Uganda staff said that while they do not like to turn children away, “the demand is greater than we can fulfill. We need more funds so we can establish more centres in other blocks in the other camps.” A KII with the refugee leader in Ayillo 2 reiterated his enthusiasm for the centres and said that he also has seen differences among children in the centres. Many parents said they wanted their older children to also participate in ECCD even though they were over-age because they saw the value and benefits of the activities. While in Ayillo 2, I witnessed a conversation between a South Sudanese refugee mother and a Plan Uganda staff. One mother actually brought her older son and asked Plan Uganda staff while we were testing her younger son if her older son could enroll in the centre. Plan Uganda staff had to explain to her that because her older son was 8 years old, he should go to the primary school in the camp because the ECCD centre was for young children. This mother responded saying that her older son did not have the opportunities that her younger son is receiving so she really wanted him to learn in the ECCD centre first. This indicated to me how much parents were demanding these services for not only their children 3-5 year old, but their older children too. The Plan Uganda staff that spoke with this mother told me that she will continue the conversation with this mother and will help her enroll her older son in

the primary school which is near the ECCD centre. She also mentioned to me that this was not an unusual request as they receive those types of requests regularly. As few ECCD services exist in South Sudan, many children had no opportunities and now they have the opportunity to go to primary school, but they saw the ECCD centre as a more attractive option. KII also indicated that children that go through ECCD activities in the camp are much better prepared for primary school than other children who have not been in the programme. One KII with an ECCD caregiver said, "Sometimes our kids are so ahead of other kids that the teachers in the primary school do not know what to do."

According to KII with Plan staff, normally they have 6 ECCD caregivers to cover the 3 age groups of children - 3, 4, and 5 years old. This is 2 caregivers per group. However, the sheer number of children who come and enrol is large. Plan mentioned that they do not have the budget to reduce the adult to child ratio in the centres. Videos I took and observations I made in Ayillo 2 showed that parents were spontaneously staying at the centre with their children and helping out the caregivers. I first noticed this because there were some people who were not actively doing activities with the kids, but were in the background or helping manage the sheer numbers. When speaking with Plan staff through a KII, they told me that these people were not staff, they were parent volunteers who on their own wanted to be there and help. Without any sort of payment, these parents decided to help. I interviewed a father who was a parent volunteer and asked him why he was there. He said, "My kids are learning something good and I am free. I don't mind that I don't get paid. I want to help." A Plan Uganda staff later told me in a KII that she wants to capitalise on the spontaneous volunteer support from some parents as they need more adults to manage the large number of children.

In contrast in Ayillo 1, which was the wait list control group, parents brought their children to participate due to their own curiosity and interest in learning more about the services Plan could offer. During a KII with a Plan Uganda staff and my own observation during the testing of children in Ayillo 1, some children, especially 3 year olds, started to cry. When I saw this happening, I would intervene and tell the research assistant to stop the activities and tell them to let the child go home with his/her mother/caregiver. On some occasions, parents did not want to take their children home even if they were crying. Plan Uganda staff had to convince them to take their child home and explain that the research team did not want a child to cry during the process and that it was not good for the child. This behaviour of the children and parents indicated to me that the parents were very interested in the

potential services that were to come to their block in Ayillo 1 and that children did not have experience interacting with many adults outside of their families or doing the kinds of activities included in the test. They were uncomfortable and I could observe this very clearly. Children in Ayillo 2 were very comfortable with the activities in the test because they had already done them before through the ECCD centres.

The Child Development score includes 5 key areas which are connected with the child development domains mentioned earlier: 1) Communication skills which is connected to the Communication and Language domain (ie. communicating in their mother tongue and basic greetings in English); 2) Gross Motor skills which are connected to the Physical Health and wellbeing domain (ie. running, jumping; balancing on one foot); 3) Fine Motor skills which are also connected to the Physical Health and well-being domain (ie. drawing a straight line, drawing a circle, writing one's names); 4) Cognitive skills connected to the Cognitive domain (ie. knowledge of colors, numbers, large/small concepts; problem solving); 5) Personal-Social skills which are connected to the Socio-emotional domain (ie. ability to wash hands, go to toilet independently). In order to better understand where the programme had the greatest impact on children's development, below is an analysis of the two groups in Ayillo 1 (wait list control) and Ayillo 2 (programme) by each child development sub-set. This was done in order to determine which aspects of the programme made the largest difference in children's lives.

Communication Skills

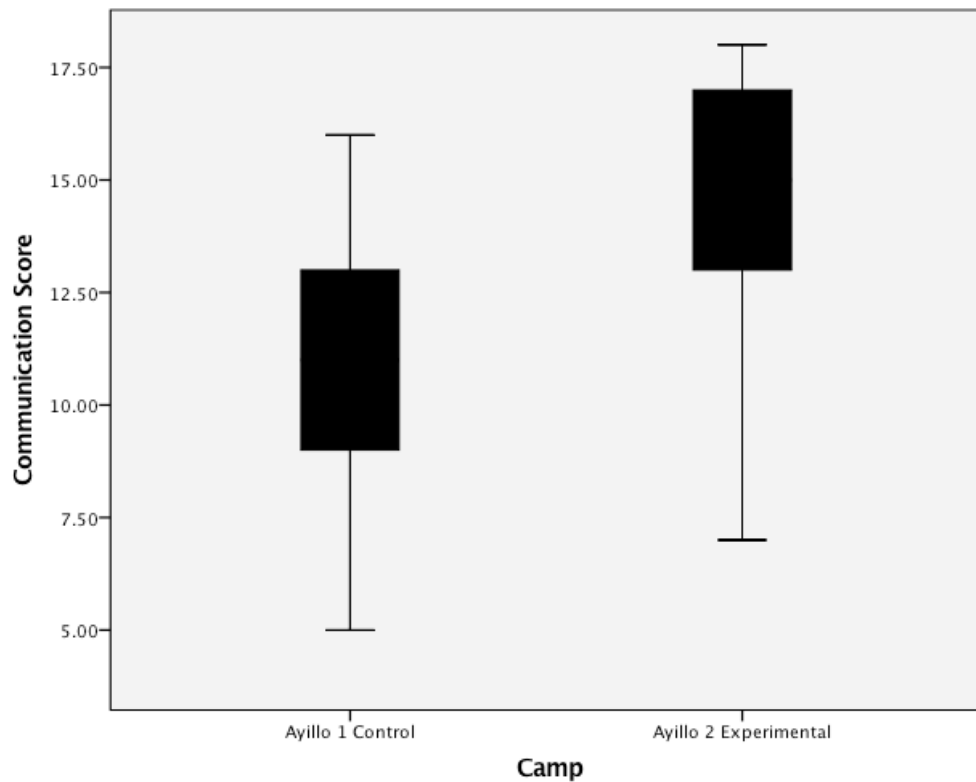
The sub-group of questions focused on Communication included developmentally appropriate activities such as following directions, saying who their friends are, saying what they would do when they are hungry or sleepy, speaking a full sentence in their language and being able to say basic greetings in English. Normally the question about English is not on the ASQ-3 test when it is administered in the United States as this is the normal language of most children. Among South Sudanese refugee children, and in particular the children in this research, Dinka is their mother tongue. As mentioned previously during the process of adapting the test to the South Sudanese cultural context and determining the capabilities parents wanted their children to have, speaking English was at the top of the list. Parents clearly see the importance of their children speaking English and so this was included in the ASQ-3. The questions included the following answers: Yes (which received a score of 3), Sometimes (which received a score of 2) and Not Yet (which received a score

of 1). The highest score a child could get in this section for his/her age group is 15 whereas the lowest score could be 5.

TABLE 6: Total Means for Children’s Communication Score by Group

Ayillo1 (Wait list Control)	N = 74	M = 10.93	Std. Deviation 3.23	Std. Error Mean 0.38
Ayillo2 (Programme)	N = 126	M = 14.52	Std. Deviation – 2.75	Std. Error Mean 0.25

CHART 5: Communication Score Distribution by Camp



As indicated in Table 6, majority of the children had some communication skills and were speaking in their language. None of the children got a score of 5, but many more had scores closer to 15. This is an overall positive indication. The overall mean score for the children in Ayillo 1 (wait list control) is 10.93 with a standard deviation of 3.2 while for the Ayillo 2 (programme) the overall mean score is 14.54 with a standard deviation of 2.7. So even with standard deviations, not many of the children in Ayillo 1 and Ayillo 2 have the same mean scores in the area of communication. When looking at the specific data set and scores, the ability of inability to speak English and use basic greetings in English seems to have made a huge difference in the mean scores as virtually none of the children from Ayillo 1 could greet people in English. Chart 5 illustrates the distribution of the communication scores among children in Ayillo 2 and Ayillo 1 and does indicate some overlap in communication scores among children in Ayillo 1 and Ayillo 2. However, the chart still shows a difference between the majority of the communication scores in Ayillo 1 and Ayillo 2.

TABLE 7: Total Communication skills Score by Group

t-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1tailed)	Means Difference	95% Confidence Interval of the Difference
-5.8746	198	p < 0.0001	3.053	-2.194

As the Table 7 shows, the T-test shows a significant difference among the programme and wait list control group at 95% confidence ($t = -5.8646$; $p < 0.0001$; $df = 198$). These results are further supported and triangulated through KII with community leaders, FGDs with parents and my own observation of the children in the two groups. During KII, research participants mentioned that the children could speak English through their involvement in the programme, and that they were confident speakers. In my observation, I could very clearly see a difference in children's communication abilities, both in Dinka and in English. Children's ability to speak English in Ayillo 2 was further supported by videos I took of children participating in ECCD activities. There were multiple songs in English which taught children the English language, but also concepts such as how to brush their teeth, wash their face, how to count to 10, different colors etc... Virtually no children in the wait list control group in Ayillo 1 spoke any English, while many in the programme group had basic conversational skills in English. I could see this not only during the testing, but also during their free play and the way they greeted me and Plan Uganda staff. I observed that children were learning how to express themselves more both in their language and in English through the CLAC programme. They interacted with other children and adults on a daily basis and seemed to feel comfortable answering questions, doing different sorts of activities and expressing themselves. In contrast, the children from Ayillo 1 sometimes did not answer questions or were quiet because they were shy and not used to answering questions even if they could do it.

Gross Motor Skills

Another sub-group within the total child development score includes questions related to a child's gross motor skills. These are skills related to large muscles and related to a child's physical well-being. The types of questions asked and activities children did include running from one side to the other, hopping on one foot, skipping, jumping a distance, catching a ball, throwing a ball overhand etc... The highest score a child could get on this is 18 while the lowest score a child could get is 6. Table 8 shows the mean scores for the gross motor skills and Table 8 shows the results of an Independent Samples T test.

TABLE 8: Total Means for Children's Gross Motor Skills Score by Group

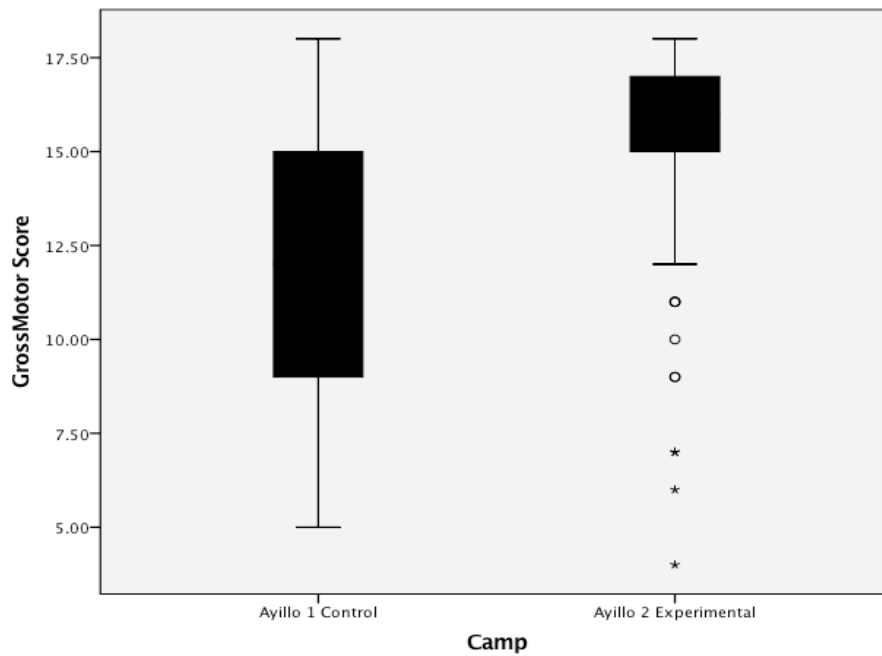
Ayillo1 (Wait list Control)	N = 74	M = 11.89	Std. Deviation – 3.85	Std. Error Mean – .45
Ayillo2 (Pro-gramme)	N = 126	M = 15.32	Std. Deviation – 2.65	Std. Error Mean – .24

Table 8 indicates that no child had the lowest score of 6 and no child had the highest score of 18. However, looking at the mean scores of both groups, it is clear that the most of the children are in the middle to higher range for gross motor skills. This is positive as it means that no child in the sample is severely behind in gross motor skills for their age even if some children on the lower end of the spectrum may have some developmental delays or are not able to fully do all of the activities asked of them. This can be due to the fact that some children simply may not have been asked to ever try some of the activities asked of them such as hop on one foot. Gross motor skills activities are a part of the CLAC programme so the inclusion of them seems to have made a difference. For example, one activity the children participate in is singing a song and hopping on 1 foot and then another. They do activities where they jump up and jump forward. These are all part of the test questions.

TABLE 9: Gross Motor skills by Group

t-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1-tailed)	Means Difference	95% Confidence Interval of the Difference
-7.3814	198	p < 0.0001	3.410	-2.646

CHART 6: Gross Motor Score Distribution by Camp



Further, through t-test for independent samples, the t value comparison children in Ayillo 1 with those in Ayillo 2 is -7.3814 and our df is 198. As the data indicates, there is a significant difference between the programme group in Ayillo 2 and the wait list control group in Ayillo 1 ($p < 0.0001$) at 95% confidence interval. However, looking at the actual mean scores the standard deviation and the distribution of the scores as illustrated in Chart 6, there is overlap in gross motor skills scores among the sample in both groups. The mean for Ayillo 1's children is 11.89 with a standard deviation of 3.85. Whereas the mean for Ayillo 2's children is 15.32 with a standard deviation of 2.65. This means that some children in Ayillo 1 (those with the highest scores among the group) had the same gross motor skills scores as children in Ayillo 2 (those with the lowest scores among the group). My own observation, videos and photos I took and KII with Plan Uganda staff did not seem to indicate statistical significance. In my own observation, children in both camps seemed to be doing well on gross motor skills. Where I did observe a difference and where a KII with Plan Uganda staff also brought up was that a difference in the scores could be due to the fact that children in Ayillo 1 were shy to try the activities for gross motor skills that they were asked to do even if they could do them. Further, gross motor skills are things that parents generally understand, especially when presented in simple terms such as the ability to walk, run, skip, and jump.

Fine Motor Skills

Another sub-group of questions in the adapted ASQ questionnaire is related to fine motor skills. The types of questions asked were related to a child's ability to hold a pencil using the pincer grasp, drawing a straight horizontal and vertical line, being able to draw circles and other shapes and being able to copy letter or write their names. The total score a child could have received in this sub-set of questions is 12 and the lowest score is 4. Table 10 and 10 show children's abilities in this area.

TABLE 10: Total Means for Children's Fine Motor skills Score by Group

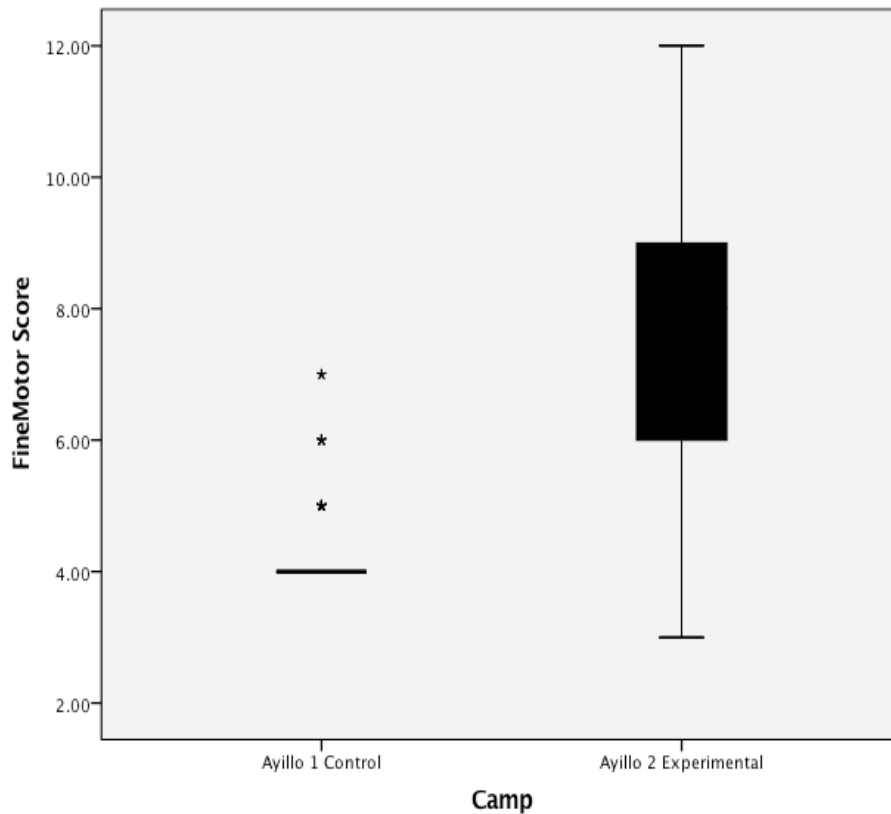
Ayillo1 (Wait list Control)	N = 74	M = 4.34	Std. Deviation – 0.71	Std. Error Mean – 0.08
Ayillo2 (Pro-gramme)	N = 126	M = 7.69	Std. Deviation – 1.83	Std. Error Mean – 0.16

The mean score for this category for children in Ayillo 1 came to 4.34 with a standard deviation of 0.71 whereas the mean for children in Ayillo 2 came to 7.69 with a standard deviation of 1.83. The mean score for Ayillo 1 came out lower than the lowest possible score because some of the questions were not answered. So, the score takes into account the fact that some of the questions were not answered. This indicates something in itself. This could mean that the research assistants did not ask children to do those specific activities (such as write their name) or it could be that when the researchers asked children questions, they started crying or did not want to try. Many of the questions left blank were in regards to children writing their name so research assistants could have also thought that if the child could not draw a shape, he/she would not be able to write his/her name. By looking at the specific scores in the data set, it is clear that many children in Ayillo 1 obtained the lowest score possible in this category and virtually no child in Ayillo 2 obtained the lowest score possible. Through my own observation, I could see that children in Ayillo 1 struggled in this area and were unable to do the activities requested of them. The CLAC programme, like the majority of early childhood education programmes, have a strong emphasis on fine motor skills. In the CLAC programme, the teachers practice holding a pencil, drawing straight, curved and other lines which are pre-writing skills. For older children that are 4 or 5 year olds, there is an emphasis on teaching children how to write letters and their names. The T-test for Independent samples further confirms that in the data there was a significant difference. The tvalue, as seen in Table 11, is -14.763 with $p < 0.0001$ at 95% confidence. Fine motor skills are key school readiness skills and based on the data, it seems that the effect of the programme intervention very strongly supports the development of these skills.

TABLE 11: Fine Motor skills by Group and Age

t-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1-tailed)	Means Difference	95% Confidence Interval of the Difference
-14.763	198	p < 0.0001	3.630	-3.22306

CHART 7: Fine Motor Score Distribution by Camp



Cognitive Skills

Children's cognitive development is the next sub-set of questions included in the child development questionnaire. These questions included problem solving, understanding concepts of opposites such as above and below, small, larger and largest. Questions also included recognition of numbers (1, 2, 3) and letters in English (as Dinka is not a written language) and ability to count to 10. The highest score possible in this sub-set of question is 12 and the lowest score is 4.

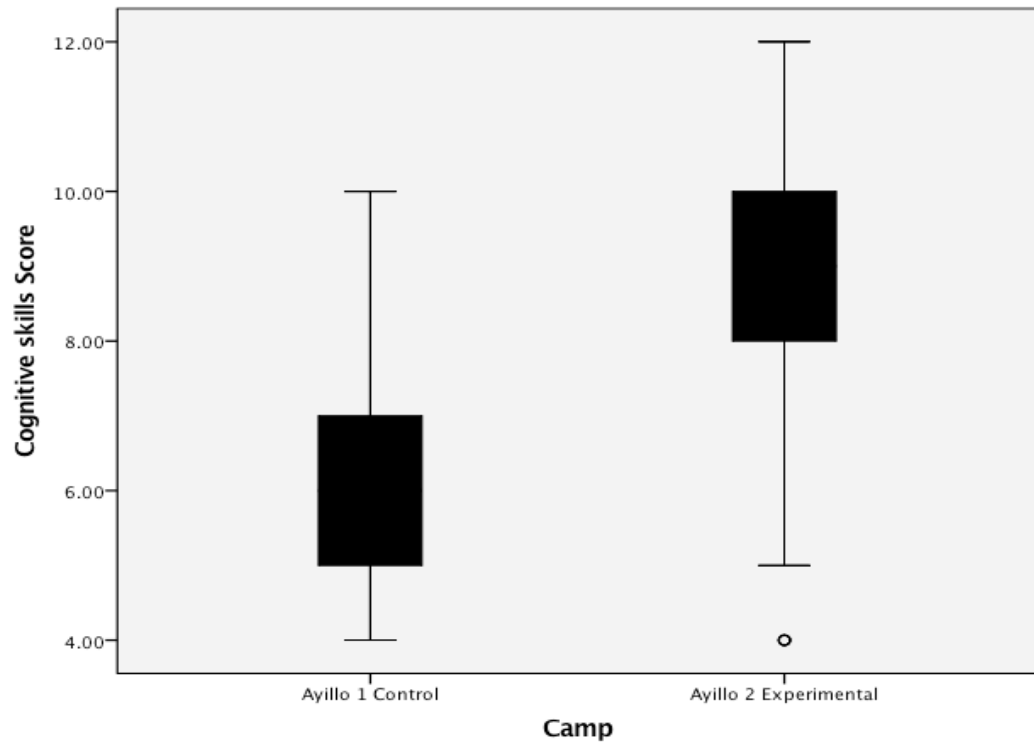
TABLE 12: Total Means for Children's Cognitive skills Score by Group

Ayillo1 (Wait list Control)	N = 74	M = 6.47	Std. Deviation – 1.45	Std. Error Mean – 0.17
Ayillo2 (Pro-gramme)	N = 126	M = 8.89	Std. Deviation – 1.89	Std. Error Mean – 0.17

TABLE 13: Cognitive skills by Group and Age

t-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1-tailed)	Means Difference	95% Confidence Interval of the Difference
-8.7176	198	p < 0.0001	2.368	-1.919

CHART 8: Cognitive skills Score Distribution by Camp



As Table 12 indicates, the mean for the children in Ayillo 1 is 6.47 with a standard deviation of 1.45 whereas the mean for children in Ayillo 2 is 8.89 with a standard deviation of 1.89. This indicates that some children in Ayillo 1 and Ayillo 2 had the same score in this sub-category. The mean score for Ayillo 1 is also quite low at 6.47; the lowest possible score being 4. This indicates that some children had very low scores in this category. Contrastingly, children in Ayillo 2 have a mean score of 8.85, which is in the middle of the range (4 – 12). The T-Test for Independent Samples (as seen in Table 13) illustrates a significant difference between the two groups with a t score of -8.7176, df of 198 and $p < 0.0001$. While the difference in the scores are significant in the sample, the fact that the scores for the children in Ayillo 2 are middle of the range indicates that they are learning something through the programme, but it is not enough to bring the majority of scores closer to the highest score of 12. During my observations of children of both groups doing the activities, I could see the difference in abilities among both groups, but the difference was not as acute as what I observed with children regarding fine motor skills. Further, part of this could be as indicated as one of the limitations earlier in the research methodology that

we have no clear indication of how long each research participant has been in the programme – whether for 8 months or 1 month as it was chaotic at the time of registering children for the research.

Personal Social Skills

The last sub-group within the test includes questions related to children’s personal and social skills – especially related to whether they can independently go to the toilet, wash their hands, have friends and know the names of their friends etc... Within the CLAC programme, there is a strong emphasis on this sub-group where children sing songs daily related to hand washing and keeping themselves clean. ECCD caregivers and parents reiterated the importance of personal hygiene and how they promote it with their children every day. The highest score a child could get in this sub-group is 16 where

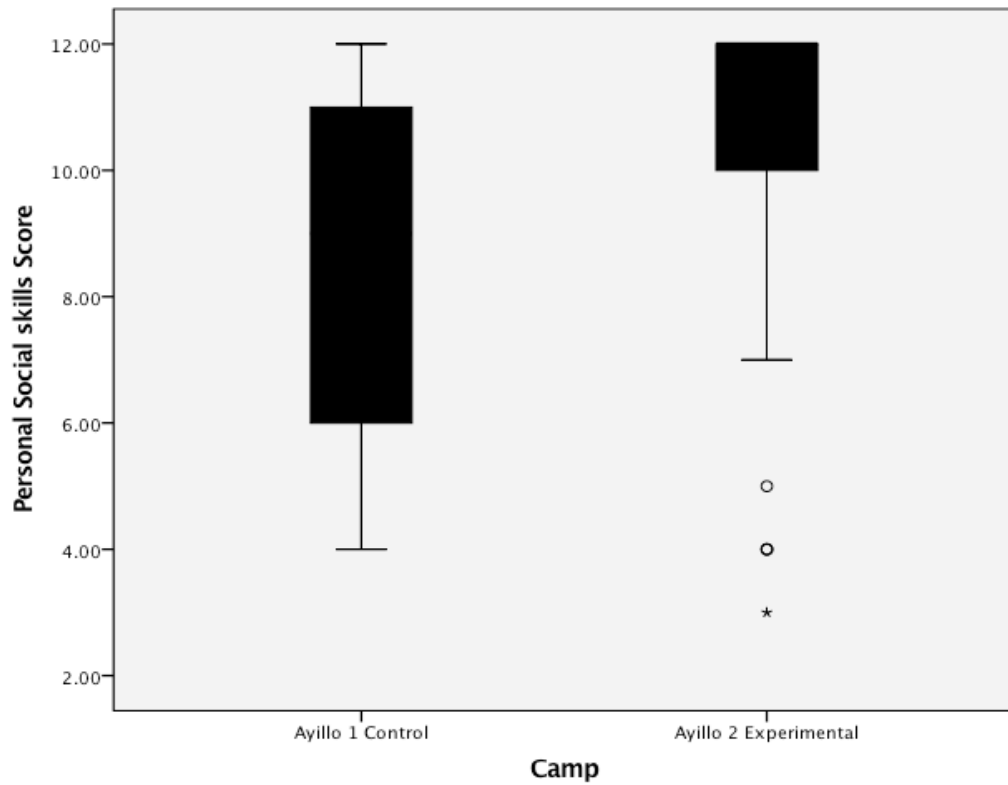
TABLE 14: Total Means for Children’s Personal Social skills Score by Group

Ayillo1 (Wait list Control)	N = 74	M = 8.66	Std. Deviation 2.64	Std. Error Mean 0.31
Ayillo2 (Programme)	N = 126	M = 10.63	Std. Deviation 1.90	Std. Error Mean 0.18

TABLE 15: Socio-emotional/Personal-Social skills by Group and Age

t-test for Equality of Means				
T Score	Degrees of Freedom	P Value - Sig (1-tailed)	Means Difference	95% Confidence Interval of the Difference
-6.0125	198	p < 0.0001	1.973	-1.3257

CHART 9: Personal Social skills Score Distribution by Camp



The means for the two groups did show a difference (8.66 for children in Ayillo 1 and 10.63 for children in Ayillo 2) however the standard deviation is large 2.64 for Ayillo 1 and 1.90 for

Ayillo 2. This again indicates that there are children from both Ayillo 1 and Ayillo 2 with the same score in this area. It also means that both groups generally did pretty good on this sub-group of tests. It makes sense as parents during Focus Group Discussions and ECCD teachers both mentioned the importance they give for children learning some of these skills. The T-test for independent samples in Table 15 did show statistical significance at 95% confidence interval ($t = -6.0125$; $df = 198$; $p < 0.0001$).

III. Description of the Parents Data Set

I followed a similar process for cleaning, coding, and then adding up the scores for the parents' data set. The parents' survey was developed based on a Plan regional survey for parenting programmes. It is based on the content of the CLAC parenting manual that is used in many countries in East Africa. The content assesses knowledge, attitudes and practice, but they are all self-reported. One limitation of this approach is that this research did not use an observation method such as the HOME (Home Observation for the Measurement of the Environment) to triangulate the data on practices, but other methods such as key informant interviews and FGDs do help to provide greater depth to the data. The parents' survey has both multiple choice questions and open ended questions. Each answer was coded with a score of 3, 2, 1, indicating whether the answer was correct (3), partially correct (2) and not correct (1). I then totalled the full score of the parents' data. The possible total could be 87 (with the highest score of 3 for each question and 29 questions in total).

The process of cleaning, coding and adding the scores for the parents' data took longer than expected as the answers included quantitative and qualitative responses. As a novice researcher, I made the mistake of not attaching every parent and child survey together so matching the parent and child surveys, which had South Sudanese names, often in handwriting that was hard to read, took time. Part of this was because during my time in the field, we were not able to collect data from children and parents all at once so the research assistants needed to follow up with the parents separately after I left Uganda. While this caused challenges in matching the parent and child surveys, the positive aspect of this was it allowed the parents to talk to the research assistants in a more relaxed environment rather than the chaos of when research assistants were collecting data from the children. I had the chance to staple the child and parent surveys together, but was nervous that if I did so and the data was not sent from Uganda to the U.S., I would lose all of the child data that we collected. So, I took all of the child data with me when I left Uganda and the parent data

came a few weeks after. Further, parent surveys were only collected from Ayillo 2 - the programme group. The initial plan was to collect two data points using the survey from Ayillo 2 and Ayillo 1, but due to the lack of time and sufficient human and financial resources, I made the decision while in Uganda to change the design of this research to something simpler - 1 data point and only 1 group of parents.

Out of the total of 126 children whose data we collected from Ayillo 2, we were able to match 90 parent surveys. The majority of the 90 parent surveys were conducted on mothers, but there were some fathers that responded to the questions. The characteristics of the parents surveyed is included in the first table show that they were all from the Dinka tribe, all spoke Dinka as their mother tongue, most were illiterate and did not complete primary or secondary school. Further, most of the parents were in single-headed households. While more parent surveys were collected than N=90 which we analysed, those that had many missing answers (about one quarter of the total) were not included. Additionally, there were some parent surveys that could not be matched because the hand writing on the parent survey was too difficult to match with the child survey. The total score for the parent survey could be 87. The mean for the parents' data for this research was 61, the median was 61. The total scores ranged from 40 to 76. For a majority of the parents, they got a 70% score on the parents' survey ($61/87 \times 100$) meaning that they got this percentage of right answers (in terms of knowledge, attitudes and practice).

TABLE 16: Parents' Survey Scores

Total Cases	Mean Score	Median Score	Total possible Score	Minimum Score	Maximum Score
N = 90	61	61	87	40	76

While reviewing the scoring of each parent survey, I saw a very clear pattern with the responses. Parents generally had better knowledge of issues related to basic nutrition, health and hygiene. For example, with regards to basic health, many parents mentioned the use of Oral Rehydration Salts for use if a child has diarrhoea, the importance of taking their sick child to the health centre in the camp. During FGD and KII, parents and community

members generally knew where key services, including health centres were located in their camps. In term of hygiene, almost all parents mentioned the importance of using soap and frequently washing hands before and after meals and after using the latrine. This was also a pattern with the child surveys where a majority of children knew about the importance of using soap, washing hands frequently. In terms of nutrition, many parents understood the importance of breastfeeding, having variety in a child's diet such as protein. Many parents said that they provided two meals a day to their child, but that was because there was not enough food in the camp. This was reiterated through the FGDs and KII. Some parents during FGDs said that they would work with other community members to make porridge for all children at the centres by volunteering to cook, provide cooking and eating utensils and firewood. They asked Plan, however, to support in getting the key ingredients for the food sugar, oil, flour etc... As mentioned previously, food distribution in the camp meant that we lost people and in particular research assistants who needed to wait in line. So the issue of food is very important to the refugees and acutely on their minds. Parents' greater knowledge in relation to health, hygiene and nutrition could also be because of other services focused on these areas in the camp which increased their knowledge.

The areas that parents seemed to need more support in understanding and practicing were issues related to positive discipline, child development, child stimulation and early learning. No other agency in Ayillo 1 and Ayillo 2 was focusing on these areas at the time of the data collection and Plan was in the early stages of its parenting programme so it makes sense that their knowledge, attitudes and practices in this area were not strong. Child stimulation and early learning are major parts of the CLAC parenting curriculum, but positive discipline is not. While there are modules about family relationships and in particular the relationship between the mother and father, the curriculum does not focus on alternative ways to discipline a child. In the surveys, many parents said that if their child was being naughty or not behaving, they would hit him/her with a cane, would not give him/her food. Very few respondents said they would use alternative non-violent means to discipline their child.

Based on the responses to the questions, many parents did not understand general developmental stages in relation to nutrition, learning etc... For example, some parents thought it was ok to give juice to a 4 month old or thought that semi-solid foods should start at 1 year. Juice is not recommended for 4 month old babies because exclusive breastfeeding is promoted. Further, starting semi-solid foods at around 6 months can provide additional vitamins for children that breast milk does not provide. In terms of ways

for children to learn, many parents did not understand how simple household items can be used for learning, especially in contexts where the availability of toys is difficult. Further, most parents did not think about making toys for children from local materials. Some parents did understand that books were important for learning and preparing children for school, but many did not read themselves and many did not have books with them in the camps. Most parents did not play enough with their children. Based on their responses, they did not understand that normal home activities can be fun and rich learning experiences for children. Lastly, most parents did not understand children's abilities, particularly during infancy, first year of life. There is a question about when a child can benefit from colourful moving objects and pictures. Infancy is the time when there is rapid eye growth and development so providing contrasting colours and patterns for children to look at is good for eye development. All of the aspects mentioned here that parents generally did not understand or practice are included in the CLAC parenting programme.

IV. Correlation between Parent Knowledge, Attitudes and Practice and Child's Development

Another question being investigated in this research was if there was a correlation or relationship between children's development score and parents' score on their survey. There is some literature that indicates that when the capability of parents is high, meaning they have higher knowledge about child development, care and early learning, have higher overall education, higher vocabularies etc... that translates into higher development and learning of their child (Center on the Developing Child, 2016; Hoover-Dempsey, K. and Sander, H., 1995; McLoyd, V. (1998); Senechal, M. and Le Fevre, J.A., 2002).

Table 17 below shows the correlation coefficients of all of the children and their parents and then the correlation coefficients of children and parent by age.

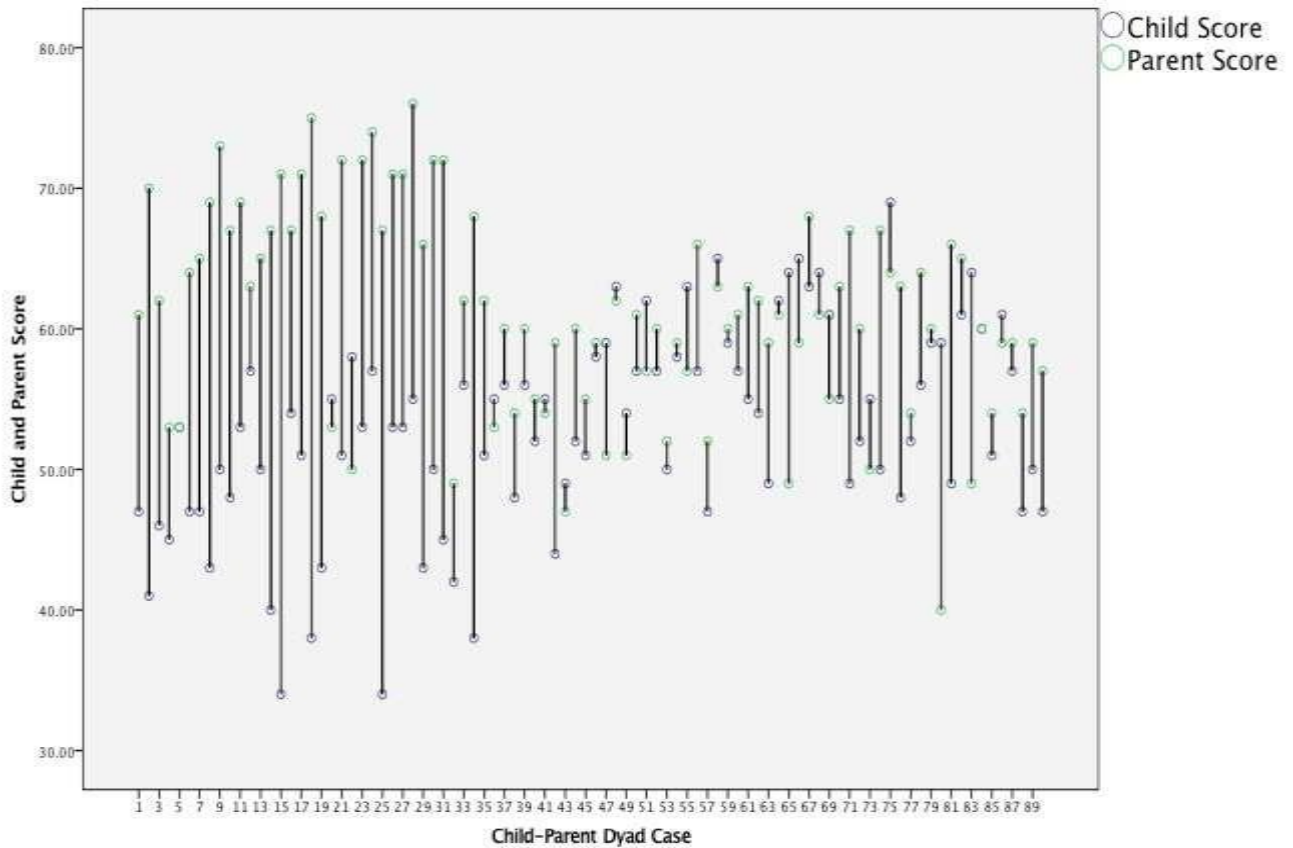
TABLE 17

	Correlation Coefficient	T score	p value	degrees of freedom
Total	-0.2875	-2.8158	0.997	88
3 year olds	-0.0942	0.51801	0.6959	30
4 year olds	0.1004	0.5432	0.2956	29
5 year olds	-0.1053	0.5230	0.6995	25

As none of these correlation coefficients are close to 1 or -1 and all are very close to 0, it indicates that no relationship, positive or negative, was found between the two groups' scores. When looking at the raw data (as illustrated in Chart 10), it was also clear that the scores of the parents and children had no pattern; they were all very scattered.

Correlations are just one type of analysis to look at the relationship between variables. I considered using Chi Square as well, but the variable of the scores are continuous while Chi Square analyses require categorical variables. I could have gone back to the data to categorise each set of scores, but I would then have had to make a decision as to the cut off for what scores would be categorised where. The decision itself of where the cut off for the scores could be argued to be biased so I decided not to do this. This does illustrate a methodological limitation. Future research could build on and deepen the analysis for this type of data.

CHART 10: Child-Parent Dyad Scores



V. Unintended Benefits of the Research

While this research focused on refugee children, 3-5 years, and their parents, there were some unintended benefits of this research. Firstly, the process of doing the research was a learning and professional development experience for Plan Uganda staff and the South Sudanese refugees that are ECCD staff and research assistants. Through the process, the Plan Uganda staff indicated that it was a nice learning experience for them and it helped them improve their existing skills and capacities as ECCD Officers. They felt more confident about child development, parenting education, asking questions, collecting data and conducting research (which is important for their ongoing data collection for programme monitoring purposes). They also reported that they learned more about child development and what children should be able to do at a certain point. They learned new games to play with children in the ECCD spaces. Similar responses were reported from the South Sudanese ECCD staff/research assistants. Many ECCD staff/research assistants and Plan Uganda staff (including the driver) requested additional child surveys so they could test their own children at home and monitor their development.

CHAPTER 8: DISCUSSION

Part 1 of the Research

In the first part of this research, I used qualitative methods to develop a set of capabilities framed around child development and in particular Vygotsky's Socio-Cultural theory. This process was important so the capabilities we tested were culturally grounded and based on what was important for children to be able to do from a South Sudanese cultural perspective. Since Sen spearheaded the Capabilities Approach, much work has been done by various researchers looking at the applicability of this model (Nussbaum, M., 2011; Saito, M., 2003; Sen, A.K., 1999; Terzi, L., 2007; Unterhalter, E., 2009; Walker, M. and Unterhalter, E., 2007). Biggeri highlighted that there is little work that has been done looking at children's capabilities (Bigger, M., 2007; Bigger, M. and Mehrotra, S., 2011). This research therefore takes a step forward and contributes to the discourses on the Capability Approach by doing a few new things: 1) looking at capabilities from an early childhood lens, 2) looking at capabilities from a South Sudanese perspective, and 3) applying culturally relevant capabilities to a refugee context.

In sum, the key capabilities identified by the FGD and KII in South Sudan are framed around child development domains includes:

Physical Development

1. Ability to run, jump. Hop
2. Ability to write

Cognitive Development

1. Reading
2. Knowledge of numbers
3. Knowledge of Letters
4. Knowledge of colors

Language and Communication

1. Ability to speak English
2. Able to understand and follow directions from elders

Socio-emotional Development

2. Cleanliness
3. Ability to go to toilet and wash hands with soap
4. Having friends
5. Ability to resolve conflicts peacefully

These capabilities were then used to adapt the ASQ-3 questionnaire which allowed me to use a culturally relevant tool to collect data in part 2.2 of this research. The development of a culturally relevant quantitative tool is another contribution of this research to the growing literature for the Capability Approach, Vygotsky's Socio-Cultural theory and the field of Early Childhood Development. This was an important step to embark upon because the merging of these two different theoretical perspectives for a humanitarian context had not been done. Further, bringing these two theoretical perspectives together is important because the practice of developing capabilities and indicators for ECCD in general for developing countries is not happening despite broad consensus that this is important to do and that existing western tools to measure this are not sufficient (Engle, P. et al, 2013). While tools such as the ASQ3 and Bayley Scales of Infant Development have been adapted in various cultural contexts, no tool has been adapted considering the South Sudanese cultural context and no tool has been adapted to use in a humanitarian context (Bornstein, M. and Lansford, J., 2013). Further, while there is broad consensus that tools assessing Early Childhood Care and Development (ECCD) should look at certain key areas such as physical development (gross and fine motor skills), socio-emotional development, language development and cognitive development, there is no agreement on what some of the key indicators or capabilities should be for different cultural contexts (Ibid).

Some researchers and practitioners such as Engle et al, (2013) and UNICEF actually call for a global tool to measure children's development so this could be compared across countries for larger scale macro data that could be used for policy change (Engle, P., Rao, N. and Petrovic, O., 2013). However, many other academics and practitioners working on child development issues disagree with having a global tool and set of capabilities. Modern academics including Sen (1999), Biggeri et al (2011), Harkness et al, (2013) and others along with Vygotsky would all disagree with this notion because developing a global tool, while it could provide some benefits, especially for data comparisons across countries, it could never include all the various external environments and cultures of the world (Sen, A.K., 1999; Biggeri, M. and Mehotra, S., 2011; Harkness, S. et al., 2013; Vygotsky, L.V.,

1981). As mentioned earlier, Vygotsky's Socio-Cultural theory emphasises the role of the external environment of the child on his or her development (Vygotsky, L., 1978). Bronfenbrenner (1979) and Rogoff (2003) extend that perspective to indicate the importance of culture in children's development (Bronfenbrenner, U., 1979; Rogoff, B., 2003). While the various cultures around the world have similarities, they also have differences and this affects parents' and society's expectations for children and therefore their capabilities at certain ages (Harkness, S. et al, 2013). Harkness et al., cite a wide range of capabilities of children based on the cultural context they live in and the expectations or perceptions of the child that their parents and society have of them (Ibid). In some countries, cultural agendas may focus on motor skills and obedience while in others it may focus on independence and verbal skills (Ibid). In western academic literature and research on brain development indicates that children are prime for language development and need regular input and practice with people speaking to them (Shonkoff, J. and Richterm L., 2013; Grantham-McGregor, S. et al., 2007; Fox S. et al., 2010). In some cultures, this is difficult for parents to understand and they do not feel it is important to talk to children until they can respond back as is the case with the South Sudanese research participants (Harkness, S., et al, 2013). Super (1976), for example found that motor skills in some African infants were reached earlier than in some Euro-American infants (Harkness, S. et al, 2013). In Indonesia, for example, it was important that children learned their daily prayers rather than certain types of verbal communication (Plan International unpublished research, 2011). Further in much of Sub-Saharan Africa, including South Sudan as we saw from FGD and KII, girls as young as 5 years are expected to help their mothers care for younger siblings, which you would rarely see in Western societies (Harkness, S., et al, 2013). This capability is seen as developmentally important to prepare girls for socially responsible roles (Ibid). The use of standardised child development tests such as the Bayley Scales of Infant and Toddler Development in developing context without a process of cultural adaptation found that for example, African children scored poorly in comparison to European or American children because certain aspects of the test are not prioritized or seen as important in those African cultures (Ibid).

Further, these two theoretical perspectives have a lot in common, but have never been considered jointly in the process of developing culturally appropriate capabilities and a quantitative data collection tool (Harkness S. et al., 2013). When capabilities have been developed, it has not focused on young children and has not considered child development frameworks.

While the process undertaken in this research was able to uncover some very important capabilities for children based on South Sudanese cultural context, there are avenues for greater investigation in this area. Firstly, this process could be done again using a larger sample of people to understand in greater depth the expectations of community members with regards to their children's development and generally society's perceptions of children.

Secondly, South Sudanese community members mentioned the importance of their children being able to solve problems and potential conflicts rather than using violence. This was not included in the adapted ASQ-3 because while it is a capability identified by community members, it is not something that Plan International is currently focusing on. So including an indicator or two looking at this particular capability did not make sense in this research. The issue of ECCD programmes' ability to influence and help children develop these crucial soft skills that promote peace, tolerance, diversity, acceptance of the other, empathy, using nonviolent ways to resolve conflict is really important and can be investigated in future research.

Thirdly, future research can also look at the involvement of children in shaping cultural perceptions of child development and expectations on children's capabilities. Participatory research methods could be used to help children fully express themselves in a way that is developmentally appropriate. As mentioned previously, due to limited time in South Sudan and Uganda, this research was unable to set up focus group discussions with different groups of children of varying ages to understand the expectations for their own development they feel from community members and elders. Vygotsky and Biggeri et al (2011) and others believe in the role of children in their own development and this could be further investigated in future research (Biggeri. M. et al. 2011).

Lastly, uncovering and developing indicators and tests to measure physical development and gross and fine motor skills was easier to do than developing indicators and tests to measure social and emotional development. While the adapted ASQ-3 had questions focused on social and emotional development such as whether children had friends etc..., more can be done in this area to really make it more rooted in South Sudanese culture.

Part 2.1 of the Research

In this part of the research, I used qualitative methods (focus group discussions, key informant interviews, observation) and existing published and unpublished documents to investigate the Community Led Action for Children (CLAC) model, which is a community based ECCD model. It is currently being implemented by Plan International in Uganda and other places. While there has been some documentation of the impacts of this model (Aboud, F. et al, 2013; Singla, D. et al, 2015), there has not been an in-depth case study of this model's implementation in both non-emergency and emergency contexts. Seeing how the model has been adapted and implemented in a refugee context fills an important gap in academic literature, but also a gap in knowledge for practitioners that are looking for useful models for ECCD in emergency situations.

Through the presentation of the CLAC model and the case study of its implementation in Lira, which is currently peaceful, had a focus on parents at its core. This is influenced by the theory of change developed by Harvard University' Center on the Developing Child, which says that when parents' capabilities are strengthened, they will be a better position to support their children's development outcomes (Center on the Developing Child, 2016). The theory states that parental influence is critical as they are children's first and life-long teachers. The overall CLAC model does not state exactly how many modules to include in the parenting sessions, how long they should last, the methodology and the content. Based on experience of implementing the parent component of the CLAC model on other countries, Plan Uganda developed a 12 session model that focused on child development, health/nutrition, and the relationship between the parents and the family. A practical, skills based approach was used in Lira.

While parenting has started being implemented in the South Sudanese camps in Adjumani, at the time of the data collection for this research, Plan had not started implementing the full spectrum of the parenting curriculum. While the same 12 modules from Lira are being used, the parenting sessions in Adjumani did not have the same approach of using participatory methods that focused on practical skills building. During the sessions, many parents did not bring their children. Part of this could be because the parenting session facilitators and Plan staff do not fully understand the CLAC approach and therefore did not actually implement it as it is intended to be where parents would be encouraged to bring children so they could practice skills they learned.

A critical aspect that came up through the qualitative data from parents and when the capabilities were being contextualised, is positive parenting and promoting peace. Promoting peace includes respecting diversity, teaching children non-violence ways to behave with others and solve problems, working collaboratively with children and people of all tribes and ethnic groups. As the majority of the ethnic groups in Adjumani are from the Dinka tribe the population probably does not see the need to respect other ethnicities or learn to live together. I observed many people arguing and fighting - children and parents – both from the same tribes and those of different tribes. In a number of instances in the camps, I saw children fighting and then their parents coming and verbally and physically fighting. FGD and KII confirmed that there is a culture of solving problems through arguing and fighting. Many South Sudanese I met and talked to during this research process want this to change and hope for a better future. This is an area that Plan International needs to look at and address in its CLAC parenting programme, especially in conflict affected fragile contexts, including refugee and internally displaced persons situations.

Early learning, which is a second key component of the CLAC programme, had both similarities and differences in its implementation. Firstly, in the non-emergency context, where there can be more space, early learning spaces were not used for other types of activities. Their sole purpose was to provide early learning services for young children. This allowed the teachers to set up the space with four corners that had distinct types of activities that promoted different aspects of children's development. In the refugee camps in Adjumani, the early learning spaces were shared spaces where other children and youth could come to learn, socialise and play. This made it difficult to set up four corners as once the young children left, the teachers had to pack everything up for the next group of children to use. In the camp, most of the spaces were tents whereas in Lira, the spaces were built by the community with local bricks and other materials. KII revealed that in other refugee and emergency contexts, there are not even constructed physical spaces and early learning happens outside or through mobile services (ie. Philippines Typhoon Haiyan, Nepal earthquake, Ethiopia South Sudanese refugee). So, space needs to be considered when starting early learning activities during emergencies. Spaces either have to be shared for other types of activities or where physical spaces are not available, mobile and learning outside can be alternatives.

In Lira, all of the materials were local materials that were culturally appropriate. In Adjumani, UNICEF ECD kits were initially used. While these provide ready to go teaching and learning

materials, KII with Plan staff mentioned that they are often not culturally appropriate or sufficient for the larger number of children being served in each space. While the kits have puzzles, balls, crayons etc... they also have games like dominoes and dolls with blond hair and blue eyes. During KII with ECCD teachers, they mentioned the inappropriateness of dominoes because in South Sudanese culture, youth and adults use them for gambling. They said parents approached them about their use of dominoes because they did not want their children to learn how to gamble. So these teachers had to explain to the parents that they were using the dominoes to teach emergent Math concepts (ie. Counting the number of dots). Further, the dolls in the kits do not look like South Sudanese children. Many South Sudanese children have never seen someone with different hair and skin color. According to KII with Plan staff, in the Philippines, Plan adapted the ECD kit to make their own culturally appropriate kits which they call the "Big Blue Bag". While the "Big Blue Bag" was used in the Philippines for the emergency situations, the government and other ECCD teachers want to use this for non-emergency situations and in particular for them to reach rural areas.

The required adaptation needed for emergency contexts can lead to innovation.

Regarding ECCD teachers, most in Lira have some qualification from the Ugandan government to teach early years' education whereas the majority of the ECCD teachers in Adjumani had no formal qualification. Part of this reason is that the same type of system of professional development does not exist in South Sudan. Additionally, during an emergency, there is not enough time for extensive training of people before they begin to work. Therefore in emergency contexts, unqualified people are often hired, as was done in Adjumani, and then they were given periodic training and support to help them slowly improve their knowledge and practice. In Adjumani, there were more parents who stayed and supported ECCD teachers than in Lira. This could be because they had the time to do this, and/or had an interest in learning and helping. Interviews with some parents who did stay to help at the ECCD centers stayed out of interest and because they said they liked what their children were learning. This has actually increased the number of adults able to support children, thereby reducing the overall adult to child ratio. This spontaneous support from parents as volunteer teacher assistants is a positive outcome that can be promoted and replicated in other emergency programmes.

Approaches and methodology used in both Lira and Adjumani were similar. Both locations had a mix of child centred and teacher centred methods being used. According to KII, Plan

promotes more child centred approaches and the use of play and manipulative for children's learning. Further, Plan believes in using music and movement to teach about basic health and hygiene, teach language etc... Neither location had fully embraced this and was using these approaches in the centres. However, it is clear that whether it is an emergency or not, the use of more child centred and play based activities is possible.

In most of the spaces in Lira, transition to primary school was done as there was a concerted effort to do so. In Adjumani, because Plan was not leading the implementation of primary education, there was not a focus to do anything to support transition. This could also be because the Plan staff or ECCD teachers were not aware of the full aspect of the CLAC model and in particular the importance of ensuring smooth transition from early learning to primary school.

Influencing policy through advocacy is a fourth component of the CLAC program and while possible to do in emergency situations, it is often not the first priority. Whereas in a nonemergency, each component of the CLAC model have equal weight and focus in terms of implementation, in an emergency context, as seen in Adjumani, there is greater weight and focus on early learning for children and parenting education than for helping children transition to primary school and to conduct advocacy to promote policy changes. In every context, these four components will need to be reviewed and implemented slightly differently. According to KIIs with Plan staff, in Central African Republic (CAR), which is also a refugee context, Plan CAR did do a lot on advocacy while at the same time focusing on the early learning and parenting piece.

Part 2.2 of the Research

This part of the research used mixed methods to look at children's development outcomes using a culturally adapted text - ASQ-3 and parents' knowledge, attitudes and practice in relation to child's various needs (physical, socio-emotional, cognitive and linguistic). This part of the research also looked at whether the children's development outcomes correlated with their parents' scores on the parent survey. Overall, there were mixed results, especially with the parent survey data and the correlations conducted between children's development and parents' score on the survey.

Child Data

The qualitative and quantitative data do show a significant difference between the programme group of children in Ayillo 2 and the wait list control group children in Ayillo 1 with total scores and also when each set of questions was divided and analysed based on the domain of child development they represent. The four main areas investigated in the children's survey included linguistic development and communication - including the ability to speak basic English greetings. The second area of focus is with regards to physical development and in particular, gross and fine motor skills (using large muscles of the legs and small muscles of hands and fingers). Thirdly, there was a focus on cognitive skills including problem solving, understanding concepts such as small, big, bigger; over and under, numbers, colours etc... The last area of investigation in the child's survey includes personal-social or socio-emotional skills such as whether children share, they have friends, are they able to go to the latrine and wash their hands on their own.

After triangulating the quantitative data for the total child development scores with qualitative data from KII, FGDs and observation, it is clear that there are significant differences. During FGDs, KIIs and my own observation, children in Ayillo 2 that were participating in the ECCD program could do more and had greater capabilities than those in the wait list control group. This could be because of the programme, but the difference could also be accounted for because the children in Ayillo 2 were used to doing activities like the ones presented in the survey whereas the Ayillo 1 children found these activities new and did not feel totally comfortable doing them with people they did not know. In addition to the measures mentioned in the survey, FGDs, KII and my own observation also indicate that the children were happy, confident and excited to participate in the ECCD activities. During FGDs with parents, many mentioned they saw huge changes in their children's development. Some parents, who were not part of the FGDs or KIIs, also told Plan and ECCD center staff that they wanted their older children to participate in the ECCD activities rather than go to primary school because they saw the value of what children were learning and because their older child had not gone through ECCD and so had not learned what the younger children were learning. Children in Ayillo 2 were so excited that those who did not have their parents with them at the time of registering research participants, but wanted to participate went home to get their parents so they could sign up and do the activities.

In terms of linguistic development, the quantitative survey showed significant differences and this is supported by the qualitative data collected. When I entered the question about

whether the child could speak basic greetings in English, almost no children from the Ayillo 1 wait list control group could speak English, while significantly more children in Ayillo 2 could. This is because the teaching of English is integrated into the children's play and activities. In particular, the ECCD teachers use songs to teach children English language and language in general. The children in Ayillo 2 were more confident to speak and when they spoke, they spoke more clearly (usually in their mother tongue). The CLAC programme, during the morning circle time, has an activity called "news news" where a few children every day can share with their peers some news in their lives. This gives children the opportunity to express themselves and in do it in front of others. Many children in Ayillo 1 were shy so they scored low on particular tests even if they actually could speak and would do so more clearly at home.

Physical development (gross and fine motor) skills were another area where the data showed significant differences. Based on my observation, I could see that while the CLAC programme is encouraging the use and development of gross motor skills, it is not as intentional and focused as its attention to other aspects. While the t-test showed significant differences in gross motor skills, through observation, I did not see such stark differences in the two groups. In the areas of fine motor skills, the survey, KII, Key informant interviews and my own observation all support the large and significant differences between the two groups. Fine motor skills are intentionally practised in the Plan ECCD centres with children practicing writing, drawing, doing puzzles, lacing etc... Many parents during the FGDs and in the parents' survey mentioned that they were not able to carry a lot when they left their homes in South Sudan; they had to leave many things. In the parent surveys and FGDs, parents explicitly mentioned toys as things of their children's they could not bring with them. While the research team did not explicitly ask about pencils, pens etc... it is very likely that if the families had these items in their houses to begin with in South Sudan, they did not carry them to the camps which helps account for the difference between the two groups. The Ayillo 2 children have access to writing materials in the ECCD centres while the Ayillo 1 wait list control groups do not have access to such items where they could practice developing their fine motor skills.

Cognitive development was another area where qualitative data supports the statistical significance found in the quantitative data. Areas such as recognition of numbers, colours, shapes, are intentionally taught in ECCD centres and children in Ayillo 2 scored higher on these tests than the children in Ayillo 1. Concepts of over and under, small, big and bigger

are also integrated into the various play, songs and games that the children experience in the ECCD centres. The results could also be because parents may understand the importance of children learning these things, but they may not know how to teach their children. Their interest and motivation might encourage children in Ayillo 2 to learn well. Helping children understand these concepts through play, songs and games are some of the skills that would be practised in the parenting groups. As the parenting programme nor the early learning/ECCD centre had not started in this particular block of Ayillo 1, the difference makes sense.

The last area that was explored in the adapted ASQ-3 survey was personal-social/socioemotional skills. This area also showed quantitatively a significant difference, but through FGDs, KIIs and my own observation, this was another area where the stark difference between the two groups was not as strong as the other sub-areas. During the adaptation process for the ASQ-3, parents mentioned the importance of cleanliness and hygiene which could account for the fact that the differences between the two groups were not stark. The other aspect of the personal-social/socio-emotional questions were about sharing, whether children had friends etc... Through my own observation, it was clear that one of the key contributions of the ECCD centres and the CLAC model is how it brings children together and helps them develop their social skills. While there are teaching and learning materials in the ECCD centres, there are not enough materials for the number of children. This is a reality of working in humanitarian settings where the needs and demands for services usually is greater than the resources available. So the idea of sharing and working together in groups is integral to the curriculum and way to teach and develop children's capabilities.

Parents Data

A lot of early years and education literature in non-emergency contexts states that when parental knowledge and capabilities are high, including their education and socio-economic status, this will provide a more stimulating and supportive environment for children to develop in, thereby positively affecting their development (Center on the Developing Child, 2016; Hoover-Dempsey, K. and Sander, H., 1995; Mc Loyd, V. (1998); Senechal, M. and Le Fevre, J.A., 2002). Parents with higher vocabulary and those that interact more with their children can have children with a larger set of words that can prepare them for later reading and writing in school (Roberts, J.E. et al, 1999; Hart, B. and Risley, T.R., 1999).

This evidence in literature was tested in a refugee camp situation where the population is displaced from their homes so the majority brought few belongings with them (ie. toys, books for children). This population also generally has low education levels, low socio-economic status and low knowledge about child development and what they could do to support their children's learning and development. The concept of early childhood care and development (ECCD), while now a part of the South Sudan national education policy, is still relatively new and services have not reached all parts of the country (UNESCO, 2015).

Unfortunately, data found in this research does not provide further evidence to support existing literature in non-emergency contexts where parental education and socio-economic status correlates to children's higher development and educational learning outcomes. There could be a number of reasons for this. It could be simply that this research was conducted in a more homogeneous population than other research which would show a broader range of education, socio-economic status etc... This population generally all have low education levels, low socio-economic status, and few things from home that could be used for children's cognitive stimulation etc... There also was a small sample (N=90) which could account for the inability to conduct proper correlation analysis. While the parenting programme had started, it was still in the early stages so it may be that many of the concepts included in the parents' surveys had not been reviewed in parenting sessions. There is a lot of movement between Adjumani, Uganda and South Sudan, as the border between the two countries is close and easy for South Sudanese to cross without visas etc... I found that many people were going back and forth across the border so it could be that some parents participated in more sessions than others or that some of the parents surveyed had not yet participated in any parenting sessions. There could have also been a miscommunication of the question and a difference in the way research assistants led the interview process for filling out the parent surveys. Yet another possibility is that emergency situations are different as they add additional stressors to parents' lives where they need to search for food and focus on daily survival, that this may have affected how they answered the questions on the surveys, especially in terms of practices. Literature states that the stress of emergencies affects people differently than daily stressors of life in developing countries and this stress affects parents' ability to care for their children as they did before (Center on the Developing Child, 2016). As the practice aspect of the survey is approximately one third, scoring lower on this section versus the knowledge section could have affected the overall parent score.

This quantitative data was triangulated with qualitative data presented in the parent survey questions which were not multiple choice, but where parents could, in their own words, answer the questions. Further, FGDs with refugee parents and KII with Plan staff, refugee leadership and others also helped to triangulate the quantitative data. Through qualitative data and by looking at the specific scores and answers on the parents' surveys, there is a clear pattern that parents have higher knowledge about basic health, nutrition and hygiene than about child development and in particular activities that could promote children's cognitive, communication, socio-emotional, gross and fine motor development. As the parenting programme was in the early stages of implementation at the time of the data collection, this could be the reason for this. It could also be that parents are getting some of these key messages about health, nutrition and hygiene from other sectors and service providers in the camp in which case the Plan parenting programme at this point is not having a huge effect. The parents' data is in line with research and evaluations done on parenting programmes where simply having sessions about knowledge were not enough to have a significant impact, but the use of practice, problem solving and peer to peer learning were crucial to having impact on parents' capabilities (Aboud, F. et al, 2013; Singla, D. et al, 2015). As Plan moves forward with the parenting element of this programme, they will need to look more closely at this component and ensure it aligns with evaluations and lessons learned from other parenting programmes and in particular with evaluations conducted on the CLAC programme in non-emergency situations (Aboud, F. et al, 2013; Singla, D. et al, 2015).

CHAPTER 9: CONCLUSION AND RECOMMENDATIONS

Globally, there are more humanitarian emergencies that are affecting more people, are lasting longer, and are costing more. While donors are starting to increase their support, the evidence base for education in emergencies, and in particularly early childhood education in emergencies, is weak. Many projects base their models upon theoretical frameworks from non-emergency contexts. While not insignificant and unimportant, emergencies change the dynamics of people's lives - children, parents, and communities. This research revealed that a model like CLAC cannot be implemented in the exact same way in non-emergencies and emergencies. Basing emergency programmes on theoretical foundations developed in non-emergencies alone is not enough to explain the myriad phenomena occurring. Further, they do not fully help develop programming models that are the most relevant and effective for children.

The nexus between ECCD and emergencies is a burgeoning area of work. There is now increased attention for education and ECCD in emergencies through the Sustainable Development Goals, a Journal on Education in Emergencies (INEE, <http://www.ineesite.org/en/journal>) and greater research in this area, increased investment from donors and governments through the global Education in Emergencies fund and other pots of money, more programmes in humanitarian situations and greater attention from governments. The overall purpose of this research was therefore 1) to bridge the academic and practitioner divide; 2) to increase the understanding of this area of work and 3) to contribute to the growing evidence base, dialogue, and interest. This research used the South Sudan crisis and refugee situation in northern Uganda to contribute in four ways. Firstly, the research developed tools relevant for the South Sudan cultural context that can be used to collect quantitative data. Secondly, the research brought together theoretical perspectives from Child Development and Human Development to create a set of capabilities based upon a child development framework that is relevant for a humanitarian context. Thirdly, this research presented a case study of how a community based ECCD model has been implemented in non-emergency and emergency contexts. Lastly, this research provided evidence of the importance of ECCD services in emergencies and the impact these services can have on children's development outcomes.

Here are some key recommendations based on this research for key stakeholders: academia, donors, governments, and practitioners.

Recommendations for Academia

Through review of literature it was clear that little evidence has been collected in emergency situations and so huge gaps remain in understanding the various models that can be used in these contexts and their effectiveness for positive child outcomes and stronger parents' capabilities (Yousafzai et al., 2014).

1. Examine the effectiveness of different models in various emergency contexts: This research provided evidence of one model - CLAC - worked in the South Sudanese refugee context in Uganda. Other models can also be researched and compared to the CLAC model. Future research can include mixed methods research, qualitative, or quantitative (ie. collecting two data points in a difference in difference methodology).
2. Further develop a set of capabilities for the South Sudan context and develop a set of capabilities for other contexts: A set of capabilities were developed in this research for the South Sudanese context. This could be further developed to capture broader consensus and perspectives of South Sudanese, including the voices of children themselves. Limitations of this research prevented me from actively engaging young people themselves in developing these sets of capabilities.
3. Conduct Cost Effectiveness studies
As funding is never sufficient to meet all needs of everyone, choices need to be made. Cost-effectiveness studies could help shed light on approaches that are promising given the costs related to providing them. Yousafzai et al. (2014) mention the limited number of cost effectiveness and cost benefit studies in early childhood and there have been none focused on ECCD in emergencies (Yousafzai, A.K. et al, 2014). The CLAC model is weaker in the areas of health and nutrition, conflict resolution, positive discipline and peace building, so future research could look at other ECCD models that have a stronger integration of these elements and compare the results with a model with a stronger learning and cognitive stimulation component like the CLAC model. There is also evidence that more holistic programming that has inputs from multiple sectors provides for better results in children and is more cost effective (Heckman, J., 2006; Woodhead, M. 2014). In particular, the integration of early learning and stimulation with nutrition has been cited as having positive

results (Yousafzai, A.K. et al, 2014). Therefore, research that looks at interventions that have a multi-sectoral approach (including early learning and nutrition, but also beyond to include health, and protection) vs. one sector in an emergency situation would make a contribution.

4. Investigate the influence of Early Childhood interventions on Peace and Gender Equality outcomes: The potential for ECCD to shape a child's identity and promote gender equality, peace (ie. tolerance, empathy, ability to see the other) etc... are other areas of potential future research. Research looking at ECCD and peace is already happening, but many of these studies have not yet looked at conflict countries in Africa.

5. Investigate Parenting programmes in emergencies: Parenting and in particular parenting programmes in emergencies is another burgeoning area that can be investigated further, both from the qualitative and quantitative perspective. Parenting programmes can be connected to early learning interventions as in this research or it can be part of a health, nutrition or livelihoods programme.

Recommendations for Donors

1. Increase support for Early Learning and Development and parenting activities in humanitarian funding

While more evidence is needed for ECCD in emergencies, this research illustrated the benefits of providing ECCD services vs not providing them. Looking at parenting support as part of that also showed to be beneficial even though a direct correlation was not found between parents' knowledge and children's learning and development outcomes. Donors can look at both humanitarian and other sources of funding. As ECCD is multi-sectoral, support can be provided through not only education, but through health, nutrition and other sectors. The Education Cannot Wait global fund and other existing mechanisms can be used to support ECCD in emergencies.

2. Support rigorous research and evaluations for ECCD in emergencies

While the evidence base for ECCD in emergencies is growing, donors will need to continue supporting rigorous research evaluations in order to strengthen the evidence base and shape future programming.

Recommendations for Government

1. Establish an inter-ministerial group focused on ECCD

The lack of understanding over what ECCD is, why it is important and how coordinated efforts could support multi-sectoral needs of children can be remedied through an inter-ministerial group focused on ECCD. This is starting to happen in some countries including the Central African Republic and Ivory Coast. It is critical that an inter-ministerial group has some budgetary and planning control and some decision-making authority or connection to a decision maker in order to have an impact on ECCD at a national level.

2. Integrate ECCD into existing national level sector plans to help reach multiple government goals

As ECCD is multi-sectoral and can impact multiple goals for governments such as goals on stunting, malnutrition, and learning, integrating ECCD and parenting services can bolster a government's ability to reach national level goals.

Recommendations for Practitioners

1. **Adapt and use ECCD models that have worked in a non-emergency context:** The case studies presented in this research illustrated that ECCD models developed for development contexts can be adapted for a humanitarian context.
2. **Adapt data collection tools to the cultural and emergency context:** The research also illustrated that measures for child development and early learning can be developed based on local cultural context and the situation of the emergency.

Each of the abovementioned stakeholders has a key role to play in increasing evidence, awareness, funding and quality services that will help improve children's lives, prepare them to be active contributors to their countries and push the global community toward reaching the Sustainable Development Goals.

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Annex I: Indicators of Parenting Education for CLAC programme

1. Discuss hopes and dreams for children and requirements to achieve the goals.
2. Identify helpful, harmful and/or discriminatory parenting practices in the community, including gender-based practices and what underpins these.
3. Acknowledge the benefits of parenting education and quality ECCD on children's future success.
4. Identify areas where more information and skills are needed, participate in discussions on topics, and gain new skills.
5. Practice new skills at home with children and discuss experiences with peers.
6. Prepare a census of children and discuss needs at each level, which disaggregates data by gender and disability. Take collective action to improve community supports for child wellbeing.
7. Help in setting up community ECCD centres or out-of-school clubs for primary children; visit and monitor programs.
8. Contribute to ECCD centre curriculum by teaching traditional games and crafts, songs, stories, etc.
9. Develop community leadership skills of both men and women in discussion, decision-making, action and reflection around a topic of great interest to parents – their own children.
10. Enroll children in Grade 1 at proper intake age, consult with teacher about children's needs and progress, encourage children to study and persist in primary school to completion.

Annex II: Research Consent Forms and Study Information Sheet

Consent form for Adults in Focus Group Discussions: Early childhood in emergencies Study

Type of Focus Group Discussion (FGD):

Location: _____

Date: _____

1. The information sheet concerning this study has been read to me and I understand what is required of me/my child if I take part in this study.
2. I have been given the opportunity to ask questions and a reply was given for all the questions to my satisfaction.
3. I understand that participation is voluntary and that I may withdraw at any time without giving a reason.
4. I consent to photographs being taken and used for the research report and the promotion of the research and can be used by any Plan office in the world and in any form of media, but children will be not be identified by their name in any photographs.

Consent for Adult (ie. Parent/caretaker, Government representative) to Participate

Name

Signature/Thumbprint

Witness of the above

Name

Signature/Thumbprint

Annex III: Consent form for Parent/Children: Early childhood in emergencies study

(For Survey conducted through Parent/Child Play Session)

Participant (Parent/Child): (First & Last Name) _____

Participant code: _____

Location: _____

Consent for Parent/Child participation:

Read out the information sheet with the parents, and use a signer, as necessary. Show and demonstrate the recorder so they understand how it works.

Do you understand why we are doing the research?



Are you happy to talk to me?



**Do you understand that you can stop me at any time and
You don't have to answer questions that you don't want to?**



Are you happy for me to take photos?



Consent for Parent/child to Participate

Name

Date

Signature/Thumbprint

Witness of the above

Name

Date

Signature/Thumbprint

Annex IV



Information Sheet for Participants: Early Learning and Development Study

You are being invited to take part in a research study being conducted jointly by Plan International Uganda and a PhD student at the Institute of Education in the UK. Before you decide to take part, it is important for you to understand why the research is being done and what it will involve. Please ask me if there is anything that is not clear or if you would like more information.

What is the purpose of the study?

Plan International Uganda is currently implementing an early childhood programme for young South Sudanese children and their parents in the Ugandan refugee camps. This study will look at the results of these programmes on children's lives.

What does the study involve? We are talking to children and adults. We will also speak with key people who are engaged in the community (teachers, elders etc.) Today our conversation with you will take about 1 hour.

Confidentiality All information which is collected in the research will be kept confidential. For the reports we will combine information from everyone I speak to and your names will not be included in any reports.

Taking Photos We would like your permission to take photos. These photos will be used for the research report and the promotion of the research and can be used by any Plan office in the world and in any form of media, but children will not be identified by their name in any photographs.

What are the benefits? The information collected in this study will help Plan International Uganda improve early childhood services for South Sudanese refugee children and families. However, we cannot give you any money or goods for taking time to talk to me today.

Do I have to take part? No. It is up to you to decide whether or not to take part. And if there are any questions that you don't want to answer then you don't have to. You can also stop at any time during the interview. If you agree to take part I will ask you to sign the consent form, which I will store securely.

Plan International's Child protection Policy: We will keep the information discussed today confidential, but if there is a concern raised about the safety of your child then that information will be shared with Plan. Also at the end of the interview if you would like to talk further about any of the issues with someone from the Plan office then we can pass on your contact details to the local office.

If you have any further questions about that are not answered here or have require any further information or explanation please contact: Plan Uganda

Thank you for your time!

Annex V: Research Tools for Quantitative Data Collection

Ages & Stages Questionnaires® **36**

Month Questionnaire

DATE: _____

Name of Child: _____

Male Female

Location: _____

Participant Code: _____



Communication	Yes	Sometimes	Not Yet	Score
1. Can the child point to 7 body parts? (ie. Nose, head, eyes, ears, hands etc...) If the child can name at least 3 parts, mark "sometimes".				
2. Can the child say his/her first and last name? (IF first name only, mark "sometimes".)				
3. Can the child follow 2 directions? (example: Stand up. Put your shoes on. Clap your hands.)				
4. Can your child greet others in English? (example: hello, how are you?)				
Communication Total				

Gross Motor Skills				
1. KICK A BALL?				
2. JUMP UP WITH BOTH FEET?				
3. JUMP FORWARD?				
4. Stand on 1 foot for 1 second at least?				
5. THROW A BALL (Or another object) – using overhand				
6. CATCH A BALL?				
Gross Motor Skills TOTAL				

Fine Motor Skills	<i>Yes</i>	<i>Sometimes</i>	<i>Not Yet</i>	<i>Total</i>
1. Can child draw a straight line – up and down?				
2. Can a child draw a circle?				
3. Is the child holding a pencil, pen or chalk like adults do (pincer grasp?)				
<i>Fine Motor Skills Total</i>				

Problem Solving	Yes	Sometimes	Not Yet	Total
1. Line up 4 objects in a row (any 4 objects). Can your child copy you and do the same thing?				
2. Ask the child, "What figure is this?" (the child might say boy, girl, man, mother, friend)				
3. Stack 3 blocks or similar items like this. Can the child copy?				
4. When you say 73 (seven, three) does your child repeat these in the same order? (Any number combination can be used. The important thing is whether the child can repeat.)				
Problem Solving Total				

48 Month Questionnaire



DATE: _____

Name of Child: _____

Male Female

Location: _____

Participant Code: _____

Communication	Yes	Sometimes	Not Yet	Score
1. Ask your child to name 3 animals (ie. Cow, goat, cat)?				
2. Ability to follow directions: Ask your child "Stand up, clap your hands, jump up and down." If he/she can do this on his/her own, mark 'yes'.				
<p>3. Does your child answer the following questions? (Mark "sometimes" if your child answers only one question.)</p> <p>"What do you do when you are hungry?" (Acceptable answers include "get food," "eat," "ask for something to eat," and "have a snack.") Please write your child's response:</p> <p>What do you do when you are tired?" (Acceptable answers include "take a nap," "rest," "go to sleep," "go to bed," "lie down," and "sit"</p>				

4. Can your child greet others in English? (example: hello, how are you?)				
Communication Total				
Gross Motor Skills				
<p>1. THROW A BALL: While standing, does your child throw a ball overhand in the direction of a person standing at least 6 feet away? To throw overhand, your child must raise his arm to shoulder height and throw the ball forward. (Dropping the ball or throwing the ball underhand should be scored as “not yet.”)</p>				
<p>2. CATCH A BALL: Does your child catch a large ball with both hands? (You should stand about 5 feet away and give your child two or three tries before you mark the answer.)</p>				
<p>4. Does your child hop up and down on one foot?</p>				
<p>5. Does your child jump forward a distance of about 20 inches from a standing position, starting with his feet together?</p>				
<p>6. Without holding onto anything, does your child stand on one foot for at least 5 seconds without losing her balance and putting her foot down? (You may give your child two or three tries before you mark the answer.)</p>				
Gross Motor Skills TOTAL				

Fine Motor Skills	<i>Yes</i>	<i>Sometimes</i>	<i>Not Yet</i>	<i>Total</i>
1. Can your child copy the following shapes ? (At least 3 – circle, triangle, square, rectangle, pentagon, etc.)				
2. Ask the child to draw a person? Does it have at least 3 parts – head, eyes, nose, hands, feet?				
3. Is the child holding a pencil, pen or chalk like adults do (pincer grasp?)				
<i>Fine Motor Skills Total</i>				

Problem Solving	<i>Yes</i>	<i>Sometimes</i>	<i>Not Yet</i>	<i>Total</i>
1. Test child's understanding of "under", "between" and "in the middle". Give each child 3 objects of any kind. For example, ask your child to put an object in under all of the objects. Ask the child to put an object in between the other objects. Ask the child to put the object in the middle on the other objects.				

<p>2. Ask the child, "Which circle is the smallest?" If your child can point to the smallest, mark 'yes'. (Do not help the child.)</p>				
<p>3. Ask your child to name 5 different colors in household items. If he/she can name 5 colors, mark 'yes'. If he/she can name fewer, mark "sometimes".</p>				
<p>4. Place 5 objects in front of child (any object). Ask the child to count, 1,2, 3, 4, 5 without help. (Do not help.)</p>				
<p>Problem Solving Total</p>				

60 Month Questionnaire



DATE: _____

Name of Child: _____

Male Female

Location: _____

Participant Code: _____

Communication	Yes	Sometimes	Not Yet	Score
<p>1. Does your child answer the following questions? (Mark "sometimes" if your child answers only one question.)</p> <p>"What do you do when you are hungry?" (Acceptable answers include "get food," "eat," "ask for something to eat," and "have a snack.") Please write your child's response:</p> <p>"What do you do when you are tired?" (Acceptable answers include: "take a nap," "rest," "go to sleep," "go to bed," "lie down," and "sit down.") Please write your child's response:</p>				

<p>2. Ability to follow 3 unrelated directions. (Others can be substituted.) Stand up. Walk to the door. Give me the toy.</p>				
<p>3. Can your child say a full sentence in your language?</p>				
<p>4. Does the child use comparison words like “heavier”, “stronger”, “shorter”? (Use your own language to assess.) Examples: I am shorter than my mom. The boy is stronger than the baby. The car is heavier than a leaf.”</p>				
<p>4. Can your child greet others in English? (example: hello, how are you?)</p>				
<p>Communication Total</p>				
<p>Gross Motor Skills</p>				
<p>1. THROW A BALL: While standing, does your child throw a ball overhand in the direction of a person standing at least 6 feet away? To throw overhand, your child must raise his arm to shoulder height and throw the ball forward. (Dropping the ball or throwing the ball underhand should be scored as “not yet.”)</p>				

<p>2. CATCH A BALL: Does your child catch a large ball with both hands? (You should stand about 5 feet away and give your child two or three tries before you mark the answer.)</p>				
<p>3. Walk on tiptoes?</p>				
<p>4. HOP forward on 1 foot?</p>				
<p>5. Without holding onto anything, does your child stand on one foot for at least 5 seconds without losing her balance and putting her foot down? (You may give your child two or three tries before you mark the answer.)</p>				
<p>6. Run from one side to another?</p>				
<p>Gross Motor Skills TOTAL</p>				

Fine Motor Skills	Yes	Sometimes	Not Yet	Total
<p>1. Ask your child to trace on the line below with a pencil. Does your child trace on the line without going off the line more than two times? (Mark "sometimes" if your child goes off the line three times.)</p>				
<p>2. Ask your child to draw a picture of a person on a blank sheet of paper. You may ask your child, "Draw a picture of a girl or a boy." If your child draws a person with head, body, arms, and legs, mark "yes." If your child draws a person with only three parts (head, body, arms, or legs), mark "sometimes." If your child draws a person with two or fewer parts (head, body, arms, or legs), mark "not yet." Be sure to include the sheet of paper with your child's drawing with this questionnaire.</p>				
<p>3. Using the shapes below to look at, does your child copy the shapes in the space below without tracing? (Your child's drawings should look similar to the design of the shapes below, but they may be different in size. Mark "yes" if she copies all three shapes; mark "sometimes" if your child copies two shapes.)</p>				

4. Write the child's name. Can he/she copy his/her name.				
<i>Fine Motor Skills Total</i>				
Problem Solving	Yes	Sometimes	Not Yet	Total
1. Show the child a household object with many colors? Can the child name 5 different colors? (If the child can name a few, but not all, mark "sometimes".)				
2. Ask the child, "Which circle is the smallest?" If your child can point to the smallest, mark 'yes'. (Do not help the child.)				
3. Can the child count to 10 without making mistakes?				
4. Ask the child where is "1", "2", "3". If the child can identify the numbers, mark "yes".				
3 1 2				
Problem Solving Total				

Annex VI: Parents Survey

Knowledge, Attitudes, Practice – Parents Survey

Location: Adjumani, Ayillo 2 camp

Participant Code: _____

Name:

Circle the correct:

Mother

Father

Both

Other Caregiver

Knowledge

1. What is the approximate age when can you expect a child to say his or her first word that has meaning in your language and that you understand?
 - a. 6 months
 - b. 9 months
 - c. 12 months
 - d. 15 months

2. At what age can a child recognize its mother?
 - a. from birth
 - b. from 3 months
 - c. from 6 months
 - d. at 1 year

3. At what age can a child enjoy looking at colourful, moving objects and colorful pictures?
 - a. From birth
 - b. From 3 months
 - c. From 6 months
 - d. From 1 year

4. At what age might a child count to three?
 - a. 6 months
 - b. 1 year
 - c. 2 years
 - d. 3 years
 - e. 4 years
 - f. 5 years

5. What are three ways that parents can help their children learn?

5. How good or bad is it to give eggs to a 9 month old?

Practices

1. Do your children have play things in your home? If so, what are they?

2. Do you have any books for your child in your home? Do you look at them with your child? If so, how often?

3. Do you play with your child at home? Do you sing, dance, listen to music with your child? If yes, how often? Rarely vs Weekly vs Daily

4. Do you talk with your child? If so, how often?

5. Do other family members or neighbors interact with your child? If so, who?

6. Do you show affection to your child (ie. hug, kiss, massage, caress your child)? If yes, how and how often?

7. How do you respond when your child is naughty?

8. How many meals/snacks does that child have daily?

9. At what age did the child start liquids other than breastmilk?

- a. After birth
- b. 3 months
- c. 6 months
- d. 1 year
- e. 1 ½ years
- f. 2 years

10. At what age did the child start eating solid foods?

- a. after birth
- b. 3 months
- c. 6 months
- d. 1 year

11. What foods do you normally feed your children?

Grains/tubers/rice Legumes Meat/fish Egg Vegetables Fruit Milk [Sugar]

Other:

12. Do children use soap for hand washing? Yes No

If so, how often? a.

1 time per day

b. Before/After eating meals

c. After going to the latrine

d. Before/after eating meals and after going to the latrine

e. Other: Please specify

13. Has the child received immunizations in the camp? Yes No If so, which ones?

14. Has your child been sick in the past month? Yes No

If yes, what illness (diarrhea, cough/cold, fever, other): _____

If so, how did you care for the child?

- a. Nothing

- b. Treated at home
- c. Took to traditional healer
- d. Took to formal health center

Annex VII: Research Tools for Qualitative Data Collection

Focus Group Discussion Semi-Structured Questions for ECCD Center Facilitators

Date: _____

Location: _____

Number of Participants in FGD: _____

1. How long have you been an ECCD centre facilitator?

2. What are the key roles you have at the centre?

3. What motivated you to become an ECCD centre facilitator?

4. Did you have experience in doing this work before?

5. What type of training, if any, have you received to prepare you to work with children?

6. What do you consider most challenging in your work (state 3 top most concerns)?

7. What type of additional training and support do you need to help you improve your work?

8. Describe a typical day/routine at the center from the time the children arrive to the time they leave ?

14. What negative aspects have you seen in children's participating in the ECCD program within the camp in comparison to those who do not participate?

15. Do you work with parents and families in the camps? If so how?

16. Do you face any challenges in working with parents and families in the camps? If so explain how?

17. Have you seen any positive aspects in the camp community due to the ECCD program? If yes please describe.

18. Have you seen any negative aspects in the camp community due to the ECCD program? If yes describe.

19. From your perspective, what are the areas that need improvement in the ECCD program in Adjuamani camps?

20. What can PLAN do to help the Camp community continue ECCD programming for children when PLAN support in the camps stops?

**Annex VIII: Focus Group Discussion Semi-Structured Questions for ECCD
Management Committee**

Date: _____

Location: _____

Number of Participants in FGD: _____

1. What motivated you to join the ECCD management committee?

2. What are your hopes and dreams for your children?

3. What do you think children can do and what do you expect them to be able to do when they are 3 -5 years old?

4. What are the roles and responsibilities of mothers and fathers in caring for children in your cultural context?

Mothers

- a. Cooking
- b. Daily feeding
- c. Bathing
- d. Playing
- e. Helping child with sleeping
- f. Dressing/cleaning
- g. Reading to and with child
- h. Taking child to/from ECCD center
- i. Earning money for family
- j. No involvement

Fathers

- a. Cooking
 - b. Daily feeding
 - c. Bathing
 - d. Playing
 - e. Helping child with sleeping
 - f. Dressing/cleaning
 - g. Reading to and with child
 - h. Taking child to/from ECCD center
 - i. Earning money for family
 - j. No involvement
5. Which children are NOT participating in the ECCD activities? Why not?
6. What can be done to help more children access ECCD activities?
7. What positive aspects, if any, have you seen in children's development and well-being by participating in the ECCD program?
8. What negative aspects have you seen in children's development and well-being by participating in the ECCD program?

9. What positive aspects, if any, have you seen in participating children's parents and family members?

10. What negative aspects, if any, have you seen in participating children's parents and family members?

11. Have you seen any positive or negative effects in the community due to the ECCD program? If yes or no, please describe.

12. From your perspective, what are the positive aspects of the ECCD program?

13. From your perspective, what are the areas that need improvement in the ECCD program?

14. What can Plan do to help you continue ECCD programming for children when Plan completes its work?

Annex IX: Focus Group Discussions: Parents

Date: _____

Location: _____

Number of Participants in FGD: _____

(Male and Female)

1. How long has your child been enrolled in the ECCD program? (Give the choices and ask them to raise their hands when appropriate.)
 - A. Not enrolled:
 - B. 1 month:
 - C. More than 1-3 months:
 - D. More than 3 months:

2. What are your hopes and dreams for your children?

3. What are the roles and responsibilities of mothers (women) in caring for young children in your cultural context?
 - Cooking
 - Daily feeding
 - Bathing
 - Playing
 - Helping child with sleeping
 - Dressing/cleaning
 - Reading to and with child
 - Taking child to/from ECCD center
 - Earning money for family
 - No involvement
 - Other

4. What are the roles and responsibilities of Fathers(men) in caring for young children in your cultural context
 - Cooking
 - Daily feeding
 - Bathing
 - Playing
 - Helping child with sleeping
 - Dressing/cleaning
 - Reading to and with child
 - Taking child to/from ECCD center
 - Earning money for family
 - No involvement
 - Other

5. What led you to enroll your child in the ECCD centre?
 - a. Child had nothing to do
 - b. You needed someone to care for your child so you could do other work
 - c. You thought your child would learn something
 - d. Other

6. How does the center support what you want for your children?

7. What do you consider the most important experiences for children at the ECCD centre?

8. What will help your child continue participating in the ECCD centre ?

9. Do you participate in activities at the centre? If so how?

10. Are there benefits for you and other family members in participating in ECCD centre activities? If so explain.

11. Are there challenges that limit you or other family members from participating in ECCD centre activities ? if so explain

12. What is one thing you would change about or add to the center if you could?

13. What advice would you give to other centers/teachers regarding working with parents and families in camp settings?

Annex X: Key Informant Interview

Note: This tool is for Part 2 of the research and will be used for key informants directly or indirectly involved in the project (ie. Staff from government, NGO, UN, community leader).

Date: _____

Participant Code: _____ Location: _____

Circle Appropriate (Type of Key Informant):

Government NGO UN CBO Community member/leader other

1. What is your role in the ECCD program in Adjumani ?

2. What do you think children know and are able to do when they are a) 3 years b) 5 years old?

3. What are the roles and responsibilities of mothers(women) in caring for children in your cultural context?

Mothers

- a. Cooking
- b. Daily feeding
- c. Bathing
- d. Playing
- e. Helping child with sleeping
- f. Dressing/cleaning
- g. Reading to and with child
- h. Taking child to/from ECCD center
- i. Earning money for family
- j. No involvement
- k. other

What are the roles and responsibilities of fathers(men) in caring for children in your cultural context?

Fathers

- a. Cooking
 - b. Daily feeding
 - c. Bathing
 - d. Playing
 - e. Helping child with sleeping
 - f. Dressing/cleaning
 - g. Reading to and with child
 - h. Taking child to/from ECCD center
 - i. Earning money for family
 - j. No involvement
 - k. Other
-
4. Which categories of children in the camp are most eligible for ECCD activities
 5. Which children in the camp are NOT participating in the ECCD activities? Why not?
 6. What do you consider to be the most important experiences of children at the centres? Why?
 7. What can be done to help more children in Adjumani camps access ECCD activities?
 8. What positive aspects, if any, have you seen in children participating in the ECCD program within the camp in comparison to those who do not participate ?
 9. What negative aspects have you seen in children's by participating in the ECCD program within the camp in comparison to those who do not participate?
 10. What positive aspects, if any, have you seen in parents and families of children participating in the ECCD program within the camps ?
 11. What negative aspects, if any, have you seen in parents and families participating in the ECCD program within the camps
 12. Have you seen any positive effects in the Camp community due to the ECCD program? If yes, please describe.
 13. Have you seen any negative effects in the camp community due to the ECCD program? If yes describe

14. From your perspective, are there any positive aspects of the ECCD program in Adjumani camps ? if so what are they?
15. From your perspective, what are the areas that need improvement in the ECCD program in Adjuamani camps?
16. What can PLAN do to help the Camp community continue ECCD programming for children when PLAN completes its work in the camps?