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MEASURING IMPACT
THROUGH A CHILD PROTECTION INDEX

FINAL REPORT

Time 1 & Time 2 Studies Kiryandongo and Adjumani refugee settlements, Uganda

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TPO UGANDA

CPC LEARNING NETWORK

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LIST OF ACRONYMS

ADRA	Adventist Development and Relief Agency
AHA	Africa Humanitarian Action
ARC	American Refugee Committee
BIA	Best Interest Assessment
BID	Best Interest Determination
CBCPM	Community-Based Child Protection Mechanism
CFS	Child Friendly Space
CPI	Child Protection Index
DRC	Democratic Republic of the Congo
ECD	Early Childhood Development
ICRC	International Committee of the Red Cross
NGO	Non-Governmental Organization
RCT	Randomized Controlled Trial
SGBV	Sexual and Gender-Based Violence
T1	Time 1
T2	Time 2
UASC	Unaccompanied and Separated Children
UNHCR	Office of the United Nations High Commissioner for Refugees
UNICEF	United Nations Children's Fund
WFP	World Food Program

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EXECUTIVE SUMMARY

The CPC Learning Network and United Nations High Commissioner for Refugees [UNHCR] have been working together since 2013 to develop, pilot and implement a new methodology to assess child protection system strength, and its impact on child protection outcomes, in displacement settings.

Child protection policy and programming is based on the assumption that strengthening the child protection system will reduce risks and improve outcomes for children in displacement settings. Yet, the evidence base for this proposition is extremely limited. This project, "Measuring Impact Through a Child Protection Index," [henceforth referred to as "the CPI Study"], seeks to test this assumption, assessing whether a strong child protection system can better protect children and prevent harm. The CPI Study seeks to assess changes in child protection system strength, and related changes in child protection outcomes, seeking to develop assessment tools and a test a methodological approach to strengthen the evidence-base for child protection interventions in humanitarian settings.

The evidence-base for child protection in humanitarian settings is extremely limited, despite a clear need to prevent and respond to harms present for children in such contexts. Methodologies generally used to explore efficacy, effectiveness, and impact of child protection initiatives are insufficient and tend to lack standardization and rigor (see for example, (Wessells 2009; Ager et al. 2013). The development and testing of new methodologies to capture the impacts of child protection activities in humanitarian settings are a priority for the child protection sector. Moreover, the value of a systems-strengthening approach is now widely accepted and underpins recent policy and programming efforts in the field (Frontiers 2016). Therefore, there is also a need for concerted effort to develop and test approaches to measure systems, rather than single interventions. The CPI Study responds to this need, establishing a methodological approach that combines rigorous qualitative and quantitative methods with a systems-level approach.

A system is defined as "a collection of components or parts that are organized around a common purpose or goal" UNICEF, 2010). Systems thinking, and systems strengthening, has been identified as an approach that enables more holistic approaches to children's protection issues in humanitarian settings. As a recent analysis notes,

> *"Systems thinking looks at an entire situation, taking into account all the different elements and factors and how they interrelate to one another. Rather than looking at protection issues in isolation, or a specific service available to children, systems thinking brings together the range of problems facing the child, the root causes, and the solutions provided at all levels. It promotes flexible programming with integrated learning and adaptation as implementation takes place"*
>
> Child Frontiers 2016

UNHCR's 2012 *Framework for the Protection of Children* takes a child protection systems approach; the CPI Study uses the *Framework* as the starting point for measuring what interventions – services, policies and procedures – considered to be central to preventing and responding to violence, abuse, neglect and exploitation of refugee children.

This report describes the research conducted in 2016 in Kiryandongo and Adjumani refugee settlements in Uganda, presenting a comparison of child protection system strength between 2014/5 and 2016, and child protection outcomes over the same time period, and key lessons, both in terms of methodology and the child protection situation for adolescent refugees in these refugee settlements in Uganda.

Methodology

The CPI Study utilized a mixed methods approach to assess child protection system strength, child protection outcomes, and perceptions of reasons for change in and associations between system strength and outcomes. Three different data collection methods were employed – key informant interviews, adolescent and caregiver surveys, and focus group discussions – at three different time points – Time 1 [T1, December 2014/ February 2015], Time 2 [T2, June-August 2016] and follow-up [November 2016].

The CPI Study seeks to operationalize UNHCR's *Framework*, and its objectives using the Child Protection Index, an instrument developed for this study to assess overall child protection system strength. At T1 and T2, data was collected for the CPI, primarily via key informant interviews with child protection practitioners in Uganda. At T1 and T2, adolescent and caregiver surveys were conducted to collect data assessing child protection outcomes. At T1, focus group discussions were conducted with adolescents to identify opportunities and barriers for adolescents' utilization of child protection activities and interventions and perceptions of quality of interventions. At follow-up, key informant interviews and focus group discussions with adolescents and caregivers were conducted, to explore reasons for observed change in child protection system strength and child protection outcomes across the study period.

Several key elements of the methodology are notable: firstly, the CPI Study focuses on child protection *systems*, rather than specific interventions, as operationalized through the CPI instrument, reflecting shifts in policy and thinking about how to effectively address child protection in humanitarian contexts (Child Frontiers 2016). Secondly, the longitudinal aspect of the study allows for assessment of change over time, and conclusions regarding potential influences on those changes, rather than simply providing a snapshot of system strength, or prevalence of risks at one point in time. Thirdly, the inclusion of a qualitative follow-up phase of research expands understanding of the associations and changes identified in the quantitative comparative analysis. Future iterations of the study methodology can build on these strengths, and address questions of adaptation of the instruments for implementation by practitioners in field settings.

Findings

The strength of the child protection system improved slightly in Adjumani, with a total score change for Adjumani between T1 and T2 of +4.5. The strength of the child protection system in Adjumani maintained as a moderate level. Some evidence of maintained system strength in terms of core policies and procedures was seen, as well as several services, such as presence of a complaints mechanism for adolescents and presence of sports and recreation activities for adolescents. In the area of utilization, Adjumani maintained a high level of recent school attendance (more than 80%), high level of reporting of feelings of safety most or all of the time at school (more than 70%) and high levels of % of adolescents who wanted to who had reported participating in structured recreation activities (more than 70%). Two areas of utilization showed a decrease: the percentage of those adolescents who wanted to participate in clubs and committees, and did participate, declined from 65.2% at T1 to 46.8% at T2, as did the percentage of adolescents who wanted to participate in life skills trainings, and did participate, which decreased from 76.1% to 57.3%. Some areas of policies and procedures, services and utilization saw improvement between T1 and T2 in Adjumani, in particular, services, which improved by 8 points.

The child protection system in Kiryandongo strengthened, according to the CPI measure, with a total score change for Kiryandongo between T1 and T2 was +13.5 points. The strength of the child protection system in Kiryandongo changed from weak to moderate. As in Adjumani, some evidence of maintained system strength in terms of core policies and procedures was seen, as well as several services, such as presence of a complaints mechanism for adolescents and presence of sports and recreation activities for adolescents. Some areas of policies and procedures, services and utilization saw improvement between T1 and T2. In both Kiryandongo and Adjumani, there was improvement in policies in place to enable refugee children to enroll without discrimination at primary and secondary education levels; in Kiryandongo, presence of clubs and committees for adolescents was an improvement, and a BID panel has been held in the past 2 months (at the time of data collection), an improvement from T1. In the area of utilization, there was significant improvement in some areas in Kiryandongo, which may be a particular achievement in strengthening of

the child protection system, given this improvement occurred in the context of the emergency response. In Kiryandongo, the percentage of adolescents reporting that they had attended school regularly in the most recent school period increased, and the percentage of respondents who reported feeling safe at school all or most of the time increased from 67% to 78.6%.

Findings regarding child protection outcomes for Adjumani and Kiryandongo refugee settlements include:

Violence exposure

Increases in *violence exposure* were primarily driven by increases in Adjumani refugee settlement, for example, at T2, 14.1% of adolescents in Adjumani reported ever having seen adults in their home physically assaulting each other, compared to 6.8% at T1 ($p<.05$). In Adjumani, at T1, 21.0% reported having had a teacher punish them by hitting or beating, and this increased to 32.0% at T2 ($p<.05$). In Kiryandongo, there were no changes in violence exposure at household level –comparison of T1 and T2 findings by site indicates that there were some increases in specific exposures in Adjumani but not Kiryandongo. In Kiryandongo, there were some changes in school-bases violence – at T1, 21.4% reported having had a teacher punish them by hitting or beating, and this increased to 28.9% at T2 ($p<.05$). Follow-up research indicated perceptions from refugee adolescents and caregivers, as well as key informants, that the influx of new refugees had increased violence risks, for reasons including violence between new arrivals and refugees who had already been in the settlements in Uganda, often due to conflict over resources; violence inflicted on adolescents by caregivers due to stress within households caused by reductions in food rations and other services; and violence instigated by new arrival adolescents, many of whom are unaccompanied and separated children, due to recent traumatic experiences and current high levels of stress experienced.

Sexual and gender-based violence

In the area of any form of sexual violence, there was very low reporting of exposure across all items focused on sexual violence, for example, 3.0% (n=22) reported having been physically forced to have sexual intercourse against their will in the past year. Even using the format of anonymous reporting, levels of reporting were low; 7.3% of the full sample reported any form of sexual violence ($p<.05$) and 10.8% reported any form of physical violence, showing a significant decrease between T1 and T2 (for sexual violence, T1: 11.3%, T2: 7.3%, $p<.05$; for physical violence, T1: 16.1%, T2: 10.8%, $p<.05$). In Adjumani, at T1 12.9% (n=32) anonymously reported a sexual assault to our interviewers, at T2 that decreased to 7.4% (n=28) ($p=0.022$). In Kiryandongo, at T1 27.7% (n=61) anonymously reported physical abuse to our interviewers, at T2 that decreased to 10.4% (n=40) ($p<0.000$). These findings indicate that the anonymous form of reporting seems to encourage reporting of sexual violence but reduce reporting of physical violence. Follow-up research, reported in Textbox 8, explored reasons for low reporting of SGBV, with refugees' reporting significant cultural barriers to acknowledging or reporting sexual violence. This cultural and normative environment likely significantly influences levels of reporting of sexual violence. The levels of sexual violence reported by adolescents in the survey component of the CPI Study in Uganda should be understood in light of what is likely significant under-reporting.

Psychosocial well-being

There were significant improvements in all psychosocial outcome measures – anxiety, emotional symptoms, hope and social support – in Kiryandongo but not in Adjumani. Adolescent feelings of safety at home improved across both sites, with the number of adolescents reporting that they felt safe at home some or none of the time decreasing from 50.0% at T1 to 36.0% at T2 in Kiryandongo ($p<.05$) and the number of adolescents reporting that they felt safe at home some or none of the time decreasing from 25.1% at T1 to 17.6% at T2 in Adjumani ($p<.05$). In Adjumani, significantly more adolescents reported feeling unsafe in the past week at markets and other public places in the settlement (T1: 19.0%, T2: 29.8%, $p<.05$) and on the way to or from markets and other public places in the settlement (T1: 15.7%, T2: 28.2%, $p<.001$). In Kiryandongo, there were significant reductions in feelings of lack of safety at markets and other public places in the settlement (T1: 36.8%, T2: 23.2%, $p<.001$) and on their way to and from markets and other public places (T1: 33.6%, T2: 20.8%, $p<.001$).

Utilization of services

A significant increase in participation across both settlements was seen for group sports activities, however, significantly fewer adolescents reported having participated in a club or committee specifically for adolescents in the past year (T1: 34.8%, T2: 24.5%, $p<.05$) and fewer reported having participated in non-formal education in the past year (T1: 44.4%, T2: 22.9%, $p<.05$). There was a significant decrease in participation in life skills activities in Kiryandongo (T1: 73.6%, T2: 15.6%, $p<.001$) and for non-formal education (T1: 56.6%, T2: 23.9%, $p<.001$).

Key lessons and synthesis

The completion of the 3-year CPI Study provides an opportunity to reflect on some over-arching methodological lessons. These include:

Study design – sampling

In both Rwanda and Uganda studies, following up baseline participants was difficult, requiring significant time during field work, and in the case of Uganda, quite limited, with a low follow-up rate of 48.2% for the full sample. This had methodological implications in terms of selection bias. In considering how to adapt study design for future implementation of the CPI, the question of whether to design the study with the aim of re-interviewing baseline respondents, or whether to select a completely new sample at T2 is worth considering. The research team suggests that the study design shift to data collection at two time points that interviews *different respondents* at T1 and T2, and adjusts statistical analysis methods to account for the differences in the two samples interviewed.

Measurement of exposure to violence

The CPI Study utilized two forms of measurement of exposure to violence in the adolescent surveys: a series of direct questions regarding personal experience, and a series of questions using anonymous reporting. The findings from the CPI Study in Uganda indicate that anonymous reporting increases reporting of sexual violence in the context of the survey, but actually decreased reporting of physical violence. From a methodological perspective, it appears that anonymous reporting was effective in increasing reporting of sexual violence. In contrast, the number of respondents who indicated that they had experienced physical violence in the past year was lower than those who reported physical violence across a range of more specific items.

Adaptation of the CPI to various refugee contexts

The CPI Study was conducted in two countries which share many similarities in terms of hosting environment and type of refugee setting, yet major differences that emerged in effectiveness of using the CPI to measure system strength in Kiziba Camp (a protracted and relatively stable situation) vs. in Uganda (in the midst of an active emergency). Future iterations of the CPI Study could test adding modules focused on specificities of the child protection system in urban settings, active emergencies, or middle-income settings, which could ensure the CPI is measuring relevant components and able to detect significant changes in system strength which may not be currently captured.

Measurement of domains of the child protection system

There are challenges associated with the current measurement of two of the three core domains of the child protection system: utilization, and policies and procedures. Service quality is currently measured through service utilization, which serves as a proxy given direct measurement of all the services and activities included in the CPI was not possible. Future iterations of the CPI methodology could respond to this measurement challenge by including questions assessing satisfaction with services into the survey instruments, or by narrowing the number of services and activities included in the CPI, and developing a checklist-style measure of quality for each of these services. In addition, the measurement in the policies and procedures domain assess whether or not a policy or procedure *exists*, rather than reflecting the actual implementation, application or adherence to the policies and procedures. Measurement of the actual implementation of laws and policies is important, given the mere existence of a law is not enough to achieve improved child protection outcomes. However, integration of this form of measurement within the CPI instrument or methodology overall requires careful formative research, piloting and instrument validation.

Design of the CPI

The findings from the CPI Study, in both Rwanda and Uganda, indicate the difficulty of disentangling whether the findings indicate that i) the hypothesis that an improved child protection system improves child protection outcomes is correct or incorrect, or ii) the measure of child protection system strength is incomplete, and confounding factors (aspects that are unmeasured but may significantly impact child protection outcomes) explain the changes or lack of changes in child protection outcomes. Therefore, the question is – does the *Framework* include the relevant benchmarks to impact child protection outcomes? There may be discrepancies between UNHCR's priority interventions, and community needs, and therefore lack of impact of changes in the CPI score and child protection outcomes, or conflicting directions of changes, may reflect these discrepancies. Validity of the CPI requires comparison of the scores and differences in scores with expert opinion regarding child protection system strength in all three contexts. For example, does expert opinion concur regarding the overall scoring of the strength of the child protection system in these three contexts? Do changes identified between T1 and T2 reflect true changes that occurred in system strength? Study design of a validity study for the CPI in these three settings is an important next methodological step in refining the instrument.


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Child protection systems strengthening is now a dominant paradigm in the humanitarian field, and UNHCR's Framework utilizes a systems strengthening approach. The CPI Study, a 'proof of concept' study of UNHCR's Framework, is the first research approach to attempt to link changes in systems strength to actual child protection outcomes. Overall, the project generated considerable insights into the methodological challenges of measuring system strength, the need for further iterations of the methodology and implementation of the study and associated instruments in order to validate the current findings, and specific insights into child protection outcomes in these refugee contexts.

Questions remain for the child protection field as a whole, including: What are the implications of the findings from the CPI Study for child protection systems strengthening policy and program design in refugee contexts, or other humanitarian settings? How can the findings be translated to improved measurement and assessment of child protection systems strengthening in humanitarian contexts? And, given the overall shift to a child protection systems strengthening framework, which is now widely accepted and underpins recent policy and programming efforts in the field (Child Frontiers, 2016), what does a systems strengthening approach mean for refugee children? Does it result in reduced violence, abuse, neglect and exploitation, and improved well-being for refugee children? Without valid and rigorous measures of system strength and system strengthening, this final question cannot be answered. The CPI Study represents a step towards improved the clarity of measurement needed to develop policy and practice of child protection systems-strengthening for refugee children.

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1.
INTRODUCTION AND BACKGROUND

1.1 Background and rationale for the study

In 2012, UNHCR launched the *Framework for the Protection of Children* [henceforth referred to as the UNHCR Framework], which recognized "both the centrality of children's protection to UNHCR's work and the growing body of practice and expertise in the child protection sector globally" (UNHCR 2012). The UNHCR Framework outlines UNHCR's role in and vision for preventing violence, abuse, neglect and exploitation of children, and promoting well-being of children in contexts which may pose overwhelming risks to health, safety and well-being. The UNHCR Framework sets out six primary goals for protection of refugee children, which are:

1. Girls and boys are safe where they live, learn and play;
2. Children's participation and capacity are integral to their protection;
3. Girls and boys have access to child-friendly procedures;
4. Girls and boys obtain legal documentation;
5. Girls and boys with specific needs receive targeted support; and
6. Girls and boys achieve durable solutions in their best interests

CPC Learning Network and UNHCR have been working together since 2013 to develop, pilot and refine a methodological approach to the assessment of child protection system strength, and its impact on child protection outcomes, in refugee settings, through the project, "Measuring Impact Through a Child Protection Index," [henceforth referred to as "the CPI Study"]. At the core of the CPI Study is a dual imperative: to operationalize the UNHCR Framework as a set of core, measureable indicators, linked to child protection outcomes, and to build the strength and methodological rigor of measurement of child protection systems in humanitarian settings.

A primary focus of the CPI Study is measuring child protection system strength and assessing changes in child protection system strength over time. In particular, the research involved developing, piloting and refining the Child Protection Index, a measure that operationalizes the UNHCR Framework and seeks to assess overall child protection system strength. The CPI Study focuses on a systems-strengthening approach given the approach is now widely accepted and underpins recent policy and programming efforts in the field (Child Frontiers 2016). The UNHCR Framework explicitly takes a systems approach, which "marks an institutional shift from mainly targeting categories of children at risk towards a systems approach to protecting children" (UNHCR 2012). Further definition of a systems-level approach, the shift towards systems-strengthening in the field of child protection, and rationale for the present research on child protection systems in refugee settings is presented in Textbox 2 (page XX).

The CPI Study included two country studies – Rwanda, focusing on Kiziba Camp, and Uganda, focusing on Adjumani and Kiryandongo refugee settlements. The CPI Study utilized a mixed methods approach to assess child protection system strength, child protection outcomes, for adolescents aged 13-17, and perceptions of reasons for change in and associations between system strength and outcomes. In Uganda, the baseline studies in Kiryandongo and Adjumani were conducted between December 2014 and February 2015, the T2 study was conducted between June and August 2016, and the follow-up study was conducted in November 2016.

The Rwanda CPI Study generated key lessons in terms of methodology and the association between child protection system strengthening and child protection outcomes. The three phases of the Rwanda CPI Study were completed in April 2016 (Meyer, Muhorakeye, and Stark 2017). A brief description of these findings here helps situate the findings of the present report within the broader aims and outcomes of the 3-year, two country CPI Study. Some of the findings included:

- **Strength of the child protection system:** The child protection system in Kiziba Camp, as assessed by the Child Protection Index, strengthened between T1 (2013) and T2 (2015), while the strength of the child protection system remained at a moderate level.

- **Changes in levels of violence:** Comparison of T1 and T2 data indicated increases of some forms of violence and some limited evidence of reduction of violence. Through qualitative focus groups, adolescents emphasized that physical and sexual abuse constitute major risks for adolescents in Kiziba Camp.

- **Psychosocial well-being and feelings of safety:** Findings also indicated an overall worsening of psychosocial well-being, with analysis indicating that there was an increase in mean levels of symptoms of anxiety and emotional problems, and a decrease in mean level of resilience. The data indicated changes in levels of safety, with adolescents are more likely to report feeling unsafe in public spaces – on the way to and from school, or on the way to and from the market – in 2015 compared to 2013.

Overall, the findings from the Rwanda CPI Study indicated that improvements in child protection system strength did not appear to have had significant impacts on reduction of violence or resulted in higher levels of psychosocial well-being in the time period between T1 and T2. While there were some promising improvements in child protection outcomes – for example, reduction in caregivers' perceptions of appropriateness of beating in response to children's behavior and increased participation in adolescent-focused activities – these improvements did not yet appear to have had significant effects on exposure to violence, well-being and feelings of safety, and only limited impacts on reduction of violence.

The present report focuses on the findings from the T2 study conducted in Adjumani and Kiryandongo refugee settlements, presenting a comparison of child protection system strength between T1 (2014/15) and T2 (2016), and child protection outcomes over the same time period. The report also includes reflections from the perspective of the CPC Learning Network on the over-arching learnings from the CPI Study, with consideration of a number of questions relating to the methodological and programmatic implications.

Evidence base for child protection in humanitarian settings

The evidence base for the impact of humanitarian child protection activities and systems is limited. Structured reviews of commonly implemented interventions – community-based child protection mechanisms (Wessells 2009) and child friendly spaces [CFSs] (Ager et al. 2013) – have found that there is a lack of proven effectiveness, scalability and impact of these interventions. The evidence-base for community-based child protection mechanisms was described in 2009 as "largely anecdotal, impressionistic, unsystematic, and underdeveloped" (Wessells 2009). Subsequent efforts to identify impacts of these interventions through rigorous methodologies have identified some promising methodologies, and documented impacts of these interventions (see Textbox 1)

However, there remains a relative dearth of rigorous published work identifying the impact of interventions in the child protection sector. Given the limitations in the evidence-base in the child protection sector, programmatic decisions are often based on organizational experience in the field, anecdotal reports of efficacy, expert opinion, and the adoption and application of programs designed and tested with different populations, under different conditions, which may have significant impacts on quality and impact of these interventions. The review of evidence for CBCPMs noted, "the collection of rigorous evidence about the effectiveness, cost, scalability, and sustainability of interventions is essential if the field of child protection is to develop and attract the resources needed to address child protection issues" (Wessells, 2009). The development and testing of new methodologies to capture the impacts of child protection activities in humanitarian settings are a priority for the sector.

The baseline report for the CPI Study in Rwanda outlined the existing literature on child protection measurement in greater depth, focusing on two key issues that emerge from the limited evidence base. The first key issue is that existing evidence is focused on specific, individual interventions, rather than taking a systems-approach. As described in Textbox 2, the value of a systems-level approach that takes into account formal and informal actors at multiple levels is widely accepted and underpins recent policy and programming efforts in the field. Given the

TEXTBOX 1:

RECENT DEVELOPMENTS IN THE EVIDENCE-BASE FOR CHILD PROTECTION INTERVENTIONS

Child-friendly spaces: Several recent evaluations of CFSs in multiple contexts have used robust study design and sampling methods to understand the impact of CFSs on protection and psychosocial outcomes. Use of a comparison group (CFS-attenders vs. non-CFS attenders) has allowed researchers to attribute impact to CFS attendance. Researchers used locally validated quantitative measures to ensure reliability and validity of outcomes measures. Moreover, use of baseline and endline assessments allowed for measurement of change over time (Metzler, Kaijuka, et al. 2013; Metzler, Savage, et al. 2013). Findings show that CFSs studied had a positive impact on psychosocial well-being, although results varied according to CFS quality, and sex and age of participants, and a small positive impact on protection outcomes, with variation according to setting and sex of participants (Metzler et al. 2015). The necessity of baseline (pre-intervention) measurement and use of a comparison group to assess impact became evident from the results of this work. For example, without a comparison group, the assessment of CFSs in Ethiopia and Uganda would have indicated that CFS attendance did not impact protection concerns in the case of Ethiopia, and psychosocial well-being in the case of Uganda. With the comparison group, it was evident that CFS attendance was protective against *increased* protection concerns and decline in psychosocial well-being, which was seen in the comparison group of non-CFS attenders (Metzler et al. 2015).

Community-based child protection mechanisms: Efforts to improve the evidence-base for CBCPMs have shown the centrality of community ownership for sustainability and efficacy of community-based mechanisms (Wessells 2015). A structured review of evidence supporting the impact of community-based child protection mechanisms identified several key factors of successful interventions in this field, including community ownership, building on existing resources and capacities, and child participation (Wessells 2009). Findings from the review were used to guide intervention and measurement efforts in a teenage pregnancy prevention intervention in Sierra Leone (Wessells, Lamin, and Manyeh 2014). The quasi-experimental research design found several impacts of the intervention between baseline and midline evaluation, including increase of adolescents aged 15-17 in intervention areas being willing to ask their partner to use a condom, increase in girls under 15 in intervention areas expressing intentions to use a condom, and adolescents in intervention areas being more likely that adolescents in non-intervention areas to feel that they could refuse sex (Stark 2014). Participatory community review of the intervention emphasized reduced teenage pregnancy in intervention villages, increased linkages to health centres, improved access to contraceptives, and improved communication between parents and children (Wessells, Manyeh, and Lamin 2014).

recognition at a policy level of the need for a systems-approach within child protection in humanitarian settings, there is also a need for concerted effort to develop and test approaches to measure systems, rather than single interventions. The CPI Study seeks to contribute towards these efforts, working to develop an analytic methodology to accurately assess system-level outcomes, changes, and the impact on child protection outcomes.

The second key issue regarding the state of the evidence-base for child protection interventions, and child protection systems is that the vast majority of the literature on interventions to improve child protection outcomes – to reduce violence, abuse, neglect and exploitation, and to improve well-being – is disconnected from interventions aiming to improve child protection systems. Previous research efforts have primarily focused on individual-level outcomes, including prevalence of adverse mental health and psychosocial outcomes (for example, (Catani et al. 2009; Panter-Brick et al. 2009), or levels of exposure to violence and abuse (for example, (Stark et al. 2013). These studies have been instrumental in documenting prevalence of key concerns regarding well-being of children in humanitarian settings, however, they are insufficient with respect to exploring the connection between systems strength, child protection programming effects and impact on child protection outcomes. Child protection systems measurement approaches that do exist are not paired with population-level data on child protection outcomes; that is, measurements of system strength do not also measure improvements in child protection outcomes, the ultimate goal of a strong child protection system. The CPI Study is unique, and garners its strength and validity, from exploring the multiple child protection domains of procedures, services, and utilization of child protection services and their impact on child protection outcomes through triangulated data drawn from mixed methods approach.

Rationale for the project, "Measuring Impact through a Child Protection Index":

The design of the CPI Study was based on the need to address gaps in the evidence-base, test a hypothesis and pilot innovative approaches within the field of measurement of child protection interventions:

- **Addressing gaps in the evidence-base:** Gaps in the evidence-base currently leave policy-makers, donors and programmers without adequate guidance as to how to best support refugee children by preventing child protection risks and improving child protection outcomes. The CPI Study specifically builds from previous efforts of mapping of child protection systems (for example, Maestral International's work with UNICEF on mapping national child protection systems in Eastern and Southern Africa) (Maestral International 2011) to combine mapping of system strength with an understanding of how system strength impacts child protection outcomes (Meyer, Steinhaus, and Stark 2015).

- **Testing a hypothesis:** The hypothesis driving the project is one that is often taken as self-evident in the field of child protection, that a good child protection environment is associated with lower levels of child protection concerns (violence, abuse, neglect and exploitation), and higher levels of psychosocial well-being. The rationale for this project, and the motivation for the study design implemented, was to test this hypothesis through rigorous and appropriate methods.

- **Innovative approaches:**

  - Assessing *changes* in system strength: Through implementing data collection at T1 and T2 phases, the research is able to identify changes in system strength, rather than only presenting a snapshot of system strength at one time point.

  - Assessing child protection outcomes: Through measuring child protection outcomes at both timepoints, the study seeks to shed light on the actual relationships between system strength and changes in system strength, and child protection outcomes.

TEXTBOX 2:

CHILD PROTECTION SYSTEMS – DEFINITION AND MEASUREMENT OF A SYSTEMS-APPROACH

Definitions:

There are several terms that are utilized in child protection systems work. The following definitions are primarily drawn from the recent overview document, *"Adapting to learn, learning to adapt: Overview and considerations for child protection systems strengthening in emergencies"* (Child Frontiers 2016):

Systems thinking "takes into account the interaction between different parts of any system to better understand how together the system works rather than simply trying to understand specific system components in isolation." Systems thinking is used in many fields, and is increasingly utilized in child protection policy and programming in humanitarian settings;

A **system** is "[a] set of things that interconnect in such a way that they produce their own pattern of behaviour over time. All systems consist of three broad categories of 'things': elements, interconnections, and a function or purpose";

A **child protection system** is a "collection of components – structures, functions, capacities – that are organized and connected to each other around a common goal, where the goal is to address child protection concerns";

Child protection systems-strengthening "refers to actions taken to improve the functioning, coordination, integration and, ultimately, effectiveness of these components and their interaction… A system is deemed to have been strengthened if there is evidence of, for example: additional capacity; improvement in the quality of processes and services; expanded reach; integration or coordination of mechanisms that were previously separate, and improvement in the functioning of processes and mechanisms" (Save the Children UK on behalf of the Child Protection Working Group 2010).

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A systems-strengthening approach has become widely accepted in the field of child protection. Several major humanitarian agencies, including UNHCR, have key policy documents outlining their approach to child protection using a systems-strengthening framework.

Why utilize "systems-thinking" in child protection in humanitarian settings?

In the field of child protection, systems-thinking is increasingly supported, as it can promote "a holistic view of children and child protection that necessarily engages the full range of actors involved in protecting children's rights" (Wulczyn and UNICEF 2010). Systems thinking in child protection "provides a powerful language, way of thinking and tools that may help child protection actors investigate and address inefficiencies in meeting the protection needs of children" (Child Frontiers 2016). UNHCR's approach within the Framework, specifically, notes that a systems-approach is a shift from "mainly targeted categories of children at risk," and provides a more holistic approach to "prevent, respond and mitigate to the risks faced by children."

How have child protection systems and systems-strengthening been measured previously?

There are challenges in capturing the multiple components of a child protection system, and in assessing changes within the system, particularly in humanitarian contexts. Some measurement and assessment efforts are described here:

Assessing perceptions of systems-strengthening: Recent work has used qualitative methods to assess perceptions of systems-strengthening efforts in South Sudan. This research engaged multiple stakeholders within the child protection system, from Government officials to community members, to identify key processes in systems strengthening from a range of perspectives (Canavera et al. 2016).

Mapping of child protection systems: There has been considerable work on mapping child protection systems, including Maestral International's work with UNICEF on mapping national child protection systems in Eastern and Southern Africa (Maestral International 2011), and work by Child Frontiers in West Africa (Child Frontiers 2010) The Child Frontiers work mapped both the formal child protection system – often institutions and laws – and informal systems – the ways families, communities and children seek to achieve child protection and improve children's well-being. Findings showed discrepancies between the goals of the formal child protection system, and priorities and needs at the community-level (Krueger 2014). The Child Frontiers methodology provides a national-level overview of what activities exist, how they operate and how various actors interact, and secondly, how the system actually functions on the ground, in terms of the actual and perceived functioning of the system from the perspective of children and caregivers.

Measurement efforts beyond mapping are needed, however, to identify dynamic changes within the system over time. The CPI Study seeks to assess both the formal child protection system – as conceptualized in the UNHCR Framework and operationalized in the CPI instrument – and its actual and perceived impacts through adolescent and caregiver surveys, key informant interviews and focus groups. In addition, the CPI Study seeks to assess the interaction between child protection system strength and child protection outcomes over time, seeking to assess the assumption underlying systems-strengthening approaches: that a stronger child protection system will improve child protection outcomes.


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Rationale for the present study, Uganda – Adjumani and Kiryandongo refugee settlements, T2 study

The present study is a T2 assessment of the strength of the child protection systems in Adjumani and Kiryandongo refugee settlements, Uganda. Specifically, the research questions of the T2 study in Uganda were:

- What changes in system strength can be identified between T1 and T2;
- What changes in key child protection outcomes for adolescents aged 13-17 can be identified between T1 and T2; and
- How are changes in system strength related to changes in violence, exploitation, abuse, neglect and psychosocial well-being of adolescents?

The T2 study was a follow-up study to the T1 baseline study conducted in 2014/15. The research partner for both the T1 and T2 study in Uganda was TPO Uganda.

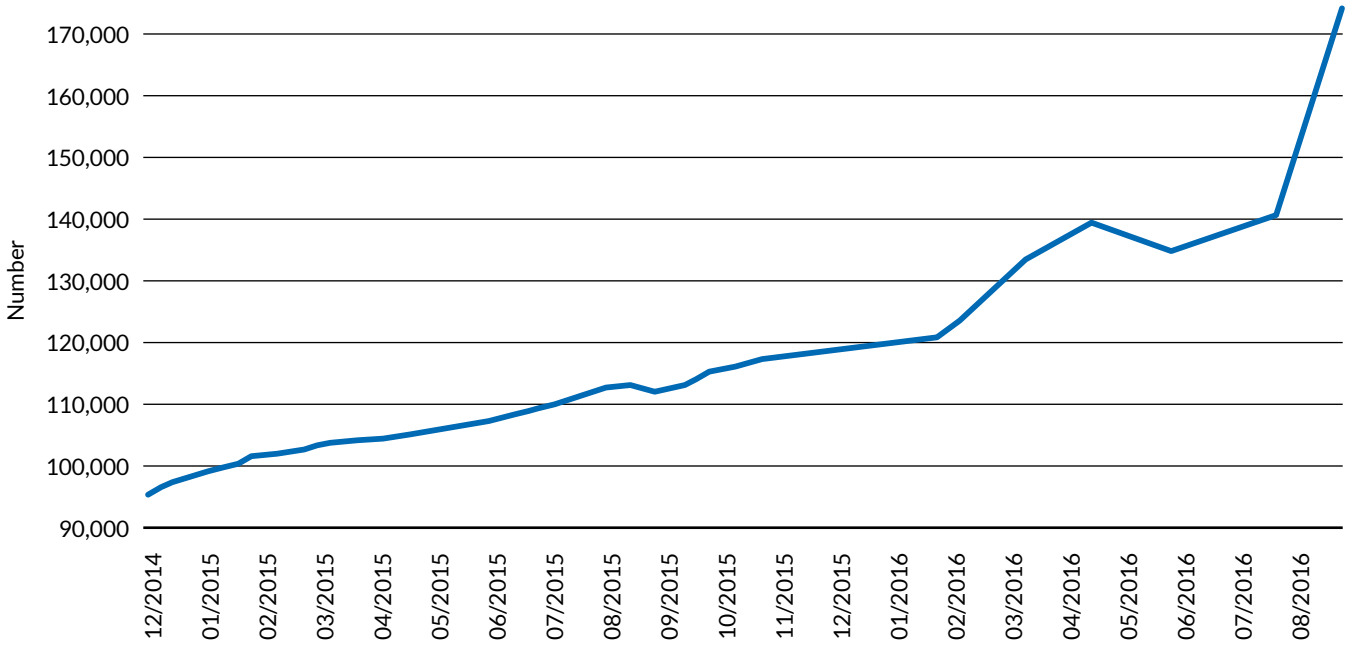
1.2 Kiryandongo and Adjumani refugee settlements

The CPI study in Uganda was conducted in two refugee settlements, Kiryandongo and Adjumani (Ayilo I). The situation in South Sudan deteriorated significantly in the course of the CPI Study, between T1 and T2 data collection, and Uganda is now hosting nearly 600,000 refugees from South Sudan, the vast majority of whom left South Sudan after violence

broke out in Juba in December 2013.[1] Specific political events have continued to lead to upticks in violence in South Sudan, and alongside these developments, massive movement of refugees across the borders of South Sudan to neighbouring countries, including Uganda (see Figure 1). T These events have led to multiple changes in the hosting environment for refugees from South Sudan in Uganda in general, and specifically, in Kiryandongo and Adjumani refugee settlements, which are discussed in greater depth in Textbox 6. Overall, UNHCR reported a funding gap of 64% for humanitarian response for the South Sudan

[1] http://data.unhcr.org/SouthSudan/regional.php

Graph 1: Trend line showing number of refugees in Adjumani over time (December 2014-August 2016)



situation in Uganda for 2016 (UNHCR 2016). Several new settlements have been established, and throughout 2016, staff members from implementing partner agencies were often drawn away from programs in Kiryandongo and Adjumani, to support establishment of programming in new settlements. Results of gaps in funding in Uganda include an increase in cases of malnutrition, given a 50% cut in food rations for refugees who arrived prior to June 2015, and gaps in coverage of water and latrines (UNHCR 2016).

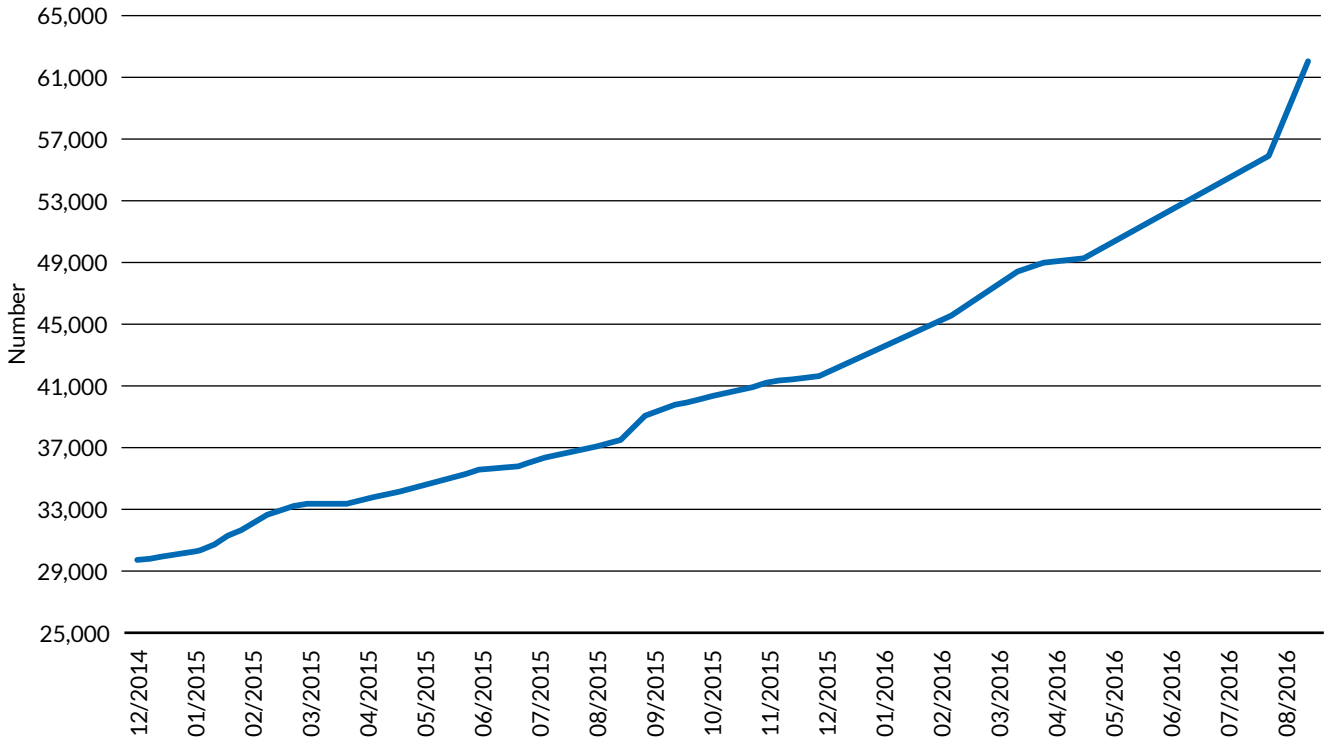
Kiryandongo refugee settlement: Uganda's Kiryandongo Refugee Settlement is located in the Kiryandongo District of Northern Uganda. UNHCR data from October 2016 indicates that there are a total of 70,834 refugees in Kiryandongo, 65,529 of whom arrived after December 2013. Over 63% of refugees are under the age of 18.[2]

Adjumani (Ayilo I) refugee settlement): Uganda's Adjumani Refugee Settlement is located in the Adjumani District of Northern Uganda. Adjumani is made up of a number of smaller refugee settlements; the total number of refugees across all the settlements is 202,780 as of October 2016, with 190,224 of this number having arrived since December 2013. More than 64% of refugees in Adjumani are under the age of 18. The present study focused on one of the refugee settlements, Ayilo I, as advised by UNHCR and TPO Uganda at the time of the T1 study, given the majority of refugees in Ayilo I had arrived more than 6 months prior to T1 data collection (a requirement for the study, which assesses exposure to the child protection system in the refugee settlement, and therefore included refugees who had been in Uganda for more than 6 months).[3]

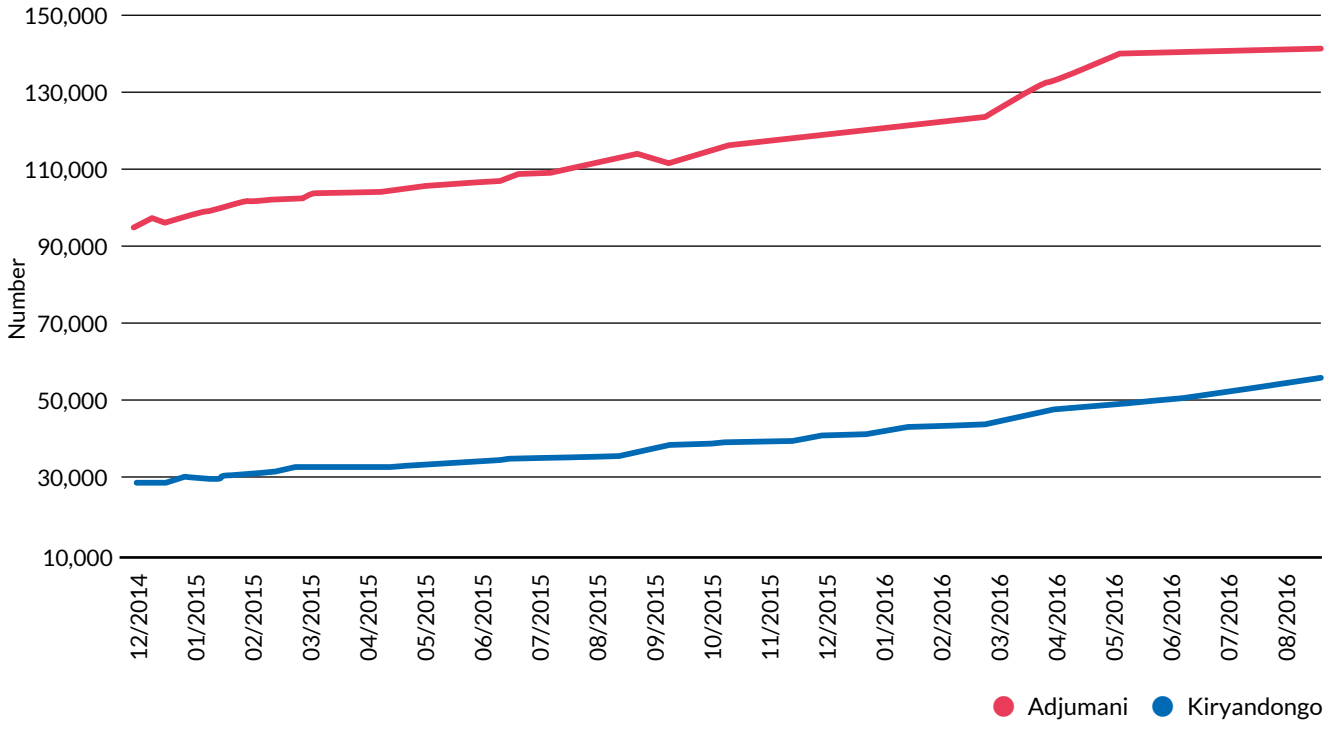
[2] http://goo.gl/B8qBqu

[3] http://goo.gl/wrGqvR

Graph 2: Trend line showing number of refugees in Kiryandongo over time (December 2014-August 2016)



Graph 3: Trend line showing number of refugees in Adjumani and Kiryandongo over time (December 2014-August 2016)



2.
METHODOLOGY

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The CPI Study aims to describe, assess, and explore change in the child protection system in two refugee settlements in Uganda, Kiryandongo and Adjumani refugee settlements. The study design included three different data collection methods:

- **Household surveys** (adolescents aged 13-17 and parents/caregivers) – conducted at T1 (2014/15) and again at T2 (2016);

The T1 study was conducted in December 2014 in Kiryandongo and February 2015 in Adjumani. The T2 study was conducted in June-July 2016 in Kiryandongo and July-August 2016 in Adjumani.

- **Focus group discussions** (adolescents aged 13-19 and parents/caregivers) – conducted at T1 and qualitative follow-up; and

- **Key informant interviews** (implementing partners, refugee leaders, UNHCR staff, government officials, and education and shelter sector leaders) – at T1, T2 and qualitative follow-up;

The CPI Study also included a follow-up phase of research, which used qualitative methods to investigate refugee adolescents', caregivers' and key informants' perceptions of the findings of the study, and explored the associations and outcomes identified in greater depth. This phase of research was conducted three months after T2 data collection, in November 2016. Each method is introduced below. Ethical considerations and procedures are detailed in Appendix 2.

2.1 Data collection, sampling and analysis methods **T2 research**

2.1.1 Child Protection Index (CPI)

Researchers used the previously developed CPI (Meyer, Muhorakeye, and Stark 2014; Meyer, Steinhaus, and Stark 2015) to assess child protection system strength across several domains central to the UNHCR Framework. The CPI utilized in Uganda is a 47-item index, with a total possible score of 100, assessing three core components:

- **PROCEDURES:** Includes items focused on existence of policies and procedures to prevent and address child protection risks, including laws and policies to address statelessness, allow access to national education systems, prevent corporal punishment and provide birth registration, policies and procedures for identifying 'at risk' children, an information management systems and information-sharing protocol, and coordinating mechanisms, including a Child Protection Working Group.

Figure 2: Data collection methods and utilization

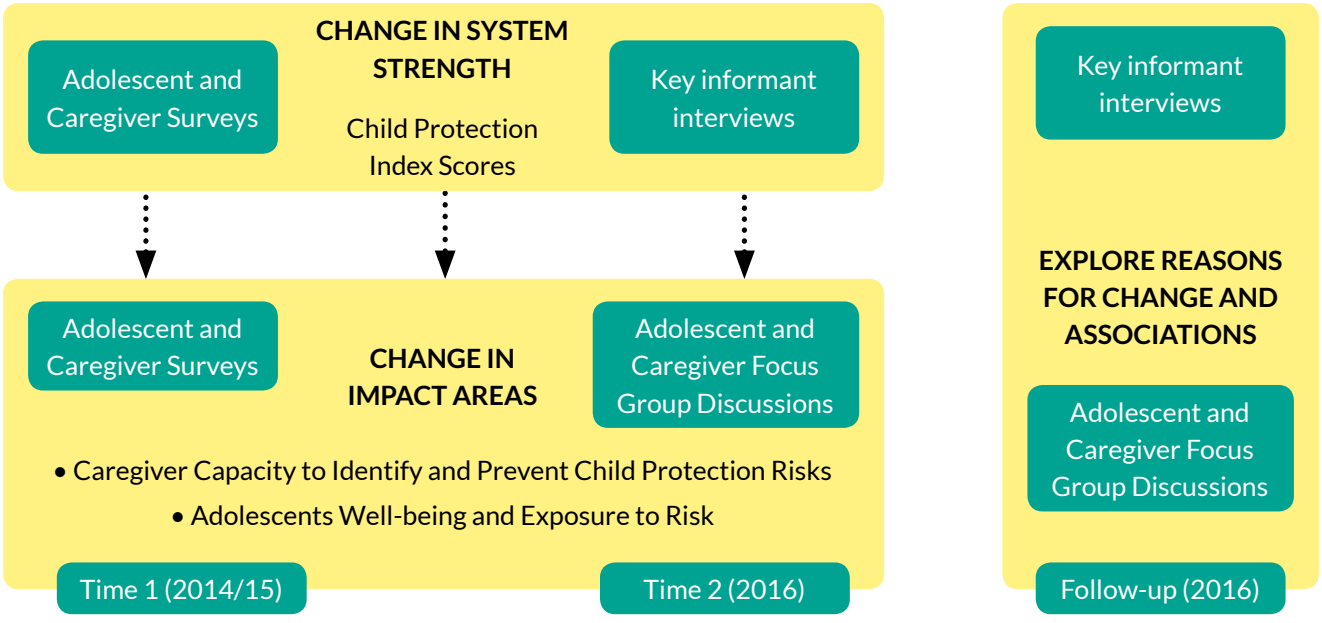

Table 1: Brief overview of CPI Study design

Terminology	Definition	Methodology	Data Sources	Data Collection
T1	Baseline – Time 1 study	Adolescent quantitative surveys Parent/caregiver quantitative surveys Key informant interviews Focus group discussions with adolescents	• Adolescents • Parent/caregivers • Key informants	December 2014-February 2015
T2	Time 2 study	Adolescent quantitative surveys Parent/caregiver quantitative surveys Key informant interviews	• Adolescents • Parent/caregivers • Key informants	June-August 2016
Follow-up	Qualitative follow-up study	Focus group discussions with adolescents and parents/ caregivers Key informant qualitative in-depth interviews	• Adolescents • Parent/caregivers • Key informants	November 2016

Table 2: T2 sample, Kiryandongo and Adjumani refugee settlements

	Adjumani						Kiryandongo					
	Adolescents		Caregivers		Key informants		Adolescents		Caregivers		Key informants	
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female
T2 data collection phase												
Quantitative survey	169	211	15	359	–	–	207	176	68	306	–	–
Key informant interviews	–	–	–	–	11	3	–	–	–		8	7
Follow up research phase												
Focus group discussions	42	42	14	50	–	–	46	53	9	69	–	–
Key informant interviews	–	–	–	–	12	3	–	–	–	–	4	6

- **SERVICES:** Includes items focused on role and functioning of community-based child protection mechanisms, availability of communal space for adolescents, safe learning environments and complaints mechanisms for adolescents, as well as availability of services and activities including technical and vocational activities and sports and recreation activities.

- **UTILIZATION** (as a proxy for quality of services): Includes items measuring adolescent participation in a range of activities designed for adolescents, including clubs and committees and sports and recreation activities, reporting of experiences of SGBV, reported feelings of safety and school attendance. This section contains the key activities and interventions identified by UNHCR as components of implementation of the Framework.

Data for the CPI were collected and evaluated at both T1 (2014/15) and T2 (2016). The overall CPI score was generated at T1 and T2 from data collected in the key informant interviews and adolescent surveys. CPI scores were then compared, with comparison of the total score and score across the three key domains (See Table 1). Change in CPI item-level and domain-level responses was one component that guided the focus of the follow-up qualitative data collection (2016).

2.1.2 Key Informant Interviews

Data for the CPI came from key informant interviews at T1 and T2. The key informant interview guide consisted of two main components: the first containing questions to feed into the CPI assessment; the second component asking key informants their views on the strengths and weaknesses of the child protection system. Across the study period, key informant interviews were conducted in Kampala (with UNHCR child protection focal points and International Committee of the Red Cross [ICRC]), in Adjumani (with UNHCR child protection focal point, community services staff and Head of Office, ARC, DRC, LWF, MTI, ICRC, Plan International UNICEF, Save the Children, War Child Canada, Windle Trust and the refugee Child Protection Committee) and Kiryandongo (with UNHCR community services and child protection staff, Windle Trust, Interaid, Real Medicine Foundation, OBK, DRC, IRC, ICRC, Save the Children, Office of the Prime Minister, TPO Uganda, the refugee Child Protection Committee, and the Refugee Welfare Committee).

Members of the research team, consisting of CPC Learning Network researchers and a research manager and research assistants from TPO Uganda, conducted all interviews, took hand-written detailed notes, and transcribed notes to be analyzed. The same procedure was followed for the follow-up interviews conducted in November 2016.

At T2, in Kiryandongo, a total of 11 key informants were interviewed, in Adjumani, a total of 15 key informants, and in Kampala, four key informants were interviewed. The sample for each settlement was constructed using purposive sampling – selecting the respondents for a sample most likely to yield answers to the specific research questions of the study.

2.1.3 Adolescent and Caregiver Surveys

SURVEY DESIGN

Adolescent and caregiver surveys were conducted at T1 and T2 (see Appendix 1 for detailed description of survey instruments). All interviews were conducted with a pair – an adolescent and an adult (above the age of 18) identified as the adolescent's caregiver. However, each individual interview was conducted in a private place and only the data collector and the specific respondent (adolescent or caregiver) were present.

All surveys were developed in English, and translated into Dinka and Nuer. The adolescent survey included the following sections: demographics; psychosocial well-being (scales measuring symptoms of anxiety, depression, and hope); exposure to violence and abuse; feelings of safety; child labor; knowledge and use of services; attitudes towards violence against children and social support.

The parent/caregiver survey included the following sections: demographics; knowledge and attitudes towards violence against children and child protection issues; household socio-economic status and Humanitarian Emergency Settings Perceived Needs Scale; child safety environment; and parent/caregiver well-being.

The surveys were all extensively pilot tested at T1, including cognitive interviewing, in order to ensure questions were comprehensible to respondents and that translations were accurate and clear. In addition, further pilot testing was conducted at T2, and minor changes made to response categories (for example, lists of available services) based on feedback during piloting. Items and scales were selected and adapted from pre-existing scales (for example, the Multi Dimensional Scale of Perceived Support) when appropriate, or developed by the researchers where appropriate (for example, the questions on feelings of safety). Measures of reliability of the scales selected (Cronbach's alpha) are included in Appendix 1.

INCLUSION AND EXCLUSION CRITERIA

Inclusion criteria for adolescents were that the respondent was between 13-17 years of age (or 18 or 19, if a baseline respondent was included at T2), and provided informed consent to participate in the interview. Caregivers were those who are identified as the primary caregiver, and also provided informed consent. Adolescents and caregivers with evident cognitive or developmental disabilities were excluded from the study for ethical reasons.

SAMPLE SIZE AND SAMPLING

At T1, a total of 471 parents/caregivers and 505 adolescents completed surveys; 34 of the adolescents were UASC who were purposively sampled, and the remaining 473 households were selected using systematic random sampling. The total sample size randomly selected households in Kiryandongo was

220 households and in Adjumani was 251 households. At T2, the research team aimed to follow-up as many baseline respondents as possible and, to account for loss to follow-up, to add new respondents to the T2 sample using systematic random sampling. At T2, a total of 763 households were surveyed, of which 227 were respondents from the T1, resulting in a total follow-up rate of 48.2%, and specifically, of 38.6% in Kiryandongo (85/ 220) and 56.6% in Adjumani (142/251). At T2, a total of 380 households were surveyed in Adjumani, and 383 in Kiryandongo. Households that were included at T2 that were not baseline respondents were selected via systematic random sampling. Further discussion of the follow-up rate is included in *Limitations*.

DATA COLLECTION PROCEDURES

Female data collectors conducted all interviews with female adolescents and focus group discussions with female-only groups.

All quantitative surveys were administered in either Dinka or Nuer (Kiryandongo) or Dinka (Adjumani) on a mobile phone-based survey program, facilitating accurate data entry and minimizing common data entry inaccuracies. Each question was displayed, individually, in a multiple-choice format, with optional text entry for items requiring broader answer categories. The data collector read the question and answer choices out loud to respondents, and selected the response given. The survey also used an anonymous reporting method for physical and sexual violence, adapted from an approach used in the WHO Multi-Country Study on Women's Health and Domestic Violence (WHO 2005) [see Textbox 3].

DATA COLLECTOR TRAINING

All quantitative surveys were conducted by trained refugee data collectors, hired in each refugee settlement. Data collectors were recruited, hired, and trained by TPO Uganda and CPC Learning Network research staff. Data collector training was 10 days in each settlement – 8 days of sessions (described below) and two days of practice and piloting of the instruments with respondents in the settlements, with 6-8 hours of training per day.

The following sessions were included in the training:

- General overview of the study: introducing the UNHCR Framework and providing a basic overview of methods and instruments;
- Roles and responsibilities of data collectors: introducing the core concepts in the research protocol, and ensuring data collectors understand their role within the overarching study;
- Child protection – concepts and principles: asking data collectors to define child protection, introducing data collectors to core principles of child protection;
- Research ethics (four sessions) – four sessions covered principles of human subjects research ethics (do no harm, confidentiality, respect for participants, informed consent); practice sessions of caregiver and adolescent informed consent forms; and discussing principles of asking sensitive questions and roleplaying discussion of sensitive topics; adverse events and referrals;
- Quality data collection – ensuring data collectors understand the need for accurate and complete data; discussing ways in which incomplete and incorrect data vs. quality data can be collected;
- Review of survey instruments – several sessions focused on reading through the survey instrument, discussing meaning of the questions, and ensuring data collectors knew how to ask each question; and
- Introduction to and practice of mobile phone technology – several sessions focused on training data collectors to effectively utilize the mobile phones for data collection;

All data collectors also discussed the principles of TPO Uganda's child protection policy, and signed the policy, indicating they would adhere to all child protection policies and procedures within the policy, prior to starting data collection.

QUALITY CONTROL

The research team implemented daily and weekly in-depth data checks to ensure quality control. Data was uploaded daily from mobile phones and analyzed using Stata 14, exploring response patterns, patterns of missing data and any outliers. Quality checking enabled the research team to identify particular data patterns by data collectors, for example, if a data collector was getting a consistently high number of affirmative responses for a particular question, or to assess the length of interviews, to ensure that data collectors were not rushing through interviews. This enabled the research team to identify missing data immediately, address any data quality concerns and provide on-going support and training to data collectors based on their individual performance.

DATA ANALYSIS

Quantitative data analysis for this study was conducted in three stages: baseline (T1, 2014/15) data were analyzed; T2 (2016) data were analyzed; and comparisons between T1 and T2 were explored. The process for cross-sectional data analysis has been discussed elsewhere (Meyer et al., 2015). The description of analysis below focuses on the quantitative comparisons between T1 and T2 data collection.

Changes over time were calculated using appropriate statistical tests.[4] Significant changes were then further explored through modeling outcome-specific, simple and multiple linear and logistic regressions. In each model, the following confounders – variables that could be responsible for alternate explanations of our findings – were included: age, gender, and parental status (both living, one living, neither living). Given hypotheses that parental living status (i.e. whether a respondent reported having neither, one or both biological parents alive) could influence exposure to child protection risks and levels of well-being, several of the key child protection outcomes were analyzed by "parental status," as well as site and gender.

Statistical analysis uses hypothesis testing. For example, in comparing the mean level of symptoms of depression at T1 to mean level of symptoms of depression at T2, we test the null hypothesis. The null hypothesis is that there is *no difference* in means between T1 and T2. In this study, we used p-values of less that .05 to indicate statistical significance. For results with a p value of less than .05, the finding indicates that we can reject the null hypothesis of no difference between T1 and T2.

FOLLOW-UP RESEARCH

The objective of the follow-up research phase was to explore the quantitative findings in greater depth, examining reasons for observed change in child protection system strength and child protection outcomes across the study period. The qualitative methods – focus groups discussions and key informant interviews – were designed to illuminate some of the T1-T2 findings, provide an opportunity for member checking,[5] and expand understanding of the associations and changes identified in the quantitative comparative analysis.

We developed study instruments for the follow-up research phase – a focus group discussion guide and a key informant interview guide – based on the following process:

- We conducted preliminary comparative analysis of the T1 and T2 data;
- We identified key findings, both expected and unexpected, in line with our hypothesis and potentially contradictory to it, were identified and discussed by the research team
- We developed focus group discussion guides and key informant interview guides based on questions developed from these findings.

[4] p-values for statistically significant differences were calculated using unpaired t-tests for continuous variables (accounting for unequal variance, when necessary), two-sample Wilcoxon rank-sum (Mann-Whitney) tests for ordinal variables and chi-squared tests or Fisher's exact tests for categorical variables (depending on expected cell values).

[5] Member checking is an approach used in qualitative research to enhance validity and trustworthiness of findings, where data or results are provided to respondents "to check for accuracy and resonance with their experiences" (Birt et al., 2016). This approach is usually utilized to enhance the validity of qualitative data; in the case of this study, this approach was adapted to the study design, using the qualitative research phase to conduct member checking using the quantitative findings.

TEXTBOX 3:

REPORTING METHODS FOR SGBV

The adolescent survey instrument included questions asking respondents to verbally self-report experiences of physical and sexual violence. Low rates of disclosure of SGBV are common in quantitative surveys of SGBV amongst refugees, often due to social stigma associated with SGBV (Vu 2014). Under-reporting is likely to result in under-estimates of actual prevalence of SGBV and physical violence. Barriers to disclosure were perceived to be a possible concern in the context of conducting the surveys in refugee settlements in Uganda.

Therefore, the research team also utilized an anonymous form of reporting for experiences of SGBV and physical violence, adopting a method that was used in the WHO Multi-Country Study on Women's Health and Domestic Violence. The WHO study utilized the following method when asking about childhood sexual abuse: after asking about childhood sexual abuse directly, interviewers asked the question again at the end of the interview, providing an opportunity for women to mark their response on a card with a visual representation of responses for "yes" (a smiling face) and "no" (a frowning face). Women then folded the card and provided the response to the interviewer without revealing the response to the interviewer. In several countries in the WHO Study, anonymous reporting resulted in higher levels of disclosure of childhood sexual abuse. Comparison of face-to-face questions and anonymous disclosure (using a sealed envelope) in a study of childhood sexual abuse amongst children in Uganda indicated that the sealed envelope method resulted in a seven-fold increase disclosure of forced sex amongst respondents (Barr et al. 2017).

For the CPI Study, this method was adapted to mobile phones, and the data collector handed the mobile phone to the adolescent respondent after directly asking about experiences of physical and sexual violence, with the following instructions:

"For the next three questions, I will give you the phone to answer. The first question will be a practice question. I will read you the question, and then hand the phone to you. If the answer is YES, please touch the button next to the red box and "swipe" left. If the answer is NO, please touch the button next to the yellow box and "swipe" left. Your answer will disappear and I will not be able to see it. If you do not see the button or have trouble moving to the next screen, please tell me. Do you understand? Do you have any questions?" The data collector then asked two general questions: one about any type of physical violence, and one about any form of sexual violence experienced, and asked the adolescent to respond anonymously.

Results indicated that the anonymous method did result in a higher prevalence estimate of sexual violence. Using the self-report method, 3.0% (n=22) reported having been physically forced to have sexual intercourse against their will in the past year, and 0.7% (n=5) reported having been pressured or persuaded to have sexual intercourse against their will in the past year. Using the format of anonymous reporting, 7.3% reported any form of sexual violence. In contrast, 10.8% reported any form of physical violence using the anonymous format, which was lower than the self-report method. These findings indicate that the anonymous form of reporting seems to encourage reporting of sexual violence but reduce reporting of physical violence. The findings from the CPI Study in Uganda indicate that anonymous reporting increases reporting of sexual violence in the context of the survey, but actually decreased reporting of physical violence. This is discussed in greater depth in Key *Lessons – Methodology*.

During T2 data collection, researchers found key informants heavily engaged with establishing transit centers, processing arrivals, and ensuring housing and food rations for new arrivals. Therefore, the research team decided to start all focus group discussions and key informant interviews conducting during the follow-up research with an open-ended question asking respondents to reflect on the impact of the influx on various aspects of adolescent well-being in the settlements, focusing more specifically on functioning of the child protection system in key informant interviews. The data collected in the follow-up research phase is integrated throughout the report, and highlighted in particular in Textboxes 7 (on the impact of the influx on child protection outcomes) and 6 (on the impact of the influx on child protection system strength). The data shed light on perceptions of the impact of the increase in refugee numbers on child protection system strength and child protection outcomes. However, the data cannot identify the *extent* to which changes in system strength and child protection outcomes identified between T1 and T2 can be attributed to the change in refugee numbers, and the related changes in focus of implementing partners, donors and services.

2.1.4 Key informant interviews:

One component of the follow-up research was key informant interviews. In these interviews, Key informant interviews conducted during the follow-up phase of research explored reasons for observed change in child protection system strength and child protection outcomes across the study period. In both refugee settlements, interviews focused on the impact of the recent influx on child protection system strength, changes in adolescents' knowledge of child protection services, improvements in levels of school attendance, reduction in household well-being (caregivers' reported hunger and income), and adolescent reporting of violence. Based on analyses that showed differences in child protection outcomes per refugee settlement, interviews in Kiryandongo and Adjumani also included different topics – for example, in Adjumani, interviews also included questions focused on the reported increases in physical abuse between T1 and T2, and in Kiryandongo, changes in adolescent psychosocial well-being between T1 and T2. Each interview also started with a short discussion of the preliminary findings of the CPI Study in Adjumani or Kiryandongo.

15 key informant interviews were conducted in Adjumani, with UNHCR, implementing partners (TPO Uganda, NRC, Save the Children, DRC, AFOD, Danish Church Aid, LWF, MTI, IRC), Uganda police force and refugee welfare leaders. In Kiryandongo, 10 key informant interviews were conducted, with UNHCR, implementing partners (War Child Canada, IRC, Samaritan's Purse, Interaid Uganda, OBK, Windle Trust, DRC, RMF) and refugee welfare organizations (CPC and RWC). All key informants were purposively selected based on their role in and expertise with the child protection sector or child protection outcomes in the settlements.

2.1.5 Focus group discussions with adolescents and caregivers:

The follow-up research phase also included focus group discussions with adolescents and caregivers. These focus group discussions focused on changes in the child protection system and child protection outcomes identified in comparison of T1 and T2 data, including the impact of the recent influx on household well-being and child protection, the changes in child protection system strength identified in the T1/ T2 comparative analysis, and refugee settlement-specific findings, for example, changes in level of physical abuse in Adjumani and improvements in psychosocial well-being in Kiryandongo.

All participants were recruited through TPO Uganda, who identified potential respondents through programming and contact with refugee leaders. A total of 10 focus group discussions with adolescents were conducted in Adjumani, all in Dinka, with a total of 84 participants. Half the focus group discussions were female-only and half male-only, and half included adolescents between 13-15 and half between 16-17 years old. In Adjumani, a total of 8 focus group discussions were conducted with caregivers, with a total of 64 participants. A total of 10 focus group discussions with adolescents were conducted in Kiryandongo, half in Nuer and half in Dinka, with a total of 89 participants. Six focus group discussions were female-only and four were male-only, and seven included adolescents aged 13-15, and three included adolescents aged 16-17 years old. In Kiryandongo, a total of 9 focus group discussions with caregivers were conducted, with a total of 78 participants.

The Research Manager and trained data collectors facilitated all the focus group discussions conducted in the follow-up phase. Specially trained note-takers took hand-written notes, subsequently transcribing and translating notes into English for analysis, and finalizing transcripts through discussion and review. Research staff reviewed English transcripts to assure data clarity and quality.

The lead researcher independently conducted a thematic analysis of focus group transcripts, reviewing all transcripts, highlighting key themes and sub-themes, and identifying direct quotes that fit within each theme and sub-theme.

LIMITATIONS

The results from the CPI Study in Uganda should be understood in light of several limitations. The validity of the measures of mental health and psychosocial outcomes was not tested. The psychosocial outcomes – for adolescents: hope, symptoms of depression and anxiety, social support, and for caregivers, depression and anxiety – were not adapted based on qualitative findings, and the research team did not include a validity study in the study design, to establish multiple aspects of validity, for example, construct validity, criterion validity, and content validity. There are methods that have successfully been utilized in studies of mental health and psychosocial outcomes in diverse populations (for example, (Betancourt et al. 2012; Haroz et al. 2014; Kohrt et al. 2016) however, within the timeline and resources of this study, we were unable to fully test and validate the psychosocial scales and mental health measures included in the instruments. Given this, the adolescent psychosocial outcomes are analyzed as continuous outcomes, meaning that interpretation regarding the levels of symptoms does not assume a particular cut-off indicating a disorder is present. The cut-off utilized for the caregiver depression and anxiety outcomes is widely utilized, but was not validated for this context and population. Therefore, these findings should be interpreted as indication of higher and lower symptoms of depression and anxiety, rather than clinical diagnosis of mental disorder.

The survey instrument utilized specific questions focused on sexual violence – *Was there a time when you were physically forced to have sexual intercourse against your will?*, and *Was there a time when you were persuaded or pressured to have sexual intercourse against your will?*, as well as questions focused on transactional sex – *Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?*, *Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?*, *Has someone other than a teacher or principal offered you money, gifts, food, services, or shelter if you had sex with him or her?*, and *Have you had sexual intercourse with someone other than a teacher or principal because you hoped to receive money, gifts, food, services or shelter?* The utilization of these general questions, rather than asking more in-depth questions focused on specific acts of violence, is in line with methodological approaches of studies focused on sexual violence (the three largest datasets on sexual violence utilize similar questions, including the WHO Multi-Country Study on Domestic Violence and Women's Health), yet also may result in underestimates that should be taken into account when interpreting the findings on SGBV prevalence from this study (WHO 2013).

The CPI is an instrument developed, piloted and implemented specifically for this study, and for the purposes of measuring i) child protection system strength at particular time-points, and ii) *changes* in child protection system strength. Thorough assessment of the capacity of the instrument to achieve both of these objectives is warranted at the completion of data analysis of both country studies. Throughout the course of the CPI Study, researchers have identified several core measurement issues associated with the CPI which suggest that further testing and refinement of the instrument is needed, in particular, if the instrument is to be adapted for utilization in a wide range of field settings, including emergencies, protracted settings, and urban displacement settings. Specific limitations of the CPI as they pertain to the CPI Study in Uganda are discussed here, with broader synthesis of the key findings in terms of methodology in *Section IV*.

As discussed in Textbox 6, there was a significant increase in numbers of refugees from South Sudan in Uganda overall between T1 and T2, including increases in numbers of refugees in Kiryandongo and Adjumani, as well as diversion of human resources and funding away from existing refugees to cope with the needs of new arrivals. While child protection system strength as assessed by the CPI did appear to change over time – in the case of Kiryandongo, an increase in system strength, and in the case of Adjumani, a slight decrease in system strength – it is unclear if the items in the CPI are sensitive to the impact of emergency. The majority of the items in the CPI, particularly the policies and procedures items, are likely to remain stable even in an emergency context. There are a limited number of items that are sensitive to the emergency – one (the number of cases per social worker) did change in both Kiryandongo and Adjumani, but this item is only assigned one point, so the change of one point reflected by the change in this item may not reflect the significance of the increase in workload for implementing partner staff or the shift in resources that was reported in key informant interviews and focus group discussions conducted at follow-up. Level of funding gap may also vary in an emergency setting, but change in this indicator may also occur in the absence of an emergency, as new funding is available to meet emergency needs.

The changes in child protection system strength, as described by key informants in the follow-up research phase, may not have been adequately captured in the current format of the CPI, and, as discussed in *Section IV*, there may need to be additional items or a separate module to adequately capture the changes in child protection system strength that may result from an emergency response, and to account for the impact of the emergency on child protection system strengthening. For example, in the case of Adjumani, absent the emergency, an interpretation of CPI scores at T1 and T2 could be that there have been minimal improvements in child protection system strength between T1 and T2; however, taking into account the emergency, the lack of significant weakening of child protection system strength between T1 and T2 could be taken as sign of a strong and resilient child protection system that did not significantly weaken, even in the face of a major emergency and a massive number of extra pressure. The data available from the CPI Study in Uganda does not allow us to determine which interpretation is more likely.

The context of the CPI Study in Uganda, with the emergency influx occurring after T1 data collection and throughout T2 data collection, also entails that changes in child protection outcomes, such as increase in violence experiences, are difficult to interpret. Are these changes associated with changes in child protection system strength, as this study hypothesizes, or unmeasured factors related to the emergency? The hypothesis tested in the CPI Study is that "*a strong child protection system is associated with lower levels of child protection concerns (violence, abuse, neglect and exploitation), and higher levels of psychosocial well-being*," yet in the context of an emergency situation occurring after T1 and during T2, it is not possible to fully disentangle the factors leading to changes in child protection outcomes, or control for the changes brought about by the influx of new refugees.

Some biases may be present in the data. For example, recall bias – a systematic error introduced by differential patterns of recall, for example, that girls are more likely to recall verbal abuse than boys, or that adolescents are more likely to recall physical violence than verbal abuse – may influence the prevalence of certain child protection risks that are reported. These biases are limitations in research on sensitive topics in multiple settings, for example, a study of gender-based violence amongst refugees in Kampala indicated that recall bias may affect reporting of SGBV as more severe types of incidents may be more easily recalled (Morof et al., 2014). Researchers on the CPI Study aimed to reduce these forms of bias by utilizing questions that have been piloted and adapted to address this issue in other settings, as well as intensive training of data collectors to ensure sensitive and systematic interviewing. Nonetheless, under- and over-reporting of key child protection risks and outcomes explored in the CPI Study cannot be discounted.

The follow-up rate for the overall sample was 48.2%, and for Adjumani, 56.6% and Kiryandongo, 38.6%. This is a low follow-up rate, and reflects the significant challenges the research team encountered in finding T1 respondents, which included not having sufficient identifying information from T1 to track down baseline respondents (including that a key piece of identifying information, phone numbers, often changed between T1 and T2, decreasing the utility of that form of tracking information); that respondents moved within the settlement or between settlements,

and that respondents had moved outside of settlements, to Kampala or returned to South Sudan, between T1 and T2. Analysis of the respondents who were included in T1 and T2, compared to those who participated in T1 but were lost to follow-up, indicate that those who were included in both waves of data collection were significantly different in terms of gender, highest level of education, socio-economic status and parental living status, which are all variables that may have affected child protection outcomes. In addition, the respondents who were only included at T2 data collection significantly differ from T1 respondents included at T2 in terms of gender, highest level of education, age, attitudes towards violence towards children, child hope, social support and parental living status. Therefore, a limitation of this study is the possibility of selection bias, where the respondents retained from T1 are significantly different from those lost to follow-up in ways that influence the outcomes at T2. For example, fewer low households were interviewed at both T1 and T2 (9.42%) than those interviewed at T1 only (11.07%). This could influence our estimates of change across several outcomes, including violence exposure. Qualitative interviews indicated that decreased socio-economic status between T1 and T2 has led to increased violence risk for children and adolescents in the home and caregivers interviewed at T1 and T2 reported slightly lower violence and hunger in their homes than those only interviewed at T1 (28.3% compared to 32.5%). Thus, it is hard to disentangle changes overtime in the refugee settlements as there is an apparent correlation between socio-economic status and violence. However, as we have systematically interviewed those with higher socio-economic status overtime, those of the lower socio-economic status (and potentially higher risk of violence) are not included in the T2 sample. This could influence the significance of findings across other outcomes as well where the relationship between socio-economic status and psychosocial outcomes are less well defined, for example this could blunt the appearance of a true effect or highlight the appearance of change over time, that is, in truth, just a reflection of the higher socio-economic status in those not lost to follow-up.

As was the case in the T1 data collection, the study design did not capture fully the ethnic diversity present in Kiryandongo and Adjumani settlements. In Kiryandongo, Dinka and Nuer were selected as interview languages, as they represented the majority of the South Sudanese refugees; however, refugees who primarily spoke Acholi were not included in the sample. In Adjumani, Dinka language was used, as this was the primary language in Ayilo I settlement. However, other ethnic languages are prevalent in other settlements in Adjumani. Exclusion of some ethnic groups from the sample may have resulted in a selection bias and under or over-estimates of child protection issues compared to the broader refugee population. This limitation should be considered when interpreting the findings and the extent to which they may be generalizable to other South Sudanese refugees in Uganda.

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3. FINDINGS

Findings for child protection system strength and all child protection outcomes are presented in this section, integrating findings for both Kiryandongo and Adjumani refugee settlements under each thematic section. Key findings for each refugee settlement are separated out below, in Textboxes 4 and 5.

TEXTBOX 4:

KEY FINDINGS FOR ADJUMANI REFUGEE SETTLEMENT

The strength of the child protection system improved slightly in Adjumani, with a total score change for Adjumani between T1 and T2 of +4.5. The strength of the child protection system in Adjumani maintained as a moderate level. Some evidence of maintained system strength in terms of core policies and procedures was seen, as well as several services, such as presence of a complaints mechanism for adolescents and presence of sports and recreation activities for adolescents. In the area of utilization, Adjumani maintained a high level of recent school attendance (more than 80%), high level of reporting of feelings of safety most or all of the time at school (more than 70%) and high levels of % of adolescents who wanted to who had reported participating in structured recreation activities (more than 70%). Two areas of utilization showed a decrease: the percentage of those adolescents who wanted to participate in clubs and committees, and did participate, declined from 65.2% at T1 to 46.8% at T2, as did the percentage of adolescents who wanted to participate in life skills trainings, and did participate, which decreased from 76.1% to 57.3%. Some areas of policies and procedures, services and utilization saw improvement between T1 and T2 in Adjumani; key informants reported that children no longer had to pay for books and uniforms, there was improvement in provisions for a safe learning environment and there are psychosocial support activities for children with disabilities, a change from T1 in Adjumani.

Specific findings regarding child protection outcomes for Adjumani refugee settlement include:

- Increases in *violence exposure* were primarily driven by increases in Adjumani refugee settlement, for example, at T2, 14.1% of adolescents in Adjumani reported ever having seen adults in their home physically assaulting each other, compared to 6.8% at T1 ($p<.05$);
- In Adjumani, at T1, 21.0% reported having had a teacher punish them by hitting or beating, and this increased to 32.0% at T2 ($p<.05$);
- Analysis of the overall sample indicated overall improvement of all psychosocial outcomes measured – anxiety, emotional symptoms, hope and social support, however, there were no significant improvements in Adjumani specifically;
- Adolescent feelings of safety at home improved across both sites, with the number of adolescents reporting that they felt safe at home some or none of the time decreasing from 25.1% at T1 to 17.6% at T2 in Adjumani ($p<.05$);
- In Adjumani, significantly more adolescents reported feeling unsafe in the past week at markets and other public places in the settlement (T1: 19.0%, T2: 29.8%, $p<.05$) and on the way to or from markets and other public places in the settlement (T1: 15.7%, T2: 28.2%, $p<.001$);
- A significant increase in participation across both settlements was seen for group sports activities, however, significantly fewer adolescents reported having participated in a club or committee specifically for adolescents in the past year (T1: 34.8%, T2: 24.5%, $p<.05$) and fewer reported having participated in non-formal education in the past year (T1: 44.4%, T2: 22.9%, $p<.05$).

TEXTBOX 5:

KEY FINDINGS FOR KIRYANDONGO REFUGEE SETTLEMENT

The child protection system in Kiryandongo strengthened, according to the CPI measure, with a total score change for Kiryandongo between T1 and T2 was +13.5 points. The strength of the child protection system in Kiryandongo changed from weak to moderate. As in Adjumani, some evidence of maintained system strength in terms of core policies and procedures was seen, as well as several services, such as presence of a complaints mechanism for adolescents and presence of sports and recreation activities for adolescents. Some areas of policies and procedures, services and utilization saw improvement between T1 and T2. In both Kiryandongo and Adjumani, there was improvement in policies in place to enable refugee children to enroll without discrimination at primary and secondary education levels; in Kiryandongo, presence of clubs and committees for adolescents was an improvement, and a BID panel has been held in the past 2 months (at the time of data collection), an improvement from T1. In the area of utilization, there was significant improvement in some areas in Kiryandongo, which may be a particular achievement in strengthening of the child protection system, given this improvement occurred in the context of the emergency response. In Kiryandongo, the percentage of adolescents reporting that they had attended school regularly in the most recent school period increased, and the percentage of respondents who reported feeling safe at school all or most of the time increased from 67% to 78.6%.

Specific findings regarding child protection outcomes for Kiryandongo refugee settlement include:

- No change in violence exposure at household level: Comparison of T1 and T2 findings by site indicates that there were some increases in specific exposures in Adjumani but not Kiryandongo;
- Some changes in school-based violence: in Kiryandongo, at T1, 21.4% reported having had a teacher punish them by hitting or beating, and this increased to 28.9% at T2 ($p<.05$);
- Findings regarding psychosocial well-being of adolescents in Kiryaondongo refugee settlement at T2 indicate overall improvement of all psychosocial outcomes measured – anxiety, emotional symptoms, hope and social support;
- Adolescent feelings of safety at home improved across both sites, with the number of adolescents reporting that they felt safe at home some or none of the time decreasing from 50.0% at T1 to 36.0% at T2 in Kiryandongo ($p<.05$);
- In Kiryandongo, there were significant reductions in feelings of lack of safety at markets and other public places in the settlement (T1: 36.8%, T2: 23.2%, $p<.001$) and on their way to and from markets and other public places (T1: 33.6%, T2: 20.8%, $p<.001$);
- There was a significant decrease in participation in life skills activities in Kiryandongo (T1: 73.6%, T2: 15.6%, $p<.001$) and for non-formal education (T1: 56.6%, T2: 23.9%, $p<.001$).

3.1 Changes in child protection system strength

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
Legal and Policy Framework								
1. For UASC, what durable solutions are currently available: resettlement, local integration, voluntary repatriation, none								
Key informant interviews and desk review	Procedures	More than one durable solution available = 4 One durable solution available = 2 No durable solutions available = 0	None = 0	None = 0	–	None = 0	None = 0	–
2. Are there laws and policies in place that prevent statelessness? Yes/No								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
3. Is this country a signatory of the 1951 Convention or does it have national asylum procedures in place? Yes/ No								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
4. Is there a policy to ensure that refugee children have free access to primary education (formal education up to Grade 6, resulting in a qualification)? Yes/ No i. Do refugee children have to pay fees (Yes/ No) ii. Do refugee children have to pay for books or uniforms (Yes/ No)								
Key informant interviews and desk review	Procedures	1 point assigned if there is a policy i. No = 1 Yes = 0 ii. No = 1 Yes = 0 Total possible: 3	Yes i. No** ii. Yes Total score: 2	Yes i. No ii. Yes Total score: 2	–	Yes i. No ii. Yes Total score: 2	Yes i. No ii. No Total score: 3	–
5. Is there a policy to ensure that refugee children have free access to secondary education (formal education up to Year 12, resulting in a qualification)? Yes/ No i. Do refugee children have to pay fees (Yes/ No) ii. Do refugee children have to pay for books or uniforms (Yes/ No)								
Key informant interviews and desk review	Procedures	1 point assigned if there is a policy i. No = 1 Yes = 0 ii. No = 1 Yes = 0 Total possible: 3	No i. Yes ii. Yes Total score: 0	No i. Yes ii. Yes Total score: 0	–	No i. Yes ii. Yes Total score: 0	No i. Yes ii. Yes Total score: 0	–
6. Is there a policy in place to ensure that refugee children are able to enroll without discrimination in national education systems at primary and secondary level? Yes/No i. Do refugee children need to pay any additional fees compared to national children? Yes/ No ii. Do refugee children need to provide special certification (i.e. from previous schools) compared to national children?								
Key informant interviews and desk review	Procedures	1 point assigned if there is a policy i. No = 1 Yes = 0 ii. No = 1 Yes = 0 Total possible: 3	No i. Yes ii. Yes Total score: 0	Yes i. No ii. Yes Total score: 2	+2	No i. Yes ii. Yes Total score: 0	Yes i. No ii. Yes Total score: 1	+1

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
7. Are there laws and policies in place against use of corporal punishment in schools that refugees attend? Yes/No								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
8. Is there a law / policy in place to ensure that refugee children can obtain birth certificates in the country of refuge?								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
9. Are there agreed criteria in place establishing which children are considered 'at risk' and how to prioritise amongst them for different services?								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
Knowledge and Data								
10. Did the most recent participatory assessment (child protection-focused or for other sectors) include input from focus groups with 100% adolescent participants or interviews with adolescents? Yes/ No								
Key informant interviews; verify with recent report	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
11. Are questions to identify children with specific needs systematically asked and the information recorded at registration? Yes/No								
Key informant interviews, desk review, direct observation	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
12. Are newborn children issued birth registration certificates within 12 months?								
Key informant interviews, desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
13. Is there a functional information management system in place for children at risk?								
Key informant interviews, desk review	Procedures	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
14. Does the location/ settlement / field office have an information-sharing protocol?								
Key informant interviews, desk review	Procedures	Yes = 1 No = 0	Yes = 1	No = 0	–1	Yes = 1	No = 0	–1

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
Coordination								
15. Are Standard Operating Procedures (either stand alone or integrated into other SOPs) that address violence against children and adolescents known and followed? i. Are referral pathways for child-sensitive services for child survivors of violence mentioned in the SOP? ii. Is the SOP published/ printed and available in the UNHCR office? iii. Is the SOP distributed to partners? iv. Is there clear guidance in the SOP on which sector takes the lead in SGBV cases against children, and how the sectors work together?								
Key informant interview; verify visually	Procedures	SOP exist: Yes = 1 No = 0 Additional points: .5 for each if yes Total possible: 3	SOP exist: Yes = 1 i. Yes ii. Yes iii. Yes iv. Yes Total score: 3	SOP exist: Yes = 1 i. Yes ii. Yes iii. Yes iv. Yes Total score: 3	–	SOP exist: Yes = 1 i. Yes ii. Yes iii. Yes iv. Yes Total score: 3	SOP exist: Yes = 1 i. Yes ii. Yes iii. Yes iv. Yes Total score: 3	–
16. Is there a coordination forum for child protection actors that has met in the last month, and were minutes and action points recorded and disseminated within 1 week?								
Key informant interviews, desk review	Procedures	Yes = .5 No = 0	Yes = .5	Yes = .5	–	Yes = .5	Yes = .5	–
17. Has a child protection strategy been developed with the participation of child protection actors?								
Key informant interviews, desk review	Procedures	Yes = .5 No = 0	Yes = .5	No = 0	–.5	Yes = .5	No = 0	–.5
Human and Financial Capacity								
18. Are 50% of teachers in pre-, primary and secondary schools attended by refugee children female? Yes/ No								
Key informant interviews, desk review	Services	Yes = 1 No = 0	No = 0	No = 0	–	No = 0	No = 0	–
19. In the last month, has the average number of cases requiring urgent follow-up exceeded an average of 25 per available case worker? Yes / No								
Key informant interviews, desk review	Services	Yes = 0 No = 1	No = 1	Yes = 0	–1	No = 1	Yes = 0	–1

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
20. What is the funding gap**** for child protection?								
Key informant interviews, desk review	Services	High funding gap = 0: OL/AOL gap for child protection is 51% or higher than the overall OL/AOL gap for all sectors. Medium funding gap = 1: OL/AOL gap for child protection is between 11% and 50% higher than the overall OL/AOL gap for all sectors No funding gap = 2: OL/AOL budget for child protection is between 0% and 10% higher than the overall OL/AOL gap for all sectors.	Medium = 1	No funding gap = 2	+1	Medium = 1	No funding gap = 2	+1
Prevention and Response Services								
21. –% of adolescents who experienced sexual violence who reported their experience (in the past 12 months) (reported by adolescent, to anyone)								
Adolescent survey	Utilization	80% or more = 6 60-79% = 4 59% or less = 0	59% or less = 0	59% or less = 0	–	59% or less = 0	59% or less = 0	–
22. –In the last year, at least 10 children at risk have been identified and/or supported by community-based child protection mechanisms in the settlement? Yes/ No								
Key informant interviews, desk review	Services	Yes = 2 No = 0	Yes = 2	Yes = 2	–	Yes = 2	Yes = 2	–
23. Which of the following activities do the community-based child protection mechanisms do in this location? i. Identification of cases (Yes/ No) ii. Prevention and awareness campaigns (Yes/ No)								
Key informant interviews	Services	.5 for each yes Total possible: 1	i. Yes ii. Yes Total score: 1	i. Yes ii. Yes Total score: 1	–	i. Yes ii. Yes Total score: 1	i. Yes ii. Yes Total score: 1	–
24. % of adolescents who have used a community-based child protection mechanism for some form of support								
Adolescent survey	Utilization	60% or more = 2 59% or less = 0	59% or less = 0	59% or less = 0	–	59% or less = 0	59% or less = 0	–
25. Are there communal spaces that meet the Child Protection Minimum Standard for adolescents to meet? Yes/ No								
Key informant interviews/ verify visually	Services	Yes = 2 No = 0	No = 0	No = 0	–	No = 0	No = 0	–
26. % of adolescents who have attended school regularly in Terms 2 or 3 (recent school period)								
Adolescent survey	Utilization	80% or more attended school regularly = 5 60-79% attended school regularly = 2 59% or less regularly attended school = 0	60-79% attended school regularly = 2***	80% or more attended school regularly = 5	+3	80% or more attended school regularly = 5	80% or more attended school regularly = 5	–

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
27. Safe learning environment i. Do schools/informal learning areas have separate latrines for girls and boys? Yes/ No ii. Are schools/informal learning environments accessible for children with different types of disabilities? Yes/ No								
Key informant interviews	Services	Yes to 2 = 4 Yes to 1 = 2 Yes to none = 0	i. Yes ii. No Total score: 2	i. Yes ii. No Total score: 2	–	i. Yes ii. No Total score: 2	i. Yes ii. Yes Total score: 4	+2
28. % of adolescents reporting they feel safe at school all or most of the time								
Adolescent survey	Utilization	70% or more reporting safety all or most of the time = 5 50-69% reporting safety all or most of the time = 2 49% or less = 0	50-69% reporting safety all or most of the time = 2	70% or more reporting safety all or most of the time = 5	+3	More than 70% reporting safety all or most of the time = 5	More than 70% reporting safety all or most of the time = 5	–
29. Is there a complaints mechanism in place for adolescents in each settlement? Yes/ No								
Key informant interviews	Services	Yes = 2 No = 0	Yes = 2	Yes = 2	–	Yes = 2	Yes = 2	–
30. Are there clubs or committees with a 100% adolescent/youth membership in each settlement that have met in the last month? Yes/ No								
Key informant interviews	Services	Yes = 2 No = 0	No = 0	Yes = 2	+2	Yes = 2	Yes = 2	–
31. % of adolescents (who wanted to) participate in clubs or committees in the past year								
Adolescent survey	Utilization	70% or more = 4 50-69% = 2 49% or less = 0	50-69% = 2	50-69% = 2	–	50-70% = 2	49% or less = 0	–2
32. i. Are there technical and vocational activities (life skills training) for adolescents in each settlement? Yes/ No ii. Do these activities reach at least 20% of out of school adolescents each year?								
Key informant interviews, desk review	Services	Yes to both = 4 Yes to one = 2 No = 0	i. Yes ii. No Total score: 2	i. Yes ii. Yes Total score: 4	+2	i. No ii. No Total score: 0	i. Yes ii. Yes Total score: 4	+4
33. % of adolescents (who wanted to) participate in life skills training in the past year								
Adolescent survey	Utilization	70% or more = 4 50-69% = 2 49% or less = 0	49% or less = 0	49% or less = 0	–	70% or more = 4	50-69% = 2	–2
34. Are there sports or recreation activities organized by UNHCR or partners for adolescents? Yes/ No								
Key informant interviews and desk review	Services	Yes = 2 No = 0	Yes = 2	Yes = 2	–	Yes = 2	Yes = 2	–

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
35. % of adolescents (who wanted to) participate in structured recreation activities in the past year								
Adolescent survey	Utilization	70% or more = 4 50-69% = 2 49% or less = 0	50-69% = 2	50-69% = 2	–	70% or more = 4	70% or more = 4	–
36. Do adolescents have their own individual ID card? Yes/ No								
Key informant interviews and desk review	Procedures	Yes = 1 No = 0	No = 0	No = 0	–	No = 0	No = 0	–
37. % of UASC for whom a best interest process has been initiated or completed in the past year								
Key informant interviews and desk review	Procedures	High: 70% or more = 2 Medium: 50-69% = 1 Low: 49% or less = 0	High = 2	High = 2	–	High = 2	High = 2	–
38. Is there a BID panel that has met in the past two months? Yes/ No								
Key informant interviews	Procedures	Yes = 2 No = 0	No = 0	Yes = 2	+2	Yes = 2	Yes = 2	–
39. Are family tracing and reunification services available in this location? Yes/ No								
Key informant interviews and desk review	Procedures	Yes = 3 No = 0	Yes = 3	Yes = 3	–	Yes = 3	Yes = 3	–
40. What is the % of UASC for whom tracing has reached an outcome (positive or negative)? (2014)								
Key informant interviews and desk review	Procedures	80% or more = 1 79% or less = 0	79% or less = 0	79% or less = 0	–	79% or less = 0	79% or less = 0	–
41. What % of UASC are in appropriate and protective care arrangements?								
Key informant interviews and desk review	Services	High : >90% = 2 Medium: 70-89% = 1 Low: <69 % = 0	Me-dium: 70-89% = 1	Me-dium: 70-89% = 1	–	High : >90% = 2	High : >90% = 2	–
42. Are there any of the following support services for children with different disabilities available? i. Health services/ support (for example, provision of specialized medical care, provision of visual or hearing aids) ii. Psychosocial services/ support (for example, support groups, counseling, targeted recreational activities)								
Key inform-ant inter-views and desk review	Services	Both in place = 4 One in place = 2 Neither in place = 0	i. No ii. Yes Total score: 2	i. No ii. Yes Total score: 2	–	i. Yes ii. No Total score: 2	i. Yes ii. Yes Total score: 4	+2
43. Is emergency accommodation available for child survivors of sexual violence? Yes / No								
Key inform-ant inter-views and desk review	Services	Yes = 2 No = 0	Yes = 2	Yes = 2	–	Yes = 2	Yes = 2	–

Source	Area	Scoring system	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
44. Are there separate detention facilities available for children in conflict with the law who require detention? Yes / No								
Key informant interviews and desk review	Services	Yes = 1 No = 0	No = 0	No = 0	–	No = 0	No = 0	–
45. Are referral pathways for reporting violence and abuse clearly displayed around the settlement? Yes / No								
Key informant interviews and direct observation	Services	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–
Advocacy and Awareness Raising								
46. Are there awareness-raising activities that have been conducted within the last 6 months that are designed by adolescents.								
Key informant interviews and desk review	Services	Yes = 1 No = 0	No = 0	No = 0	–	No = 0	No = 0	–
47. Are there posters and other visual materials displaying child protection messages visible in the settlement? Yes / No								
Key informant interviews and desk review	Services	Yes = 1 No = 0	Yes = 1	Yes = 1	–	Yes = 1	Yes = 1	–

* Item scoring changed due to recalculation of T1 data

** Points are assigned based on a definition of fees as fees for tuition. As noted in the Findings section, some key informants (particularly in Kiryandongo) noted that functional fees were a barrier for refugee children attending school.

*** Funding gap is defined as the "gap between Operational Level (OL) and Above Operational Level (AOL) budget as per the operation's plan at the beginning of the year".

**** xxxx

Domain (possible points)	T1 Kiryandongo Score N=16	T2 Kiryandongo Score N=11	Kiryandongo Score Change	T1 Adjumani Score N=11	T2 Adjumani Score N=15	Adjumani Score Change
Utilization (30)	8/30*	14/30	+6	17/30	13/30	-4
Policies and procedures (35)	21/35	23.5/35	+2.5	23/35	23.5/35	+.5
Services (30)	20/30**	25/30	+5	21/35**	29/35	+8
Total	**49/100**	**62.5**	**+13.5**	**61/100**	65.5	+4.5

* Item scoring changed due to change in scoring of Item 26, from 0 to 2 at T1.

** one point was added to the services score at T1 in both Kiryandongo and Adjumani as Q.19 (burden on social workers) was coded incorrectly.

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Total score change for Kiryandongo between T1 and T2 was + 13.5 points. The strength of the child protection system in Kiryandongo changed from weak to moderate. Total score change for Adjumani between T1 and T2 was +4.5. The strength of the child protection system in Adjumani maintained as a moderate level.

Points – Total possible 100

- 81-100 indicates **HIGHLY FUNCTIONAL** child protection system
- 51-80 indicates **MODERATE LEVEL** child protection system
- 50 and below indicates comparatively **WEAK** child protection system

The following discusses three aspects of system strength between T1 and T2: stability, lack of improvement or decrease in strength, and improvement:

STABILITY

There are several components of the CPI that child protection actors would hope to see hold stable over time, and which indicate maintained system strength. Evidence of maintained system strength is reported in both Kiryandongo and Adjumani for a range of procedures: laws and policies in place to prevent statelessness, Uganda being a signatory of the 1951 Convention, laws and policies to prevent corporal punishment, policies in place to allow refugee children to obtain birth certificates, and agreed-upon criteria to identify at-risk children. Stability of several of the policies and procedures between T1 and T2 is expected, given many of the items assess specific laws and legal procedures that are unlikely to change over a short period.

In the area of services, several items also maintained across both settlements: at least 10 children at risk having been identified or supported by community-based child protection mechanisms, role of community-base child protection mechanisms

(identifying cases and running prevention and awareness campaigns), presence of a complaints mechanism for adolescents, and presence of sports and recreation activities for adolescents.

In the area of utilization, Adjumani maintained a high level of recent school attendance (more than 80%), high level of reporting of feelings of safety most or all of the time at school (more than 70%) and high levels of % of adolescents who wanted to who had reported participating in structured recreation activities (more than 70%).

LACK OF IMPROVEMENT

These were aspects of policies and procedures, services and utilization that were stable between T1 and T2, however, this stability indicates a lack of improvement in key child protection domains. These are domains in which system strengthening would entail improvement in achievements in these areas. In the area of services, in both Kiryandongo and Adjumani, there are still less than 50% of teachers who are women; as at T1, there are no communal spaces that meet Child Protection Minimum Standards in either settlement at T2. There was lack of improvement in some areas in utilization: the percentage of adolescents who reported having experienced violence (in the survey) who indicated that they report their experience is less than 60% and the percentage of adolescents who utilized a community-based child protection mechanism is less than 60% in both refugee settlements. In the area of procedures, in both refugee settlements all adolescents do not have their own ID card, as at T1.

There were also some areas of decline of system strength. The monthly number of cases needing urgent follow-up for social workers did not exceed 25 in either settlement at T1, but was more than 25 in both settlements at T2; key informants reported that this was directly related to the influx, and the stretched capacity of humanitarian organizations. In both settlements, two areas of procedures were reported to have declined: key informants reported that there was no longer an information-sharing

TEXTBOX 6:

FOLLOW-UP FINDINGS

The impact of the recent influx of refugees from South Sudan on child protection system strength in Kiryandongo and Adjumani:

Key informants discussed impacts of the refugee influx on quality of services, coordination and overall strength of the child protection system in both Adjumani and Kiryandongo, noting pressures on the child protection system, as well as some positive impacts. Key informants in both Kiryandongo and Adjumani noted that the influx put pressure on the capacity of implementing partners to deliver child protection activities and services, and that lack of trained staff was a challenge. A staff member of an implementing agency in Kiryandongo explained, "*staff remained the same, daily activities such as home visits reduced because all staff were busy at the reception centre capturing information on the separated children.*" Another implementing partner staff member in Kiryandongo noted, "*There was pressure exerted on the persons in child protection, and they needed more manpower to handle the new people who came in.*" A staff member of an implementing partner organization in Kiryandongo explained that staff members were redirected from existing programmes towards the emergency response, describing the situation as such:

> *"they realised that the number of children was overwhelming e.g. the number of girl children became bigger even for the senior women teachers at school to handle. As such they realised a need to co-opt other people to provide services. It also led to many meetings which in turn delayed the existing programmes. There were so many meetings to address issues to do with the influx, planning meetings, capturing the data of new refugees, to take stock of how many new refugees to enable them respond to their needs."*

A child protection implementing agency staff member in Adjumani concurred, explaining, "*With the coming of the refugees, we have seen a lot of diversion in terms of different actors; the old settlements have now been forgotten.*"

Key informants also discussed the impact of the influx on coordination of child protection activities and services, and between agencies with responsibility for different aspects of child protection. Several key informants noted that while there had been challenges to coordination, for example, a UNHCR staff member in Adjumani reflected,

> *"It affected coordination among partners. We were all focusing on saving lives and ensuring people got where to stay, and as thus some [child protection] cases were double captured by different partners."*

A staff member of an implementing agency in Kiryandongo noted the negative impact of the influx on coordination, saying

> *"The influx affected the strength of the child protection system because we even missed biweekly meetings and meetings with child protection committees, coordination was affected yet that is where they identify cases, discuss them for management."*

However, the influx also provided a platform for improved coordination. An implementing agency staff member in Adjumani concurred, saying:

> *"Previously, issues of children were not looked into seriously, now partners have put in more human resources for easy follow up, coordination on issues of children. We used to have meetings once a month by the Child Protection Working Group, now it is weekly. The influx has in a way improved coordination on issues of children. Overall, networking and coordination have increased and improved."*

Overall, impacts on quality and availability of child protection services and activities were noted, as one staff member of an implementing agency in Adjumani explained,

> *"There are very many children and adolescents now which explains why some services have improved and others not. The numbers are overwhelming. Yes, the services are there but they cannot meet all needs of all the children hence a gap as a result of challenges of services not reaching some of them."*

Key informants widely agreed that quality of services to refugees who had been in Uganda prior to the recent influx had been affected, at least in the short-term.

Yet, positive changes and child protection system strengthening was also noted. As described above, after initial challenges, coordination – in terms of frequency of meetings, and quality of information sharing – improved due to the practices initiated due to the influx. The influx generated more donor interest, and more funding, for child protection; a staff member of an implementing partner organization in Adjumani explained that the child protection system "*has strengthened it because the influx has made people change strategies. In the past many programs were not directed towards child protection but now many are directed towards that.*" Several key informants in Adjumani agreed, for example, a UNHCR staff member reported that the influx

> "*brought in more attention from the partners. We have emergency response that came across and this came with specialists who came with different ideas. Some of the partners also have their global emergency response that we learnt to enrich our work.*"

The CPI Study in Uganda was conducted in the midst of the emergency response to the crisis in South Sudan. The follow-up research phase documented the multiple and overlapping impacts of the influx on child protection system strength, including capacity, quality of services, and coordination, and on child protection outcomes, including violence against children and psychosocial well-being.

protocol, which had implications for registration of child protection cases during the emergency. In addition, key informants also reported a change in the item assessing whether there is a child protection strategy that has been developed with the participation of child protection actors. In Adjumani, two areas of utilization showed a decrease: the percentage of those adolescents who wanted to participate in clubs and committees, and did participate, declined from 65.2% at T1 to 46.8% at T2, as did the percentage of adolescents who wanted to participate in life skills trainings, and did participate, which decreased from 76.1% to 57.3%.

IMPROVEMENT

Some areas of policies and procedures, services and utilization saw improvement between T1 and T2. For example, in Adjumani, key informants reported that children no longer had to pay for books and uniforms. In both Kiryandongo and Adjumani, there was improvement in policies in place to enable refugee children to enroll without discrimination at primary and secondary education levels. In the area of services, in Adjumani, there was improvement in provisions for a safe learning environment – the overall score for this domain in Adjumani improved from 21 to 29 out of 35, a significant achievement in the context of the stress on the child protection system due to the increase in refugee numbers. In Kiryandongo, presence of clubs and committees for adolescents was an improvement, and in both settlements, improvement in provision of technical and lifeskills training activities was seen between T1 and T2. In Kiryandongo, a BID panel has been held in the past 2 months (at the time of data collection), an improvement from T1, and in Adjumani, there are psychosocial support activities for children with disabilities. In the area of utilization, a proxy for service quality, there was significant improvement in some areas in Kiryandongo, which may be a particular achievement in strengthening of the child protection system, given this improvement occurred in the context of the emergency response. In Kiryandongo, the percentage of adolescents reporting that they had attended school regularly in the most recent school period increased, and the percentage of respondents who reported feeling safe at school all or most of the time increased from 67% to 78.6%.

TEXTBOX 7:

FOLLOW-UP FINDINGS

The impact of the recent influx of refugees from South Sudan on child protection outcomes in Kiryandongo and Adjumani:

Analysis of data from focus group discussions and key informant interviews conducted during the follow-up research phase indicates three main concerns that are related to child protection outcomes: the impact of the influx on food rations, hunger and household well-being; impacts on education, and impacts on prevalence of violence against adolescents.

Impact on food rations, hunger and household well-being:

Caregivers and adolescents reported the significant cuts to food rations due to the increase in new arrivals of refugees, and identified a number of key impacts of this reduction in food rations on health and well-being. For example, in a focus group discussion in Adjumani for female adolescents between 16-17 years old, an adolescent noted that,

> *"Life has become worse…the budget they [international organizations] had for us has been reduced and shared with the new refugees which has made our lives difficult as we don't have the excess [food] we used to sell to cater for our other needs."*

Caregivers in a focus group discussion in Adjumani noted,

> *"Their lives [adolescent refugees] have changed since the reduction of food ration, they move to school hungry and when they get back home there is no food thus poor feeding condition."*

Cuts to food rations were seen to have resulted in hunger, as well as overall reduction in household well-being, as refugees were no longer able to sell excess food rations to meet other needs. Caregivers also connected the reduction in food rations to decreased engagement in education, as adolescents are not able to concentrate on school when they are hungry.

Impacts on education:

Caregivers and adolescent refugees reported that the influx of refugees had positive and negative impacts on quality and accessibility of education. While access to education was perceived to have improved overall (confirmed by the quantitative findings from the T1/ T2 comparison), many caregivers and adolescents reported reductions in quality of education, including overcrowding of classrooms and high ratios of students to teachers, reducing the quality of the learning environment. Caregivers in a focus group discussion in Adjumani explained,

> *"The problem we are facing is education because our children go to school and end up playing with others instead of studying due to their large numbers which makes the teachers fail to control them."*

> *"This rampant increase of refugees has made children overcrowded in school. They go running from home because if they delay, they will not find where to sit. Overcrowding has also made learning in school difficult because it's hard for one teacher to teach many pupils."*

Impact on prevalence of violence:

Caregivers and adolescents reported an increase in levels of violence against adolescents associated with the recent influx of refugees. Some reasons for this increase included overcrowding and decline in access to key basic needs. For example, a caregiver in Adjumani noted, "*the current food shortage has led to random movement, for example, in market places, where people end up stealing and they are beaten.*" Refugees perceived overcrowding in schools as leading to increased use of violence against students by teachers, and violence between students. A respondent in a focus group discussion of adolescent males between 16-17 in Adjumani explained,

> *"There are many punishments administered by teachers due to the congestion of children that stresses them and they cane children heavily. Congestion has been brought about by the new refugees."*

Refugees reported decreases in household income due to reduced food rations, and this was also perceived to be related to key child protection risks, such as early marriage. An adolescent girl in a focus group discussion of 16-17 year olds in Adjumani noted,

> *"Our parents also force us to get married at an early age, when they see a rich man who has come from South Sudan with a lot of money, they force us to get married to them because they want money from those rich men."*

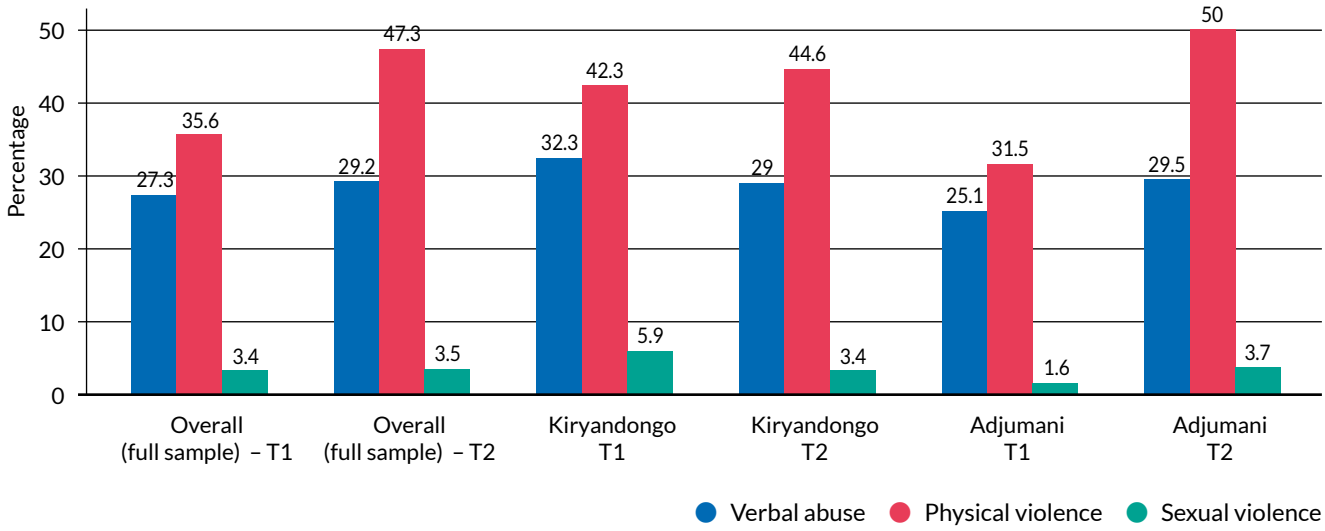
Caregivers and adolescents also attributed the increase in violence to the behaviors of the refugees coming recently from South Sudan, who had been exposed to violence as a way of addressing problems or interacting with others from different tribes in the recent conflict. Increases of teenage pregnancy were also reported. For example, in a focus group discussion with adolescent girls aged between 13-15 in Kiryandongo, a respondent explained,

> *"There is a high level of teenage pregnancy since people are very many here, so instead of waiting at the borehole through the long queue adolescent girls end up going to their boyfriends…. Teenage pregnancy has increased; many people have come to the camp and there are many boys who distract girls and make them pregnant."*

3.2 Demographics

Table 7 in Appendix 3 displays T2 sample demographics and changes in sample demographics between T1 and T2. Some findings include that there was a significant increase in adolescent respondents who reported that neither of their parents was alive (11.9% at T1, 16.3% at T2, $p<.05$); this increase was driven by the sample in Adjumani, where 3.1% of respondents at T1 reported neither parent being alive compared to 16.1% at T2 ($p<.001$). Across the full sample, at T2, 16.3% reported having neither parent alive (compared to 11.9% at T1); 30.5% reported having only their biological mother alive (compared to 29.2% at T1); 6.6% reported having only their biological father alive (compared to 7.8% at T1), and 46.7% reported having both biological parents alive, compared to 51.1% at T1, a change that was primarily driven by differences in the sample in Adjumani, which reported a significant increase in proportion of adolescents with no biological parents alive (T1: 3.2%, T2: 16.1%), and reduction in proportion reporting having both parents alive (T1: 58.6%, T2: 44.2%). There was a significant reduction of adolescents reporting that they have their own ID card or formal documentation, from 89.7% overall at T1 to 68.9% overall ($p<.001$). Recent school attendance was significantly higher across the full sample and each refugee settlement, for example, increasing from 77% at T1 in Kiryandongo to 85.4% at T2 ($p<.05$).

Graph 4: Change in overall verbal, physical and sexual abuse



3.3 Violence and abuse

Questions regarding exposure to violence and abuse were asked focusing on lifetime prevalence (whether a respondent had ever experienced an event), and past year exposure (using last South Sudanese Independence Day as the recall date selected for the survey (see Appendix 1 for further discussion)). Results here focus primarily on lifetime prevalence questions, given they do not depend on respondents' recall and are likely more inclusive of experiences of violence. At T2, 56.6% (n=432) of respondents reported having experienced any form of violence, with 35% of the full sample (n=267) reporting that this had happened since last South Sudanese Independence Day. 47.3% (n=361) reported having ever experienced any form of physical abuse, with 20.1% (n=153) reporting this having happened in the past year. 3.6% (n=27) reported ever having experienced any form of sexual violence, with 2.8% (n=21) reporting this having happened in the past year. 29.2% (n=223) reported ever having experienced any form of verbal abuse, with 20.8% (n=159) reporting this having occurred in the past year.

Changes in lifetime exposure to specific types of violence and abuse between T1 and T2 are displayed Appendix 3 (Tables 8 and 9), and Table 10 shows the changes by gender and Table 11 shows the changes by parental status. Significant changes by type of violence for the overall sample were not identified for forms of sexual violence or witnessing violence in the home, whereas there was a statistically significant increase in forms of verbal abuse (for example, an increase of respondents reporting having been screamed at loudly or aggressively, from 11.5% at T1 to 17.9% at T2, $p<.05$), and in some forms of physical violence, for example, having ever been hit, beaten or spanked in the home increased from 13.3% to 22.1% ($p<.001$).

Comparison of T1 and T2 findings by site indicates that there were some increases in specific exposures in Adjumani but not Kiryandongo. For example, at T2, 14.1% of adolescents in Adjumani reported ever having seen adults in their home physically assaulting each other, compared to 6.8% at T1 ($p<.05$). Table 9 in Appendix 3 shows that these increases were seen across a number of physical and verbal assault items in Adjumani, suggesting that overall significant increases in physical and verbal abuse for the full sample are driven by changes in Adjumani, whereas levels of specific items stayed the same or reducing slightly (non-significantly) in Kiryandongo between T1 and T2.

In focus group discussions, caregivers emphasized that violence against adolescents only happens in schools and in public places in the settlements, and not within households. However, the quantitative data indicate this to not be the case; exposure to violence within the household continues to be a child protection concern for adolescents in both Adjumani and Kiryandongo. For example, at T2, more than 20% of adolescents reported having been hit, beaten or spanked at home. Follow-up research indicated that caregivers perceive that proper discipline of children requires some use of violence, and that this form of violence is not considered as harmful for adolescents. For example, as a caregiver in a focus group discussion

in Adjumani explained when asked about how violence used as a form of discipline affects adolescents:

> *"Beating a child is just disciplining and they gain some moral uprightness. So it affects their life by making them morally good."*

The same respondent continued that laws in Uganda guide them to reduce their use of violence as a form of discipline,

> *"Before we came here, when we were in our motherland, we used to cane them and tell them that indiscipline is bad, we also talked to them but those children who cannot change are called and beaten. When we came here, whenever we beat them we are arrested and we are told that we are violating them, so now we just talk to them."*

These laws against use of violence as a form of discipline were viewed as problematic by some caregivers, resulting in disorder and increased violence within the broader community, as adolescents misbehave and get into fights when they are not adequately disciplined. For example, as a caregiver in Adjumani explained,

> *"When we were in Sudan, when children go wrong we beat them but here in Uganda they don't allow us to beat them, thus causing violence like fighting."*

Some caregivers noted that it is the role and responsibility of a caregiver to discipline their child, including using violence, if needed. A caregiver in a focus group discussion in Adjumani explained,

> *"Beating a child is way of disciplining them. Like I said, when the child is beaten for doing wrong he or she will not do anything wrong even if I as a parent am not at home."*

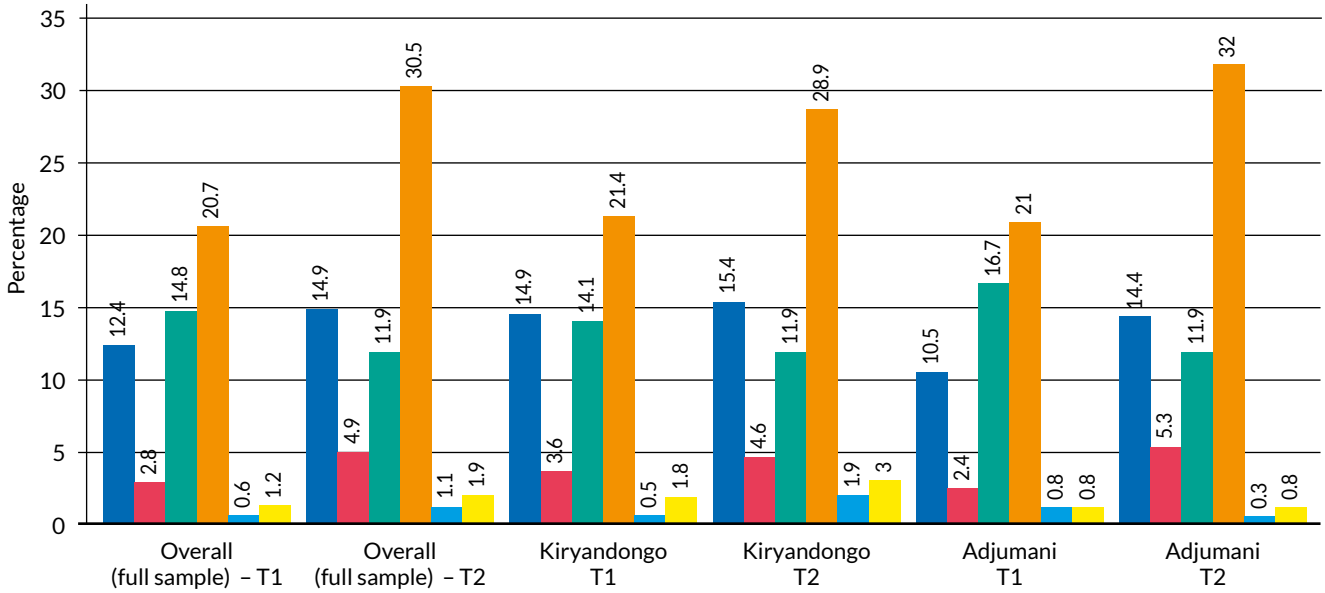
Other caregivers explained that they had been exposed to different ideas as refugees in Uganda, and encouraged to use alternate means of discipline, including explaining how to behave and talking about problems with adolescents; for example, a caregiver in Adjumani noted, "*In case the child repeats the same mistake, still there is no need for you to cane but you use other measures like talking to the child.*" Nonetheless, it appears that caregivers have the perspective that their role in educating adolescents regarding proper behavior and actions includes use of physical violence.

Quantitative findings regarding caregivers' perspectives on the acceptability of physical violence as a response to specific contexts confirms widespread agreement with the use of violence against children in these contexts. Levels of caregivers' attitudes towards the acceptability of use of physical violence against children in different contexts indicated high, but varying, endorsement of physical violence against children. At T2, high levels of endorsement of the use of physical violence included the following contexts: if a child uses drugs or alcohol (83.8%, n=627), if a child is engaging in sex work (81.7%, n=611), if a child steals (86.2%, n=645), and if their child does not want to go to school (73.9%, n=553). The context least often endorsed as indicating an acceptable use of physical violence against children was that of if a child refuses to get married (15.4%, n=115). Changes in views of physical violence against children as acceptable in various contexts primarily reflected increases in endorsement of violence; for example, at T1, 76.6% agreed that it was acceptable to beat a child if they engaged in sex work, and at T2, this increased to 81.7% ($p<.05$) and at T1, 45.0% of caregivers reported that it was acceptable to beat a child if they wet their bed, which increased to 52.4% at T2 ($p<.05$).

Other factors associated with prevalence of violence against adolescents were explored in the follow-up research. Qualitative data indicate that some of these factors include impacts of the influx of new refugees to both settlements, such as overcrowding, increased competition over limited resources, and behavior of new arrivals, perceived to be influenced by recent exposure to violence in South Sudan. For example, in a focus group discussion in Kiryandongo with adolescent boys aged between 13-15, a respondent explained,

> *"The coming of new refugees has increased fighting and people are almost killing one another. Children are always fighting from the play grounds and this is because the new arrivals were used to fighting in South Sudan and they came with the same manners here… Those new arrivals' minds are always full of fighting and they are not used to the way we are living here. They beat children randomly at the water points, even at child friendly spaces."*

Grap 5: School violence – change in specific items between T1 and T2, overall and by site



- During the past term, have you been hit, pushed, kicked or shoved on school property?
- Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?
- Have you been screamed or yelled at very loudly or aggressively at school?
- Has a teacher ever punished you by hitting or beating you?
- Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?
- Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?

In Kiryandongo, in particular, refugees reported a spill over of conflict between the Dinka and Nuer from the conflict in South Sudan, for example, an adolescent male Dinka refugee, in a focus group for 16-17 year olds, explained that,

> *"If your mother, father or Guardian sent you on the way, they [other refugees] will ambush you and they ask you the president you are supporting, and when you tell them the person who is not their choice they beat you up."*

A caregiver in a focus group discussion in Adjumani noted,

> *"These people have come with bad practice of fighting the children like fighting with the children who they have found here yet we had good relationship with the community around here. Some of the people like the new refugees have misunderstanding with old settlers. They have transferred the conflict from South Sudan to Uganda and children fight everyday because the new comers are used to fighting."*

Congestion due to the influx was also noted as a reason for an increase in violence against adolescents. A caregiver in Adjumani described the situation as such:

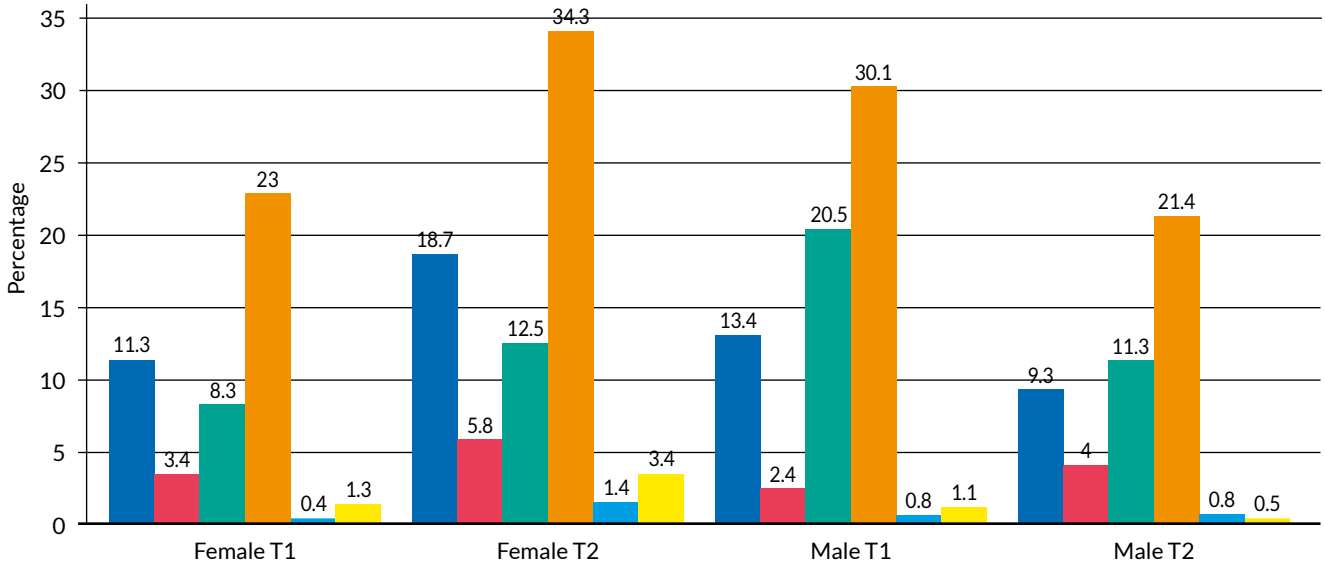
> *"There is more fighting among adolescents this year compared to last year because of the overwhelming population that leads to congestion everywhere like borehole, school, and food distribution points."*

A key informant working for an implementing partner agency in Adjumani explained,

> *"Most of the public places are congested like the boreholes and young children may be beaten by the old people. Even at the market place children might be beaten."*

Key informant interviews also reflected widespread perceptions that the influx had led to an increase in violence, including violence against adolescents, with key informants identifying a number of key factors for the increase in violence: violence between new arrivals and refugees who had already been in the settlements in Uganda, often due to conflict

Graph 6: School violence – change in specific items between T1 and T2, gender



- During the past term, have you been hit, pushed, kicked or shoved on school property?
- Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?
- Have you been screamed or yelled at very loudly or aggressively at school?
- Has a teacher ever punished you by hitting or beating you?
- Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?
- Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?

over resources; violence inflicted on adolescents by caregivers due to stress within households caused by reductions in food rations and other services; and violence instigated by new arrival adolescents, many of whom are unaccompanied and separated children, due to recent traumatic experiences and current high levels of stress experienced.

Table 11 in Appendix 3 shows analysis of violence outcome changes between T1 and T2, and indicates that some changes were associated with biological parent status. For example, there was a significant change in reporting of having been screamed at loudly and aggressively in the household by adolescents with no living parents (T1: 7.5%, T2: 24.2%, $p<.05$) and with one only living parent (T1: 11.9%, T2: 19.8%, $p<.05$), while for some other exposures adolescents with both biological parents living reported increases in exposure (for example, having seen someone in the home use weapons, T1: 1.9%, T2: 5.4%, $p<.05$). Reporting of physical violence by a teacher was significantly higher at T2 than at T1 for adolescents with no living parents (T1: 13.3%, T2: 30.3%) and for adolescents with only one living parent (T1: 18.9%, T2: 30.9%, $p<.05$). Patterns of changes of exposure to violence according to biological parent living status indicates some trends towards greater vulnerability of adolescents with no or one living biological parent compared to adolescents with both living parents, however, this trend was not the case for all violence exposures, and for the majority of violence exposures, parental living status does not appear to confer additional vulnerability to exposure and is not associated with differences in changes between T1 and T2.

Quantitative analysis included exploration of changes in exposure to forms of violence between T1 and T2 by gender, given the hypothesis that gender influences risks for violence amongst adolescents in this context. Table 10 in Appendix 3 displays this analysis. There were no consistent patterns across all violence items by gender; there was a slight trend towards decrease in exposure for girls (for example, girls reporting that they had ever been hit, beaten or spanked with a hand in the home decreased from 31.2% at T1 to 25.4% at T2, $p<.001$), but increases in forms of school violence (physical assault on school property, hitting or beating by a teacher). Girls reported increases in physical assault in public spaces (T1: 5.1%, T2: 11.1%, $p<.05$),

whereas the counter trend was seen for boys (T1: 11.7%, T2: 6.7%, p<.05).

In follow-up research, adolescents disagreed as to whether girls or boys were more vulnerable to violence. In some cases, adolescents report that girls were more at risk and more impacted by violence, for reasons including that girls can get pregnant due to sexual violence, which can result in school drop-out and stigmatization, that girls face more physical violence as a form of discipline as caregivers are concerned that girls should represent their families well and display good behavior, and that girls' physical vulnerability means that they can be seriously harmed by violence; as a male caregiver in Adjumani explained,

> *"I have witnessed certain things that the girls are subjected to. Some have misunderstandings with the boys in school and while on the way from school they may fight with them. Since the girls are weak in nature, boys may harm them seriously and this makes us worried about them."*

However, others perceived boys to be more at risk, for various reasons, including that girls are actually more protected as they are not allowed to move around on their own and are expected to stay at home; as a male adolescent in a focus group discussion in Adjumani explained, girls' "*work is to cook food, wash utensils and clean the house. Boys are the ones who move.*" This is perceived as resulting in girls being safer than boys, who move around the settlement, interact with boys from different ethnic backgrounds in playgrounds and in other public spaces, and who can be expected to respond to threats of violence with actual violence, thus escalating conflicts. The quantitative findings from this study do not indicate strong patterns in terms of the gendered nature of violence risk in Adjumani and Kiryandongo refugee settlements, and the qualitative findings indicate varying perceptions regarding how gender operates as a risk factor for violence against adolescents.

There were some significant increases in forms of school-violence, for example, in both Adjumani and Kiryandongo, there were significant increases in adolescents reporting that they had a teacher punish them by hitting or beating them. In the full sample, there was a significant increase in adolescents reporting having been hit or beaten for punishment by a teacher, from 20.7% at T1 to 30.5% at T2 (p<.001). In Adjumani, at T1, 21.0% reported having had a teacher punish them by hitting or beating, and this increased to 32.0% at T2 (p<.05); in Kiryandongo, similarly, at T1, 21.4% reported having had a teacher punish them by hitting or beating, and this increased to 28.9% at T2 (p<.05). There was a gendered dimension to these changes in exposure to violence at school; between T1 and T2, girls were statistically significantly more likely to report having been physically assaulted on school property (T1: 11.3%, T2: 18.7%, p<.05), and were significantly more likely to report assault by a teacher (T1: 23.0%, T2: 34.3%, p<.05).

Concerns regarding teachers' use of violence against children, and overcrowding at schools due to the increase in numbers of refugees, were expressed by caregivers and adolescents in the follow-up research.. A caregiver in a focus group discussion in Adjumani explained,

> *"Some teachers in schools also beat children and some children have big wounds because of caning."*

Another caregiver noted that one of the causes of tension between teachers and students is that teachers are from the host community, leading to cultural and linguistic misunderstandings:

> *"We also fear teachers because the majority are from the host community. Sometimes when child goes to inquire about something they didn't understand in class, these teachers are harsh they may end up slapping the child."*

Differences in ethnic background between the teachers and refugees was perceived by some refugees as a reason for violence against adolescents in schools, for example, a male adolescent in a focus group discussion for 13-15 year olds explained,

> *"Caning has become intensive [at school] because last year we had some Dinka teacher, and now Madi (the host community) teachers are the ones teaching and they can kick, beat and even box."*

Follow-up research indicated that over-crowding and relationships between teachers and adolescents perceived as the primary factors leading to violence in schools.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3.4 Sexual and gender-based violence – prevalence and reporting

In the area of any form of sexual violence, there was very low reporting of exposure across all items focused on sexual violence, for example, 3.0% (n=22) reported having been physically forced to have sexual intercourse against their will in the past year, and 0.7% (n=5) reported having been pressured or persuaded to have sexual intercourse against their will in the past year. Reasons for low reporting within the context of the study are discussed in Textbox 8, based on follow-up research exploring perceptions of sexual violence amongst caregivers and adolescents. Even using the format of anonymous reporting, levels of reporting were low; 7.3% of the full sample reported any form of sexual violence ($p<.05$) and 10.8% reported any form of physical violence, showing a significant decrease between T1 and T2 (for sexual violence, T1: 11.3%, T2: 7.3%, $p<.05$; for physical violence, T1: 16.1%, T2: 10.8%, $p<.05$). In Adjumani, at T1 12.9% (n=32) anonymously reported a sexual assault to our interviewers, at T2 that decreased to 7.4% (n=28) ($p=0.022$). In Kiryandongo, at T1 27.7% (n=61) anonymously reported physical abuse to our interviewers, at T2 that decreased to 10.4% (n=40) ($p<0.000$). These findings indicate that the anonymous form of reporting seems to encourage reporting of sexual violence but reduce reporting of physical violence.

Formal reporting of physical or sexual violence remained low. Of the 22 respondents who indicated having experienced sexual violence, 54.5% told someone about their experience (see Table 3 below). Data also indicated that adolescents were most likely to feel comfortable seeking help from their mother (22.2%) or police/ someone in the security sector (19.5%) for a friend or acquaintance who was sexually victimized, however, comparison of T1 and T2 findings indicated a general trend towards lower endorsement of seeking help (for example, proportion of adolescents reporting that they would feel comfortable seeking help from a friend reduced from 15.6% at T1 to 10.4% at T2, $p<.05$).

TEXTBOX 8:

FOLLOW-UP FINDINGS

Perspectives on sexual violence in Kiryandongo and Adjumani

These findings may reflect a true low prevalence of sexual violence against adolescents in Kiryandongo and Adjumani refugee settlements. However, the research team also wanted to explore other potential reasons for low levels of reporting, including stigma against reporting sexual violence to the data collectors in the course of the survey. Data concerning SGBV are generally perceived to be affected by under-reporting of experiences of sexual violence, and this may particularly be the case when respondents are asked directly about their own experiences. A study conducted in refugee settlements in Adjumani and Arua settlements in Uganda indicated that 90% of respondents believed that some community members did not report SGBV experience for multiple reasons, including stigma and perception of SGBV as a private matter (Agency for Capacity Building 2016). The follow-up research phase therefore included questions in focus group discussion designed to elicit perceptions of and perspectives on sexual violence in the two refugee settlements, while framing the questions in terms of general opinions, rather than asking about direct experiences.

In focus group discussions with caregivers, the vast majority of respondents stated that there is no sexual violence in the refugee settlements, citing cultural norms against sexual violence. For example, one caregiver explained that cultural norms protect against sexual violence, noting that sexual violence "*is not there because in our culture a girl is married at the age of 18 years.*" In response to a question probing on the types of violence adolescents may experience in the settlements, a caregiver in a focus group discussion in Adjumani responded regarding sexual violence, "*It has never happened here, we have never heard about it.*" Another respondent in the same focus group noted that their lack of knowledge of sexual violence was not because it was not reported: "*The issue of sexual violence can't be hidden because it's immoral, so people don't risk because of the penalty that will be imposed on them.*" Caregivers also explained that sexual violence does not exist given understanding and knowledge of the punishments for perpetrators of sexual violence. A caregiver in Adjumani explained, "*We have never heard any issue of sexual violence because security is tight.*"

Despite the widespread agreement amongst caregivers that sexual violence against adolescents is non-existent, there were a limited number of instances in which risks of sexual violence were noted by caregivers; in particular, increased interactions with the Ugandan host communities (due to adolescent having to travel further to collect firewood and water) were perceived as a potential risk for sexual violence; one caregiver in Adjumani explained, "*Sexual violence is not common but currently people cannot go to the nearby bush that belongs to the host community because they are chased and threatened to be raped.*"

Perspectives from adolescent refugees themselves were more mixed; overall, the majority reported that there is no sexual violence, or none that they have heard of, for example, saying "*it doesn't happen here*" in response to any questions focused on sexual violence. However, in some female-only adolescent focus groups, girls acknowledged that there are risks of sexual violence and coercion. For example, in a focus group discussion in Adjumani, a girl explained, "*when young men meet us they want to take us to their home and if we refuse, they take us by force.*"

The majority of caregivers and adolescents were unable or unwilling to acknowledge the existence of sexual violence against adolescents. This cultural and normative environment likely significantly influences levels of reporting of sexual violence. The levels of sexual violence reported by adolescents in the survey component of the CPI Study in Uganda should be understood in light of what is likely significant under-reporting.

Table 3. Change in adolescent reporting of most recent sexual abuse that occurred within the past year

Question	Baseline, T1	Follow-up, T2	Change
	N (%)	N (%)	p-value
Did you tell anyone about most recent physically forced sexual intercourse?			
Yes	10 (66.7)	12 (54.5)	0.461
No	5 (33.3)	10 (45.5)	
Did you tell anyone about most recent psychologically forced sexual intercourse?			
Yes	3 (42.9)	1 (25.0)	*0.530
No	4 (57.1)	3 (75.0)	

Notes. * Fischer's exact test run due to small cell values.

Data from the follow-up research phase documents multiple barriers to reporting violence victimization, and for sexual violence in particular. Cultural norms around sex, sexuality, and sexual violence in the refugee communities in Adjumani and Kiryandongo refugee settlements are such that discussion of sexuality, and even more so, sexual violence, is strongly discouraged. A refugee leader, interviewed as a key informant in Adjumani, summarized:

> *"In South Sudan, the culture says that we do not say anything to do with sexuality – it is very secret, sexual issues are not supposed to be told to anyone. It is there in our culture."*

A key informant in Kiryandongo noted,

> *"Culture is a big issue here – sexual violence is taking place but they [refugees] conceal the cases because in their culture they do not talk about it…I think they train the girls to conceal this as it is not something they discuss with other people."*

The stigma of sexual violence is associated with perceptions of a girls' value in society, and ability to make a good marriage in the future. In a key informant interview in Kiryandongo, a staff member of an implementing partner explained,

> *"According to the South Sudan culture, issues to do with sex are not talked about and if a girl is raped she may not get a chance of getting married again as she is considered not worth anything. The rather say that they [the boy and girl] agreed and then marriage arrangements are made."*

Some key informants noted that the barriers to reporting only operate in cases of sexual violence. As a key informant working at an implementing agency in Adjumani explained, "*For beating or any physical violence, they [adolescents] tell people but may be if they are forced to have sex they might not mention it because of fear of shame.*" Another key informant in Adjumani concurred: "*For physical abuse, they [adolescents] may tell someone but sexual abuse they don't tell.*"

Table 4. Change in who adolescents would feel comfortable seeking help from if friend or acquaintance were sexually victimized

Relation	T1	T2	Change
	N (%)	N (%)	p-value
Mother	145 (28.7)	169 (22.2)	**0.008**
Father	64 (12.7)	75 (9.8)	0.113
Other relative	99 (19.6)	72 (9.4)	**<0.0001**
Friend	79 (15.6)	79 (10.4)	**0.005**
Teacher/Principal	30 (5.9)	15 (2.0)	**<0.0001**
Religious leader	36 (7.3)	29 (3.8)	**0.009**
Health care provider / doctor / nurse	71 (14.1)	28 (3.7)	**<0.0001**
Traditional healer	24 (4.8)	18 (2.4)	**0.020**
Police/someone from security sector	173 (34.3)	149 (19.5)	**<0.0001**
Counselor	25 (5.0)	45 (5.9)	0.470
Community leader	57 (11.3)	69 (9.0)	0.191

Notes. **Bold** indicates statistically significant finding, p<0.050.

The possibility of violence between victim and perpetrators' families was cited as another barrier to reporting, for example:

> *"When they [female victims of sexual violence] report to their brothers, they will attack the boy who forced the girl and kill him. So they [girls] decide to keep quiet" (focus group discussion for male adolescents, 13-15, Kiryandongo).*

According to caregivers in Kiryandongo,

> *"When some ones daughter is raped by a man she may keep quiet because they know that when they report to any person they might cause a fight between the two families and parents may kill one another."*

Some key informants noted that caregivers and community leaders can themselves act as barriers to reporting. A staff member working for an implementing agency in Adjumani explained that even if an adolescent does report to their caregiver, the caregiver may discourage reporting, noting the perceptions of caregivers that reporting sexual violence will impact their child's status in society:

> *"Even a parent may not come up [report] because of the culture in that when they say publically that they were sexually abused, they think their child might lose value and may not get a man to marry them and bring them cows in future so they are encouraged to keep quiet."*

Another implementing partner staff member in Adjumani noted the role of refugee community leaders in discouraging reporting:

> *"They [community leaders] often times feel that sexual abuse is a minor case and they can handle at the family level without reporting. This could be the reason why some of the cases might not be known to the implementing partners."*

A caregiver in Kiryandongo noted,

> *"In our culture a girl is equivalent to wealth in for of cows and if a man rapes a girl, he is bound to be killed. That's why they [caregivers] convince them [girls who were victims of sexual abuse] and they keep quiet. A parent will just see a daughter pregnant and they decide to settle the matter locally."*

Adolescents also reported perceptions that telling caregivers about their own experiences of violence would result in negative consequences. For example, a respondent in a focus group discussion of males, 16-17 years old, in Adjumani explained, "*we fear being beaten by parents. When you report that you were fighting, you may end up being beaten more.*" Some caregivers concurred that physical violence inflicted by caregivers could result from reporting, for example, a caregiver in Adjumani noted that the main barrier to adolescents reporting is that "*They fear that they will be beaten by their parents.*"

Other barriers reported by key informants, in particular, indicate problems with service quality, and in particular, lack of perceived outcomes or results due to reporting. For example, a staff member in Adjumani explained,

> *"I think that the system needs to be seen working because some cases end up being thrown by police before reaching court. This is because they lack statements to back them up and this discourages people from reporting. We need to improve on ensuring that justice is done."*

For refugees, the primary barrier related to service quality was language, affecting knowledge of services and willingness to use services, wherein even if an adolescent was aware of services, and willing to report experiences of violence, they perceived language barriers as an obstacle. In a focus group discussion with female adolescents, 13-15 years old, in Adjumani, respondents explained:

> *"Many people don't know where to report due to language barrier because even if we go to report but we don't know the language to speak we go and stay there the whole day and nothing is done for us."*

> *"Because of translation problem we can't report and even struggle to report because even if we go to police people tend to translate what we tell them differently, so why should we struggle to go to report?"*

Table 5. Change in psychosocial well-being, mean and by site

Psychosocial well-being outcome	T1	T2	Change	Adjumani			Kiryandongo		
				T1	T2	Change	T1	T2	Change
Adolescent	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**
SCARED	2.2 [2.5]	1.6 [1.9]	**0.001**	1.1 [1.8]	1.2 [1.8]	0.5615	3.5 [2.6]	1.9 [2.0]	**<0.0001**
MFQ	8.1 [6.4]	6.9 [5.7]	**0.0002**	7.2 [6.3]	6.6 [5.4]	0.1728	8.7 [6.3]	7.1 [5.9]	**0.0021**
Children's Hope Scale	7.2 [3.5]	7.8 [3.5]	**0.0029**	6.6 [3.3]	6.8 [3.3]	0.4888	8.1 [3.7]	8.8 [3.5]	**0.0334**
MSPSS	33.1 [6.8]	31.9 [7.7]	**0.0045**	32.4 [6.5]	32.1 [7.9]	0.6473	34.5 [7.1]	31.8 [7.4]	**<0.0001**
Caregiver	**N (%)**	**N (%)**	**p-value**	**N (%)**	**N (%)**	**p-value**	**N (%)**	**N (%)**	**p-value**
Anxiety (HSCL)	264 (52.3)	597 (44.5)	**0.007**	85 (33.9)	152 (40.6)	0.087	168 (76.4)	181 (48.4)	**<0.0001**
Depression (HSCL)	320 (63.4)	738 (55.9)	**0.008**	131 (52.2)	195 (52.1)	0.990	170 (77.3)	223 (59.6)	**<0.0001**

At T2, the research team added some questions on early and forced marriage to the survey (see Appendix 1 for description of the new questions). Results indicate that 2.3% (n=7) reported having been encouraged to marry since last South Sudanese Independence Day. The most common reasons given for marriage pressure included: family believed the respondent would be safer if married (n=1), family will be provided for with marriage (n=3), family would receive money or goods (n=1), and family had trouble meeting basic needs (n=1). 1 respondent did not know why. Only one adolescent was set to marry someone their age, the rest were 5 (n=1) or 10 (n=1) years older or unknown age (n=3). Only 1 (14.3%, n=1) out of the 7 ended up getting married, the rest were able to refuse the marriage. While focus group discussions at T1 indicated that early and forced marriage was a significant child protection problem, the quantitative findings at T2 do not confirm this (see Meyer et al., 2015). This may be for several reasons, including that adolescents and caregivers recognize this problem to be severe, and therefore prioritized discussion of this issue in the focus group discussions at T1, while its actual prevalence is low, or due to under-reporting of early and forced marriage in the quantitative survey.

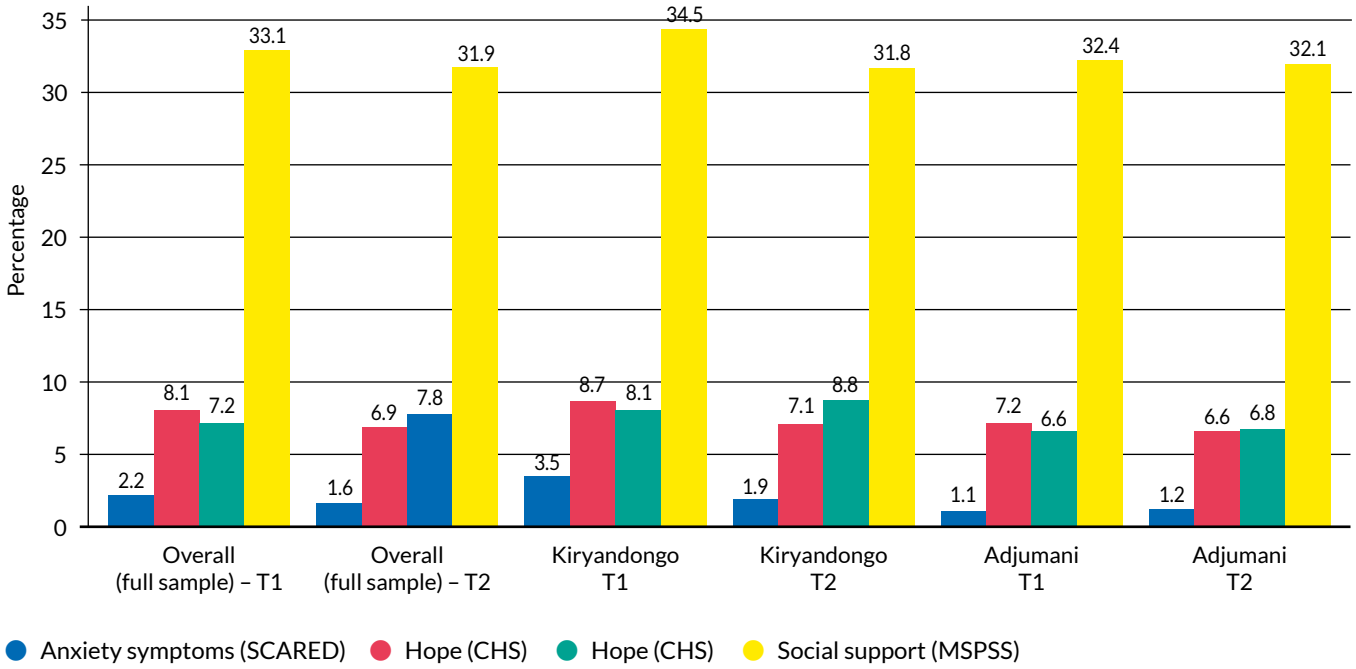
3.5 Adolescent and caregiver psychosocial well-being

Findings regarding psychosocial well-being of adolescents at T2 indicate overall improvement of all psychosocial outcomes measured – anxiety, emotional symptoms, hope and social support. At T2, analysis of the full sample indicates that symptoms of anxiety significantly decreased, as measured by the Screen for Child Anxiety Related Emotional Disorders (SCARED), from a mean of 2.2 out of 10 at T1 to 1.6 out of 10[6] (p=.001) (Birmaher et al. 1999). This trend of improvement of psychosocial outcomes was seen across symptoms of depression and levels of hope for the full sample. The mean of the Moods and Feelings Questionnaire, with higher scores indicating higher levels of symptoms of depression, decreased from 8.1 at T1 to 6.9 at T2 (p<.001). Mean levels of hope, as measured by the Children's Hope Scale increased from 7.2 at T1 to 7.8[7] at T2 (p<.05) (Snyder et al. 1997), with higher levels indicating higher levels of hope. However, the mean level of reported social support decreased from 33.1 at T1 to 31.9 at T2 (p<.05), as assessed by the Multidimensional

[6] Clinical-cut offs for the complete SCARED instrument are available from Birmaher et al 1999, however the current instrument included only 5 items, and as such there are no available psychometric evaluations. There is insufficient evidence at this time to validate context specific cut-offs for this population, therefore, continuous scores are reported here.

[7] Clinical-cut offs for the complete Children's Hope Scale are available from Snyder et al 1997, however there are no available psychometric evaluations on adolescents in Rwanda or similar settings. There is insufficient evidence at this time to validate context specific cut-offs for this population, therefore, continuous scores are reported here.

Graph 7: Mean levels of psychosocial outcomes between T1 and 2, overall and by site



Scale of Perceived Social Support. Analysis by site indicated that these changes are driven by changes in Kiryandongo, which had statistically significant changes for each outcome, improvements in symptoms of anxiety, depression and levels of hope, and reductions in social support.

Table 17 in Appendix 3 indicates the differences in changes in psychosocial well-being by parental living status. Whereas analysis of the overall sample and by site indicated that improvements were seen on all psychosocial well-being outcomes for Kiryandongo refugee settlement, analysis by parental living status indicates that improvements were only significant for some groups of adolescents – for example, while improvements were seen for mean levels of symptoms of anxiety for adolescents with no, one or both parents living, improvements in mean levels of depression were only significant for adolescents with one parent. The patterns of differences in changes in psychosocial well-being by parental living status did not indicate a strong trend of vulnerability to adverse psychosocial well-being for respondents with one or no living parents, however, and further investigation of other covariates which may have influenced patterns and directions of change of psychosocial well-being is warranted.

Exploration of this improvement in psychosocial outcomes, specifically in Kiryandongo, in the follow-up research phase revealed mixed findings. There was no overall consensus from adolescents, caregivers and key informants that these findings reflected real improvements in adolescents' psychosocial well-being, especially as discussions indicated that the ongoing emergency response was perceived to have had multiple and on-going impacts on children's health and well-being.

One theme that emerged from the follow-up research is that the overall safety and security afforded to refugees in the settlements in Uganda had improved their psychosocial well-being, and that the passage of time since displacement was a factor in explaining the levels of improvement in these outcomes. For example, in a key informant interview in Kiryandongo, a staff member of an implementing partner organization explained her perceptions that adolescent worry and anxiety had decreased, and that hope had increased:

> *"In the settlement, they are given hope that life can turn around. When they see those who have benefitted from services, those in school and out of school are trained with skills, that gives them hope. They [the adolescents] were*

more worried before because they had just arrived, new environment but now they are used to the life here so they are less worried. When they stay around they start utilising the services. They are available, they get to know how and where to get them from. They know that if I have a problem I can run to police, if I am in trouble I can call an ambulance. They realise that this is home."

Caregivers interviewed in focus group discussions in Kiryandongo concurred. One explained,

> *"It's true when you are in a new place you get worried and when you have gotten used to people within, you feel safe. At first they did not know the place and they were worried because of the relatives they left in Sudan."*

> *"Adolescents have now gotten familiar with the environment around them which makes them less worried."*

Safety and security experienced in the refugee settlements in Uganda, especially in comparison to experiences in South Sudan, were cited as factors leading to improved psychosocial well-being. A caregiver explained,

> *"These children, when they were brought from Sudan, they saw people killed before them and here they can go to neighbors and they play; they find that it is safe and secure here for them and this makes them less worried."*

Provision of and access to services was also cited as a reason for reduced anxiety and depression amongst adolescents, as a caregiver explained:

> *"The adolescents have hope because of the education they are getting and they know that it will change their lives."*

Another noted,

> *"Adolescents are hopeful because they have seen people who are educated, having a good life so they are also hopeful that they will have a better life."*

A respondent in a focus group discussion for adolescent males aged between 16-17 in Kiryandongo explained,

> *"Yes we were worried somehow because we had just come, but now we are settled here, we are now fine and we don't worry compared to the time we came. However we still have many things that worry us."*

Caregivers and adolescents expressed concern about the impact of the emergency response on access to and quality of services, and identified these changes as challenges to the finding regarding improved psychosocial well-being. For example, caregivers explained that while adolescents' access to school had improved, and that going to school gave them hope, this was attenuated by the overcrowding at schools and poor quality of teaching, both resulting from the influx of new refugees. For example, a caregiver explained that the decrease in symptoms of depression and anxiety identified in the T1/ T2 comparison did not adequately capture the impact of the influx on services for adolescents:

> *"Sometimes when our children are sick you call the ambulance to take them to the hospital their phones are switched off and they don't respond yet the distance to the health centre is far, and this makes the children worried."*

Another explained, "*there are some of the things that still make children worried, like if the child has nothing to eat, he feels worried.*" Caregiver and adolescents emphasized that some factors that had operated to reduce worry and sadness amongst adolescents – security, access to education, and getting used to life in the settlements – were not adequate to address the impact of the influx on adolescent well-being. As an adolescent male in a focus group discussion for refugees aged 16-17 explained, "*I have hope too but since they deducted the food it has made me worried.*"

Gender analysis of psychosocial outcomes (Table 16, Appendix 3) identified that girls, but not boys, had significantly lower symptoms of anxiety and depression, higher levels of hope, and lower levels of social support. Exploration of the reasons behind these gendered changes of psychosocial outcomes was beyond the scope of the follow-up data collection phase.

Changes in caregiver psychosocial well-being between T1 and T2 were identified; across the full sample, there were significantly lower levels of depression (a change from 63.4% at T1 to 55.9% at T2, $p<.05$) and significantly lower levels of anxiety (a reduction from 52.3% at T1 to 44.5% at T2, $p<.05$). At T2, 55.9% (n=418) caregivers met criteria for depression based on the HSCL cut-off of 1.75, and 44.5% (n=333) met criteria for anxiety based on the HSCL cut-off of 1.75. This change was again driven by changes in Kiryandongo; there were no significant changes in caregiver depression or anxiety in Adjumani between T1 and T2, but there were significantly lower numbers of caregivers meeting the cut-off for higher levels of depression and anxiety in Kiryandongo. The percentage of caregivers with higher levels of depression decreased from 77.3% at T1 to 59.6% at T2 ($p<.0001$), and the percentage of caregivers with higher levels of anxiety decreased from 76.4% at T1 to 48.4% at T2 ($p<.0001$).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3.6 Feelings of safety

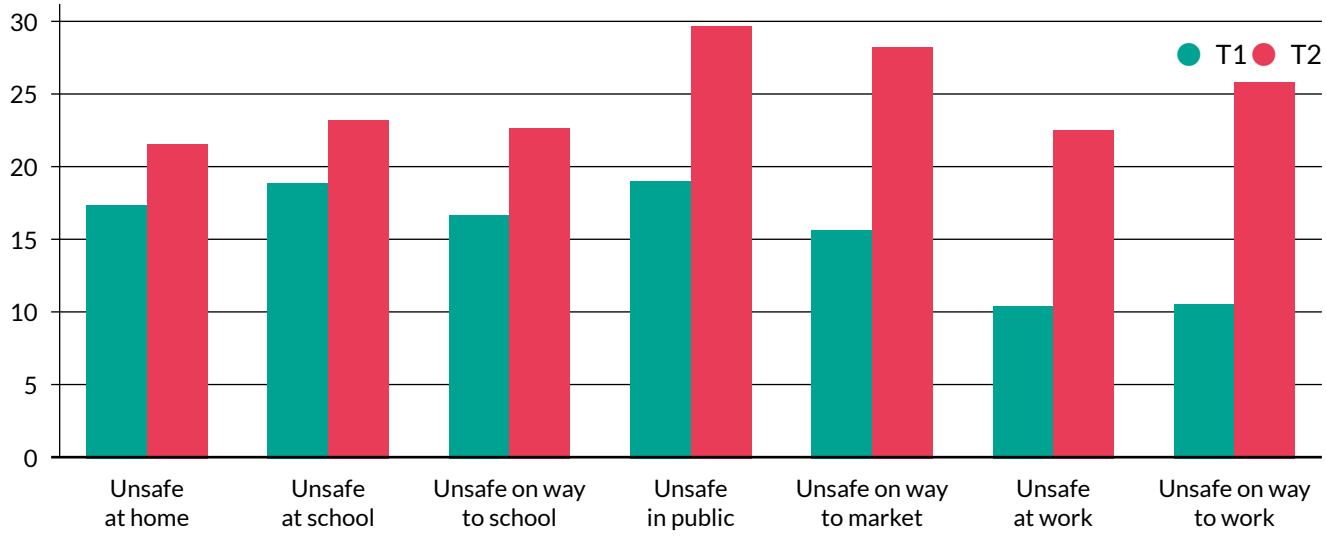
At T2, overall levels of feelings of lack of safety at home, at school, at markets and other public places in the settlements, and on the way to and from markets and other public places, remained high. For example, more than a quarter of adolescents reported feeling safe at home none or some of the time, and 20% reported feeling unsafe at home in the past week. There were, however, some significant reductions in feelings of lack of safety between T1 and T2.

There were some reports of positive changes due to the increase in refugee population, for example, an adolescent male in a focus group of 13-15 year olds in Kiryandongo reported, "*there has been improvement in security*," and an adolescent male in a focus group discussion of 16-17 year olds in Kiryandongo confirmed that "*due to population increase there has been tight security and you no one is allowed to move at night; when you move police will get you and arrest you*."

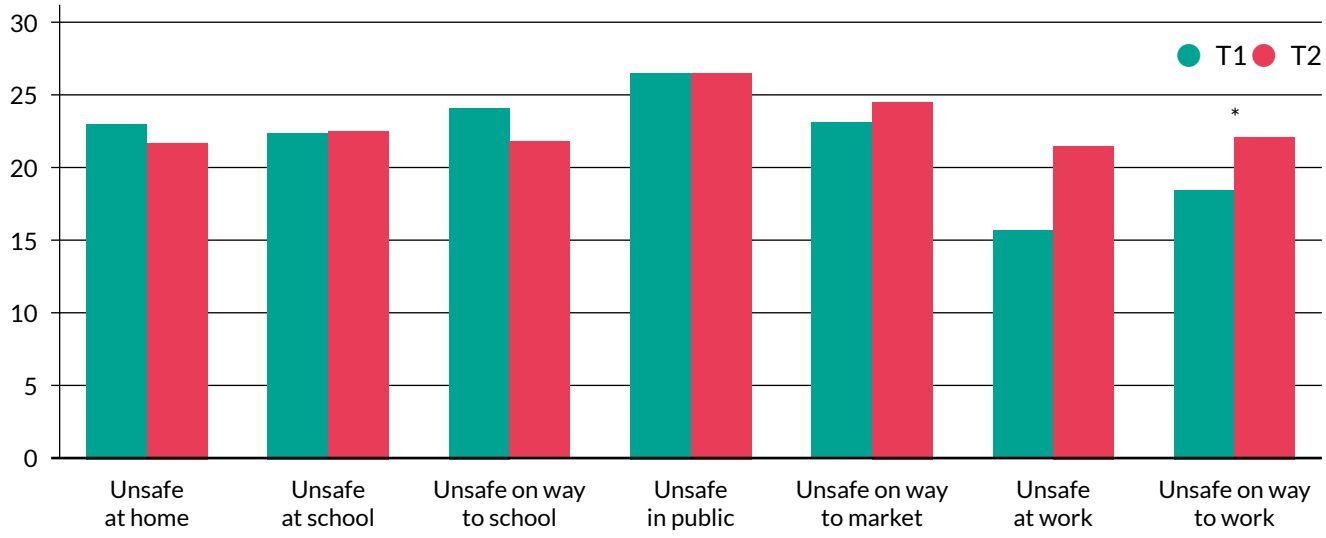
Adolescent feelings of safety at home improved across both sites, with the number of adolescents reporting that they felt safe at home some or none of the time decreasing from 25.1% at T1 to 17.6% at T2 in Adjumani ($p<.05$) and from 50.0% at T1 to 36.0% at T2 in Kiryandongo ($p<.05$). This same trend of increased adolescent feelings of safety at school was seen across the full sample and both Kiryandongo and Adjumani, for example, in Kiryandongo the percentage of adolescents who reported that they felt safe at school some or none of the time decreased from 54.1% at T1 to 24.3% at T2. This significant trend towards greater feelings of safety, especially in combination with the improved psychosocial outcomes found in Kiryandongo, indicates overall improvements in child protection outcomes investigated in this study. Using the different measure of feelings of safety in the past week, there were no significant changes across the full sample, apart from an increase in feelings of lack of safety on the way to work in the past week (See Graph 8 below). However, analysis disaggregated by site indicated significant reductions in feelings of lack of safety in the past week across a number of locations, for example, displayed for Kiryandongo in Graph 9, below.

In contrast, feelings of safety regarding markets and other public places in the settlement, and travel to and from markets and other public places in the settlement, showed differing trends by settlement. In Adjumani, significantly more adolescents reported feeling unsafe in the past week at markets and other public places in the settlement (T1: 19.0%, T2: 29.8%, $p<.05$) and on the way to or from markets and other public places in the settlement (T1: 15.7%, T2: 28.2%, $p<.001$). In Kiryandongo, the opposite trend was identified, with reductions in feelings of lack of safety at markets and other public places in the settlement (T1: 36.8%, T2: 23.2%, $p<.001$) and on their way to and from markets and other public places (T1: 33.6%, T2: 20.8%, $p<.001$). Patterns of feelings of lack of safety in the past week varied in Adjumani, for example,

Graph 8: Change in adolescent safety in Adjumani, past week



Graph 9: Change in adolescent safety, past week safety



Graph 10: Change in adolescent safety in Kiryandongo, past week

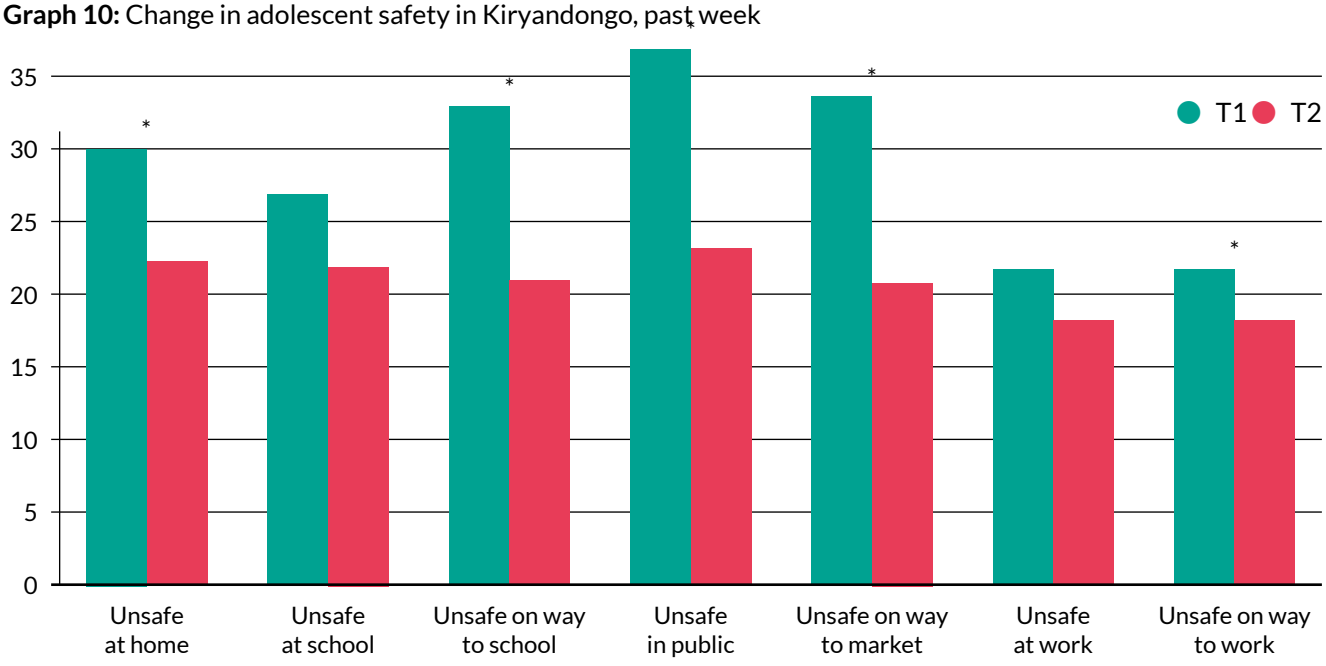


Table 6. Change in activity use, overall and by site

Question	Complete			Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Utilization of services, by activity									
In the past year, have you ever participated in a group sports activity organized by an NGO?									
Yes	47 (23.4)	313 (41.7)	**<0.0001**	14 (15.4)	137 (36.4)	<0.0001	30 (31.6)	176 (46.9)	0.007
In the past year, have you ever participated in a club or committee specifically for children or adolescents?									
Yes	82 (37.8)	244 (33.0)	0.192	31 (34.8)	90 (24.5)	**0.048**	49 (41.5)	154 (41.4)	0.980
In the past year, have you participated in any non-formal education in the settlement?									
Yes	66 (53.2)	172 (23.4)	**<0.0001**	16 (44.4)	85 (22.9)	**0.004**	47 (56.6)	87 (23.9)	**<0.0001**
In the past year, have you ever participated in any life skills training in the camp?									
Yes	174 (64.4)	181 (24.9)	0.188	12 (25.5)	126 (33.7)	0.261	162 (73.6)	55 (15.6)	**<0.0001**

showing no significant change in feeling unsafe in the past week in the home, whereas as noted above, a significantly larger proportion of adolescents in Adjumani reported feeling unsafe in the past week at markets and other public places. In contrast, the patterns in Kiryandongo identified in the analysis show consistent improvements in perceptions and feelings of safety across locations, as seen in Graph 10 below.

There were some gender differences in changes in feelings of safety between T1 and T2. 53.2% of girls reported feeling safe at home all or most of the time at T1, which increased to 72.2% at T2 (p<.05); at T1, 68.9% of girls reported feeling safe at school all or most of the time, which increased to 81.6% at T2 (p=.001), and at T1, 65.2% of girls reported missing no school in the past term because they felt unsafe, which increased to 78.4% at T2 (p<.05), indicating a general trend towards girls perceiving greater safety and security between T1 and T2. Assessed using questions focused on feelings of safety in the past week, boys were significantly less likely to report feeling unsafe at home in the past week (T1: 25.2, T2: 16.2, p<.05).

3.7 Access to, knowledge of and utilization of child protection activities and services

Table 21 in Appendix 3 displays changes in knowledge and utilization of child protection activities and services in the full sample and by site between T1 and T2. In terms of utilization of child protection and child-focused activities in the settlements, at T2, 41.7% of adolescents participated in a group sports activity; 33.0% participated in a club or committee specifically for children or adolescents; 23.4% participated in any type of non-formal education in the settlement in the past year; and 24.9% participated in any life skills training in the settlement in the past year. There were differing trends in participation in activities; for example, a significant increase in participation across both settlements was seen for group sports activities (for example, in Kiryandongo: T1 31.6%, T2, 46.9%, p<.05). However, there was a significant decrease in participation in life skills activities in Kiryandongo (T1: 73.6%, T2: 15.6%, p<.001) and across both settlements and the full sample for non-formal education (full sample: T1: 53.2%, T2: 23.4%, p<.001). Overall, access to education increased; focus group discussions conducted for the follow-up research phase included exploration of perceptions of this increase and the impact of access to education on adolescents (see Textbox 9).

TEXTBOX 9:

FOLLOW-UP FINDINGS

Access to education and perceptions of impacts of education on adolescents

One of the notable findings at T2 was the increase in school attendance. The percentage of adolescents who reported having attended primary or secondary school in the past two terms increased from 87.8% at T1 to 95.6% at T2 in Adjumani, and from 77% at T1 to 85.4% at T2 in Kiryandongo. Focus group discussions conducted at follow-up explored whether refugees concurred with this finding regarding increased school attendance, and also examined reasons for the increase in school attendance, and perceptions of the impact of education on adolescent refugees.

Focus group discussions with caregivers and adolescents confirmed that there is widespread perception that access to education has increased. A caregiver in a focus group discussion in Kiryandongo explained that the number of children attending school had increased "*because the children came to know about the importance of education.*" Many refugees explained that adolescents had started to attend school in the settlements once they realized that they would be staying in Uganda for a long time; an adolescent male in a focus group discussion in Adjumani explained, "*When we just arrived, we had no interest to learn because we knew we would not take long here [in Uganda], but elders advised us to study and get some knowledge.*" Finally, the influx of refugees itself was perceived as a reason for the increase in access to education. In a focus group discussion in Kiryandongo, caregivers noted,

> "*The arrival of the new refugees has improved the life of the people because their children are now going to school in high numbers due to the support given to the community around by different organizations.*"

Caregivers and adolescents uniformly perceived the increased attendance of adolescents at school as a positive, for example, a caregiver in Kiryandongo noted,

> "*It affects them positively because they are so much engaged in school that even when they come home for lunch, they have their lunch very fast so that they can go back to school on time. Children are now wiser and bright because of the knowledge they get from school.*"

Many respondents described the value of education in terms of the concrete skills it imparts to adolescents, as well as the ways in which it can alter and inform behaviors. For example, a caregiver in a focus group discussion in Kiryandongo noted that adolescents have learnt about sanitation, how to read and write, how to "*appreciate*" and "*thank their parents*," and "*how to respect parents and other elders.*" Adolescents similarly reported recognition of the value of education. In a focus group discussion with female adolescents aged between 16-17 in Adjumani, a respondent explained that school

> "*improves our relationship with friends. When we are in school we get to interact and know our friends better as we study in school.*"

Another respondent in the same focus group described the benefits:

> "*It helps me get a good job and be in position to meet my needs and give other necessary help to my family members like school fees, buy food for them.*"

Many caregivers and adolescents related the value of education to the conflict in South Sudan, both in terms of lack of education being a precipitating factor for the conflict, and education being a tool to preventing further conflict and rebuilding the country. As a caregiver in Kiryandongo noted,

> "*Education is so good in a way that children can be able to understand. We had problems in South Sudan because we didn't go to school that's why there is fighting there and if we educate our children, they can change our country.*"

Overall, follow-up research indicated positive perceptions regarding the impact of education on adolescent refugees in Adjumani and Kiryandongo; some gaps and distinctions in access amongst the refugee adolescents noted, and concerns regarding quality of education, including overcrowding in schools, were pervasive.

3.8 Socio-economic well-being

Table 28 in Appendix 3 indicates patterns of child labor across T1 and T2; patterns indicate a slight trend towards greater participation of adolescents in household chores (for example, did household chores, such as shopping, in the past week: T1: 44.3%, T2: 52.9%, p<.05), and more than a quarter of adolescents reported having missed school in order to carry out labor for the household at T2, although this was not significantly different than T1.

Significant changes in reporting of hunger by caregivers between T1 and T2 were identified (Table 34, Appendix 3). At T2, 73.5% of caregivers across the sample reported having insufficient food in the past four weeks due to a lack of resource to procure food (compared to 54.7% at T1, p<.0001); at T2, 74.3% of caregivers reported family members going to sleep hungry because of insufficient food in the past four weeks (compared to 58.1% at T1, p<.0001); and 65.1% of caregivers reported a household member going at least a day and night without food because of insufficient resources to procure food in the past four weeks (compared to 53.7%, p<.0001). These patterns were widely confirmed in focus group discussions with caregivers and adolescents, and key informant interviews, during follow-up research, where a 50% food ration cut, instituted for refugees who had arrived in Uganda prior to June 2015, was widely perceived to have resulted in significant gaps in household food security in both refugee settlements.

In addition to hunger, caregivers' perceived needs were assessed (Table 35, Appendix 3). Percentages of caregivers reporting serious problems of various kinds was high at T2; for example, at T2, 83.3% of caregivers reported having a serious problem with food, 89.0% of caregivers reported having a serious problem having enough or good enough clothes, shoes, bedding or blankets, 75.5% reported having a serious problem due to separation from family, and 79.2% reported having a serious problem with insufficient healthcare at T2. Trends of change from T1 to T2 varied, and increased significantly for some items (problem due to access to safe water for drinking or cooking; food; clothing, shoes, bedding or blankets; access to clean toilet) and decreased for other items. In focus group discussions, caregivers related these changes in socio-economic well-being to the growth in numbers of refugees in the settlements. In a focus group discussion in Adjumani, a caregiver explained,

> *"The coming of the new refugees has changed our lives because there is no food in our houses, we therefore ask UN to bring back the food ration we used to get back."*

> *"When we came here the food ration was enough, those who had big family size were given enough but now due to the coming of the new refugees what is given to them is not enough."*

Caregivers and adolescents associated the decline in household well-being, including access to food rations, and access to basic services and needs, including access to water, with increased violence against adolescents. An adolescent girl in a focus group discussion in Adjumani noted,

> *"Last year we were few but this year the population has gone high so when we go to fetch water from the borehole and the line is long we jump the queue because we want to get water before others we end up fighting as we struggle to fetch the water."*

A caregiver in a focus group discussion in Adjumani reported,

> *"There is more fighting among adolescents this year compared to last year because of the overwhelming population that leads to congestion everywhere like borehole, school, and food distribution points."*

Changes in socio-economic status were also described as causing significant stress within households, resulting in use of violence against adolescents in the household. As one caregiver in Adjumani reported,

> *"there is much violence this year compared to last because this year things are down, like parents are always in bad moods due to hunger in homes, some of them have resorted to beating children and children have also involved themselves in fighting with each other."*

A caregiver in Adjumani explained,

> *"There is much violence this year compared to last because this year things are down, like parents are always in bad moods due to hunger in homes, some of them have resorted to beating children and children have also involved themselves in fighting with each other."*

Comparison of T1 and T2 data indicates changes in household well-being; qualitative data reflects these changes, and indicates that these changes have impacts on child protection risks, including exposure to physical and sexual violence.

4.
KEY LESSONS – METHODOLOGY

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The follow-up phase of research in Uganda marked the completion of data collection for the 3-year CPI Study, and this report concludes the analysis and synthesis of findings in Uganda, while analysis and synthesis of findings in Rwanda have been presented in a separate report (Meyer, Muhorakeye, and Stark 2017). At this stage of the project, over-arching methodological lessons can be explored and presented here, to identify key next steps in methodology and refinement of the over-arching study design.

4.1 Study design – sampling

The original study design, with household surveys implemented at two time-points, envisaged conducting T2 surveys with the same respondents as were interviewed at baseline, resulting in data that would represent specific individual-level changes that occurred between T1 and T2. The follow-up rate in Kiziba Camp, Rwanda, was 84.4%, which was achieved by devoting significant time and resources during fieldwork to identifying baseline respondents. In the context in Uganda, there was significantly more population movement within and between refugee settlements, and modes of identifying baseline respondents were not effective, resulting in a low follow-up rate of 48.2% for the full sample. In Uganda, in order to conduct T2 data collection with a larger sample, new respondents were added at T2, however, selection bias has been identified and induced by addition of the new respondents, and the significant loss to follow-up. In considering how to adapt study design for future implementation of the CPI, the question of whether to design the study with the aim of re-interviewing baseline respondents, or whether to select a completely new sample at T2 is worth considering. The time and effort required to identify baseline respondents in a particular setting is likely to vary. For example, the higher follow-up rate in Kiziba Camp in Rwanda is due to the particularities of the location and population, where there is little resettlement, limited population movement within the camp, and very limited population movement outside of the camp, and nonetheless, a significant proportion of efforts during fieldwork consisted of finding baseline respondents. In contexts where there are factors that create additional challenges to conducting effective follow-up, for example, movement within and between refugee settings within the same country, the efficient and effective collection of high-quality data could be hampered by efforts to identify baseline respondents. As such, the research team suggests that the study design shift to data collection at two time points that interviews *different respondents* at T1 and T2, and adjusts statistical analysis methods to account for the differences in the two samples interviewed.

4.2 Measurement of exposure to violence

The CPI Study utilized two forms of measurement of exposure to violence in the adolescent surveys: a series of direct questions regarding personal experience, and a series of questions using anonymous reporting (by handing the mobile phone over to the adolescent and explaining to them how to indicate that they had experienced either sexual violence or physical violence). The findings from the CPI Study in Uganda indicate that anonymous reporting increases reporting of sexual violence in the context of the survey, but actually decreased reporting of physical violence. For reporting of sexual violence, reporting remained low, and the cultural and social factors explored in the follow-up research phase and described in detail in Textbox 8 should be taken into account when interpreting the quantitative findings regarding sexual violence. However, from a methodological perspective, it appears that anonymous reporting was effective in increasing reporting of sexual violence. In contrast, the number of respondents who indicated that they had experienced physical violence in the past year was lower than those who reported physical violence across a range of more specific items, i.e. hit or beaten with a hand in the home. It appears that the aggregate form of question asked using the anonymous method – have you been slapped, beaten, or kicked by any person? – may have not been well-understood by respondents, or may have encouraged respondents to think of particular types of violence (for example, perpetrated by someone outside of the home) compared to the more specific questions asked in the direct method, which included descriptions of the particular kind of violence, and in some cases, indication of where the violence occurred. Future iterations of the CPI Study could test the hypothesis that the anonymous form of reporting is more effective for measuring sexual violence than physical violence; the findings from the Uganda CPI

Study indicate the utility of offering different ways to report sexual violence, yet indicates that specific, directed questions focused on various forms of physical violence are more effective than an aggregate question in measuring physical violence.

4.3 Adaptation of the CPI to various refugee contexts

Over the past decade, UNHCR and other humanitarian agencies have identified significant changes in the nature of displacement and variation in the prevalent contexts of displacement. For example, Spiegel et al. highlight changes in length of displacement and location of displacement – a shift from predominantly rural settings to a mix of rural and urban settings, and a shift from predominantly low-income countries hosting the majority of the world's refugees to an increasing number of middle-income countries hosting large numbers of refugees (Spiegel et al., 2010). The CPI Study was conducted in two countries which share many similarities in terms of hosting environment and type of refugee setting, yet major differences that emerged in effectiveness of using the CPI to measure system strength in Kiziba Camp (a protracted and relatively stable situation) vs. in Uganda (in the midst of an active emergency). The UNHCR Framework serves as a framework to protect all refugee children, and the CPI as an instrument seeking to operationalize the Framework and measure child protection system strength needs to be able to be adapted to various contexts. Future iterations of the CPI Study could test adding modules focused on specificities of the child protection system in urban settings, active emergencies, or middle-income settings, which could ensure the CPI is measuring relevant components and able to detect significant changes in system strength which may not be currently captured. The addition of specific modules, to be implemented alongside the existing CPI, would ensure that the core components of child protection system strength are measured using the same items and components in all settings, but that additional modules identify and assess important differences between contexts.

4.4 Measurement of domains of the child protection system

There are challenges associated with the current measurement of two of the three core domains of the child protection system: utilization, and policies and procedures.

Service quality is currently measured through service utilization, which serves as a proxy given direct measurement of all the services and activities included in the CPI was not possible. As discussed in the Rwanda T2 report, this approach has limitations, including that low utilization may be for a wide range of reasons. As the Rwanda T2 report notes, "the use of utilization as a proxy for quality means that the primary drivers of poor utilization – whether accessibility, appropriateness of services, or external factors, such as cultural norms – may not be fully understood." Future iterations of the CPI methodology could respond to this measurement challenge by including questions assessing satisfaction with services into the survey instruments. This approach could be susceptible to response bias, however; in some contexts, respondents may indicate low or high satisfaction for reasons unrelated to actual satisfaction, for example, if they perceive that they may lose access to services if they indicate dissatisfaction. Another approach would be to narrow the number of services and activities included in the CPI, and developing a checklist-style measure of quality for each of these services. This quality checklist approach was utilized in studies assessing the impact of child-friendly spaces (for example, Metzler et al., 2013a), and can be operationalized as a variable to analyze whether service quality is associated with psychosocial and violence outcomes.

In addition, the measurement in the policies and procedures domain assess whether or not a policy or procedure *exists*, rather than reflecting the actual implementation, application or adherence to the policies and procedures. For example, a law against corporal punishment may exist, but the law may be poorly or unevenly enforced, diminishing the impact of the existence of the law. Integration of measures of the actual implementation of the policies and procedures may be able to be achieved through brief questions in key informant interviews, additional desk research, or a combination of the two. However, the question of implementation of a policy or procedure is not clear-cut, and the subjectivity of these questions

could result in conflicting data that are difficult to interpret. Measurement of the actual implementation of laws and policies is important, given the mere existence of a law is not enough to achieve improved child protection outcomes. However, integration of this form of measurement within the CPI instrument or methodology overall requires careful formative research, piloting and instrument validation.

These issues reflect an over-arching challenge in the CPI Study: there is an imperative to measure the core elements of the child protection system, comprehensively, while ensuring that instruments are feasible to implement in the field, i.e. as brief and concise as possible. The first iteration of the CPI instrument, utilized in the pilot test in Rwanda in 2013, was 141 items, which included granular detail to capture quality of a wide range of services, but proved to be unwieldy and difficult to implement in the field, resulting in a massive dataset that did not lend itself well to analysis and interpretation. As such, while some findings indicate a need to incorporate further questions and measures into the CPI instrument, the need for brevity and feasibility of implementation in field settings entails that addition of further detail and complexity to the study design may limit, rather than strengthen, the findings.

4.5 Design of the CPI

The CPI is an instrument that was specifically designed to operationalize UNHCR's Framework, and how the document itself theorizes that refugee children will be kept safe from harm. The findings from the CPI Study, in both Rwanda and Uganda, indicate the difficulty of disentangling whether the findings indicate that i) the hypothesis that an improved child protection system improves child protection outcomes is correct or incorrect, or ii) the measure of child protection system strength is incomplete, and confounding factors (aspects that are unmeasured but may significantly impact child protection outcomes) explain the changes or lack of changes in child protection outcomes. As noted in the case of the Rwanda CPI Study, there is a need to consider whether the CPI includes all the relevant and appropriate benchmarks related to child protection outcomes; this is more a policy consideration than a methodological consideration, given the specific objective of the overarching project was to measure the Framework. Therefore, the question is – does the *Framework* include the relevant benchmarks to impact child protection outcomes? There may be discrepancies between UNHCR's priority interventions, and community needs, and therefore lack of impact of changes in the CPI score and child protection outcomes, or conflicting directions of changes, may reflect these discrepancies. Consideration of the need to add additional benchmarks to the CPI raises the larger question of whether or how a child protection systems approach in displacement settings, as conceptualized in UNHCR's *Framework*, operates to impact individual-level changes for adolescent refugees. In the CPI Study in Rwanda, household-level factors emerged as important influences on child protection risks and well-being, yet these factors may not be considered aspects of the child protection system, and policies and programs to improve household-level factors influencing child protection outcomes (for example, psychosocial programs for caregivers) may not be measured as part of the child protection system.

In addition to this over-arching question relating to the focus of the CPI, there are several next steps for methodological development of the CPI. Firstly, the CPI has now measured system strength in three different refugee camps or settlements (Kiziba Camp in Rwanda, Adjumani and Kiryandongo refugee settlements in Uganda), and child protection system strength in all three settings has been quantified via the CPI. Validity of the CPI requires comparison of the scores and differences in scores with expert opinion regarding child protection system strength in all three contexts. For example, does expert opinion concur regarding the overall scoring of the strength of the child protection system in these three contexts? Do changes identified between T1 and T2 reflect true changes that occurred in system strength? Study design of a validity study for the CPI in these three settings is an important next methodological step in refining the instrument. Secondly, the weighting of the items in the CPI was discussed and developed in collaboration with UNHCR. However, given the weighting of the items has a significant influence on the final scores of child protection system strength, further iterative development of the weighting system is needed. For example, is it valid, i.e. reflective of the actual strength of the system, that Adjumani scored a slight increase in child protection system strength according to the weighting of the CPI, and did Kiryandongo's child protection system strength actually increase from weak to moderate in the context of the emergency?

5.
SYNTHESIS

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The combination of changes in CPI scores, changes in child protection outcomes, and qualitative findings brings to light a number of key issues related to the child protection system in Adjumani and Kiryandongo refugee settlements. The following discussion highlights some of these findings, elaborating on the key themes as they relate to the objectives of the CPI Study.

5.1 CPI score and changes in child protection system strength

The strength of the child protection system was measured at two time points in both Kiryandongo and Adjumani refugee settlements. Total score change for Kiryandongo between T1 and T2 was + 13.5 points, and the strength of the child protection system in Kiryandongo changed from weak to moderate. Total score change for Adjumani between T1 and T2 was +4.5. The strength of the child protection system in Adjumani maintained at a moderate level.

Both Adjumani and Kiryandongo refugee settlements saw several components of the child protection system maintain stability over time, including various laws and policies protecting refugees at the national-level and services relating to community-based child protection mechanisms. In the area of utilization, Adjumani maintained a high level of recent school attendance, high level of reporting of feelings of safety most or all of the time at school and high levels of percentage of adolescents who wanted to who had reported participating in structured recreation activities. Areas of lack of improvement in both settlements included lack of communal spaces for adolescents, percentages of adolescents reporting experiences of violence, and some areas of decline were noted, including caseload for social workers increasing, due to the emergency. In both settlements, two areas of procedures were reported to have declined: key informants reported that there was no longer an information-sharing protocol, which had implications for registration of child protection cases during the emergency. In addition, key informants also reported a change in the item assessing whether there is a child protection strategy that has been developed with the participation of child protection actors. In the area of utilization, a proxy for service quality, there was significant improvement in some areas in Kiryandongo, which may be a particular achievement in strengthening of the child protection system, given this improvement occurred in the context of the emergency response. In Kiryandongo, the percentage of adolescents reporting that they had attended school regularly in the most recent school period increased, and the percentage of respondents who reported feeling safe at school all or most of the time increased from 67% to 78.6%. In Adjumani, significant improvements in the services domains were achieved in the context of a major emergency and stress on the child protection system.

As noted throughout the report, a major emergency, affecting several aspects of child protection system strength, occurred after the T1 data collection for this study, and throughout the T2 data collection. The follow-up research phase afforded an opportunity to gain considerable insight into the various impacts of the influx on child protection system strength, on one hand, and child protection outcomes, on the other, through focus group discussions with refugee caregivers and adolescents, and key informant interviews with child protection practitioners and stakeholders.

Many key informants noted that child protection activities had been side-lined in favor of life-saving activities, such as shelter and water and sanitation; as one key informant working for an implementing partner in Adjumani explained, "*people don't see it as life saving, they see tangible items like boreholes, health and then think about child protection later*." This perception has resulted in significant gaps in funding to child protection activities, and related reduction in provision of child protection services and activities. This prioritization of life-saving activities in the course of a major humanitarian emergency is understandable, yet significant work has been done in the humanitarian field to ensure that child protection concerns are mainstreamed within other core sectors. From key informants' description of the side-lining of child protection concerns within the broader response to the increased influx of South Sudanese refugees in Uganda, it appears that there have been challenges to child protection mainstreaming – "ensur[ing] child protection considerations inform all aspects of humanitarian action" (CPMS 2016). In the context of an emergency, maintaining, rather than strengthening, child protection system strength may be a more achievable objective. The slight improvements (+4.5 in Adjumani) and more significant in Kiryandong (+13.5) indicate that from the perspective of the quantitative

CPI assessment this was achieved. Follow-up research indicates a mixed picture: key informants noted stresses on service provision and staff capacity, impacting service quality, and acknowledged diversion of funding and services from refugees already in Uganda to the new arrivals. However, the emergency also appears to have catalyzed improved coordination and planning.

5.2 Child protection outcomes

There were complex and multi-directional changes in child protection outcomes across the various areas assessed. An over-arching conclusion of improvement or decline in child protection outcomes, overall or per settlement, cannot be made, however, some trends and key points are worth highlighting. The timing of the T2 data collection and follow-up research results in difficulties assessing whether changes in child protection outcomes were caused by the refugee influx, and connecting statistically significant changes in violence exposure and psychosocial well-being causally with the change in refugee population in Uganda is not possible. However, the follow-up research indicated consistent and strong perceptions regarding the influence of the emergency response on adolescent violence risks and adolescent well-being.

Violence exposure: At T2, 56.6% (n=432) of respondents reported ever having experienced any form of violence; 47.3% (n=361) reported having ever experienced any form of physical abuse; 3.6% (n=27) reported ever having experienced any form of sexual violence, and 29.2% (n=223) reported ever having experienced any form of verbal abuse, with 20.8% (n=159) reporting this having occurred in the past year. Levels of violence reported are high, yet likely under-reported; prevention and response services to address the various forms of violence appear to be ineffective in the face of several reinforcing factors, including cultural and social influences on perceptions of violence and reporting of violence, power structures and relationships within households, and perceptions regarding the presence of sexual violence against adolescents in these refugee settlements. The data collected in the follow-up research phase for this study in Uganda provides nuanced insights into these areas, and prevention and response programming in both Kiryandongo and Adjumani could be strengthened on the basis of these findings.

Overall, significant changes by type of violence for the overall sample were not identified for forms of sexual violence or witnessing violence in the home, whereas there was a statistically significant increase in forms of verbal abuse (for example, an increase of respondents reporting having been screamed at loudly or aggressively, from 11.5% at T1 to 17.9% at T2, $p<.05$), and in some forms of physical violence, for example, having ever been hit, beaten or spanked in the home increased from 13.3% to 22.1% ($p<.001$). The time period between T1 and T2 may be too short to see significant changes in levels of violence, and changes in specific items (rather than overall types of exposures, i.e. physical violence, verbal violence) may not be indicative of notable trends in child protection risks.

A notable finding from the follow-up research exploring the impact of the influx is the widespread perceptions that violence against adolescents had increased, for multiple reasons relating to the influx: over-crowding in schools, frustration of caregivers and stress at the household level, lack of access to basic needs and competition over resources, and clashes between refugee groups, including ethnic groups. These perceptions were documented from refugees and key informants. The influx is also perceived to have put pressure on child protection services, including violence prevention and response activities. Education was documented to have increased, yet quantitative data also indicates increases in violence against adolescents in school settings, a finding that was confirmed in follow-up research, with caregivers and adolescents reporting concerns regarding teachers' use of violence in schools and violent environments in schools in both settlements. These findings indicate the need to assess levels of risk and exposure to violence in the context of the emergency influx, and monitor what may be a worsening situation for adolescent refugees in Adjumani and Kiryandongo.

Data indicate the impact of household-level influences on violence risk. One theme that emerged strongly in qualitative data was the effect of the emergency response of household socio-economic status, and the survey findings on household hunger confirmed these perceptions. Caregivers and households were often dependent on selling food rations for funds for other expenses, including schools fees, and the reduction in food rations is associated with both increased levels of hunger and stress levels regarding overall household well-being. A second theme is the acceptability of use of violence against children in this context. In

focus group discussions, caregivers emphasized that violence against adolescents only happens in schools and in public places in the settlements, and not within households. However, the quantitative data indicate this to not be the case; exposure to violence within the household continues to be a child protection concern for adolescents in both Adjumani and Kiryandongo. Lack of acknowledgment that these forms of violence occur, or perceptions of these forms of violence as normal and acceptable methods of discipline, are likely to be significant barriers in efforts to reduce child protection risks in these contexts. Follow-up research indicated that caregivers perceive that proper discipline of children requires some use of violence, and that this form of violence is not considered as harmful for adolescents. While caregivers report no longer using violent discipline due to the laws in Uganda, it appears that these forms of violence persist, and interventions to address social norms and perceptions regarding violence against children are needed to address this influence on child protection outcomes. Quantitative findings regarding caregivers' perspectives on the acceptability of physical violence as a response to specific contexts confirm widespread agreement with the use of violence against children in these contexts.

5.3 Perceptions and reporting of SGBV

Survey data in T2, as in T1, indicated low levels of SGBV; yet, this data should be interpreted with some caution given findings in the follow-up research which indicate a series of pervasive influences on reporting of SGBV, both in terms of acknowledging SGBV exposure in the survey, and in reporting experiences to family members or formal services. Data from the follow-up research phase documents multiple barriers to reporting violence victimization, and for sexual violence in particular. Cultural norms around sex, sexuality, and sexual violence in the refugee communities in Adjumani and Kiryandongo refugee settlements are such that discussion of sexuality, and even more so, sexual violence, is strongly discouraged. These multiple, reinforcing barriers may have resulted in under-reporting in the survey, and importantly, under-utilization of services for SGBV available in these refugee settlements. Again, the role of and relationship with caregivers emerged as an important influence on acknowledgment and reporting of SGBV. Some caregivers were described as likely to respond to an adolescent reporting SGBV with anger and blame, and some caregivers reported trusting community leaders to resolve the issue at a community level, which may not result in SGBV survivors accessing services that they may need. The data indicate several overlapping issues: firstly, relationships with caregiver and caregivers' responses to adolescent SGBV experience was described as determining decisions adolescents make in terms of acknowledging, and formally or informally, reporting, SGBV experience. Secondly, community perceptions of SGBV strongly reinforce stigma, and decrease likelihood of formal or informal reporting, and may result in community responses to SGBV that do not address the needs of survivors. Finally, quality of services for SGBV appears to be a problem, with issues of language barrier and appropriateness of services cited as reasons why adolescents may not formally report or attempt to access services.

5.4 Psychosocial well-being

Findings regarding psychosocial well-being of adolescents at T2 indicate overall improvement of all psychosocial outcomes measured – anxiety, emotional symptoms, hope and social support. Analysis by site indicated that these changes are driven by changes in Kiryandongo, which had statistically significant changes for each outcome, improvements in symptoms of anxiety, depression and levels of hope, and reductions in social support. There were some data at follow-up to confirm these findings, with some caregivers reporting that with the duration of time in the refugee settlements extending, refugee adolescents were benefitting from improved safety and security, and that improved access to education was also resulting in increased hope for the future and reduced worry and depression. However, the factors driving these changes in Kiryandongo, and not in Adjumani, are not clear, and require further exploration. In addition, caregivers and adolescents expressed concern about the impact of the emergency response on access to and quality of services, and identified these changes as challenges to the finding regarding improved psychosocial well-being. Caregivers and adolescents emphasized that some factors that had operated to reduce worry and sadness amongst adolescents – security, access to education, and getting used to life in the settlements – were not adequate to address the impact of the

influx on adolescent well-being. The documented improvements in psychosocial well-being may not be sustained, and influences on psychosocial well-being, including increase in violence exposure and decline in quality of services, are important to monitor, given widespread perception that adolescent psychosocial well-being is decreasing, and that gains in safety and security are being attenuated by recent changes in living conditions and uncertainty of access to basic needs for a large proportion of refugee adolescents in these settings.

5.5 Conclusion

Child protection systems strengthening is now a dominant paradigm in the humanitarian field, and UNHCR's Framework utilizes a systems strengthening approach. The CPI Study, a 'proof of concept' study of UNHCR's Framework, is the first research approach to attempt to link changes in systems strength to actual child protection outcomes. Overall, the project generated considerable insights into the methodological challenges of measuring system strength, the need for further iterations of the methodology and implementation of the study and associated instruments in order to validate the current findings, and specific insights into child protection outcomes in these refugee contexts.

Questions remain for the child protection field as a whole, including: What are the implications of the findings from the CPI Study for child protection systems strengthening policy and program design in refugee contexts, or other humanitarian settings? How can the findings be translated to improved measurement and assessment of child protection systems strengthening in humanitarian contexts? And, given the overall shift to a child protection systems strengthening framework, which is now widely accepted and underpins recent policy and programming efforts in the field (Child Frontiers, 2016), what does a systems strengthening approach mean for refugee children? Does it result in reduced violence, abuse, neglect and exploitation, and improved well-being for refugee children? Without valid and rigorous measures of system strength and system strengthening, this final question cannot be answered. The CPI Study represents a step towards improved the clarity of measurement needed to develop policy and practice of child protection systems-strengthening for refugee children.

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APPENDICES

APPENDIX 1:

DESCRIPTION OF MEASURES USED IN ADOLESCENT AND CAREGIVER SURVEYS

A1.1. Adolescent survey

DEMOGRAPHICS

This section included items on respondent's place of birth, time spent in Uganda, household characteristics (including size of household, primary caregiver, and whether the adolescent lives with their biological mother and/ or father), school attendance and school attainment level.

PSYCHOSOCIAL WELL-BEING

Four scales (for anxiety, hope, depression and social support) at both waves of data collection. Reliability of the scales were tested using a Cronbach's alpha:

- **ANXIETY** – measured using the Screen for Child Anxiety Related Disorders (SCARED). The Cronbach's alpha for this scale was .67 in the overall sample, .65 in Adjumani and .67 in Kiryandongo, indicating questionable internal consistency for this measure in this sample.
- **HOPE** – defined as perceived pathways and agency to accomplish goals and measured with The Children's Hope Scale. The Cronbach's alpha for this scale was .70 in the overall sample, .66 in Adjumani and .69 in Kiryandongo, indicating questionable to acceptable internal consistency for this measure in this sample.
- **DEPRESSION** – The Moods and Feelings Questionnaire, a 13 item self-report measure developed to assess core elements of depression (Angold et al., 2005). The overall Cronbach's alpha for the full sample was .85; .81 for Adjumani and .88 for Kiryandongo, indicating good internal consistency for this measure for this sample.
- **SOCIAL SUPPORT** – Social support was calculated using the Multidimensional Scale of Perceived Social Support (MSPSS), a 12-item scale measuring perceived support from family, friends and a significant other. The overall Cronbach's alpha was .87 for the full sample, Kiryandongo and Adjumani, indicating good internal consistency for this measure for this sample.

EXPOSURE TO VIOLENCE AND ABUSE

- This section assessed adolescents' exposure to violence and abuse in the home, verbal abuse, physical abuse, intimate partner violence, sexual violence, violence in school, violence in the community, transactional sex, and forced early marriage, adapting questions that have been used in previous studies of Violence against Children designed by the Centers for Diseases Control and the IPSCAN Child Abuse Screening Tool – Children's Version. All items, except sexual abuse experience, asked respondents to report whether an event had ever happened in their lifetime and how many times it had happened since last South Sudanese Independence Day (July 2015). As at T1, this was selected as a recall date to improve recall; rather than asking about events in the past year, asking about events since a specific, memorable time-point is likely to improve accuracy of recall. This recall period was selected through discussions with data collectors and piloting a number of possible alternatives.
- Additional items related to reporting of violence, reasons for non-report, and relational information about the perpetrator of the violence were also included.
- The T2 instrument included a number of items focusing on early and forced marriage, including whether the respondent had been encouraged to marry since last South Sudanese Independence Day; reasons why the respondent had been encouraged to get married; age of the intended partner; and whether the respondent was able to refuse the marriage or planned to get married.

FEELINGS OF SAFETY

These items explored the issue of safety in the refugee settlements, and asked adolescents if they have ever felt unsafe in a number of locations, including home, school, at the market, and on the way to school within the past week. Researchers designed these questions specifically for the CPI Study, for the Rwanda baseline data collection, in 2013.

EXPLOITATION – CHILD LABOR

This section asked about adolescents' experience of work, including hard physical labor, and work earning money for the household. Researchers designed these questions specifically for the CPI Study, for the Rwanda baseline data collection, in 2013.

KNOWLEDGE AND USE OF SERVICES AND INTERVENTIONS

This section sought to assess adolescents' knowledge of different services in the settlement, including services for those who have experienced or are experiencing violence and abuse, problems at school, problems at home and health problems. Adolescents were also asked to report if they knew of the various child protection committees in the settlement, and to report their perception of the role of the child protection committee. Finally, this section assessed participation in, and reasons for non-participation in, activities such as structured recreation activities, clubs and committees, non-formal education and life skills training. Researchers designed these questions specifically for this survey, based on the key interventions identified within the UNHCR Framework.

ATTITUDES TOWARDS VIOLENCE AGAINST CHILDREN

This section presented a number of scenarios and asked adolescents to respond whether it is right for a caregiver to beat children in the given scenario. Scenarios included if the child is disobedient, if the child talks back to the parent, if the child steals and if the child refuses to get married. These questions were adapted from a Knowledge, Attitudes and Practices survey implemented by AVSI in Rwanda (AVSI and InfoAid, 2013).

A1.2. Parent/caregiver survey

DEMOGRAPHICS

This section included items on respondent's place of birth, time spent in Uganda, household characteristics (including size of household), educational attainment level, marital status, and birth registration and documentation of children.

ATTITUDES TOWARDS VIOLENCE AGAINST CHILDREN

This section assessed caregivers' attitudes towards adolescents, knowledge of child protection committees in the camp and the role of those committees, attitudes towards harsh punishment of children, and towards reporting of abuse and violence against children.

HOUSEHOLD SOCIO-ECONOMIC STATUS

- This section used items adapted from Demographic and Health Surveys, including questions focused on household income, employment and frequency of work, and source of drinking water. In order to develop a scale of ownership of household items, data collectors asked respondents to list all the items the household owned during the pilot test in 2013, in order to develop questions for the full study that would allow for indicators of household socio-economic status. This section also includes the Food and Nutrition Technical Assistance [FANTA] Household Hunger Scale, a measure that includes three questions and three measures of frequency in order to assess household hunger and allow for estimation of prevalence of households affected by 1) little to no household hunger, 2) moderate household hunger; and 3) severe household hunger. Finally, questions assessed use of health services and reasons for not utilizing health services for children who needed it in the past 12 months.
- Perceived needs were assessed using items from the Humanitarian Emergency Settings Perceived Needs Scale [HESPER]. The scale was developed to fill the gap between population-based indicators that assess "objective" indicators (i.e. malnutrition indicators) and qualitative data reflecting

perceptions of needs, which is usually collected using convenience samples. The scale "aims to provide a method for assessing perceived needs in representative samples of populations affected by large-scale humanitarian emergencies in a valid and reliable manner." Caregivers were asked about whether they had a serious problem with a series of issues relating to them as individuals (i.e. enough safe water for drinking or cooking, enough food, easy and safe access to a toilet, physical health, distress, safety and family separation), as well as serious problems that may exist at the community-level (for example, physical or sexual violence against women, alcohol or drug use).

CAREGIVER WELL-BEING

- Caregiver well-being was assessed using the Hopkins Symptoms Checklist 25, a measure of depression and anxiety previously used in a number of international settings. The measure asks respondents to report frequency of feelings and emotions over the past week, such as feeling "suddenly scared for no reason," "trembling," "faintness, dizziness or weakness," and "spells of terror or panic." In order to generate categorical variables (i.e. depressed or not depressed), the widely used cut-off of an average of 1.75 (out of 4) for depression, anxiety and total score was used for analysis. This cut-off has not been validated in this setting, so these findings should be read with some caution and further analysis is required to assess the appropriate cut-off for this population. The Cronbach's alpha for the depression sub-scale in the full sample was .80; in Adjumani it was .75 and in Kiryandongo it was .85, indicating internal consistency ranging between acceptable and good. For the anxiety sub-scale, the Cronbach's alpha for the full sample was .72; for Adjumani, .57 and for Kiryandongo, .80. The internal consistency of the anxiety sub-scale in Adjumani is poor, while findings in Kiryandongo indicate high internal consistency.

APPENDIX 2:

ETHICAL CONSIDERATIONS

This study employed a number of ethics procedures based on best practices for conducting research on sensitive topics with adolescents. Data collector training included a focus on all ethics procedures: explaining the study, obtaining permission from the caregiver, obtaining informed consent from the caregiver, obtaining informed consent from the adolescent, and checking in with the adolescent after the interview.

Data collectors were trained to be aware of the effects questions may have on respondents and how best to respond, based on the respondent's level of distress. They were instructed, however, not to provide any counseling, but instead to inform respondents of services available and how to access those services if needed.

TPO Uganda and UNHCR Uganda agreed to exempt researchers and data collectors from any existing mandatory reporting policies of abuse and violence. When a case was identified, the respondent was informed of services, and asked if s/he would like assistance in accessing those services.

Upon entering a selected household, data collectors identified the primary caregiver, in order to provide a short introduction to the study and obtain permission to interview an adolescent aged between 13-17 (up to age 19 for baseline respondents). Data collectors were trained to present the survey as an opportunity to learn more about the health and life experiences of male and female adolescents and youth in the camps, emphasizing that the survey is both confidential and voluntary. While this explanation did not fully present the content of the survey, which included questions about sexual violence and violence in the home, this approach was seen as justified, as a description of the study which included all components of the survey could potentially reduce caregiver permission and therefore exclude adolescents from the survey who are at-risk or in vulnerable situations.

The data collector then sought informed consent from the caregiver to participate in the caregiver survey, and then subsequently sought informed consent/assent from the adolescent, to complete to adolescent survey. The adolescent survey was only conducted if a caregiver was present to give permission. In households where the caregiver was an adolescent, the adolescent and caregiver surveys (without the well-being measures) were both administered to the adolescent caregiver. All informed consent and permission was obtained through a written form that data collectors read to respondents. Informed consent forms explained to respondents that information they provided was confidential, and that their decision regarding participation was voluntary and would have no bearing on their access to health or relief services or to their family's access to these services.

Data collectors ensured that the interview took place in a private setting, to protect confidentiality and enable respondents to feel comfortable responding to sensitive questions. Data collectors found that the most private space to conduct the interview was in the respondents' home, with the caregiver leaving the house during the adolescent interview, and vice versa.

After completion of the interview with an adolescent respondent, data collectors asked respondents the following post-survey screening questions: "I know this discussion might have been difficult for you. How are you feeling right now? Would you like to discuss any of these issues further with someone else?" Respondents were offered information about services in the camp that they could access if they wished.

Adolescents and caregivers who agreed to participate in focus groups were administered one-on-one informed consent by a data collector. The focus group facilitator monitored the participants for distress, and reminded participants that they could choose not to answer a question, or to end their participation in the focus group at any time.

No identifying information was collected about respondents, and each survey was identified only by a survey ID number. All data was collected using mobile phone technology, and survey data was uploaded daily onto a secure server.

APPENDIX 3:

RESULTS, ADOLESCENT AND CAREGIVER SURVEYS: DETAILED OUTPUT

A3.1 Demographics

Table 7. Change in demographics by site

Question	Complete			Adjumani			Kiryandongo		
	T1 (n=471)	T2 (n=763)	Change	T1 (n=251)	T2 (n=380)	Change	T1 (n=220)	T2 (n=383)	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Demographics									
Gender									
Male	268 (53.1)	376 (49.3)	0.186	133 (53)	169 (44.5)	**0.036**	114 (51.8)	207 (54)	0.597
Female	237 (46.9)	387 (50.7)		118 (47)	211 (55.5)		106 (48.2)	176 (46)	
Age									
Mean [SD]	14.6 [1.4]	15.3 [1.6]	**<0.001**	14.5 [1.4]	15.1 [1.5]	**<0.001**	14.8 [1.5]	15.5 [1.7]	**<0.001**
Parental status									
Orphan	60 (11.9)	124 (16.3)	**0.0018**	8 (3.2)	61 (16.1)	**0.0001**	32 (14.7)	63 (16.4)	0.7098
Only mother alive	147 (29.2)	233 (30.5)		91 (36.3)	138 (36.3)		51 (23.4)	95 (24.8)	
Only father alive	39 (7.8)	50 (6.6)		5 (2)	13 (3.4)		28 (12.8)	37 (9.7)	
Both parents alive	257 (51.1)	356 (46.7)		147 (58.6)	168 (44.2)		107 (49.1)	188 (49.1)	
Living situation									
Live with neither parent	206 (40.8)	124 (31.9)	**0.0003**	59 (23.5)	61 (27.1)	0.2283	115 (52.3)	63 (38.4)	**0.0002**
Live with only mother	222 (44)	142 (36.5)		133 (53)	84 (37.3)		89 (40.5)	58 (35.4)	
Live with only father	7 (1.4)	6 (1.5)		1 (0.4)	2 (0.9)		5 (2.3)	4 (2.4)	
Live with both parents	70 (13.9)	117 (30.1)		58 (23.1)	78 (34.7)		11 (5)	39 (23.8)	
Birth country									
South Sudan / Sudan	495 (98.0)	725 (95)	0.9891	243 (96.8)	368 (96.8)	0.5870	218 (99.1)	357 (93.2)	0.4166
Uganda	3 (0.6)	23 (3)		3 (1.2)	5 (1.3)		0 (0)	18 (4.7)	
Other	7 (1.4)	15 (2)		5 (2)	7 (1.8)		2 (0.9)	8 (2.1)	
Years lived in Uganda									
Mean [SD]	0.9 [0.5]	2.4 [0.7]	**<0.001**	1.0 [0.2]	2.5 [0.8]	**<0.001**	0.9 [0.6]	2.2 [0.9]	**<0.001**

Question	Complete			Adjumani			Kiryandongo		
	T1 (n=471)	T2 (n=763)	Change	T1 (n=251)	T2 (n=380)	Change	T1 (n=220)	T2 (n=383)	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Number of people living in household									
Mean [SD]	8.1 [3.9]	8.4 [3.8]	0.1578	9.1 [4.7]	9.1 [4.6]	0.9302	7.2 [2.6]	7.6 [2.5]	**0.0276**
Have own refugee ID card or formal documentation?									
Yes	453 (89.7)	526 (68.9)	**<0.0001**	218 (86.9)	208 (54.7)	**<0.0001**	204 (92.7)	318 (83)	**0.001**
No	51 (10.1)	235 (30.8)		32 (12.7)	170 (44.7)		16 (7.3)	65 (17)	
Education									
Ever attended school									
Yes	460 (91.3)	733 (96.1)	**<0.0001**	238 (94.8)	362 (95.3)	0.801	191 (87.2)	371 (96.9)	**<0.0001**
No	44 (8.7)	30 (3.9)		13 (5.2)	18 (4.7)		28 (12.8)	12 (3.1)	
Attended primary or secondary school in term 2 or term 3 (i.e. recently)									
Yes	383 (83.3)	663 (90.5)	**<0.0001**	209 (87.8)	346 (95.6)	**<0.0001**	147 (77)	317 (85.4)	**0.012**
No	77 (16.7)	70 (9.5)		29 (12.2)	16 (4.4)		44 (23)	54 (14.6)	
Highest level of education completed									
Primary or less	370 (80.3)	642 (87.6)	**0.001**	174 (73.1)	313 (86.5)	**<0.0001**	170 (88.5)	329 (88.7)	0.961
At least some secondary or more	91 (19.7)	91 (12.4)		64 (26.9)	49 (13.5)		22 (11.5)	42 (11.3)	

Notes. **Bold** indicates statistically significant finding, p<0.050.

A3.2 Violence

Table 8. Change in lifetime exposure to violence between T1 and T2

Question	T1	T2	Change
	N (%)	N (%)	p-value
Exposure to violence in the home			
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?			
Yes	42 (8.3)	74 (9.7)	0.403
No	463 (91.7)	689 (90.3)	
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?			
Yes	71 (14.1)	118 (15.5)	0.491
No	434 (85.9)	645 (84.5)	
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?			
Yes	53 (10.5)	102 (13.4)	0.124
No	452 (89.5)	660 (86.6)	
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?			
Yes	25 (5.0)	47 (6.2)	0.364
No	479 (95.0)	715 (93.8)	
Verbal, physical, and emotional abuse in the home			
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?			
Yes	58 (11.5)	136 (17.9)	**0.002**
No	445 (88.5)	625 (82.1)	
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?			
Yes	33 (6.6)	74 (9.8)	**0.045**
No	470 (93.4)	683 (90.2)	
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?			
Yes	22 (4.4)	46 (6.1)	0.181
No	483 (95.6)	709 (93.9)	
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?			
Yes	47 (9.3)	81 (10.7)	0.444
No	456 (90.7)	678 (89.3)	
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?			
Yes	27 (5.3)	71 (9.4)	**0.009**
No	478 (94.7)	685 (90.6)	
Has anyone ever pushed, grabbed or kicked you?			
Yes	53 (10.5)	113 (14.8)	**0.025**
No	451 (89.5)	648 (85.2)	
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?			
Yes	67 (13.3)	168 (22.1)	**<0.001**
No	437 (86.7)	592 (77.9)	
Has anyone in your family or living in your home ever threatened you with a knife or a gun?			
Yes	23 (4.6)	38 (5)	0.721
No	482 (95.4)	723 (95)	
Sexual violence in the past year			
Was there a time when you were physically forced to have sexual intercourse against your will?			
Yes	15 (3)	22 (3)	0.967
No	486 (97)	723 (97)	
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?			
Yes	7 (1.4)	5 (0.7)	0.196
No	493 (98.6)	741 (99.3)	
Has someone other than a teacher or principal offered you money, gifts, food, services, or shelter if you had sex with him or her?			
Yes	5 (1.0)	9 (1.2)	*0.792
No	496 (99.0)	739 (98.8)	
Have you had sexual intercourse with someone other than a teacher or principal because you hoped to receive money, gifts, food, services or shelter?			
Yes	5 (1.0)	8 (1.1)	*1.000
No	494 (99.0)	737 (98.9)	

Question	T1	T2	Change
	N (%)	N (%)	p-value
School- based violence			
During the past term, have you been hit, pushed, kicked or shoved on school property?			
Yes	62 (12.4)	109 (14.9)	0.206
No	439 (87.6)	622 (85.1)	
Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?			
Yes	14 (2.8)	36 (4.9)	0.061
No	489 (97.2)	696 (95.1)	
Have you been screamed or yelled at very loudly or aggressively at school?			
Yes	74 (14.8)	87 (11.9)	0.139
No	426 (85.2)	644 (88.1)	
Has a teacher ever punished you by hitting or beating you?			
Yes	104 (20.7)	222 (30.5)	**<0.001**
No	398 (79.3)	507 (69.6)	
Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?			
Yes	3 (0.6)	8 (1.1)	0.359
No	497 (99.4)	717 (98.9)	
Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?			
Yes	6 (1.2)	14 (1.9)	0.314
No	494 (98.8)	706 (98.1)	

Question	T1	T2	Change
	N (%)	N (%)	p-value
Camp-based violence			
Have you been hit, pushed, kicked or shoved in a public area of the settlement, apart from at school?			
Yes	43 (8.6)	67 (8.9)	0.850
No	459 (91.4)	688 (91.1)	
Has someone threatened or injured you with a weapon such as a gun, knife, or stick in a public area of the settlement, apart from at school?			
Yes	30 (6.0)	36 (4.8)	0.346
No	473 (94.0)	721 (95.2)	
Anonymously reported			
Since the last South Sudanese Independence Day have you had sex with any person?			
Yes	57 (11.3)	71 (9.3)	0.247
No	447 (88.7)	692 (90.7)	
Since the last South Sudanese Independence Day have you been sexually violated or abused by any person?			
Yes	32 (11.3)	56 (7.3)	**0.040**
No	251 (88.7)	707 (92.7)	
Since the last South Sudanese Independence Day, have you been slapped, beaten, or kicked by any person?			
Yes	81 (16.1)	82 (10.8)	**0.006**
No	423 (83.90	681 (89.3)	

Table 9. Change in lifetime exposure to verbal and physical violence between T1 and T2 by site

Question	Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home						
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?						
Yes	24 (9.6)	38 (10)	0.856	16 (7.3)	36 (9.4)	0.370
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?						
Yes	27 (10.8)	54 (14.2)	0.204	39 (17.7)	64 (16.7)	0.749
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?						
Yes	17 (6.8)	54 (14.2)	**0.004**	34 (15.5)	48 (12.5)	0.314
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?						
Yes	9 (3.6)	25 (6.6)	0.105	14 (6.4)	22 (5.8)	0.763
Verbal, physical, and emotional abuse in the home						
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?						
Yes	22 (8.8)	72 (19)	**<0.0001**	33 (15)	64 (16.7)	0.582
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?						
Yes	15 (6)	44 (11.7)	**0.018**	17 (7.7)	30 (7.9)	0.941
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?						
Yes	11 (4.4)	23 (6.1)	0.355	10 (4.5)	23 (6.1)	0.422
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?						
Yes	13 (5.2)	41 (10.8)	**0.014**	33 (15)	40 (10.5)	0.106
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?						
Yes	11 (4.4)	42 (11.2)	**0.003**	16 (7.3)	29 (7.6)	0.886
Has anyone ever pushed, grabbed or kicked you?						
Yes	17 (6.8)	54 (14.2)	**0.004**	35 (15.9)	59 (15.5)	0.890
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?						
Yes	31 (12.4)	95 (25.1)	**<0.0001**	34 (15.5)	73 (19.1)	0.259
Has anyone in your family or living in your home ever threatened you with a knife or a gun?						
Yes	11 (4.4)	14 (3.7)	0.665	11 (5)	24 (6.3)	0.517
Sexual violence in the past year						
Was there a time when you were physically forced to have sexual intercourse against your will?						
Yes	4 (1.6)	13 (3.5)	*0.156	11 (5)	9 (2.4)	0.087
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?						
Yes	0 (0)	1 (0.3)	*0.413	7 (3.2)	4 (1.1)	0.062
Has someone other than a teacher or principal offered you money, gifts, food, services, or shelter if you had sex with him or her?						
Yes	2 (0.8)	0 (0.0)	*0.157	3 (1.4)	9 (2.4)	0.378
Have you had sexual intercourse with someone other than a teacher or principal because you hoped to receive money, gifts, food, services or shelter?						
Yes	1 (0.4)	1 (0.3)	*1.000	4 (1.8)	7 (1.9)	*1.000

Question	Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
School- based violence						
During the past term, have you been hit, pushed, kicked or shoved on school property?						
Yes	26 (10.5)	52 (14.4)	0.160	32 (14.6)	57 (15.4)	0.778
Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?						
Yes	6 (2.4)	19 (5.3)	0.081	8 (3.6)	17 (4.6)	0.581
Have you been screamed or yelled at very loudly or aggressively at school?						
Yes	41 (16.7)	43 (11.9)	0.093	31 (F)	44 (11.9)	0.445
Has a teacher ever punished you by hitting or beating you?						
Yes	52 (21.0)	116 (32.0)	**0.003**	47 (21.4)	106 (28.9)	**0.045**
Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?						
Yes	2 (0.8)	1 (0.3)	*0.569	1 (0.5)	7 (1.9)	*0.269
Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?						
Yes	2 (0.81)	3 (0.85)	*1.000	4 (1.8)	11 (3.0)	*0.432
Camp-based violence						
Have you been hit, pushed, kicked or shoved in a public area of the settlement, apart from at school?						
Yes	16 (6.5)	36 (9.5)	0.179	24 (10.9)	31 (8.3)	0.283
Has someone threatened or injured you with a weapon such as a gun, knife, or stick in a public area of the settlement, apart from at school?						
Yes	7 (2.8)	17 (4.5)	0.284	22 (10.0)	19 (5.0)	0.020
Anonymously reported						
Since the last South Sudanese Independence Day have you had sex with any person?						
Yes	20 (8.0)	29 (7.6)	0.866	36 (16.4)	42 (11.0)	0.057
Since the last South Sudanese Independence Day have you been sexually violated or abused by any person?						
Yes	32 (12.9)	28 (7.4)	**0.022**	n/a	28 (7.3)	–
Since the last South Sudanese Independence Day, have you been slapped, beaten, or kicked by any person?						
Yes	19 (7.6)	42 (11.1)	0.152	61 (27.7)	40 (10.4)	**<0.0001**

Notes. **Bold** indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5. n/a indicates that item was not asked of this subgroup at this time.

Table 10. Change in exposure to verbal and physical violence between T1 and T2 by gender

Question	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home						
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?						
Yes	36 (9.3)	55 (8.8)	0.583	23 (8.6)	38 (10.1)	0.515
No	351 (90.7)	569 (91.2)		245 (91.4)	338 (89.9)	
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?						
Yes	60 (15.5)	86 (13.8)	0.111	45 (16.8)	58 (15.4)	0.641
No	327 (84.5)	538 (86.2)		223 (83.2)	318 (84.6)	
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?						
Yes	60 (15.5)	84 (13.5)	0.055	29 (10.8)	42 (11.2)	0.889
No	326 (84.5)	539 (86.5)		239 (89.2)	334 (88.8)	
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?						
Yes	26 (6.7)	40 (6.4)	0.692	11 (4.1)	21 (5.6)	0.394
No	360 (93.3)	582 (93.6)		257 (95.9)	355 (94.4)	
Verbal, physical, and emotional abuse in the home						
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?						
Yes	83 (21.5)	110 (17.7)	**0.002**	31 (11.6)	53 (14.1)	0.341
No	303 (78.5)	511 (82.3)		237 (88.4)	322 (85.9)	
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?						
Yes	44 (11.5)	63 (10.2)	0.173	14 (5.2)	30 (8)	0.168
No	340 (88.5)	557 (89.8)		253 (94.8)	343 (92)	
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?						
Yes	28 (7.3)	39 (6.3)	0.178	11 (4.1)	18 (4.8)	0.670
No	353 (92.7)	579 (93.7)		257 (95.9)	356 (95.2)	
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?						
Yes	43 (11.2)	63 (10.2)	0.271	27 (10.1)	38 (10.1)	0.998
No	340 (88.8)	556 (89.8)		240 (89.9)	338 (89.9)	
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?						
Yes	46 (12.1)	65 (10.5)	0.108	8 (3.0)	25 (6.6)	**0.038**
No	334 (87.9)	552 (89.5)		260 (97.0)	351 (93.4)	
Has anyone ever pushed, grabbed or kicked you?						
Yes	72 (18.7)	96 (15.4)	**0.004**	29 (10.9)	41 (10.9)	0.986
No	313 (81.3)	526 (84.6)		238 (89.1)	335 (89.1)	
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?						
Yes	120 (31.2)	158 (25.4)	**<0.001**	29 (10.8)	48 (12.8)	0.446
No	265 (68.8)	463 (74.6)		239 (89.2)	327 (87.2)	

Question	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Has anyone in your family or living in your home ever threatened you with a knife or a gun?						
Yes	28 (7.3)	45 (7.2)	0.970	6 (2.2)	10 (2.7)	0.731
No	358 (92.7)	578 (92.8)		262 (97.8)	365 (97.3)	
Sexual violence in the past year						
Was there a time when you were physically forced to have sexual intercourse against your will?						
Yes	7 (1.9)	14 (2.3)	0.379	8 (3.0)	15 (4.0)	0.496
No	364 (98.1)	591 (97.7)		259 (97.0)	359 (96.0)	
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?						
Yes	4 (1.1)	4 (0.7)	0.113	7 (2.6)	1 (0.3)	**0.008**
No	371 (98.9)	605 (99.3)		259 (97.4)	370 (99.7)	
Has someone other than a teacher or principal offered you money, gifts, food, services, or shelter if you had sex with him or her?						
Yes	2 (0.9)	8 (2.1)	*0.331	3 (1.1)	1 (0.3)	*0.313
No	232 (99.2)	367 (97.9)		264 (98.9)	372 (99.7)	
Have you had sexual intercourse with someone other than a teacher or principal because you hoped to receive money, gifts, food, services or shelter?						
Yes	1 (0.4)	5 (1.3)	*0.414	4 (1.5)	3 (0.8)	*0.457
No	233 (99.6)	367 (98.7)		261 (98.5)	370 (99.2)	
School- based violence						
During the past term, have you been hit, pushed, kicked or shoved on school property?						
Yes	18 (11.3)	59 (18.7)	**0.040**	29 (13.1)	32 (9.3)	0.150
No	141 (88.7)	257 (81.3)		192 (86.9)	313 (90.7)	
Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?						
Yes	7 (3.4)	21 (5.8)	0.191	6 (2.40)	15 (4.0)	0.269
No	201 (96.6)	339 (94.2)		244 (97.6)	357 (96.0)	
Have you been screamed or yelled at very loudly or aggressively at school?						
Yes	17 (8.3)	45 (12.5)	0.120	52 (20.8)	42 (11.3)	**0.001**
No	189 (91.8)	315 (87.5)		198 (79.2)	329 (88.7)	
Has a teacher ever punished you by hitting or beating you?						
Yes	58 (23.0)	104 (34.3)	**0.004**	92 (30.1)	63 (21.4)	**0.015**
No	194 (77.0)	199 (65.7)		214 (69.9)	232 (78.6)	
Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?						
Yes	1 (0.4)	5 (1.4)	*0.410	2 (0.8)	3 (0.8)	*1.000
No	234 (99.6)	350 (98.6)		263 (99.3)	367 (99.2)	

Question	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?						
Yes	3 (1.3)	12 (3.4)	0.180	3 (1.1)	2 (0.5)	0.654
No	232 (98.7)	339 (96.6)		262 (98.9)	367 (99.5)	
Camp-based violence						
Have you been hit, pushed, kicked or shoved in a public area of the settlement, apart from at school?						
Yes	12 (5.1)	42 (11.1)	**0.011**	31 (11.7)	25 (6.7)	**0.027**
No	224 (94.9)	337 (88.9)		235 (88.4)	351 (93.4)	
Has someone threatened or injured you with a weapon such as a gun, knife, or stick in a public area of the settlement, apart from at school?						
Yes	14 (5.9)	14 (3.7)	0.190	16 (6.0)	22 (5.9)	0.940
No	222 (94.1)	367 (96.3)		251 (94.0)	354 (94.2)	
Anonymously reported						
Since the last South Sudanese Independence Day have you had sex with any person?						
Yes	30 (12.7)	25 (6.5)	**0.008**	27 (10.1)	46 (12.2)	0.403
No	207 (87.3)	362 (93.5)		240 (89.9)	330 (87.8)	
Since the last South Sudanese Independence Day have you been sexually violated or abused by any person?						
Yes	25 (19.1)	30 (7.8)	**<0.001**	7 (4.6)	26 (6.9)	0.321
No	106 (80.9)	357 (92.3)		145 (95.4)	350 (93.1)	
Since the last South Sudanese Independence Day, have you been slapped, beaten, or kicked by any person?						
Yes	35 (14.8)	34 (8.8)	**0.021**	46 (17.2)	48 (12.8)	0.115
No	202 (85.2)	353 (91.2)		221 (82.8)	328 (87.2)	

Notes. **Bold** indicates statistically significant finding, p<0.050.

Table 11. Change in exposure to verbal and physical violence between T1 and T2 by biological parental status

Question	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home									
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?									
Yes	3 (7.5)	12 (9.7)	*1.000	16 (8.6)	22 (7.8)	0.748	23 (8.9)	40 (11.2)	0.358
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?									
Yes	5 (12.5)	20 (16.1)	*0.801	31 (16.7)	48 (17)	0.932	34 (13.2)	50 (14)	0.772
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?									
Yes	6 (15.0)	21 (16.9)	0.774	16 (8.6)	46 (16.3)	**0.017**	29 (11.3)	35 (9.9)	0.570
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?									
Yes	3 (7.5)	7 (5.7)	*0.707	15 (8.1)	21 (7.4)	0.785	5 (1.9)	19 (5.4)	**0.032**
Verbal, physical, and emotional abuse in the home									
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?									
Yes	3 (7.5)	30 (24.2)	***0.023**	22 (11.9)	56 (19.8)	**0.025**	31 (12.1)	50 (14.1)	0.469
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?									
Yes	2 (5.0)	13 (10.6)	*0.363	16 (8.6)	33 (11.7)	0.287	13 (5.1)	28 (7.9)	0.165
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?									
Yes	2 (5.0)	8 (6.5)	*1.000	8 (4.3)	20 (7.1)	0.209	10 (3.9)	18 (5.1)	0.472
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?									
Yes	7 (17.5)	17 (13.8)	0.568	23 (12.4)	38 (13.5)	0.744	15 (5.8)	26 (7.3)	0.462
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?									
Yes	3 (7.5)	15 (12.1)	*0.566	15 (8.1)	33 (11.8)	0.191	8 (3.1)	23 (6.5)	0.059
Has anyone ever pushed, grabbed or kicked you?									
Yes	5 (12.5)	31 (25.0)	0.097	27 (14.5)	46 (16.3)	0.600	19 (7.4)	36 (10.1)	0.247
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?									
Yes	5 (12.5)	34 (27.6)	0.051	33 (17.8)	69 (24.5)	0.090	27 (10.5)	65 (18.3)	**0.008**
Has anyone in your family or living in your home ever threatened you with a knife or a gun?									
Yes	3 (7.5)	5 (4.1)	0.411	12 (6.5)	19 (6.7)	0.911	6 (2.3)	12 (3.4)	0.446
Sexual violence in the past year									
Was there a time when you were physically forced to have sexual intercourse against your will?									
Yes	0 (0.0)	6 (5.9)	*0.338	7 (3.8)	8 (2.9)	0.617	8 (3.2)	8 (2.3)	0.513
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?									
Yes	0 (0.0)	1 (0.8)	*1.000	4 (2.2)	3 (1.1)	0.357	3 (1.2)	1 (0.3)	0.179

Question	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Has someone other than a teacher or principal offered you money, gifts, food, services, or shelter if you had sex with him or her?									
Yes	0 (0.0)	2 (1.6)	*1.000	2 (1.1)	2 (0.7)	* 0.653	3 (1.2)	5 (1.4)	*1.000
Have you had sexual intercourse with someone other than a teacher or principal because you hoped to receive money, gifts, food, services or shelter?									
Yes	0 (0.0)	3 (24)	*0.552	2 (1.1)	3 (1.1)	*1.000	3 (1.2)	2 (0.6)	*0.655
School- based violence									
During the past term, have you been hit, pushed, kicked or shoved on school property?									
Yes	9 (15.0)	14 (12.1)	0.640	24 (13.0)	49 (18.4)	0.133	29 (11.4)	46 (13.2)	0.497
Has someone threatened or injured you with a weapon such as a gun, or knife, or stick on school property?									
Yes	3 (5.0)	8 (6.8)	*0.752	6 (3.2)	14 (5.3)	0.305	5 (2.0)	14 (4.0)	0.152
Have you been screamed or yelled at very loudly or aggressively at school?									
Yes	6 (10.2)	16 (13.7)	0.507	30 (16.2)	36 (13.5)	0.428	38 (15.0)	35 (10.1)	0.069
Has a teacher ever punished you by hitting or beating you?									
Yes	8 (13.3)	35 (30.2)	**0.014**	35 (18.9)	82 (30.9)	**0.004**	61 (23.9)	105 (30.2)	0.090
Has a teacher or principal offered you money, gifts, food, shelter, or a better grade in school if you had sex with him or her?									
Yes	2 (3.3)	1 (0.9)	*0.273	0 (0.0)	2 (0.8)	*0.515	1 (0.4)	5 (1.5)	*0.409
Have you had sexual intercourse with a teacher or principal because you hoped to receive money, gifts, food, shelter, or a better grade in school?									
Yes	1 (1.7)	3 (2.6)	*1.000	0 (0.0)	7 (2.7)	***0.045**	5 (2.0)	4 (1.2)	*0.506
Camp-based violence									
Have you been hit, pushed, kicked or shoved in a public area of the settlement, apart from at school?									
Yes	5 (8.3)	13 (10.7)	0.622	18 (9.7)	27 (9.7)	0.985	19 (7.5)	27 (7.6)	0.935
Has someone threatened or injured you with a weapon such as a gun, knife, or stick in a public area of the settlement, apart from at school?									
Yes	3 (5.0)	5 (4.1)	*1.000	11 (5.9)	16 (5.7)	0.921	16 (6.3)	15 (4.2)	0.256
Anonymously reported									
Since the last South Sudanese Independence Day have you had sex with any person?									
Yes	4 (6.7)	13 (10.5)	*0.588	29 (15.6)	28 (9.9)	0.065	24 (9.4)	30 (8.4)	0.683
Since the last South Sudanese Independence Day have you been sexually violated or abused by any person?									
Yes	2 (7.1)	5 (4.0)	*0.613	13 (12.3)	24 (8.5)	0.257	17 (11.4)	27 (7.6)	0.165
Since the last South Sudanese Independence Day, have you been slapped, beaten, or kicked by any person?									
Yes	6 (10.0)	13 (10.5)	0.919	39 (21.0)	33 (11.7)	**0.006**	35 (13.7)	36 (10.1)	0.175

Notes. **Bold** indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5.

Table 12. Change in exposure to verbal and physical violence between T1 and T2, past year

Question	T1	T2	Change
	N (%)	N (%)	p-value
Exposure to violence in the home, past year			
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?			
Yes	99 (40.6)	66 (91.7)	**<0.001**
No	145 (59.4)	6 (8.3)	
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?			
Yes	118 (47)	99 (85.3)	**<0.001**
No	133 (53)	17 (14.7)	
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?			
Yes	100 (42.2)	88 (88.9)	**<0.001**
No	137 (57.8)	11 (11.1)	
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?			
Yes	81 (35.4)	39 (84.8)	**<0.001**
No	148 (64.6)	7 (15.2)	
Verbal, physical, and emotional abuse in the home, past year			
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?			
Yes	106 (43.4)	111 (84.1)	**<0.001**
No	138 (56.6)	21 (15.9)	
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?			
Yes	86 (36.9)	60 (83.3)	**<0.001**
No	147 (63.1)	12 (16.7)	
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?			
Yes	79 (34.5)	38 (84.4)	**<0.001**
No	150 (65.5)	7 (15.6)	
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?			
Yes	95 (41.1)	72 (90)	**<0.001**
No	136 (58.9)	8 (10)	
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?			
Yes	75 (33)	56 (84.8)	**<0.001**
No	152 (67)	10 (15.2)	
Has anyone ever pushed, grabbed or kicked you?			
Yes	95 (40.4)	92 (84.4)	**<0.001**
No	140 (59.6)	17 (15.6)	
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?			
Yes	111 (44.4)	138 (84.7)	**<0.001**
No	139 (55.6)	25 (15.3)	
Has anyone in your family or living in your home ever threatened you with a knife or a gun?			
Yes	74 (32.5)	37 (97.4)	***<0.001**
No	154 (67.5)	1 (2.6)	
Sexual violence in the past year			
Was there a time when you were physically forced to have sexual intercourse against your will?			
Yes	15 (3)	22 (3)	0.967
No	486 (97)	723 (97)	
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?			
Yes	7 (1.4)	5 (0.7)	0.196
No	493 (98.6)	741 (99.3)	

Notes. Total n's vary by question as 'past year' question only asked to those who ever experienced item.
Bold indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5.

Table 13. Change in exposure to verbal and physical violence between T1 and T2 by site, past year

Question	Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home, past year						
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?						
Yes	24 (100.0)	32 (86.5)	*0.147	73 (33.5)	34 (97.1)	**<0.001**
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?						
Yes	22 (81.5)	43 (81.1)	0.970	91 (41.6)	56 (88.9)	**<0.001**
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?						
Yes	17 (100.0)	43 (84.3)	*0.186	82 (37.6)	45 (93.8)	**<0.001**
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?						
Yes	10 (100.0)	22 (91.7)	*1.000	69 (31.8)	17 (77.3)	**<0.001**
Verbal, physical, and emotional abuse in the home, past year						
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?						
Yes	20 (87.0)	55 (79.7)	*0.547	83 (38.1)	56 (88.9)	**<0.001**
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?						
Yes	12 (80.0)	32 (76.2)	*1.000	73 (33.6)	28 (93.3)	**<0.001**
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?						
Yes	9 (81.8)	16 (72.7)	*0.687	69 (31.8)	22 (95.7)	**<0.001**
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?						
Yes	10 (76.9)	36 (90)	*0.343	84 (38.7)	36 (90)	**<0.001**
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?						
Yes	8 (72.7)	34 (87.2)	*0.351	67 (31)	22 (81.5)	**<0.001**
Has anyone ever pushed, grabbed or kicked you?						
Yes	15 (88.2)	36 (72)	*0.322	79 (36.4)	56 (94.9)	**<0.001**
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?						
Yes	26 (83.9)	70 (77.8)	0.470	83 (38.2)	68 (93.2)	**<0.001**
Has anyone in your family or living in your home ever threatened you with a knife or a gun?						
Yes	10 (90.9)	13 (92.9)	*1.000	63 (29.2)	24 (100.0)	**<0.001**
Sexual violence in the past year						
Was there a time when you were physically forced to have sexual intercourse against your will?						
Yes	4 (1.6)	13 (3.5)	*0.156	11 (5)	9 (2.4)	0.087
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?						
Yes	0 (0)	1 (0.3)	*0.413	7 (3.2)	4 (1.1)	0.062

Notes. Total n's vary by question as 'past year' question only asked to those who ever experienced item.
Bold indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5.

Table 14. Change in exposure to verbal and physical violence between T1 and T2 by gender, past year

Question	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home, past year						
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?						
Yes	68 (56.7)	29 (85.3)	**0.002**	31 (25)	37 (97.4)	***<0.001**
No	52 (43.3)	5 (14.7)		93 (75)	1 (2.6)	
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?						
Yes	72 (59.5)	45 (76.3)	**0.027**	46 (35.4)	54 (94.7)	***<0.001**
No	49 (40.5)	14 (23.7)		84 (64.6)	3 (5.3)	
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?						
Yes	71 (58.7)	49 (84.5)	**0.001**	29 (25)	39 (95.1)	***<0.001**
No	50 (41.3)	9 (15.5)		87 (75)	2 (4.9)	
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?						
Yes	63 (55.8)	21 (84)	**0.009**	18 (15.5)	18 (85.7)	***<0.001**
No	50 (44.2)	4 (16)		98 (84.5)	3 (14.3)	
Verbal, physical, and emotional abuse in the home, past year						
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?						
Yes	68 (55.3)	63 (78.8)	**0.001**	38 (31.4)	48 (92.3)	***<0.001**
No	55 (44.7)	17 (21.3)		83 (68.6)	4 (7.7)	
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?						
Yes	66 (56.4)	33 (76.7)	**0.019**	20 (17.2)	27 (93.1)	***<0.001**
No	51 (43.6)	10 (23.3)		96 (82.8)	2 (6.9)	
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?						
Yes	63 (55.8)	23 (85.2)	**0.005**	16 (13.8)	15 (83.3)	***<0.001**
No	50 (44.2)	4 (14.8)		100 (86.2)	3 (16.7)	
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?						
Yes	65 (56)	38 (90.5)	**<0.001**	30 (26.1)	34 (89.5)	***<0.001**
No	51 (44)	4 (9.5)		85 (73.9)	4 (10.5)	
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?						
Yes	61 (52.6)	34 (81)	**0.001**	14 (12.6)	22 (91.7)	***<0.001**
No	55 (47.4)	8 (19)		97 (87.4)	2 (8.3)	
Has anyone ever pushed, grabbed or kicked you?						
Yes	63 (54.3)	53 (77.9)	**0.001**	32 (26.9)	39 (95.1)	***<0.001**
No	53 (45.7)	15 (22.1)		87 (73.1)	2 (4.9)	

Question	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?						
Yes	75 (58.1)	94 (81.7)	**<0.001**	36 (29.8)	44 (91.7)	***<0.001**
No	54 (41.9)	21 (18.3)		85 (70.2)	4 (8.3)	
Has anyone in your family or living in your home ever threatened you with a knife or a gun?						
Yes	64 (55.2)	27 (96.4)	***<0.001**	10 (8.99)	10 (100.0)	***<0.001**
No	52 (44.8)	1 (3.6)		102 (91.1)	0 (0.0)	
Sexual violence in the past year						
Was there a time when you were physically forced to have sexual intercourse against your will?						
Yes	7 (1.9)	14 (2.3)	0.379	8 (3.0)	15 (4.0)	0.496
No	364 (98.1)	591 (97.7)		259 (97.0)	359 (96.0)	
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?						
Yes	4 (1.1)	4 (0.7)	0.113	7 (2.6)	1 (0.3)	**0.008**
No	371 (98.9)	605 (99.3)		259 (97.4)	370 (99.7)	

Notes. Total n's vary by question as 'past year' question only asked to those who ever experienced item.
Bold indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5.

Table 15. Change in exposure to verbal and physical violence between T1 and T2 by biological parental status, past year

Question	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Exposure to violence in the home, past year									
Has anyone in your home ever used drugs and/or alcohol and then behaved in a way that frightened you?									
Yes	18 (52.9)	11 (91.7)	***0.034**	38 (43.2)	19 (90.5)	***<0.001**	43 (35.8)	36 (92.3)	***<0.001**
Have you ever seen adults in your home shouting and yelling at each other (arguing) in a way that frightened you?									
Yes	19 (54.3)	16 (80)	*0.082	46 (50.5)	40 (87)	**<0.001**	53 (43.1)	43 (86)	**<0.001**
Have you seen adults in your home hit, kick, slap, punch each other or hurt each other physically in other ways?									
Yes	20 (58.8)	17 (85)	*0.069	35 (41.7)	41 (93.2)	***<0.001**	45 (38.5)	30 (85.7)	**<0.001**
Have you ever seen anyone in your home use knives, guns, sticks, rocks or other things to hurt or scare someone else inside the home?									
Yes	19 (57.6)	6 (85.7)	*0.224	35 (40.2)	18 (90)	***<0.001**	27 (25.2)	15 (78.9)	***<0.001**
Verbal, physical, and emotional abuse in the home, past year									
Has anyone in your family or living in your home ever screamed at you very loudly and aggressively?									
Yes	19 (54.3)	24 (82.8)	**0.016**	40 (44.9)	46 (86.8)	**<0.001**	46 (39)	41 (82)	**<0.001**
Has anyone in your family or living in your home ever called you names, said mean things or cursed you?									
Yes	19 (55.9)	9 (69.2)	*0.515	36 (42.9)	28 (87.5)	***<0.001**	31 (27.4)	23 (85.2)	***<0.001**
Has anyone in your family or living in your home ever said that they wished you were dead/ had never been born?									
Yes	19 (55.9)	8 (100)	***0.035**	28 (34.1)	17 (85)	***<0.001**	31 (27.9)	13 (76.5)	***<0.001**
Has anyone in your family or living in your home ever threatened to leave you forever or abandon you?									
Yes	20 (58.8)	15 (88.2)	*0.053	39 (45.3)	32 (86.5)	**<0.001**	36 (33)	25 (96.2)	***<0.001**
Has anyone in your family or living in your home ever threatened to hurt or kill you, including invoking evil spirits against you?									
Yes	17 (53.1)	13 (92.9)	***0.016**	31 (36.5)	28 (90.3)	***<0.001**	26 (24.1)	15 (71.4)	**<0.001**
Has anyone ever pushed, grabbed or kicked you?									
Yes	19 (55.9)	26 (86.7)	***0.013**	39 (44.8)	35 (81.4)	**<0.001**	36 (32.1)	31 (86.1)	**<0.001**
Has anyone in your family or living in your home ever hit, beat or spanked you with a hand?									
Yes	20 (57.1)	29 (87.9)	***0.007**	44 (47.3)	56 (86.2)	**<0.001**	46 (38.3)	53 (81.5)	**<0.001**
Has anyone in your family or living in your home ever threatened you with a knife or a gun?									
Yes	18 (54.6)	7 (100.0)	**0.033**	28 (33.3)	18 (94.7)	***<0.001**	27 (24.8)	12 (100.0)	**<0.001**
Sexual violence in the past year									
Was there a time when you were physically forced to have sexual intercourse against your will?									
Yes	0 (0.0)	6 (5.9)	*0.338	7 (3.8)	8 (2.9)	0.617	8 (3.2)	8 (2.3)	0.513
Was there a time when you were persuaded or pressured to have sexual intercourse against your will?									
Yes	0 (0.0)	1 (0.8)	*1.000	4 (2.2)	3 (1.1)	0.357	3 (1.2)	1 (0.3)	0.179

Notes. Total n's vary by question as 'past year' question only asked to those who ever experienced item.
Bold indicates statistically significant finding, p<0.050.
* indicate Fishers exact tests for n < 5.

A3.3 Psychosocial well-being

Table 16. Change in adolescent psychosocial well-being, mean and by gender

Psychosocial well-being outcome	T1	T2	Change	Female			Male		
				T1	T2	Change	T1	T2	Change
Adolescent	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**
	N=505	**N=763**		**N=237**	**N=387**		**N=268**	**N=376**	
SCARED	2.2 [2.5]	1.6 [1.9]	**0.001**	2.5 [2.5]	1.4 [1.7]	**<0.001**	1.9 [2.5]	1.7 [2.1]	0.3085
Moods and Feelings Questionnaire [MFQ]	8.1 [6.4]	6.9 [5.7]	**0.0002**	9.0 [6.0]	6.5 [5.2]	**<0.001**	7.3 [6.6]	7.3 [6.1]	0.8585
Children's Hope Scale	7.2 [3.5]	7.8 [3.5]	**0.0029**	6.3 [3.0]	7.7 [3.2]	**<0.001**	8.0 [3.8]	7.9 [3.8]	0.8273
MSPSS	33.1 [6.8]	31.9 [7.7]	**0.0045**	33.6 [5.0]	31.6 [7.2]	**0.0001**	32.7 [8.1]	32.3 [8.1]	0.5436
Caregiver	**N (%)**	**N (%)**	**p-value**	**N (%)**	**N (%)**	**p-value**	**N (%)**	**N (%)**	**p-value**
	N=505	**N=748**		**N=451**	**N=665**		**N=54**	**N=83**	
Anxiety (HSCL)	264 (52.3)	597 (44.5)	**0.007**	229 (50.8)	301 (45.3)	0.070	35 (64.8)	32 (38.6)	**0.003**
Depression (HSCL)	320 (63.4)	738 (55.9)	**0.008**	280 (62.1)	373 (56.1)	**0.046**	40 (74.1)	45 (54.2)	**0.019**

Notes. **Bold** indicates statistically significant finding, p<0.050.
SCARED= Screen for Child Anxiety Related Emotional Disorder;
MFQ = Moods and Feelings Questionnaire;
MSPSS = Multidimensional Scale of Perceived Social Support.
For Caregiver outcomes N is number meeting threshold cut-offs (1.75)

Table 17. Change in psychosocial well-being, mean and by biological parental status

Psychosocial well-being outcome	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
Adolescent	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**	**Mean [SD]**	**Mean [SD]**	**p-value**
SCARED	3.1 [2.7]	2.1 [2.3]	**<.000**	2.5 [2.7]	1.7 [1.9]	**<.005**	1.8 [2.2]	1.3 [1.7]	**<.005**
MFQ	10.9 [5.3]	9.7 [6.5]	0.2121	9.7 [6.9]	7.2 [5.6]	**<0.0001**	6.3 [5.7]	5.6 [4.9]	0.10
Children's Hope Scale	7.2 [3.4]	6.8 [3.3]	0.53	7.0 [3.7]	8.1 [3.5]	**0.0011**	7.4 [3.5]	7.9 [3.5]	0.06
MSPSS	31.7 [7.9]	30.5 [8.9]	0.38	32.5 [7.4]	31.2 [7.8]	0.06	34.0 [6.0]	33.1 [7.0]	0.08

Notes. **Bold** indicates statistically significant finding, p<0.050.
SCARED= Screen for Child Anxiety Related Emotional Disorder;
MFQ = Mood and Feelings Questionnaire;
HSCL = Hopkins Symptom Checklist;
MSPSS = Multidimensional Scale of Perceived Social Support.

Table 18. Change in feelings of safety, overall and by site

Question	Complete			Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Home									
Felt unsafe at home (feel safe some or none of the time)									
Yes	173 (36.7)	199 (26.3)	**<0.0001**	63 (25.1)	67 (17.6)	**0.023**	110 (50.0)	138 (36.0)	**0.001**
Felt unsafe at home in past week									
Yes	109 (23.3)	165 (21.7)	0.513	43 (17.4)	80 (21.2)	0.248	66 (30.0)	85 (22.3)	**0.036**
School									
Felt unsafe at school (feel safe some or none of the time)									
Yes	178 (37.8)	155 (20.3)	**<0.0001**	59 (23.5)	62 (16.3)	**0.025**	119 (54.1)	93 (24.3)	**<0.0001**
Caregiver thought adolescents were unsafe in school									
Yes	270 (54.2)	419 (56.9)	0.347	118 (48.2)	272 (73.5)	**<0.0001**	136 (61.82)	147 (40.2)	**<0.0001**
Felt unsafe at school in past week									
Yes	97 (22.9)	162 (22.5)	0.893	40 (18.9)	82 (23.2)	0.229	57 (26.9)	80 (21.9)	0.176
Felt unsafe on way to or from school in the past week									
Yes	105 (24.8)	154 (21.8)	0.244	35 (16.7)	78 (22.7)	0.089	70 (32.9)	76 (21.0)	**0.002**
Caregiver thought adolescents were unsafe on way to or from school									
Yes	282 (56.3)	426 (57.6)	0.655	137 (62.3)	153 (41.7)	**<0.0001**	129 (52.2)	273 (73.2)	**<0.0001**
Market and public spaces									
Felt unsafe in the market or other public spaces in the past week									
Yes	128 (27.4)	200 (26.5)	0.714	47 (19.0)	112 (29.8)	**0.003**	81 (36.8)	88 (23.2)	**<0.0001**
Felt unsafe on way to or from the market or other public spaces in the past week									
Yes	113 (24.2)	185 (24.5)	0.897	39 (15.7)	106 (28.2)	**<0.0001**	74 (33.6)	79 (20.8)	**0.001**
Caregiver thought adolescents were unsafe in the market or other public spaces									
Yes	252 (50.2)	357 (48.4)	0.543	122 (49.2)	203 (54.6)	0.189	101 (45.9)	211 (57.8)	**0.005**
Caregiver thought adolescents were unsafe somewhere within the settlement, that unsafe places existed									
Yes	112 (23.2)	151 (20.4)	0.230	35 (15.3)	56 (15.0)	0.928	73 (33.2)	95 (25.8)	0.053
Work									
Felt unsafe at work in the past week									
Yes	47 (15.6)	115 (21.5)	**0.039**	17 (10.4)	68 (24.6)	**<0.0001**	30 (21.7)	47 (18.2)	0.399
Felt unsafe on way to or from work in the past week									
Yes	56 (18.6)	116 (22.1)	0.234	17 (10.6)	69 (25.8)	**<0.0001**	39 (27.7)	47 (18.2)	**0.028**

Notes. **Bold** indicates statistically significant finding, p<0.050.

Table 19. Change in feelings of safety, overall and by adolescent gender

Question	Complete			Female			Male		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Home									
Felt unsafe at home (feel safe some or none of the time)									
Yes	173 (36.7)	199 (26.3)	**<0.0001**	103 (46.0)	108 (27.9)	**<0.0001**	70 (28.3)	97 (25.8)	0.483
Felt unsafe at home in past week									
Yes	109 (23.3)	165 (21.7)	0.513	47 (21.3)	104 (27.2)	0.108	62 (25.2)	61 (16.2)	**0.006**
School									
Felt unsafe at school (feel safe some or none of the time)									
Yes	178 (37.8)	155 (20.3)	**<0.0001**	110 (49.1)	95 (24.6)	**<0.0001**	68 (27.5)	60 (16.0)	**<0.0001**
Caregiver thought adolescents were unsafe in school									
Yes	228 (45.2)	106 (35.0)	**0.005**	61 (25.7)	35 (25.0)	0.874	167 (62.3)	71 (43.6)	**<0.0001**
Felt unsafe at school in past week									
Yes	97 (22.9)	162 (22.5)	0.893	46 (24.7)	101 (29.0)	0.290	51 (21.4)	61 (16.4)	0.121
Felt unsafe on way to or from school in the past week									
Yes	105 (24.8)	154 (21.8)	0.244	57 (31.0)	96 (28.2)	0.495	48 (20.1)	58 (15.9)	0.185
Caregiver thought adolescents were unsafe on way to or from school									
Yes	219 (43.4)	106 (35.0)	**0.019**	58 (24.5)	33 (23.6)	0.843	161 (60.1)	73 (44.8)	**0.002**
Market and public spaces									
Felt unsafe in the market or other public spaces in the past week									
Yes	128 (27.4)	200 (26.5)	0.714	67 (30.3)	101 (26.6)	0.325	61 (24.8)	99 (26.3)	0.669
Felt unsafe on way to or from the market or other public spaces in the past week									
Yes	113 (24.2)	185 (24.5)	0.897	57 (25.7)	90 (23.7)	0.583	56 (22.8)	95 (25.3)	0.477
Caregiver thought adolescents were unsafe in the market or other public spaces									
Yes	250 (49.5)	158 (52.2)	0.467	82 (34.6)	48 (34.3)	0.951	168 (62.7)	110 (67.5)	0.313
Caregiver thought adolescents were unsafe somewhere within the settlement, that unsafe places existed									
Yes	482 (95.5)	295 (97.4)	0.170	224 (94.5)	135 (96.4)	0.400	258 (96.3)	160 (98.2)	0.266
Work									
Felt unsafe at work in the past week									
Yes	47 (15.6)	115 (21.5)	**0.039**	33 (21.9)	77 (25.3)	0.426	14 (9.3)	38 (16.5)	**0.046**
Felt unsafe on way to or from work in the past week									
Yes	56 (18.6)	116 (22.1)	0.234	36 (23.7)	74 (25.3)	0.701	20 (13.4)	42 (18.0)	0.234

Notes. **Bold** indicates statistically significant finding, p<0.050.

Table 20. Change in feelings of safety, by biological parental status

Question	Orphan						Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Home									
Felt unsafe at home (feel safe some or none of the time)									
Yes	19 (47.5)	44 (35.5)	0.174	70 (40.0)	72 (25.4)	**0.001**	82 (32.3)	89 (25.0)	**0.048**
Felt unsafe at home in past week									
Yes	14 (35.9)	20 (16.1)	**0.008**	46 (26.4)	67 (23.8)	0.534	47 (18.7)	78 (22.0)	0.310
School									
Felt unsafe at school (feel safe some or none of the time)									
Yes	27 (67.5)	47 (37.9)	**0.001**	73 (41.7)	62 (21.9)	**<0.0001**	77 (30.3)	46 (12.9)	**<0.0001**
Caregiver thought adolescents were unsafe in school									
Yes	28 (46.7)	6 (21.4)	**0.024**	80 (43.0)	42 (37.5)	0.349	119 (46.3)	58 (35.6)	**0.030**
Felt unsafe at school in past week									
Yes	6 (16.2)	25 (21.9)	0.455	46 (29.5)	62 (23.9)	0.204	45 (19.7)	75 (21.7)	0.547
Felt unsafe on way to or from school in the past week									
Yes	11 (29.7)	22 (19.8)	0.210	42 (27.3)	62 (24.0)	0.464	51 (22.2)	70 (20.8)	0.689
Caregiver thought adolescents were unsafe on way to or from school									
Yes	29 (48.3)	8 (28.6)	0.080	76 (40.9)	40 (35.7)	0.378	113 (44.0)	58 (35.6)	0.088
Market and public spaces									
Felt unsafe in the market or other public spaces in the past week									
Yes	11 (28.2)	33 (27.1)	0.888	50 (28.7)	74 (26.4)	0.592	66 (26.2)	93 (26.3)	0.982
Felt unsafe on way to or from the market or other public spaces in the past week									
Yes	11 (28.2)	31 (25.4)	0.729	49 (28.2)	74 (26.4)	0.686	52 (20.6)	80 (22.6)	0.547
Caregiver thought adolescents were unsafe in the market or other public spaces									
Yes	30 (50.0)	13 (46.4)	0.755	90 (48.4)	56 (50.0)	0.787	129 (50.2)	89 (54.6)	0.378
Caregiver thought adolescents were unsafe somewhere within the settlement, that unsafe places existed									
Yes	59 (98.3)	28 (100.0)	0.492	179 (96.2)	106 (94.6)	0.514	242 (94.2)	161 (98.8)	**0.019**
Work									
Felt unsafe at work in the past week									
Yes	7 (23.3)	23 (25.8)	0.784	18 (15.7)	47 (23.5)	0.098	22 (14.2)	45 (18.3)	0.284
Felt unsafe on way to or from work in the past week									
Yes	8 (25.8)	18 (20.5)	0.535	24 (20.7)	48 (24.7)	0.414	24 (15.7)	50 (20.6)	0.224

Notes. **Bold** indicates statistically significant finding, p<0.050.

A3.5 Knowledge of child protection services

Table 21. Change in knowledge and utilization of child protection activities and services, complete and by site

Question	Complete			Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Knowledge of services									
Do you know of a place to go to if you have experienced violence or abuse?									
Yes	361 (74.6)	262 (35.2)	**<0.0001**	179 (74.6)	139 (36.6)	**<0.0001**	152 (72.4)	123 (33.7)	**<0.0001**
Do you know where to go if you have a health problem?									
Yes	128 (26.0)	595 (78.6)	**<0.0001**	70 (28.3)	297 (78.2)	**<0.0001**	42 (19.9)	298 (79)	**<0.0001**
Do you know where to go if you have a problem at school?									
Yes	342 (71.3)	330 (43.8)	**0.0001**	180 (75.3)	146 (38.6)	**<0.0001**	131 (63.3)	184 (49.1)	**0.0001**
Do you know where to go if you have a problem at home?									
Yes	387 (83.9)	193 (25.7)	**<0.0001**	211 (90.2)	47 (12.4)	**<0.0001**	153 (74.3)	146 (39.4)	**<0.0001**
Do you know where to go if you have a problem at work?									
Yes	191 (57.9)	9 (40.9)	0.120	67 (42.1)	2 (33.3)	0.668	120 (78.9)	7 (43.8)	**0.0002**
Utilization of services, by organization									
Have you asked for help from UNHCR?									
Yes	385 (76.4)	419 (54.9)	**<0.0001**	199 (79.6)	223 (58.7)	**<0.0001**	159 (72.3)	196 (51.2)	**<0.0001**
Have you asked for help from TPO?									
Yes	75 (14.9)	116 (15.2)	0.875	28 (11.2)	30 (7.9)	0.160	43 (19.5)	86 (22.5)	0.402
Have you asked for help from Save the Children?									
Yes	105 (20.8)	152 (19.9)	0.693	46 (18.4)	62 (16.3)	0.497	55 (25)	90 (23.5)	0.678
Have you asked for help from Windletrust?									
Yes	33 (6.5)	291 (38.1)	**<0.0001**	9 (3.6)	83 (21.8)	**<0.0001**	24 (10.9)	208 (54.3)	**<0.0001**
Have you asked for help from DRC?									
Yes	37 (7.3)	4 (1.0)	***<0.022**	30 (12)	30 (12)	**<0.0001**	3 (1.4)	4 (1)	0.725
Have you asked for help from InterAid Uganda?									
Yes	72 (14.3)	35 (9.1)	**0.020**	50 (20)	50 (20)	**0.022**	17 (7.7)	35 (9.1)	0.552
Have you asked for help from Real Medicine Foundation?									
Yes	128 (25.4)	11 (2.9)	**<0.0001**	93 (37.2)	93 (37.2)	**<0.0001**	21 (9.5)	11 (2.9)	**<0.0001**
Utilization of services, by activity									
In the past year, have you ever participated in a group sports activity organized by an NGO?									
Yes	47 (23.4)	313 (41.7)	**<0.0001**	14 (15.4)	137 (36.4)	**<0.0001**	30 (31.6)	176 (46.9)	**0.007**
In the past year, have you ever participated in a club or committee specifically for children or adolescents?									
Yes	82 (37.8)	244 (33.0)	0.192	31 (34.8)	90 (24.5)	**0.048**	49 (41.5)	154 (41.4)	0.980
In the past year, have you participated in any non-formal education in the settlement?									
Yes	66 (53.2)	172 (23.4)	**<0.0001**	16 (44.4)	85 (22.9)	**0.004**	47 (56.6)	87 (23.9)	**<0.0001**
In the past year, have you ever participated in any life skills training in the camp?									
Yes	174 (64.4)	181 (24.9)	0.188	12 (25.5)	126 (33.7)	0.261	162 (73.6)	55 (15.6)	**<0.0001**

Notes. **Bold** indicates statistically significant finding, p<0.050. * indicate Fishers exact tests for n < 5.

Table 22. Role of Child Protection Committee

Role mentioned	Complete		
	T1	T2	Change
	Mentioned N (%)	Mentioned N (%)	p-value
Raise awareness for child rights and advocacy for community children	146 (80.7)	129 (77.7)	0.498
Monitor child protection in the community, such as identifying vulnerable children	101 (55.8)	131 (78.9)	**<0.0001**
Give advice to children, parents, and community members	45 (24.9)	77 (46.4)	**<0.0001**
Refer cases to social workers	11 (6.1)	43 (25.9)	**<0.0001**
Protect children from violence and abuse	47 (26)	86 (51.8)	**<0.0001**
Teach children good behavior and give advice	26 (14.4)	45 (27.1)	**0.003**

Notes. **Bold** indicates statistically significant finding, p<0.050

Table 23. Role of Child Protection Committee, by site

Role Mentioned	Adjumani					
	T1	T2	Change	T1	T2	Change
	Mentioned N (%)	Mentioned N (%)	p-value	Mentioned N (%)	Mentioned N (%)	p-value
Raise awareness for child rights and advocacy for community children	204 (81.9)	114 (68.3)	**0.001**	45 (80.4)	108 (67.1)	0.061
Monitor child protection in the community, such as identifying vulnerable children	148 (59.4)	124 (74.3)	**0.002**	20 (35.7)	89 (55.3)	0.012
Give advice to children, parents, and community members	80 (32.1)	72 (43.1)	**0.023**	16 (28.6)	51 (31.7)	0.665
Refer cases to social workers	23 (9.2)	53 (31.7)	**<0.0001**	8 (14.3)	20 (12.4)	0.720
Protect children from violence and abuse	49 (19.7)	77 (46.1)	**<0.0001**	20 (35.7)	64 (39.8)	0.593
Teach children good behavior and give advice	44 (17.7)	69 (41.3)	**<0.0001**	8 (14.3)	28 (17.4)	0.590

Notes. **Bold** indicates statistically significant finding, p<0.050

Table 24. Change in knowledge and utilization of child protection activities and services, complete and by gender

Question	Complete						Male		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Knowledge of services									
Do you know of a place to go to if you have experienced violence or abuse?									
Yes	361 (74.6)	262 (35.2)	**<0.0001**	192 (83.8)	102 (27.4)	**<0.0001**	169 (66.3)	160 (42.9)	**<0.0001**
Do you know where to go if you have a health problem?									
Yes	128 (26.0)	595 (78.6)	**<0.0001**	79 (34.1)	276 (72.3)	**<0.0001**	49 (18.8)	319 (85.1)	**<0.0001**
Do you know where to go if you have a problem at school?									
Yes	342 (71.3)	330 (43.8)	**0.0001**	184 (81.8)	151 (39.9)	**<0.0001**	158 (62)	179 (47.7)	**<0.0001**
Do you know where to go if you have a problem at home?									
Yes	387 (83.9)	193 (25.7)	**<0.0001**	198 (87.2)	94 (24.9)	**<0.0001**	199 (80.9)	99 (26.6)	**<0.0001**
Do you know where to go if you have a problem at work?									
Yes	191 (57.9)	9 (40.9)	0.120	107 (60.8)	8 (53.3)	0.571	84 (54.5)	1 (14.3)	*0.043
Utilization of services, by organization									
Have you asked for help from UNHCR?									
Yes	385 (76.4)	419 (54.9)	**<0.0001**	190 (80.2)	209 (54)	**<0.0001**	195 (73)	210 (55.9)	**<0.0001**
Have you asked for help from TPO?									
Yes	75 (14.9)	116 (15.2)	0.875	23 (9.7)	55 (14.2)	0.098	52 (19.5)	61 (16.2)	0.286
Have you asked for help from Save the Children?									
Yes	105 (20.8)	152 (19.9)	0.693	48 (20.3)	46 (11.9)	**0.005**	57 (21.3)	106 (28.2)	**0.049**
Have you asked for help from Windletrust?									
Yes	33 (6.5)	291 (38.1)	**<0.0001**	48 (20.3)	46 (11.9)	**<0.0001**	21 (7.9)	170 (45.2)	**<0.0001**
Have you asked for help from DRC?									
Yes	37 (7.3)	4 (1.0)	***<0.022**	33 (13.9)	2 (1.1)	***<0.0001**	4 (1.5)	2 (1)	*0.692
Have you asked for help from InterAid Uganda?									
Yes	72 (14.3)	35 (9.1)	**0.020**	39 (16.5)	19 (10.8)	0.102	33 (12.4)	16 (7.7)	0.101
Have you asked for help from Real Medicine Foundation?									
Yes	128 (25.4)	11 (2.9)	**<0.0001**	81 (34.2)	2 (1.1)	***<0.0001**	47 (17.6)	9 (4.3)	**<0.0001**
Utilization of services, by activity									
In the past year, have you ever participated in a group sports activity organized by an NGO?									
Yes	47 (23.4)	313 (41.7)	**<0.0001**	15 (23.1)	104 (27.7)	0.442	32 (23.5)	209 (55.7)	**<0.0001**
In the past year, have you ever participated in a club or committee specifically for children or adolescents?									
Yes	82 (37.8)	244 (33.0)	0.192	29 (39.7)	97 (26.6)	**0.024**	53 (36.8)	147 (39.2)	0.616
In the past year, have you participated in any non-formal education in the settlement?									
Yes	66 (53.2)	172 (23.4)	**<0.0001**	27 (58.7)	66 (18.1)	**<0.0001**	39 (50)	106 (28.6)	**<0.0001**
In the past year, have you ever participated in any life skills training in the camp?									
Yes	174 (64.4)	181 (24.9)	0.188	82 (61.2)	83 (22.4)	**<0.0001**	92 (67.6)	98 (27.5)	**<0.0001**

Notes. **Bold** indicates statistically significant finding, p<0.050. * indicate Fishers exact tests for n < 5.

Table 25. Role of Child Protection Committee, by gender

Role Mentioned	Girls			Boys		
	T1	T2	Change	T1	T2	Change
	Mentioned N (%)	Mentioned N (%)	p-value	Mentioned N (%)	Mentioned N (%)	p-value
Raise awareness for child rights and advocacy for community children	135 (85.4)	93 (57.4)	**<0.0001**	146 (80.7)	129 (77.7)	0.459
Monitor child protection in the community, such as identifying vulnerable children	92 (58.2)	82 (50.6)	0.172	101 (55.8)	131 (78.9)	**<0.0001**
Give advice to children, parents, and community members	63 (39.9)	46 (28.4)	**0.030**	45 (24.9)	77 (46.4)	**<0.0001**
Refer cases to social workers	22 (13.9)	30 (18.5)	0.265	11 (6.1)	43 (25.9)	**<0.0001**
Protect children from violence and abuse	30 (19)	55 (34)	**0.002**	47 (26)	86 (51.8)	**<0.0001**
Teach children good behavior and give advice	32 (20.3)	52 (32.1)	**0.016**	26 (14.4)	45 (27.1)	**0.003**

Notes. **Bold** indicates statistically significant finding, p<0.050

Table26. Change in knowledge and utilization of child protection activities and services, by biological parental status

Question	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Knowledge of services									
Do you know of a place to go to if you have experienced violence or abuse?									
Yes	29 (78.4)	36 (29.3)	**<0.0001**	136 (75.1)	96 (34.8)	**<0.0001**	177 (72.5)	130 (37.6)	**<0.0001**
Do you know where to go if you have a health problem?									
Yes	8 (22.2)	91 (74.6)	**<0.0001**	45 (24.6)	219 (77.7)	**<0.0001**	62 (24.7)	285 (80.7)	**<0.0001**
Do you know where to go if you have a problem at school?									
Yes	27 (73.0)	50 (40.3)	**<0.0001**	132 (72.5)	115 (41.4)	**<0.0001**	165 (69)	165 (47)	**<0.0001**
Do you know where to go if you have a problem at home?									
Yes	35 (94.6)	27 (22.0)	**<0.0001**	147 (82.1)	66 (23.7)	**<0.0001**	194 (82.6)	100 (28.7)	**<0.0001**
Do you know where to go if you have a problem at work?									
Yes	28 (90.3)	3 (75.0)	0.399*	74 (57.4)	4 (40)	0.286	86 (56.2)	2 (25)	0.084
Utilization of services, by organization									
Have you asked for help from UNHCR?									
Yes	31 (77.5)	52 (41.9)	**<0.0001**	139 (74.7)	158 (55.8)	**<0.0001**	196 (76.6)	209 (58.7)	**<0.0001**
Have you asked for help from TPO?									
Yes	2 (5.0)	14 (11.3)	0.362*	33 (17.7)	40 (14.1)	0.292	37 (14.5)	62 (17.4)	0.326
Have you asked for help from Save the Children?									
Yes	2 (5.0)	24 (19.4)	**0.044***	37 (19.9)	57 (20.1)	0.947	64 (25)	71 (19.9)	0.137
Have you asked for help from Windletrust?									
Yes	2 (5.0)	35 (28.2)	**0.002***	8 (4.3)	101 (35.7)	**<0.0001**	23 (9)	155 (43.5)	**<0.0001**
Have you asked for help from DRC?									
Yes	1 (2.5)	1 (1.6)	1.000*	13 (7)	1 (0.8)	**0.008**	22 (8.6)	2 (1.1)	**0.001**
Have you asked for help from InterAid Uganda?									
Yes	6 (15.0)	8 (12.7)	0.740	32 (17.2)	13 (9.8)	0.064	30 (11.7)	14 (7.4)	0.137
Have you asked for help from Real Medicine Foundation?									
Yes	5 (12.5)	2 (3.2)	0.106*	51 (27.4)	5 (3.8)	**<0.0001**	64 (25)	4 (2.1)	**<0.0001**
Utilization of services, by activity									
In the past year, have you ever participated in a group sports activity organized by an NGO?									
Yes	5 (50.0)	49 (40.1)	0.557	15 (20.8)	124 (44.9)	**<0.0001**	26 (23.9)	140 (39.5)	**0.003**
In the past year, have you ever participated in a club or committee specifically for children or adolescents?									
Yes	12 (75.0)	35 (29.4)	**<0.0001**	33 (38.4)	100 (37.3)	0.860	44 (39.6)	109 (31)	0.090
In the past year, have you participated in any non-formal education in the settlement?									
Yes	4 (36.4)	21 (17.7)	0.221*	32 (62.7)	65 (23.7)	**<0.0001**	24 (41.4)	86 (25.1)	**0.010**
In the past year, have you ever participated in any life skills training in the camp?									
Yes	7 (21.9)	25 (21.0)	0.915	67 (69.1)	66 (25.2)	**<0.0001**	81 (58.7)	90 (26.1)	**<0.0001**

Notes. **Bold** indicates statistically significant finding, p<0.050. * indicate Fishers exact tests for n < 5.

Table 27. Role of Child Protection Committee, by biological parent status

Role Mentioned	Orphan			Single Parent			Both Parents		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	Mention N (%)	Mention N (%)	p-value	Mention N (%)	Mention N (%)	p-value	Mention N (%)	Mention N (%)	p-value
Raise awareness for child rights and advocacy for community children	10 (83.3)	35 (74.5)	0.519	115 (91.3)	75 (64.7)	**<0.0001**	137 (75.7)	112 (67.9)	0.106
Monitor child protection in the community, such as identifying vulnerable children	6 (50.0)	36 (76.6)	**0.069**	74 (58.7)	74 (63.8)	0.419	100 (55.2)	103 (62.4)	0.176
Give advice to children, parents, and community members	1 (8.3)	22 (46.8)	***0.019**	39 (31)	43 (37.1)	0.315	60 (33.1)	58 (35.2)	0.695
Refer cases to social workers	0 (0.0)	21 (44.7)	***0.005**	15 (11.9)	22 (19)	0.127	18 (9.9)	30 (18.2)	**0.027**
Protect children from violence and abuse	3 (25.0)	19 (40.4)	*0.506	22 (17.5)	47 (40.5)	**<0.0001**	49 (27.1)	75 (45.5)	**<0.0001**
Teach children good behavior and give advice	1 (8.3)	16 (34.0)	*0.150	22 (17.5)	37 (31.9)	**0.009**	33 (18.2)	44 (26.7)	0.060

Notes. **Bold** indicates statistically significant finding, p<0.050 * indicate Fishers exact tests for n < 5.

A3.6 Socio-economic status

Table 28. Change in household socio-economic well-being

Question	T1	T2	Change
	N (%)	N (%)	p-value
Adolescent economic activity			
Worked for someone outside family, past week			
Yes	148 (29.4)	221 (29)	0.884
No	355 (70.6)	540 (71)	
Received cash or goods for work for someone outside family, past week			
Yes	141 (95.3)	11 (5)	**<0.0001**
No	7 (4.7)	210 (95)	
Collected water or firewood for household, past week			
Yes	244 (48.7)	433 (57.2)	**0.003**
No	257 (51.3)	324 (42.8)	
Worked on a family farm, past week			
Yes	67 (13.4)	131 (17.3)	0.062
No	434 (86.6)	627 (82.7)	
Did household chores, such as shopping, past week			
Yes	223 (44.3)	401 (52.9)	**0.003**
No	280 (55.7)	357 (47.1)	
Missed school because of above work activities, past week			
Yes	108 (23.9)	196 (26.8)	0.279
No	343 (76.1)	536 (73.2)	
Worked or done any business that brought in money, past week			
Yes	42 (8.8)	23 (3)	**<0.0001**
No	437 (91.2)	735 (97)	
Ever been injured or sick because of work			
Yes	57 (11.5)	8 (34.8)	**0.001**
No	439 (88.5)	15 (65.2)	

Table 29. Main sources of income, caregiver report

Main Source of Income	T1	T2
	N (%)	N (%)
Farming	215 (42.6)	234 (31.3)
Wages	28 (5.5)	17 (2.3)
Business activities (i.e. selling products)	45 (8.9)	52 (7)
Selling food from WFP	74 (14.7)	186 (24.9)
Cash from international organization	7 (1.4)	12 (1.6)
Money from family member or friend	36 (7.1)	29 (3.9)
No income	100 (19.8)	218 (29.1)

Note. * Main source of income significantly different from T1 to T2, p <0.0001

Table 30. Change in household socio-economic well-being, by site

Question	Complete			Adjumani			Kiryandongo		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Adolescent economic activity									
Worked for someone outside family, past week									
Yes	148 (29.4)	221 (29)	0.884	64 (25.7)	108 (28.4)	0.454	76 (34.5)	113 (29.7)	0.214
Collected water or firewood for household, past week									
Yes	244 (48.7)	433 (57.2)	**0.003**	115 (46.6)	219 (57.6)	**0.007**	114 (51.8)	214 (56.8)	0.241
Worked on a family farm, past week									
Yes	67 (13.4)	131 (17.3)	0.062	28 (11.3)	58 (15.3)	0.163	37 (16.8)	73 (19.3)	0.448
Did household chores, such as shopping, past week									
Yes	223 (44.3)	401 (52.9)	**0.003**	104 (41.8)	214 (56.5)	**<0.0001**	104 (47.3)	187 (49.3)	0.625
Missed school because of above work activities, past week									
Yes	108 (23.9)	196 (26.8)	0.279	47 (19)	77 (21.4)	0.453	58 (34.3)	119 (31.9)	0.578
Worked or done any business that brought in money, past week									
Yes	42 (8.8)	23 (3)	**<0.0001**	24 (9.7)	6 (1.6)	**<0.0001**	17 (8.6)	17 (4.5)	**0.044**
Ever been injured or sick because of work									
Yes	57 (11.5)	8 (34.8)	**0.001**	18 (7.2)	2 (33.3)	*0.072	38 (17.9)	6 (35.3)	0.080

Notes. **Bold** indicates statistically significant finding, p<0.050
* indicate Fishers exact tests for n < 5.

Table 31. Main sources of income, caregiver report by site

Main Source of Income	Adjumani		Kiryandongo	
	T1	T2	T1	T2
	N (%)	N (%)	N (%)	N (%)
Farming	113 (45)	113 (30.2)	80 (36.4)	121 (32.4)
Wages	13 (5.2)	11 (2.9)	14 (6.4)	6 (1.6)
Business activities (i.e. selling products)	31 (12.4)	41 (11)	13 (5.9)	11 (2.9)
Selling food from WFP	32 (12.7)	59 (15.8)	39 (17.7)	127 (34)
Cash from international organization	5 (2)	5 (1.3)	2 (0.9)	7 (1.9)
Money from family member or friend	18 (7.2)	16 (4.3)	13 (5.9)	13 (3.5)
No income	39 (15.5)	129 (34.5)	59 (26.8)	89 (23.8)

Note. * Main source of income significantly different from T1 to T2, p <0.0001 for each site

Table 32. Change in household socio-economic well-being, by gender

Question	Complete			Girls			Boys		
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Adolescent economic activity									
Worked for someone outside family, past week									
Yes	148 (29.4)	221 (29)	0.884	66 (28)	127 (32.9)	0.197	82 (30.7)	94 (25.1)	0.114
Received cash or goods for work for someone outside family, past week									
Yes	141 (95.3)	11 (5)	**<0.0001**	65 (98.5)	9 (7.1)	***<0.0001**	76 (92.7)	2 (2.1)	***<0.0001**
Collected water or firewood for household, past week									
Yes	244 (48.7)	433 (57.2)	**0.003**	155 (66.2)	268 (70.3)	0.287	89 (33.3)	165 (43.9)	**0.007**
Worked on a family farm, past week									
Yes	67 (13.4)	131 (17.3)	0.062	37 (15.8)	63 (16.4)	0.835	30 (11.2)	68 (18.1)	**0.017**
Did household chores, such as shopping, past week									
Yes	223 (44.3)	401 (52.9)	**0.003**	117 (49.6)	262 (68.6)	**<0.0001**	106 (39.7)	139 (37)	0.482
Missed school because of above work activities, past week									
Yes	108 (23.9)	196 (26.8)	0.279	63 (31.3)	146 (40.2)	0.037	45 (18)	50 (13.6)	0.132
Worked or done any business that brought in money, past week									
Yes	42 (8.8)	23 (3)	**<0.0001**	27 (12.3)	16 (4.2)	**<0.0001**	15 (5.8)	7 (1.9)	**0.008**
Ever been injured or sick because of work									
Yes	57 (11.5)	8 (34.8)	**0.001**	30 (12.9)	7 (43.8)	**0.001**	27 (10.3)	1 (14.3)	0.731

Notes. **Bold** indicates statistically significant finding, p<0.050
* indicate Fishers exact tests for n < 5.

Table 33. Change in household socio-economic well-being, by biological parent status

Question	Orphan								
	T1	T2	Change	T1	T2	Change	T1	T2	Change
	N (%)	N (%)	p-value	N (%)	N (%)	p-value	N (%)	N (%)	p-value
Adolescent economic activity									
Worked for someone outside family, past week									
Yes	10 (25.0)	38 (30.9)	0.477	57 (30.6)	86 (30.4)	0.953	78 (30.6)	97 (27.3)	0.379
Received cash or goods for work for someone outside family, past week									
Yes	9 (90.0)	1 (2.6)	*	53 (93)	6 (7)	**<0.0001**	76 (97.4)	4 (4.1)	***<0.0001**
Collected water or firewood for household, past week									
Yes	20 (51.3)	68 (54.8)	0.698	98 (53)	167 (59.6)	0.155	118 (46.3)	198 (56.1)	**0.017**
Worked on a family farm, past week									
Yes	6 (15.4)	21 (17.1)	0.805	25 (13.5)	50 (17.9)	0.213	33 (12.9)	60 (16.9)	0.180
Did household chores, such as shopping, past week									
Yes	22 (55.0)	63 (51.2)	0.678	89 (47.8)	141 (50.2)	0.622	100 (39.2)	197 (55.6)	**<0.0001**
Missed school because of above work activities, past week									
Yes	8 (29.6)	42 (35.3)	0.575	47 (27.6)	70 (26.2)	0.742	50 (21.5)	84 (24.3)	0.430
Worked or done any business that brought in money, past week									
Yes	2 (5.4)	4 (3.2)	*0.622	21 (12.1)	10 (3.5)	**<0.0001**	18 (7.3)	9 (2.6)	**0.006**
Ever been injured or sick because of work									
Yes	13 (33.3)	1 (25.0)	*1.000	20 (10.9)	5 (50)	**<0.0001**	24 (9.5)	2 (22.2)	0.211

Notes. **Bold** indicates statistically significant finding, p<0.050
* indicate Fishers exact tests for n < 5.

Table 34. Change in hunger scale

Question	T1	T2	Change
	N (%)	N (%)	p-value
In the past 4 weeks, was there ever no food to eat of any kind in your house because of lack of resources to get food?			
Yes	276 (54.7)	549 (73.5)	**<0.0001**
No	229 (45.3)	198 (26.5)	
In the past 4 weeks, did you or any household member go to sleep at night hungry because there was not enough food?			
Yes	293 (58.1)	552 (74.3)	**<0.0001**
No	211 (41.9)	191 (25.7)	
In the past 4 weeks, did you or any household member go a whole day and night without eating anything at all because there was not enough food?			
Yes	271 (53.7)	486 (65.1)	**<0.0001**
No	234 (46.3)	260 (34.9)	

Notes. **Bold** indicates statistically significant finding, p<0.050.

Table 35. Change in perceived needs, caregiver report

Question	T1	T2	Change
	N (%)	N (%)	p-value
Personal or family			
Do you have a serious problem because you do not have enough water that is safe for drinking or cooking?			
A serious problem	377 (75.2)	459 (61.8)	**<0.0001**
Not a serious problem	124 (24.8)	284 (38.2)	
Do you have a serious problem with food?			
A serious problem	369 (73.5)	619 (83.3)	**<0.0001**
Not a serious problem	133 (26.5)	124 (16.5)	
Do you have a serious problem because you do not have easy and safe access to a clean toilet?			
A serious problem	340 (67.9	545 (73.4)	**0.036**
Not a serious problem	161 (32.1)	198 (26.6)	
Do you have a serious problem because you do not have enough, or good enough, clothes, shoes, bedding or blankets?			
A serious problem	424 (84.8)	666 (89.0)	**0.027**
Not a serious problem	76 (15.2)	82 (11.0)	
Do you have a serious problem because you do not have enough income, money or resources to live?			
A serious problem	445 (89.4)	679 (91.1)	0.295
Not a serious problem	53 (10.6)	66 (8.9)	
Do you have a serious problem with your physical health?			
A serious problem	373 (75.4)	548 (74.1)	0.607
Not a serious problem	122 (24.6)	192 (25.9)	
Do you have a serious problem because you are not able to get adequate health care for yourself?			
A serious problem	413 (85.0)	574 (79.2)	**0.011**
Not a serious problem	73 (15.0)	151 (20.8)	
Do you have a serious problem because you feel very distressed?			
A serious problem	358 (73.2)	458 (62.1)	**<0.0001**
Not a serious problem	131 (26.8)	279 (37.9)	
Do you have a serious problem because you or your family are not safe or protected where you live now?			
A serious problem	370 (75.1)	412 (55.6)	**<0.0001**
Not a serious problem	123 (24.9)	329 (44.4)	
Do you have a serious problem because your children are not in school, or are not getting a good enough education?			
A serious problem	385 (78.6)	475 (64.2)	**<0.0001**
Not a serious problem	105 (21.4)	265 (35.8)	
Do you have a serious problem because in your situation it is difficult to care for family members who live with you?			
A serious problem	376 (76.3)	515 (69.5)	**0.009**
Not a serious problem	117 (23.7)	226 (30.5)	

Question	T1	T2	Change
	N (%)	N (%)	p-value
Do you have a serious problem because you are not getting enough from people in your community?			
A serious problem	369 (74.8)	571 (76.9)	0.419
Not a serious problem	124 (25.2)	172 (23.1)	
Do you have a serious problem because you are separated from family members?			
A serious problem	398 (80.6)	564 (75.5)	**0.036**
Not a serious problem	96 (19.4)	183 (24.5)	
Community			
Is there a serious problem in your community because of an inadequate system for law and justice, or because people do not know enough about their legal rights?			
A serious problem	373 (78.5)	494 (67.3)	**<0.0001**
Not a serious problem	102 (21.5)	240 (32.7)	
Is there a serious problem for women in your community because of physical or sexual violence towards them, either in the community or in their homes?			
A serious problem	288 (59.3)	356 (50.6)	**<0.003**
Not a serious problem	198 (40.7)	347 (49.4)	
Is there a serious problem in your community because people drink a lot of alcohol, or use harmful drugs?			
A serious problem	294 (60.5)	358 (49.4)	**<0.0001**
Not a serious problem	192 (39.4)	367 (50.6)	
Is there a serious problem in your community because people have a mental illness?			
A serious problem	296 (61.9)	371 (50.7)	**<0.0001**
Not a serious problem	182 (38.1)	361 (49.3)	
Is there a serious problem in your community because there is not enough care for people who are on their own?			
A serious problem	390 (79.6)	543 (73.7)	**0.017**
Not a serious problem	100 (20.4)	194 (26.3)	

Notes. **Bold** indicates statistically significant finding, p<0.050.


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