Uganda Parenting for Respectability Implementation Science Evaluation (UPRISE): A hybrid type II cluster randomised controlled trial (cRCT)

STUDY REPORT

Submitted to Evaluation Fund

AUTHORS

Siu Godfrey[1], Jamie Lachman[2], Brenda N. Simbwa[1], Carolyn Namutebi[1], Richard Sekiwunga[1], Joseph Kahwa[1], Betty Okot[1], Francisco Calderon[2], Qing Han[2], Martha Atuhaire[1], Julie Ridell[3], Daniel Wight[3].

1. Makerere University Child Health and Development Centre
2. University of Oxford, UK
3. University of Glasgow, UK

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ACRONYMS

CEA	Cost-Effectiveness Analysis
CHDC	Child Health & Development Centre
cRCT	Cluster Randomized Controlled Trial
DALYs	Daily Adjusted Life Years
FAT	Facilitators Assessment Tool
FGD	Focus Group Discussion
IPV	Intimate Partner Violence
LC	Local Chairperson
NGOs	Non-governmental organizations
PfR	Parenting for Respectability
PiN	Parenting in Nutshell
SVRI	Sexual Violence Research Initiative
UPRISE	Uganda Parenting for Respectability Implementation Science and Impact Evaluation
VAC	Violence Against Children
WHO	World Health Organization

EXECUTIVE SUMMARY

The Uganda Parenting for Respectability Implementation Science Evaluation (UPRISE) study combines a cluster randomised controlled trial (cRCT) and implementation science to examine the effectiveness, cost-effectiveness, and effect of different implementation modalities of the Parenting for Respectability (PfR) programme on the reduction of violence against children and gender-based violence. The study was conducted in Amuru district in Northern Uganda and Wakiso district in Central in Uganda between September 2020- April 2022. We enrolled female and male parents in the intervention arm (PfR) from Amuru district (N=635) and Wakiso district (N=619), while the comparison arm (PiN) enrolled 612 in Amuru and 515 in Wakiso, and conducted a baseline survey of these parents, and a sample of 880 of their children aged 10-15 years. The current report describes baseline results and the feasibility and impact of two different implementation modalities (peer vs professional, rural v urban) in terms of programme delivery.

Baseline results reveal that child maltreatment, measured using physical violence and emotional violence, are a common problem in both Wakiso and Amuru districts. The results show parents as the main perpetrators of physical and emotional violence against children. Our results show that being an older parent and female was a key risk factor for perpetrating physical and emotional violence. We found that partner conflict, in particular intimate partner violence was high, and was associated with being female, having COVID-related stress, substance abuse, engaging in child maltreatment, and being resident in Amuru district. However, having a partner predicted lower levels of child maltreatment than being single. This finding suggests the importance of addressing spousal relationships to reduce both VAC and IPV. Although studies on parenting interventions to reduce VAC are increasing, few specially combine VAC and IPV programming to address the link between them. There is need to pay special attention to IPV in rural areas.

A total of 208 facilitators were recruited from among parents and categorized as professional and peer to deliver the sessions in pairs. This delivery model was acceptable among the parents, and the facilitators welcomed their role and appreciated the training they received, which allowed them to experience the programme as parents would. Our analysis of parental participation, and impact of facilitators shows that enrollment and attendance of PfR sessions by region was higher in Amuru at 95% than Wakiso 75.9%, with women generally attending more than men. Also, rural participants registered a higher attendance than peri-urban across the two study districts. Results on analysis of quality of delivery of the programme suggest that gender of facilitator was not associated with quality of delivery, but age was, with older facilitators associated with less quality delivery, which is confirmed by qualitative findings in which the older facilitators were known to cling to certain normative cultural values which affected their ability to challenge inequitable gendered norms and practices in line with PfR messages. Results also show that delivery was better by facilitators from Amuru than those in Wakiso, and this might partly explain the higher attendance of the programme in Amuru. However, as expected it was more difficult to mobilise urban parents than rural, in part because of the cosmopolitan nature of residents and the nature of occupation in urban areas, while rural parents tended to have time to attend sessions in the afternoons after garden work. Yet, we learnt from the results on mobilisation efforts that, in all study settings, including rural areas, it is crucial to identify and understand the multifaceted nature of family vulnerabilities in order not to leave out the vulnerable families, while in the more urban areas, parents who do not speak the dominant language of the area may be inadvertently left out by parenting programmes which over emphasises the use of local language.

Based on the overall cost analysis, investment in the scale up of the UPRISE project would be feasible and beneficial for Uganda and other countries especially if policy makers and other partners used the evidence from initial studies such as this one. The roll-out and implementation would not vary much across different geographical locations in Uganda save for area-specific costs such as accommodation and transportation costs during the training of facilitators.

These findings may be somewhat limited by the analysis conducted. Since we are yet to collect follow-up data current analysis is limited to baseline and participation data only, and therefore we have no results yet to demonstrate the effectiveness of the UPRISE on primary outcomes. However, these results contribute to the expanding literature on VAC and IPV, and provide empirically-based and critical information to policymakers, donors, and implementers on delivery modalities and potential costs for parenting programmes, which is crucial when planning scale-up of evidence-based parenting programmes in Uganda. These results will contribute to the ongoing discussions of a national parenting agenda being implemented by the Gender Ministry in collaboration with CHDC and a consortium of about 70 agencies implementing parenting interventions. In particular, the findings will feed into the development of the national standards for parenting programmes, and the national parenting manual, led by CHDC and supported by UNICEF.

We recommend analyses of end line and follow-up data from the UPRISE cluster randomised controlled trial to demonstrate the effectives of the programme in reducing the primary outcome. Analysis of participation and intervention effects using the CACE analysis method maybe particularly helpful for studies involving parent / family centered interventions. Qualitative data could provide more nuanced information on programme feasibility and impact.

CHAPTER ONE: INTRODUCTION AND BACKGROUND

1.1 Introduction

This report describes the background, objectives, methods and early results of the Ugandan Parenting for Respectability Implementation Science and Impact Evaluation (UPRISE) study conducted in two Ugandan districts – Amuru and Wakiso – between 2020 and 2022. The UPRISE study combines implementation science research and impact evaluation to both assess the effectiveness of the Parenting for Respectability (PfR) programme and examine three critical issues to optimize its delivery on a large scale. It has used a hybrid type 2 cluster randomized controlled design. For the purpose of this report, the results are limited to baseline results, participation data, and facilitator data. The study is a collaboration between three university research units – Makerere University Child Health and Development Centre, the Department of Social Policy and Intervention, University of Oxford UK and the Social and Public Health Sciences Unit, University of Glasgow UK and a local implementing partner, SOS Children's Villages Uganda.

1.2 Background

Intimate partner violence (IPV) and violence against children (VAC) are interlinked and are major social, development and public health concerns. Globally it is estimated that approximately 30% ever-partnered women worldwide have experienced physical and/or sexual violence by an intimate partner at some point in their lives [1]. IPV prevalence among women in Uganda is very high. The Uganda Demographic and Health Survey 2018 found that 36% of women had ever experienced partner physical violence, while 22% had ever experienced partner sexual violence [2]. Violence against children is extremely widespread globally, with approximately half of all children – one billion aged 2-17 years – reporting having experienced violence in the past year [3]. Furthermore, one in five women and up to one in ten men have been victims of sexual violence in childhood [2]. The Uganda national VAC survey 2015 found that 59% girls and 68% boys had experienced physical violence in their childhood, and 35% girls and 17% boys had experienced sexual violence in their childhood [4]. Such violence in Uganda and most Sub-Saharan African countries is usually perpetrated by people known to children in their homes and community [4, 5]. IPV and VAC are major causes of morbidity and mortality, they undermine the social functioning of the victims and their families, and have lifetime consequences for physical, sexual, reproductive and mental health [6, 7]. The prevention of both forms of violence would contribute to many Sustainable Development Goals since they strain health systems, lower educational achievement and economic productivity, and undermine economic and social development, [6, 8, 9] and elimination of IPV is essential to Goal Five.

Many studies confirm the link between VAC and IPV, suggesting the need for an integrated approach to their prevention. A recent narrative review identified six ways in which they are interrelated [10]: they have many shared risk factors, starting in the family; social norms legitimise both and discourage children and women from seeking help; both often occur within the same household [10, 11, 12]; both can be transmitted across generations; they can have similar consequences across the lifespan, and finally, both intersect in adolescence, a time of heightened vulnerability to violence.

Factors perpetuating IPV and VAC exist at multiple socio-ecological levels. For IPV, familial level factors include having been abused as a child, having an absent or rejecting father, inter-partner conflict, and male control of wealth and decision-making. Community level factors include women's isolation and male

peer groups that legitimize men's violence. At the macro level IPV is associated with cultural norms that condone violence within the family, schools and community, establish rigid gender roles and link masculinity to toughness, male honour, dominance and ownership of women, and it thrives where policy, legislation and implementation of laws is weak [11]. VAC is more likely in families that have difficulties developing stable, warm and positive relationships [6], where parents are unresponsive to their children, have harsh or inconsistent parenting styles, believe that corporal punishment is an acceptable form of discipline [13] or have a poor understanding of child development, and therefore unrealistic expectations about the child's behaviour (8).

Recognizing that IPV is perpetuated at multiple levels [11, 12], preventative interventions often focus on other psychosocial problems, e.g. poverty or alcohol abuse, as well as on inter-partner violence, although they are more effective if their main aim is to reduce IPV [13]. The shared familial risk factors for IPV and VAC, and the increasing policy interest in optimizing parenting influence, provides a great opportunity for early intervention. An increasing number of parenting programs are being implemented and tested in LMICs to reduce VAC [14], and evidence is emerging that, if delivered by trained lay workers, they can be effective in improving child outcomes [15, 16]. However, interventions directly addressing early prevention of both IPV and VAC in LMICS remain limited [17].

Furthermore, very few parenting programmes in LMICs harness cultural drivers and pre-existing motivations to change behaviour [18]. In sub-Saharan Africa little attention has been paid to one of the most important dimensions of parenthood for both mothers and fathers: the need to maintain the family's respectability, in large part achieved through the appropriate behaviour of the children and their parents [19, 20]. This core motivation might be harnessed in the design of interventions to reduce spousal violence, modify negative parenting and encourage sensitive parenting, in order to reduce children's future risk of sexual, physical and/or emotional violence. Changes in parenting practices are more likely to be sustained if reinforced by close relatives, especially by partners. Yet in Uganda we are not aware of parenting programmes that deliberately recruit fathers in their own right, offering them single sex sessions.

1.2.1 The Parenting for Respectability (PfR) Programme
In response to a call from the Sexual Violence Research Initiative (SVRI) we designed a community-based parenting programme, *Parenting for Respectability* (*PfR*), to address this gap in Uganda, and contribute evidence on how a parenting program can address both IPV and VAC. PfR is a 16-session manualised programme starting with nine single sex sessions followed by seven mixed sex sessions, delivered once a week by two local facilitators who receive one week's training [23]. It is intended to modify four familial predictors of GBV: poor parent-child attachment; harsh parenting; inequitable gendered socialization and parental conflict [21]. The first nine sessions are delivered to single sex groups, allowing men and women to discuss sensitive issues initially without worrying about the perspectives of the other gender, and the remaining sessions are mixed sex. The programme draws on parents' pre-existing motivation to maintain respectability, largely achieved through children's good behaviour and respect for elders and builds on parents' existing skills and experience. The intervention's rationale, programme theory and formative evaluation are described elsewhere [25]. PfR was developed following the Six Steps for Quality Intervention Development (6SQuID) model [22]. It initially underwent formative evaluation over three years (2014-2016) with six groups in three villages in Wakiso District in central Uganda [20]. From 2016-19 we conducted a pre-post ('proof of concept') outcome evaluation in Wakiso with 484 parents and 212 children to establish whether there was sufficient evidence of effectiveness to warrant progression to a

randomized controlled trial. The outcomes suggested that this was the case. There were significant improvements in primary outcomes for both parent- and child-reports, including large effects for reduced harsh parenting, as well as increased positive parenting. The programme has been disseminated widely in Uganda (www.parenting.ug.org), and both government and NGOs have expressed interest to scale it.

An explicit programme theory incorporates Attachment Theory, the concept that positive behavioural control develops emotional control, and Social Learning Theory. The intervention has five features which differentiate it from most parenting programmes:

1. it focuses on the concern of both fathers and mothers that their children should be well behaved and maintain the family's respectability;
2. it deliberately aims to include fathers as much as mothers, starting with single-sex sessions;
3. it is intended for all parents and carers of children aged from 0 to 17;
4. it promotes parents' confidence in positive parenting and reducing partner conflict by engaging them in identifying their own solutions; and
5. it promotes healthy spousal relationships through reflection on social norms and communication.

In spite of the successes in the development of PfR, two key uncertainties remain: (i) the optimal way to scale up the intervention in a 'real-world setting', and (ii) whether the evidence of effectiveness would be confirmed through a more rigorous, experimental, evaluation. With support from the Evaluation Fund, this study combines a rigorous cluster randomised control trial (cRCT) evaluation of PfR with an implementation study using a hybrid type 2 design to examine its effectiveness and cost-effectiveness as well as answer critical contextually relevant implementation science questions. This is essential to ensure that precious resources are not wasted and that there are no harmful unintended consequences from the programme.

Throughout the report 'parents' refers to all adults with ongoing caring responsibility for someone under 18 years old, 'mothers' to female caregivers and 'fathers' to male caregivers.

1.3 Study objectives, research questions and study hypothesis

1.3.1 Overall goals
The primary goal of this study is to conduct a cRCT evaluation of PfR to test its effectiveness and cost-effectiveness for reducing violence against children and gender-based violence. The secondary goal is to investigate key implementation variables to determine the most optimal method of scaling-up the PfR programme in Uganda and other low-income countries.

1.3.2 Objectives
1. Test the effectiveness of PfR in modifying four primary outcomes: parent-reported and child-reported harsh parenting and partner conflict. Secondary outcomes include positive parenting, parental support for children's education, child behaviour problems, parent/child mental health problems, material provision for children (all parent- and child-report), as well as inequitable

gendered socialisation and parenting self-efficacy, including protecting children from sexual abuse (parent-report only).

2. Examine the cost effectiveness of PfR using incremental cost-effectiveness analyses (CEA) based both on the primary outcomes of harsh parenting and partner conflict as well as on disability-adjusted life years (DALYs).
3. Examine how three implementation variables – rural vs peri-urban locality, previously established groups vs new groups, and professional vs non-professional facilitators – affect participation, programme fidelity, and quality of delivery (measured quantitatively).
4. Examine the impact of participant engagement and quality of delivery by facilitators on the primary outcomes of parent- and child-reported harsh parenting and partner conflict.
5. Examine associations between baseline characteristics and participant engagement to further understand potential barriers to participation and whether there are particularly vulnerable families that have greater challenges in attending the programme.
6. Qualitatively investigate five elements of implementation: (i) what training facilitators need (length, follow-up, who delivers training, location, etc.); (ii) what supervision facilitators need (frequency, by whom, nature of feedback, etc.); (iii) targeting of PfR at the most vulnerable families and how this can be done; (iv) disseminating PfR's messages beyond those participating in group sessions to operate at a community, as well as individual, level; (v) differences between Wakiso and Gulu Districts in facilitative and hindering contextual factors. We will explore how these affect participation, programme fidelity, quality of delivery, participant response and community-wide impact.

1.3.3 Hypotheses

Hypothesis 1: PfR will significantly reduce rates of child maltreatment at 3-months follow-up, as measured by parent and child-reports of the ICAST-Trial Scale, in comparison to a control group receiving a one-hour lecture on parenting and partner relationships.

Hypothesis 2: PfR will significantly reduce rates of partner conflict at 3-months follow-up, as measured by parent and child-reports of an adapted version of the Conflict Tactics Scale and WHO Coercion scale, in comparison to a control group receiving a one-hour lecture on parenting and partner relationships.

Hypothesis 3: PfR will have a significant effect on secondary outcomes associated with the risk of violence against children and intimate partner violence at 3-months follow-up, including positive parenting, parental support for children's education, child behaviour problems, parent/child mental health problems, and material provision for children (all parent- and child-report), as well as inequitable gendered socialisation and parenting self-efficacy, including protecting children from sexual abuse (parent-report), in comparison to a control group receiving a one-hour lecture on parenting and partner relationships.

Hypothesis 4: PfR will be cost-effective in terms of incremental cost-effectiveness analyses (CEA) based both on the primary outcomes of harsh parenting and partner conflict as well as on disability-adjusted life years (DALYs).

Hypothesis 5:

> *A) Geographical location (urban vs peri-urban).* There will be no difference between urban and peri-urban delivery in attendance, competent adherence, and cost-effectiveness.

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B) Facilitator Experience (professional vs community). Although professional facilitators may achieve more comprehensive delivery, community facilitators may achieve better rapport with participants. As a result, there will be no difference between professional and community facilitators in attendance, competent adherence, and cost-effectiveness.

The initial intention to evaluate group composition was dropped due to failure to find suitable existing groups (see page xxx).

CHAPTER TWO: METHODOLOGY

2.1 Study setting
The trial was stratified across two districts, Wakiso in central Uganda and Amuru in Northern Uganda. Participating clusters were either villages or wards (i.e., groups of villages) depending on their population size and geographical proximity.

2.2 Trial design
We conducted an effectiveness-implementation hybrid type 2 design to: a) determine the effectiveness and cost-effectiveness of PfR, and b) determine the feasibility and impact of three different implementation strategies in terms of programme delivery [21]. The cRCT involves 54 clusters with: 1:1 intervention: control; 2 groups of 15-20 parents each per cluster, 50% male 50% female; 2,328 parents in total. In addition, 886 children 10-14 years were recruited. We also analysed the quality of delivery of 77 out of the 108 intervention arm facilitators. We examined three different factors related to programme implementation within the 27 PfR clusters.

2.3 Eligibility criteria

2.3.1 Inclusion criteria for parents:
- Age 18 or older;
- Primary caregiver responsible for the care of a child between the ages of 10 and 14;
- Agreement to participate in PfR if allocated to the treatment condition;
- Provision of consent to participate in the full study.

2.3.2 Inclusion criteria for participating children:
- Age 10 to 14 years;
- Live in the same household as primary caregiver who is part of PfR study;
- Parent/caregiver gives consent to participate in the study;
- Provision of consent to participate in the full study.

2.3.3 Inclusion criteria for facilitators:
- Age 18 or older;
- Signed up for PfR
- Provision of consent to participate in the full study

2.4 Recruitment
Following meetings with the implementing partner (SOS CV) and the district/ sub counties technical officers to clarify eligibility and recruitment procedure, the joint team identified Busukuma Town Council in Wakiso and Lamogi sub-county in Amuru as the study sites from which the clusters (i.e., villages or sub-villages) would be recruited. Both sites were selected because they had no other active parenting programmes. After obtaining community-level consent from community leaders to conduct the study, the project team with support of the local leaders conducted a house-to-house mobilization of eligible

participants. In Amuru district, the village based cultural leaders called the Rwot, who head clans, provided additional support in mobilization of households. Using the community mobilization guide and study information material (see appendix), information pertaining to the study was given to the eligible households, and those interested in participating were invited to a local converging point for additional information and baseline survey, aiming to recruit as many men as women. By deliberately recruiting fathers, the project addresses the recurrent concern about lack of male involvement.

A total of 33 rural clusters and 21 peri-urban were mobilized from which 2,821 parents (1,614 women, 1,207 men) and 2,328 were identified to take part in the study. We randomly selected one child between the ages of 10 and 14 per household to participate in the study, though not the intervention which is only delivered to adults. Informed consent procedures were administered by trained and supervised research personnel both verbally and in writing to account for low-literacy rates. Research personnel were thoroughly trained and supervised by the Principal Investigator and co-investigators on recruitment, informed consent, and assessment procedures.

2.5 Randomization

Randomization in the cRCT was conducted at the cluster level immediately after baseline data collection. Clusters allocated to the control group receive a two-hour lecture. We used concealed computer-generated codes to randomly allocate the 54 clusters. A co-principal investigator performed random allocation of clusters from a remote site. SOS then notified the participating village and ward leaders, and families of their allocation status after baseline data collection was completed in order to assure that participants are blind to allocation during the initial assessment. The allocation status of other participating clusters was concealed from selected villages, thus reducing the potential for inter-village rivalries. Although research assistants conducting data assessments were blind to allocation at baseline, due the nature of the interventions it will be difficult to maintain blindness at follow-up assessments.

2.6 Power calculations

We conducted sensitivity power analyses in order to calculate the minimum detectable Incidence Risk Ratios necessary to obtain a significant intervention effect in the cRCT based on both adult- and child-reported primary outcomes of harsh parenting and parental conflict. Using two-tailed Poisson regression mixed-level models, we assumed a Type I error of $p < 0.05$, 80% power, and a 1:1 intervention to control ratio with an estimated 12.5% dropout rate (i.e., 6 clusters), 24 clusters (960 adults and 480 children) in each allocation group, or 48 clusters in total. We also assumed an intra-cluster correlation ICC = 0.05 to account for clustering. Even though we are using an intention-to-treat design using maximum likelihood estimation to account for missing data, we increased the final estimated sample size to N = 54 clusters or 2,160 parents and 1,080 children at baseline to account for at least a 12.5% study dropout of clusters (i.e., 6 clusters). Thus, this sample size has sufficient power to detect significant intervention effects (group differences) at IRR = 0.48 for adult-report and IRR = 0.58 for child report (i.e., 30% and 33% reduction, respectively).

For the evaluation of implementation components, we conducted similar sensitivity power analyses in order to calculate the minimum detectable Cohen's D effect size to obtain a significant effect of each component level on implementation outcomes of participation rates and implementation quality. Following recommendations for component selection by Watkins et al. [22], we assumed a Type 1 error of $p < 0.10$, and 80% power with a sample size of 480 adults and an ICC of 0.05. Thus, this sample size has

sufficient power to detect significant component effects at Cohen's d = .26 on implementation outcomes (i.e., implementation fidelity, competent adherence, and participation).

2.7 Interventions

2.7.1 Intervention arm

The intervention groups received the full Parenting for Respectability (PfR) programme; that is, they received 16 sessions each lasting 2-3hrs delivered weekly in a participatory way by trained peer facilitators. Parents receiving PfR first received nine sessions in single sex groups and then male and female groups are split into half and mixed to complete the programme as mixed sex groups. Parental participants are given take home assignments to practice the skills learned during the sessions with their children and/ or spouse, and the experiences and lessons are reviewed in the first few minutes of the next session.

2.7.2 Comparison arm

The comparison arm received a two-hour, non-participatory, structured lecture called Parenting in a Nutshell (PiN) on parenting and partner relationships. Three topics covered were 1) child development; 2) positive parenting; and 3) resolving partner conflicts. Facilitators delivering this lecture had the similar expertise and characteristics with the facilitators engaged in PfR, although their training was shorter and consist of a two-hour course on how to deliver the lecture.

2.8 Outcomes measurements

Primary outcomes are child-reported and parent-reported child maltreatment, IPV, and partner conflict. We were interested in changes in level of **harsh parenting** (parent- and child-report) and **dysfunctional partner relationships** (parent- and child-report). Parent-report (22 items) and child-report (17 items) of **harsh parenting** was based on the frequency of verbal and physical abuse in the past month (e.g., "How often do you hit your child with a stick or other objects when he/she has done something wrong?") with items ranging from 1 (never) to 4 (often). Children reported on both their female and male caregivers which were analysed separately. Parent-report (9 items) and child-report (4 items) of **dysfunctional partner relationships** was based on the frequency of verbal and physical conflict between male and female partners (e.g., "How often is there serious anger or hostility between you and your partner") with each item ranging from 1 (not at all) to 4 (more than once a week) (see appendix xx).

Secondary outcomes included positive parenting (parent-report: 18 items; child-report: 15-items), respectful child behavior (parent/child-report: 4 items), care-child conflict (parent-report: 5 items), parent self-inefficacy (parent-report: 4 items), provision of necessities as proxy for child neglect (parent/child-report: 6/14 items), co-parenting (parent-report: 4 items), partner involvement in caregiving (parent-report: 5 items), and community/collective parenting (parent-report: 3 items), attitudes towards gender socialization (parent-report: 13 items), and knowledge of child development (parent-report: 5 items). Others were partner coercive control and communication about sexual behaviour.

Some measurements were previously validated in Wakiso during the pre-post study, and/or were adapted (appendix xx). The measures were translated into Luganda for Wakiso and Acholi for Amuru and checked by the Trial Manager and Coordinator for accuracy of the translation. Demographics, and baseline frequencies of overall child maltreatment, as well as physical, emotional and sexual abuse and their predictors were measured at baseline while intervention effectiveness is measured at 8-months post-baseline, and 12-months post-baseline.

2.9 Process outcomes

Data collected from the process evaluation investigated the implementation of the PfR programme using quantitative data, complemented by qualitative data, and are used to examine implementation fidelity, competent adherence, and participation. *Implementation fidelity* by programme facilitators of the PfR programme uses self-report checklists by programme implementers, to examine the extent to which core intervention components are delivered. These checklists include the specific activities within each session, such as home practice discussion and role-playing exercises. Then, in order to produce a basic level of fidelity, a ratio of programme implementation to programme design was created for both self-report and observational scores [23].

According to Borrelli and colleagues, a standard of 80% programme fidelity is considered as "high treatment fidelity" [24]. *Competent adherence* is assessed using the PfR Facilitator Assessment Tool (PfR-FAT) [25]. The PfR-FAT was developed by the study investigators and programme developers to assess the proficiency of programme delivery by facilitators as a prerequisite to certification. Three standard behaviour categories based on the core process skills (25 items), includes modelling skills (6 items, e.g., "give positive, specific, and realistic instructions"), collaborative facilitation (7 items, e.g., "accept participant responses verbally by reflecting back what the participant says"), and group management and leadership skills (12 items, e.g., "use open-ended questions during group discussions"). Items are summed to create a total score of competent adherence. *Programme adherence* is assessed by examining rates of enrolment, attendance, dropout, completion, and engagement of home activities. *Enrolment rates* are based on the ratio of those who attend at least one session of PfR or the lecture session in the control group. *Mean attendance rates* for enrolled participants are determined based on the ratio of number of attended sessions to the total number of programme sessions (PfR = 16 sessions). *Dropout rates* for enrolled participants are defined as the percentage of participants who fail to attend at least three consecutive sessions and do not attend any sessions at a later stage. *Completion rates* for the entire allocation group are determined based on the number of enrolled participants who attend a cut-off threshold of at least 66% of the programme [26]. Qualitative data also examines barriers to implementation and participation, and potential approaches to overcoming these barriers.

2.10 Blinding

The allocation status of other participating families will be concealed from participants, thus reducing the potential for contamination. Research assistants conducting data assessments and statisticians conducting analysis were blind to allocation in order to minimise assessment bias [40, 41]. In the case of instances of harm or severe abuse being reported by a participant at any stage of the study, the allocation status of the participant will be un-blinded. All cases of un-blinding will be reported. Because of facilitators' involvement in the programme implementation, blinding will not be possible for service providers. Similarly, of course, participants cannot be blind to their own treatment condition.

2.11 Quantitative data collection

The clusters or villages were mobilized by a research team comprising SOS and CHDC and a village leader. Village leaders normally moved around to invite interested parents and their 10-14-year-old children within their village to converge in a particular place for meetings. Data were collected in the community meeting place, though in some cases at home. A maximum of 20 participants were mobilized to converged at each meeting point. At the meeting place, participants were informed about the study by the research coordinator and SOS fieldworkers, and those who were interested were individually and privately

screened for eligibility, and individual written informed consent was obtained, while children assented and their parents consented. Baseline data were then collected by 10 trained interviewers in Amuru and 12 interviewers in Wakiso, with the help of ODK tablets uploaded with translated questionnaires. Data collectors were fluent in the local languages in the study sites and most had prior experience working with vulnerable families in Uganda. They were extensively trained in ethics, informed consent, and interviewing techniques by the study investigators. All data collection points had a detailed protocol scripted to ensure consistency across data collectors. Participants were offered a refreshment or UGX 5,000 = approx. 1.2 USD as compensation for their time. Program adherence data were collected using an attendance register administered by the facilitators, with support from a research assistant assigned to process evaluation. Program participants also completed a self-report checklist indicating whether they have completed the home activity task.

2.11.1 Quantitative data management and analysis
The study used two methods to upload and store data at the end of each day of data collection. First, the ODK tablets would transmit encrypted data using a 256-bit encryption via wireless networks to the study's Open Data Kit server (www.opendatakit), housed at a central server managed by CHDC's Information Technology Services. Only senior research personnel have access to this server (PIs, co-Is, and data manager). It has a robust security system with firewalls and frequent backing up of all data. Data transmission was done on a daily basis from the CHDC site. All data collected on CASI tablets were encrypted as soon as the questionnaire was finalised (i.e., completed by interviewer) and accessible only by senior research personnel. Access to general functioning of the tablets was password protected, and each tablet had a GPS tracking application installed and activated. This application would allow for remote deletion of all information on the tablet in case of theft. Tablets were stored in a locked cabinet at the Child Health and Development Centre office after data collection.

Frequencies for several socio-demographic and associations were calculated to assess their distribution. Analyses of participation data was conducted in two stages. First, we examined whether participant characteristics and outcomes measured at baseline are associated with attendance in either PfR or PiN. Second, we used the Complier Average Causal Effect Analyses (CACE) to explore the effect of attendance on the intervention effect of primary and secondary variables.

2.12 Cost effectiveness data collection
Programme costs were calculated using a micro-costing approach, multiplying resource use by unit costs, divided into 1) start-up costs including costs required for coordinating recruitment, community mobilisation, and facilitator training; 2) programme delivery costs which includes staff-time, transportation, and other materials for home-based individual consultations, parent-group sessions, and supervision sessions; and 3) administrative costs to manage the implementation. A questionnaire was circulated to the relevant project officers and facilitators to fill-in the costs/ expenses of the project as they remember as well as the opportunity cost of their being involved in the PfR as facilitators.

2.13 Qualitative data collection
Qualitative data collected to address implementation questions included session observations (N=54); focus group discussions (FGD) with parents (N=8, 7-10 per FGD). In addition, data we collected through semi-structured interviews with Wakiso and Amuru District Community Development Services (N=6), community leaders and structures (N=8), trainers of trainers (N=6), implementation staff (N=4) and semi structured interviews with facilitators (N=40) each lasting from 60 – 90 minutes. Facilitators' interviews

explored challenges in implementing the programme on both a process (e.g., using a collaborative approach and/or explaining concepts such as child-led play) and logistical level (e.g., recruitment, session length, location, meals). All data were audio recorded and complemented with researchers notes. Additional data were drawn from open-ended questions in the facilitator self-assessment and facilitator assessment surveys. The table below summarizes the data collected by type, location, cluster, participant category and method.

Table 1: Summary of qualitative data

Respondent category	Method	District	Cluster	No ppts	Total
1. Facilitators in PfR Full sessions (11-15) N =1 per facilitator	Participant/Session observations	Amuru	PfR rural/urban	28	54
		Wakiso	PfR rural/urban	26	
2. Facilitators (Profs., peers, rural, peri-urban, male, female)	Semi structured interviews	Amuru	PfR rural/urban	16	40
			PiN Rural/urban	04	
		Wakiso	PfR Rural/urban	16	
			PiN Rural/urban	04	
3. Local government/district officials		Amuru		03	06
		Wakiso		03	
4. Parents (males, females, married, single, widowed, divorced/ cohabiting Separated, etc)		Amuru	PfR participants	10	20
		Wakiso	PfR participants	10	
5. Community structures/leaders (males, females, rural, urban, etc)		Amuru	Rural/urban	04	08
		Wakiso		04	
6. Trainers of facilitators		Amuru	Neutral	03	06
		Wakiso		03	
7. Implementation staff		Amuru		02	04
		Wakiso		02	
Total interviews				138	138
8. Parents FGDs (male and female groups separately with 6 participants per FGD)	Focus group discussions	Amuru	Neutral	04	08
		Wakiso		04	

2.13.1 Qualitative data management and analysis

Audio recordings of FGDs and interviews were copied onto an external hard drive and also kept in a lockable filing cabinet. A sample of the audio records and handwritten raw data was transcribed verbatim. Following familiarization with the data, and determining that the data were vast, the team decided to conduct a manual analysis of a sample of data by identifying pertinent issues relating to the research questions and topics set out in the study guides. Despite the limitations of this approach the findings offer important insights regarding facilitator training and supervision needs, the targeting of the most vulnerable, mobilization needs, facilitator roles/preparation, and important community and contextual differences between districts.

2.14 Ethical approval

Ethical approval for this study was obtained prior to inception of the study from Makerere University School of Humanities and Social Sciences Institutional Review Board (MUSSS-2021-29 SS900ES)) and the University of Glasgow College of Social Science Research Ethics Committee (400200186). Research Assistants were trained on how to administer consent. They were also oriented on the CHDC child safeguarding policy, being sensitive to potential distress by the participant, and referral pathway, and COVID19 protection guidelines while undertaking data collection.

CHAPTER THREE: IMPLEMENTATION APPROACH

3.1 Partnership and consultative meetings with SOS CV

Following grant approval and notification by Evaluation Fund, CHDC and collaborators (Universities of Oxford and Glasgow, UK) held partnership meetings with SOS to discuss a possible collaboration for the implementation of the UPRISE. This was not an entirely new partnership as SOS had collaborated with CHDC during the PfR pre-post study, but the UPRISE project needed a different implementation arrangement since the Evaluation Fund grant covered only research costs. Thus, various meetings were held with SOS, with three main objectives (i) to understand the on-going family strengthening and planned parenting interventions in the different locations SOS operates in (ii) discuss the scope and type of collaboration CHDC was seeking (iii) discuss research and implementation roles.

As part of the process of developing this partnership, CHDC also held meetings with SOS National Office to discuss national level commitment to the UPRISE project in terms of human resources and other financial resources, and how UPRISE implementation plans might be harmonized with SOS. In particular, it was critical at this level to discuss frankly what the partnership would accomplish together and how, and whether SOS and CHDC agreed regarding the value of implementation science evaluation. Following these meetings SOS CV welcomed the opportunity to be an implementing partner for the UPRISE project, and it was resolved that SOS would delay their planned implementation of PfR until a full proposal is written ethics approvals completed.

Following OAK Foundation's announcement of a funding opportunity to conduct an RCT for the PfR project, further meetings and were held with SOS between July and November 2020 to discuss changes to explore implications with of the new design and scope, catchment communities and timelines. The discussions focused on understanding the new design and implications of the expanded sample size, allocation of resources, role of the implementing organization and research organization, and timelines, and how these would affect SOS' priorities regarding their preplanned implementation of PfR. Additionally, the advent of COVID-19 and the lockdown measures interrupted original plans and timelines, necessitating several adjustments. Thus, from the several additional planning meetings and partner orientation engagements, we reached consensus and acted on a number of important issues affecting project start-up (i) agreed that it was in the best interest of PfR programme to conduct a large scale combined RCT and Implementation science evaluation. SOS and CHDC therefore agreed on the proposed design, sample, cost and technical capacity implications of the new design (ii) jointly identified suitable project implementation sites, with Amuru and Wakiso districts identified to offer opportunities to test implementation of UPRISE in different geographical contexts (iii) discussed community entry strategies and received SOSs input to the draft Community Mobilisation Guide before it was finalized by CHDC (iv) agreed to further delay community mobilization activities that SOS had planned in June 2020 to both comply with the COVID-19 lock-down and government ban on community-based research activities as well as allow the completion of the new grant making processes and receiving of the approval to the revised protocols from the different bodies, and (v) since these changes meant that SOS would further delay their preplanned implementation of parenting work, thereby affecting deliverables of their existing grants, it was agreed that SOS would in the meantime go ahead with a small-scale implementation of PfR

with a few groups, as their resources would permit. CHDC would support by this by conducting training of key SOS staff to provide the PfR manuals and other training resources, to enable quality implementation.

Three noteworthy outcomes resulted from these consultations and actions (i) CHDC conducted a training of trainers (ToT) for SOS's staff (ii) CHDC financed the production of PfR manuals and illustration materials for SOS (iii) the various commitments made by SOS and the extent it became pro-active in planning the upcoming large scale delivery of PfR RCT provided incredibly useful evidence that both SOS and CHDC had developed collective insights, and a sense of mutual need and interdependence regarding PfR UPRISE implementation.

3.2 Scoping visits and district entry meetings

We conducted scoping visits and district entry meetings in Gulu and Wakiso districts in order to (i) familiarize with the proposed study setting (ii) gain local buy-in (iii) strengthen planning for the research and implementation processes. The visits were conducted by a joint team from SOS Head Office in Kampala and CHDC between July and August 2021. In both districts, our particular approach and focus was to discuss suitability of the proposed sites and strategies for community mobilization, and entry and engagement with the district/ sub-county authorities. The visit to SOS Gulu Location Office served an additional purpose; that is, (i) to gain insight about the preparedness and readiness of SOS Gulu Location to lead the implementation, (ii) to discuss logistics and indicative costs to support project start-up and delivery in this site, and (iii) to identify opportunities within the CHDC Gulu Project Office to support PfR research. During this visit we gained useful insights and impressions that led to important changes to our intentions to implement PfR in Gulu district, that is, we established that Gulu district had had a fairly heavy presence of parenting programmes and therefore would not be the most suitable site for PfR UPRISE cRCT. Consequently, two other neighboring districts (Amuru and Nwoya), both formerly part of Gulu district were considered. Three sub counties in the two districts (Alero and Koch Goma Sub Counties in Nwoya District and Lamogi Sub County in Amuru District) were promptly visited and following meetings with different stakeholders including the Senior Assistant Secretaries (SAS), LC III Chairpersons, Community Development Officers and Parish Chiefs, a decision was taken to implement PfR in Lamogi Sub County in Amuru District given the limited number of parenting programmes as well as positive impressions about the level of interest by the local leaders. In Wakiso district, visits were made to two sub-counties (Gombe and Busukuma) and a resolution was reached to target Busukuma sub county in Wakiso District, since it did not have any other ongoing parenting interventions.

Following the scoping visits in both districts the combined project team (CHDC and SOS) planned and conducted formal District Entry Meetings. The objectives were (i) to formally introduce the project to the district authorities, (ii) clarify its implementation approach and present its approvals and demonstrate its compliance with the COVID19 SOPs, (iii) secure buy-in and discuss the role of the local government structures in supporting mobilization of the study clusters, and (iv) gather additional contextual and strategic information to consider during implementation. In Wakiso the entry meetings were conducted at three different levels. First, there was an entry meeting at Wakiso district headquarters, which was attended by top district political and technical staff. The second meeting was held at Nassana Municipality in Wakiso district, the administrative unit where Busukuma sub-county (SC) belongs. This was attended

by the Assistant Town Clerk, S/CDO and Probation Officer, among others. The third meeting was held at Busukuma Town Council for the technical officials and managers. This three-day meeting targeted leaders at different levels, including the security forces, to ensure that all the key people were informed and well oriented about the project and its implementation plans. In Amuru, only one meeting was held and attended by the CDO, DCDO, Parish Chief, while the LCIII Chairperson of Lamogi sub-county was visited separately, briefed about the programme and invited to monitor the training of facilitators and groups.

At the end of the district entry meetings in both sites, we resolved and achieved the following: (i) participating sub-counties and villages were jointly selected with guidance from district leaders, and in both districts, Community Development Officers provided a list and a map showing all the villages to guide the random selection of the clusters (ii) local government administrators at parish level (Parish Chiefs) would support the study with mobilization of parents (iii) the study teams would continue to conduct orientation of the local government officials to further their understanding of the study in order to support mobilization activities, and (iv) the participating sub-counties agreed to provide a free venue for conducting the training of facilitators would take place.

3.3 Training of Facilitators

Facilitators are critical to the implementation of the UPRISE cRCT, as they lead the delivery of the parental sessions. Once recruited, one of the fundamental issues in developing facilitator capacity is their training, and subsequently, their monitoring. The ideal approach and duration of PfR facilitator training has been resolved during the formative and pre-post stages, although further learning is necessary with facilitators of different characteristics to improve it, in view of scale-up considerations. A central part of the training is that the facilitators go through the programme sessions as if they are the parents, which usually is the case anyway, to become familiar with the content of the programme experience the programme as a parent would and have an opportunity to reflect on the lessons. Facilitators were recruited from the 54 clusters (26 in Wakiso and 28 from Amuru) and they received two sets of training lasting two weeks in total prior to starting to deliver the sessions themselves. The first phase guided facilitators on the implementation of the first nine single sex sessions (1-9) while the second referred to as the *Top-up* introduced them to the remaining seven mixed group sessions (10-16). The top-up session was vital in promoting reflective practice and a spirit of self-evaluation among facilitators. By the time of the top-up training (after the first 9 sessions) many facilitators (including professionals and peers) had realized that they spent time reading the facilitator's notes in session, which affected the entire delivery. The top-up enabled trainers to re-orient facilitators and together reflect on effective use of the manual, appropriate instructional techniques, preparations for sessions, conflict management, facilitation skills and challenges encountered in the course of implementation. In the process, facilitators were paired in terms of social and instructional skills strengths and learning needs with them aim of situating the more adept ones to play supportive roles.

The training was participatory and followed the PfR Facilitators Manual, introducing facilitators to the PfR programme, sessions, illustrations and training resources, and instructional skills for delivering the sessions. The training of facilitators was led by the expert trainers who either were involved in developing the programme, or have been trainers since its inception. SOS CV – the implementing partner – provided

administrative support, including mobilizing the local leadership at the county and Town Council to preside over the official opening and closing of the training. SOS CV Field Officers also participated in the training to ensure they understood the delivery processes and content, given their critical role in monitoring and supervising the facilitators. In total, 208 facilitators were trained and were categorized as either professional (had some prior professional training e.g. teacher) or peer (had no professional training). The table below summarises the distribution of the facilitators trained in both Wakiso and Amuru, for PfR and PiN delivery.

Table 2: Total number of facilitators trained in Busukuma and Lamogi

	BUSUKUMA	LAMOGI
Number of clusters	26	28
Total Number of facilitators trained	102	106
Number of facilitators trained (PfR)	50	54
Number of facilitators trained (PiN)	52	52
Number of male facilitators trained	51	53
Number of female facilitators trained	51	53
Number of Peer facilitators trained	34	44
Number of Professional facilitators trained	16	12

3.4 Developing and finalization of PfR programme materials

Before actual implementation of the cRCT, CHDC up dated and/ or developed new resources. The PfR manual was revised based on recommendations from OAK Foundation to address child sexual abuse more explicitly by including a session on *Prevention of sexual abuse for children 17 years and below*. The manual also underwent language translation from English to both Luganda and Luo. Another resource developed was the PfR Mobilization and Recruitment Guide. This following the PfR scaling support from Spring Impact and recommendation of other partners who were implementing the PfR programme such as Child Rights and Violence Prevention Fund (CRVP F) partners and SOS. This guide helps whoever undertakes mobilization and recruitment of parents with the steps to do so systematically. The guide had been tested with the implementation at CRVP-F partners in the different regions and found to be an extremely useful tool to guide community entry and recruitment of participants and facilitators as it outlines how to enter a community, how to conduct community entry meetings, how to identify and how to select community-based facilitators, and how to form parental groups. It was also used by programme staff, community mobilizers /leaders and community-based facilitators who spearheaded the implementation of the parenting programme in their communities. The guide also provides an overview of the PfR programme to help the coordinators, mobilizers and community facilitators get familiar with it, and confidently,

mobilize people for the programme. Additionally, CHDC finalized and/ or developed new illustration materials – picture codes and charts – to be used as teaching aids by the facilitators during the sessions.

CHAPTER FOUR: STUDY RESULTS

4.1 Quantitative

The study recruited 2,328 parents from 54 clusters in Amuru and Wakiso districts, and these were then allocated to the intervention and control arm after completing a baseline survey. In addition, 886 of their children completed the baseline survey but did not participate in the intervention.

Figure 1: Trial flow diagram
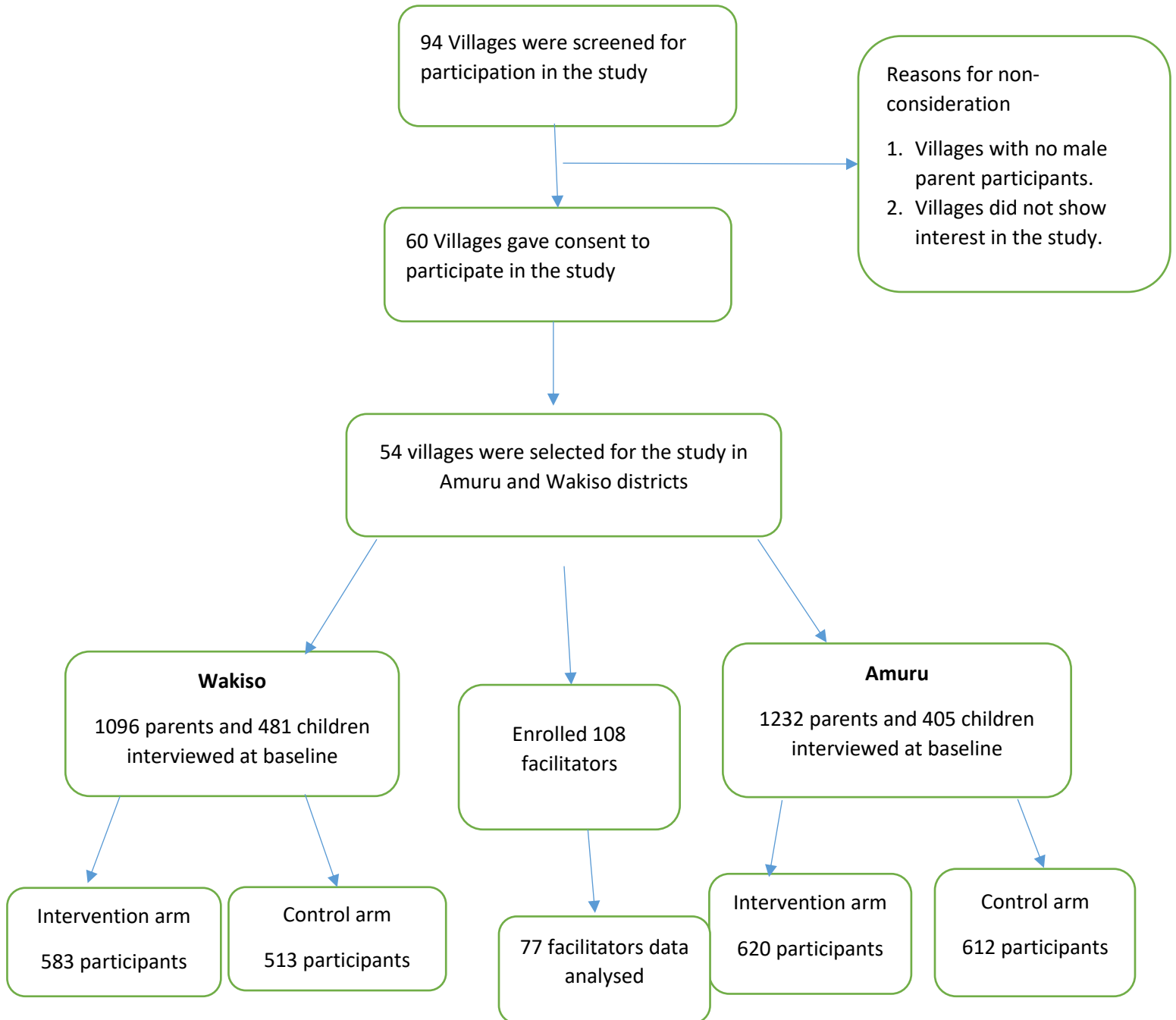
4.2 Baseline results

4.2.1 Parents' demographic characteristics

The mean age of the parents was 38 years. The majority of the parents were biological (70%) and had finished at least primary education (57%). The average number of children in the households was 4.

Table 3: Descriptive Statistics of Parent Variables

Measures	Total	Min/Max
Parent age, M (SD)	38.08 (12.08)	18/90
Female parent, n (%)	1,252 (54%)	—
Parent education (finished primary or higher), n (%)	1,181 (57%)	—
Residence (Amuru), n (%)	1,232 (52.9%)	
Marital status (Married), n (%)	1,737 (74.6%)	
Religion (Christian), n (%)	2,127 (91.4)	
Parent disability, n (%)	110 (5%)	—
Number of children in the household, M (SD)	3.80 (2.05)	0/21
Number of infants in the household, M (SD)	0.45 (0.59)	0/5
Father present in household, n (%) - child	654(75%)	—
Female parent present in household, n (%) - child	790 (89%)	—
Attitudes towards equitable gender socialization, M (SD)	11.26 (4.06)	0/24
Parenting stress, M (SD)	18.19 (7.95)	0/36
Parent depression, M (SD)	5.18 (5.12)	0/21
COVID-related stress, n (%)	1,940 (84%)	—

4.2.2 Parents' exposure to violence as a child

Although exposure to physical and sexual assault in childhood was less common at community level, parents reported to have been exposed to high levels of physical violence at family level (48%), at school (47%). Those who had witnessed their female parent being physically assaulted by husband were 31.4% while those who had witnessed their father being physically assaulted by wife were 24.5% (Figure 2).

Figure 2: Parents' exposure to violence in childhood

Past exposure to violence

Category	Never	Rarely	Sometimes	Often
Sexual Violence from the community	85.4	9.6	4	1.2
Physical Violence from the community	69.8	19.5	8.0	2.3
Physical violence repeatedly at school by teachers or fellow…	10.5	38.8	27.9	19.8
Physical violence by your parent/ family members	16.8	34.5	25.3	22.7
See/hear your father being beaten or insulted repeatedly by…	47.3	22.8	11.4	13.1
See/hear your mother being beaten or insulted repeatedly by…	40.5	22.9	12.7	18.7

■Never ■Rarely ■Sometimes ■Often

4.2.3 Children's demographic characteristics

Among the child participants, 54% were female. The mean age of the children was 12 years. Nearly all the children were in school with slightly more girls (52%) than boys (48%) (not shown in table).

Table 4: Descriptive Statistics of Child Variables

Measures	Total	Min/Max
Child age, M (SD)	11.97 (1.49)	9/15
Female child, n (%)	476 (54%)	—
Child attendance in school, n (%)	876 (99%)	—
Child disability, n (%)	21 (2%)	—
Child orphan hood, n (%)	73 (8.2%)	—
Child misbehavior, M (SD)	4.93 (4.55)	0/24
Child prosocial behavior, M (SD)	8.05 (2.03)	1/10
Attitudes towards equitable gender socialization, M (SD)	10.92 (3.94)	0/24

4.2.4 Parents' relationship with the child

Among fathers, 81.5% were biological and among female parents 76.1% were biological parents. Female

parents were higher in most categories compared to the male parents. (Figure 3)

Figure 3: Parents' relationship with the children
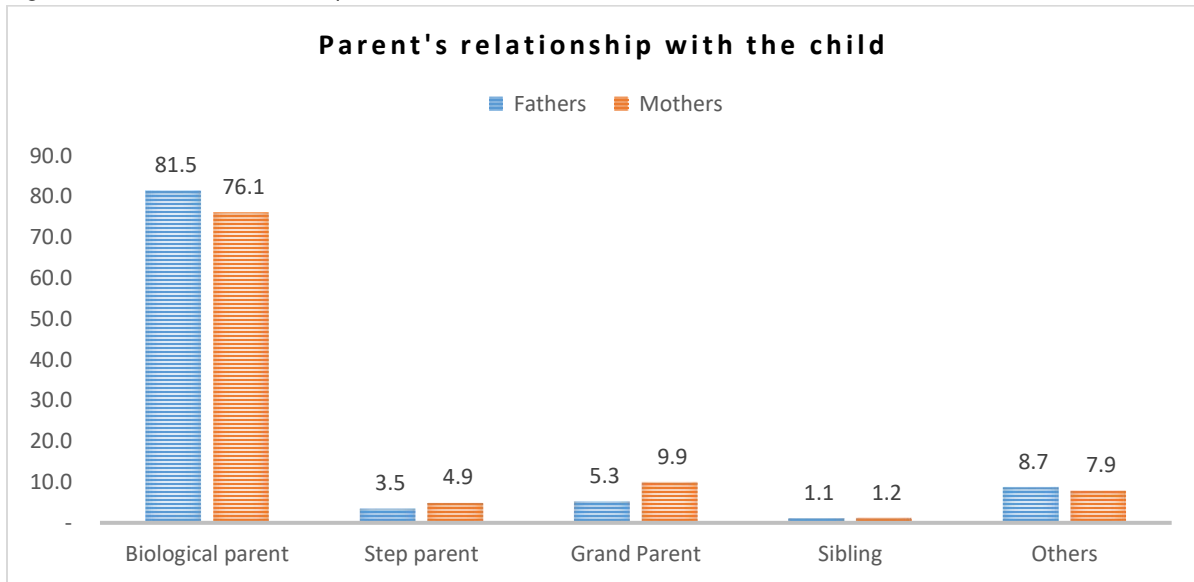
4.2.5 Provision of necessities

The majority of the children in Wakiso (more than 94%) reported to have all the three meals in the past month while in Amuru more children reported to have had supper (96.7%) compared to breakfast (60.9%) in the past month.

Figure 4: Provision of meals in households
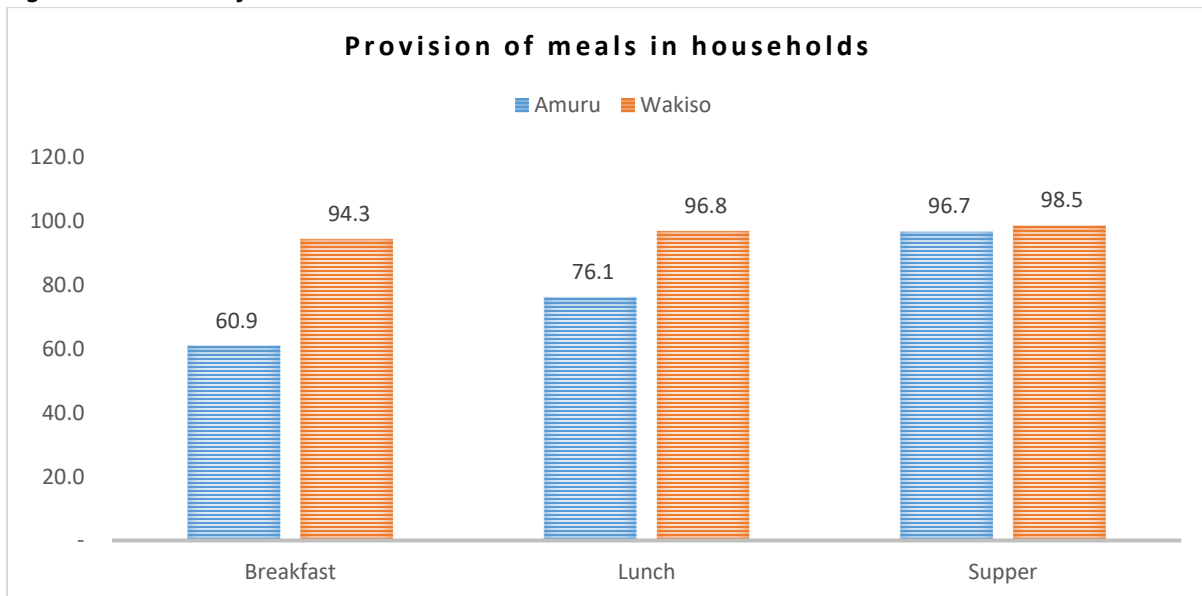
More than 70% of the children reported that their parents provided with necessities when they needed them as shown in the graph below.

Figure 5: Provision of necessities in the household

Provision of necessities in the household

Amuru — Wakiso

Category	Amuru	Wakiso
Soap to wash	85.7	89.9
School fees	81.9	86.9
School materials	81.7	87.2
School uniform	79.8	87.2
New clothes	81.5	83.0
Pair of shoes	66.1	80.0
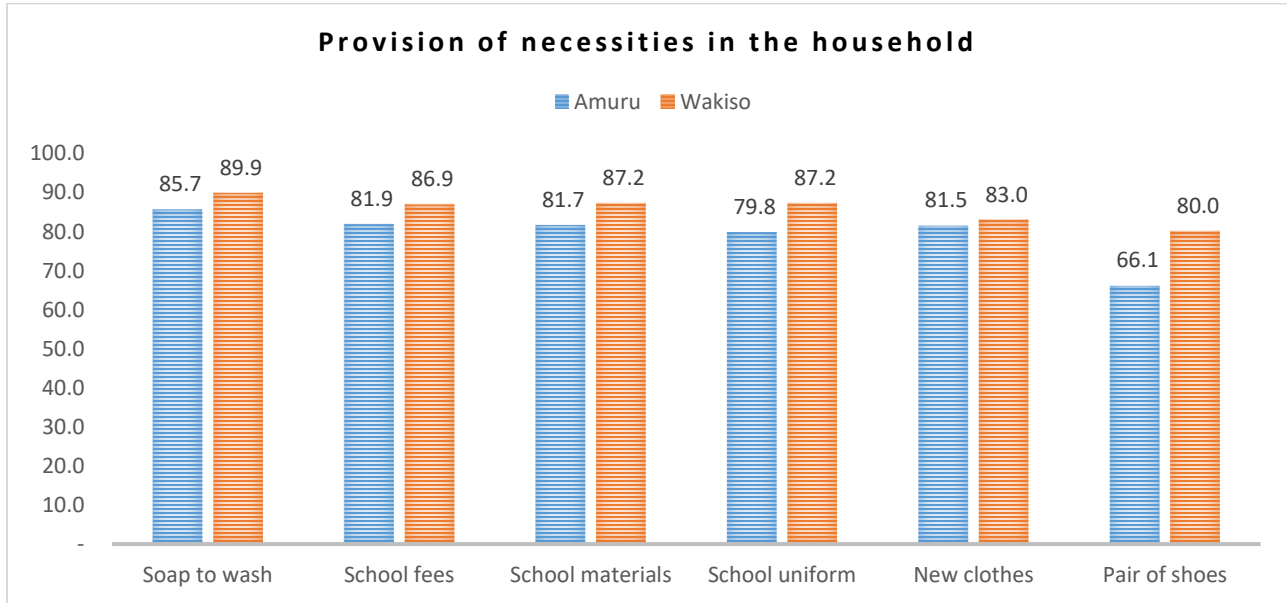
Table 5. Descriptive Statistics of Family/Community Variables

Measures	Total	Min/Max
Presence of other parents, n (%)	209 (24%)	—
Food provision-parent report, M (SD)	3.23 (1.21)	0/6
Food provision-child report, M (SD)	3.19 (1.17)	0/6
Basic necessities-parent report, M (SD)	4.68 (1.79)	0/6
Basic necessities-child report, M (SD)	4.97 (1.64)	0/6
COVID negative impact on family, M (SD)	259 (29%)	—
Family vulnerability, M (SD)	1.44 (1.45)	0/7

4.3 Primary and Secondary outcomes

We investigated child maltreatment by parents and parental conflict in the past one month. The children reported that in the past month they experienced at least four instances of maltreatment from their male parent and six from their female parent. The parents also reported that overall maltreatment of children by parents themselves was at least 13 times from both parents in the past month.

We asked children about physical and emotional abuse from both their male and female parents in the past month. The children reported that in the past month they experienced five instances of emotional abuse from their male parent and three of emotional abuse from their female parent. Children also

reported to have experienced physical abuse at least twice from their female parents and once from their male parents.

Table 6. Child maltreatment by parent

Measures	Total	Min/Max
Child maltreatment-Male, M (SD)	4.11 (5.24)	0/45
Child maltreatment-Female, M (SD)	6.32 (6.11)	0/39
Child maltreatment-Parent, M (SD)	13.07 (14.02)	0/87
Attitudes supporting corporal punishment-Total, M (SD) - child	2.73 (2.49)	0/8
Attitudes supporting corporal punishment-Boy, M (SD)	1.38 (1.27)	0/4
Attitudes supporting corporal punishment-Girl, M (SD)	1.37 (1.26)	0/4
Attitudes supporting corporal punishment-Total, M (SD) - adult	3.05 (2.51)	0/8

4.3.1 Parental monitoring and supervision

We asked children about how the parents supervised or monitored their behavior at home. Most children reported female parents to often monitor them in most aspects of their lives. Notably 57.1% of the children reported female parent monitoring of household chores. Nearing half of the children (47.7%) reported a lack of monitoring use of technology by female parents.

Figure 6: Female Parental monitoring / supervision

Female parental monitoring / supervision

	Never	Rarely	Sometimes	Often	888
Female parent figure try to monitor your use of technologydevices?	47.7	11.3	9.5	19.5	11.7
Female parent figure try to know whether you have done household chores?	.8	16.3	22.3	57.1	2.3
Female parent figure try to know where you go when you leave the house?	4.0	21.1	24.5	47.9	2.6
Female parent figure try to know where you goafter school?	8.8	20.0	26.3	40.4	3.4
Female parent figure try to know how you spend your free time?	6.8	23.1	32.6	35.1	2.1
Female parent figure try to know whom you spend time with?	6.3	20.7	30.0	40.7	2.1

The children also reported that there was never or rarely any supervision from male parents. Notably 50.2% of children reported that male parents did not monitor the children's use of technology devices

Figure 7: Male parental monitoring / supervision

Male parental monitoring / supervision

	Never	Rarely	Sometimes	Often	888
Tell your male parent figure things about your life.	50.2	9.9	7.3	11.6	20.7
Male parent figure praises you.	19.0	29.5	16.1	21.4	13.9
Male parent figure comforts you.	17.5	28.1	17.5	22.7	14.2
Male parent figure listens to you.	19.5	25.7	17.0	21.9	14.3
Male parent figure gets involved in activities that you like.	20.5	30.5	19.3	15.6	14.0
Friendly talk with your male parent figure.	21.1	27.4	18.4	19.2	13.7

4.3.2 Positive parenting

When asked about child neglect in the last month 94% of the parents reported they did not neglect their children at all. Children reported that their female parents exhibited positive parenting 21 times and their male parents 15 times in the last month. We found from the children's reports that female parents monitored them 11 times in the last month while the male parents monitored them eight times. Children reported that their female parents supported them nine times and male parents eight times. Generally, the parents rarely supported their children's education. Children reported that they misbehaved at least five times and displayed prosocial behavior 12 times in the last month. The children reported that the mean score of gender socialization among their care takers was 13. This implies the children were neutral on whether their care takers treat boys and girls differently in the family. The mean score for respectability behavior among both female and male parents was 5 meaning that the children reported that they sometimes observed their parents expressing respectability behavior. The mean score for respectability importance was 4 among both male and female parent therefore the children reported that their parents only expressed respectability importance sometimes in their families. (Table 7).

Table 7. Descriptive Statistics of Parent-Child Variables

Measures	Total	Min/Max
Positive parenting-Male, M (SD)	15.06 (8.82)	0/33
Positive parenting-Female, M (SD)	21.46 (7.37)	0/33
Parental monitoring-Male, M (SD)	7.72 (5.14)	0/18
Parental monitoring-Female, M (SD)	11.49 (4.26)	0/18
Positive parenting-Adult, M (SD)	18.87 (7.71)	0/33
Parent support of education-Male, M (SD)	8.26 (4.46)	0/15
Parenting support of education-Female, M (SD)	9.49 (3.95)	0/15
Parent support of education-Adult, M (SD)	8.87 (4.14)	0/15
Respectful behaviour-importance-Male, M (SD)	3.87 (1.89)	0/6
Respectful behaviour-importance-Female, M (SD)	4.29 (1.61)	0/6
Respectful behaviour-importance, M (SD)	5.09 (1.89)	0/8
Respectful behaviour-modelling-Male, M (SD)	4.81 (1.7)	0/6
Respectful behaviour-modelling-Female, M (SD)	5.16 (1.3)	0/6
Sexual abuse, M (SD)	0.4 (1.05)	0/8
Communication about sexuality-Male, M (SD)	0.86 (1.54)	0/6
Communication about sexuality-Female, M (SD)	1.37 (1.9)	0/6
Communication about sexuality-Parent, M (SD)	1.43 (2.51)	0/8

4.3.3 Partner Conflict and Intimate Partner Violence

Children in Amuru district reported to witness high instances of intimate partner conflict (Verbal 36.65% and Physical 24.5%) among their parents. In Wakiso the children reported to have witnessed more verbal conflicts 23.2% than physical fights 7.4% among their parents.

Figure 8: Partner conflict in the children's presence
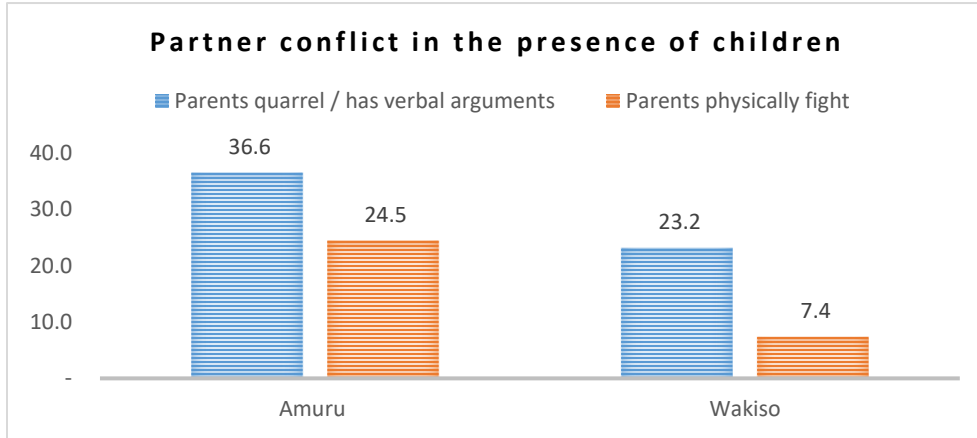
4.3.4 Intimate Partner Violence

Overall majority of parents were experiencing intimate partner violence from their partners. Male parents reported have experienced more instances of partner coercion 84.1% and partner negotiation 77.4% compared to physical abuse 28.3% and psychological aggression from their partners. Women on the other hand reported to have experienced more physical violence 76.3% and intimate partner coercion 77.7% compared to partner negotiation and psychological aggression.

Figure 9: Intimate partner Violence Victimization
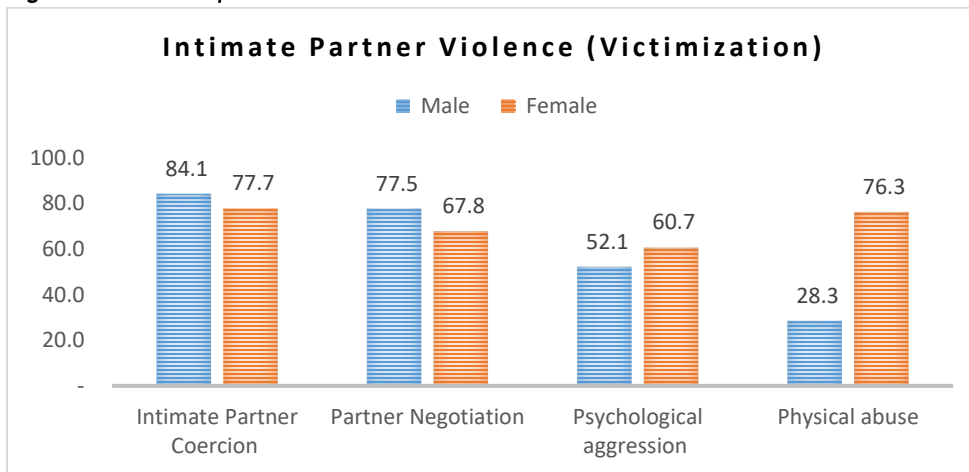
Parents reported to have perpetrated intimate partner violence against their partners too. Overall the male parents reported to have coerced their partners more (77%), Psychologically (55.2%) and physically (34.8%) assaulted them. The female parents too reported high perpetration in intimate partner coercion (75.6%), partner negotiation (71.2%) and psychological aggression (55.2%).

Figure 10: Intimate partner violence (Perpetration)
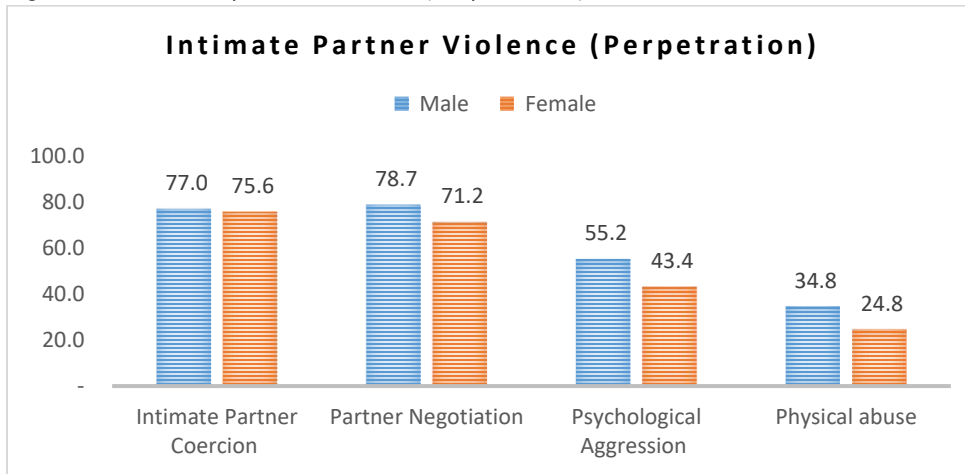
The mean score for Intimate partner coercion was 17. Parents experienced at least one type of intimate partner coercion twice in the last month. They also coerced their partners at least 12 times in the last month.

Parents reported to have experienced psychological aggression 4 times from their partners in the last months and they too psychologically abused their partners 3 times in the last month. Parents also reported to have experienced physical abuse 2 times from their partners and they abused their partners physically 2 times in the last 2 months.

Table 8. Descriptive Statistics of Partner Relationship Variables

Measures	Total	Min/Max
Parent conflict, M (SD)	0.94 (1.48)	0/6
Positive partner relationship, M (SD)	1.07 (1.15)	0/3
COVID impact on partner relationships-parent report, n (%)	606 (28%)	—
COVID impact on partner relationships-child report, n (%)	112 (14%)	—
Relationship status (partnered), n (%)	2,023 (88%)	—
Partner coercion-perpetration, M (SD)	12.39 (12.42)	0/80
Partner coercion-victimisation, M (SD)	17 (16.6)	0/80
Partner negotiation-perpetration, M(SD)	7.86 (6)	0/16
Partner negotiation-victimisation, M(SD)	7.01 (5.82)	0/16
Intimate partner violence-perpetration, M(SD)	4.44 (6.63)	0/48
Intimate partner violence-victimisation, M(SD)	6.33 (9.07)	0/48
Sexual violence-victimisation, M(SD)	0.36 (1.32)	0/8

4.4 Factors influencing the baseline level of primary variables

The goal of the present analysis was to explore potential predictors of six baseline primary outcomes: parent-reported child maltreatment, boy-reported child maltreatment, girl-reported child maltreatment, intimate partner violence victimisation, intimate partner violence perpetration, and partner conflict reported by both parents and children). We systematically analyse the predictors of the main outcome variables through six ecological levels: the innermost and core are the child and parent levels, then there are the parent-child level and partner relationship levels, and these are within the family and community levels (see Figure 1). The specific variables included in each level are shown in Table 8.

Figure 11. Six Levels of Potential Influences on Baseline Primary Variables
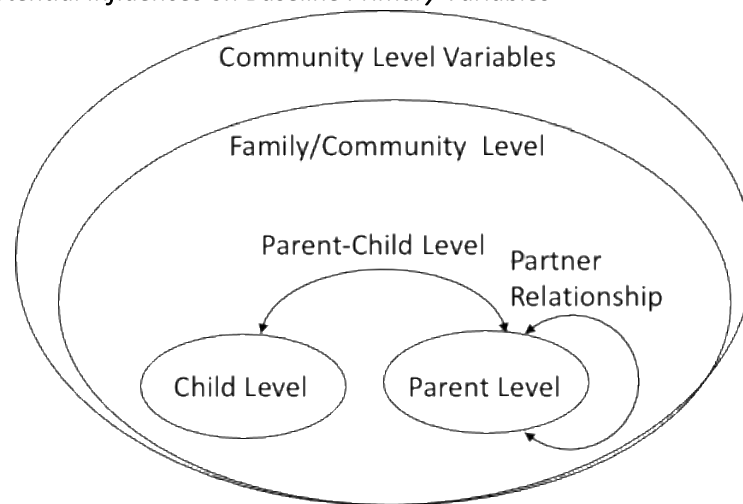
Our analyses were conducted in three stages. First, we assessed correlations between predictors and primary outcomes and developed a correlation table to investigate our findings. We used a threshold of $\alpha = 0.05$ (i.e., $p < 0.05$) to assess for significant correlations. Second, we conducted a variability test for independent variables to assess: (1) whether there were too many missing values (for this reason we did not consider child orphan hood in the single regression) and (2) whether the variation was too low. If all the values except the main value were less than 10% of the total population, then the variation is considered too small and not included in the regression analysis (i.e., we did not consider sexual abuse-child report, sexual violence-victimisation, sexual violence-perpetration and community sexual violence in the single regression). Through the above steps, we screened out potential variables that are significantly correlated and can be entered into single regression.

Third, we explored potential influencing factors of primary outcomes using linear/Poisson regression models. Bonferroni corrections for multiple comparisons were used to also calculated adjusted p-values. To estimate the size of our effects, we reported standardised beta and incidence rate ratio (IRR) values. Although we calculated adjusted p values, there is still a risk of multiple testing. Thus, we also set a

threshold for effect size when considering meaningful associations. We used a 10% cut-off threshold criterion to determine whether the results held practical significance in addition to statistical significance. In particular, for linear models, results were discussed if the standardised β estimate values fell above or below the range of -0.2 to 0.2. For those linear regressions for which standardized beta cannot be calculated, we will report all significant results (i.e., adjusted P-values less than 0.05). Likewise, for Poisson models, results were discussed if the IRR values were above or below the range of 0.9 to 1.1. All analyses were conducted using R (Version 1.4.1103) statistical computing software (R Core Team, 2021).

4.4.1 Multivariate analysis

The means and standard deviations for all measures/variables are presented in Tables 2-6. The results of our regression models are shown in the Tables 7-12 below. We developed linear models for child-report maltreatment (male and female), and partner conflict outcome variables in separate regression for each independent variable (Tables 9-11). For the variables whose measurement method is frequency - parent-report maltreatment, intimate partner violence perpetration and intimate partner violence victimisation - we used the distribution test process in Figure 2 to determine the corresponding regression model.

Figure 12. Distribution Test Flowchart
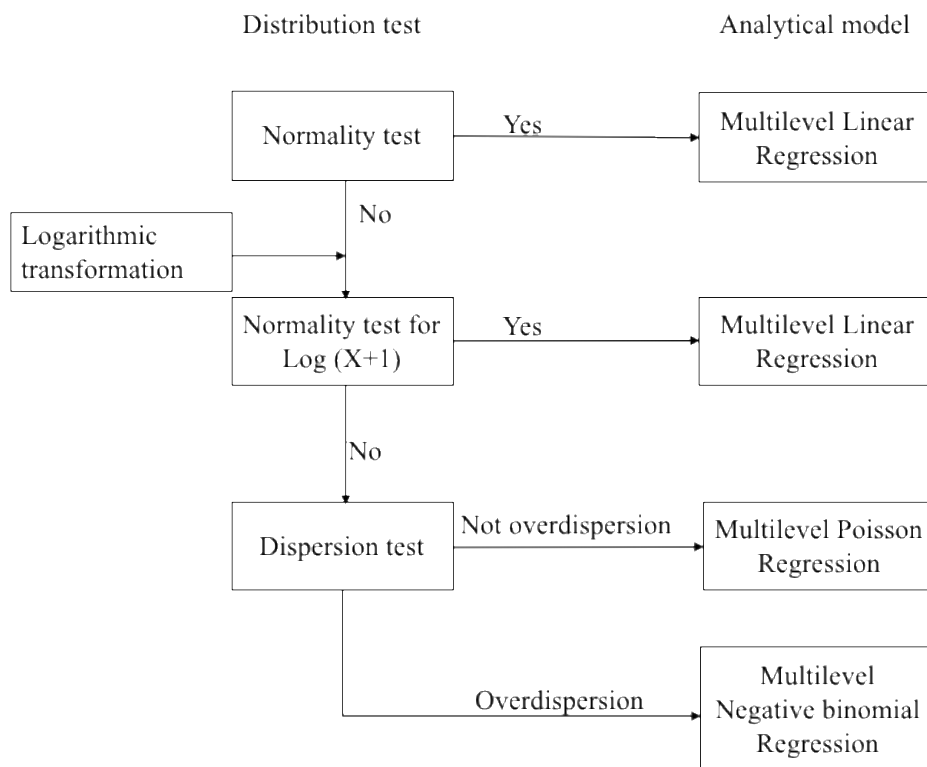
After performing distribution checks, we created Poisson models for parent-report maltreatment, intimate partner violence perpetration and intimate partner violence victimisation outcome variables in separate regression for each independent variable (Tables 9, 13, 14).

4.4.2 Parental Child Maltreatment

Table 9 shows the association between potential baseline predictors and child maltreatment for both parental figures overall. Factors associated with significantly higher levels of child maltreatment at baseline were: being single compared to having a partner; being a female parent; having a greater COVID-19 impact on partner relationships; having attitudes supportive of corporal punishment; living in Wakiso District compared to Amuru District; having a male child; having a child with a disability; COVID-related stress; and living in a peri-urban compared to a rural community. We also see that child prosocial behaviour, parent literacy, attitudes towards equitable gender socialisation, parental stress, parental depression, parental exposure to violence as a child, parental emphasis on the importance of respectful behaviour, and IPV coercion, negotiation, perpetration and victimisation were significantly associated with increased child maltreatment at baseline. However, given the small effect sizes, these findings are not robust.

Table 9. The effect of baseline predictors on Child Maltreatment

Predictors	β	SE	p	p_{Adjusted}	IRR	95% CI_{Lower}	95% CI_{Upper}
Child Level Variables							
Child misbehaviour	0.08	0.00	<0.001	<0.001	1.08	1.08	1.08
Child prosocial behaviour	-0.05	0.00	<0.001	<0.001	0.95	0.95	0.95
Child gender, Female	*-0.13*	*0.01*	*<0.001*	*< 0.001*	*0.88*	*0.86*	*0.90*
Child disability	*0.16*	*0.02*	*<0.001*	*< 0.001*	*1.18*	*1.14*	*1.22*
Parent Level Variables							
Female parent	*0.54*	*0.01*	*<0.001*	*<0.001*	*1.71*	*1.67*	*1.75*
Parent literacy	0.08	0.01	<0.001	<0.001	1.09	1.08	1.10
Attitudes towards equitable gender socialisation	0.04	0.00	<0.001	<0.001	1.04	1.04	1.04
Parenting stress	0.02	0.00	<0.001	<0.001	1.02	1.02	1.03
Parent depression	0.04	0.00	<0.001	<0.001	1.04	1.04	1.04
Parent exposure to violence as a child	0.03	0.00	<0.001	<0.001	1.03	1.03	1.04
COVID-related stress	*0.17*	*0.02*	*<0.001*	*<0.001*	*1.18*	*1.15*	*1.22*
Parent-Child Level Variables							
Parent support of education-Adult	-0.03	0.00	<0.001	<0.001	0.97	0.97	0.98

Attitudes supporting corporal punishment-Total	*0.14*	*0.00*	*<0.001*	*<0.001*	*1.15*	*1.14*	*1.15*
Attitudes supporting corporal punishment-Boy-Parent	*0.26*	*0.00*	*<0.001*	*<0.001*	*1.30*	*1.29*	*1.31*
Attitudes supporting corporal punishment-Girl-Parent	*0.27*	*0.00*	*<0.001*	*<0.001*	*1.30*	*1.29*	*1.31*
Respectful behaviour-importance	0.04	0.00	<0.001	<0.001	1.05	1.04	1.05
Partner Relationship Level Variables							
COVID impact on partner relationships	*0.33*	*0.01*	*<0.001*	*<0.001*	*1.39*	*1.36*	*1.43*
Relationship status (partnered)	-0.16	0.02	<0.001	<0.001	0.85	0.83	0.88
Partner coercion-perpetration	0.02	0.00	<0.001	<0.001	1.02	1.02	1.02
Partner coercion-victimisation	0.02	0.00	<0.001	<0.001	1.02	1.02	1.02
Partner negotiation-perpetration	0.03	0.00	<0.001	<0.001	1.03	1.03	1.03
Partner negotiation-victimisation	0.01	0.00	<0.001	<0.001	1.01	1.01	1.01
Intimate partner violence-perpetration	0.02	0.00	<0.001	<0.001	1.02	1.02	1.02
Intimate partner violence-victimisation	0.02	0.00	<0.001	<0.001	1.02	1.02	1.02
Community Level Variables							
Community location (peri-urban/rural)	*0.11*	*0.01*	*<0.001*	*<0.001*	*1.11*	*1.09*	*1.14*
Geographical region (Amuru/Wakiso)	*0.71*	*0.01*	*<0.001*	*<0.001*	*2.03*	*1.98*	*2.08*

4.4.3 Female parent perpetration of child maltreatment

Table 10 shows that attitudes towards equitable gender socialisation, male child maltreatment, attitudes supporting corporal punishment for boys, COVID impact on partner relationships, COVID negative impact on family, and living in the geographical region of Wakiso predicted increased child maltreatment by female parents at baseline. Further, the results show that positive parenting, parental support of education, respectful behaviour modelling for males and females, respectful behaviour importance for females, and access to basic necessities was associated with reduced child maltreatment by female parents at baseline. We also see that attitude supporting corporal punishment, partner conflict, and community physical violence was statistically linked to greater female parent perpetration of child maltreatment at baselines. Further, positive parenting and respectful behaviour modelling was linked to reduced female parent perpetration of child maltreatment at baseline. However, given these results fell outside of our criteria for inclusion of clinically significant results due to having a small effect size, these findings may not be robust.

Table 10. The effect of baseline predictors of child maltreatment by female parents (child-report)

Predictors	β	standardised β	SE	p	p$_{Adjusted}$
Child Level Variables					
Attitudes supporting equitable gender socialisation	*0.26*	*1.03*	*0.05*	*<0.001*	*<0.001*
Parent-Child Level Variables					
Positive parenting-Female	-0.16	-1.15	0.03	<0.001	<0.001
Parenting support of education-Female	*-0.29*	*-1.15*	*0.05*	*<0.001*	*<0.001*
Child maltreatment-Male	*0.62*	*3.22*	*0.03*	*<0.001*	*<0.001*
Attitudes supporting corporal punishment-Total	0.17	0.42	0.08	0.045	0.671
Attitudes supporting corporal punishment-Boy	0.39	0.21	0.17	0.019	0.280
Respectful behaviour-importance-Female	-0.32	-0.51	0.13	0.014	0.208
Respectful behaviour-modelling-Male	*-0.46*	*-0.78*	*0.12*	*<0.001*	*0.003*
Respectful behaviour-modelling-Female	*-1.07*	*-1.39*	*0.16*	*<0.001*	*<0.001*
Partner Relationship Level Variables					
Partner conflict	*1.03*	*1.53*	*0.14*	*<0.001*	*<0.001*
COVID impact on partner relationships	*2.52*	*0.88*	*0.60*	*<0.001*	*<0.001*
Family/Community Level Variables					
Basic necessities	-0.37	-0.60	0.13	0.004	0.066
COVID negative impact on family	*2.21*	*1.01*	*0.45*	*<0.001*	*<0.001*
Community Level Variables					
Community physical violence	*2.06*	*1.6*	*0.36*	*<0.001*	*<0.001*
Geographical region (Amuru/Wakiso)	*2.95*	*—*	*0.40*	*<0.001*	*<0.001*

4.4.4 Male parent perpetration of child

Table 11 shows that partner conflict, COVID impact on partner relationships, and living in the Wakiso geographic region are associated with increased child maltreatment by male parents reported by children.

Analyses showed that attitudes towards equitable gender socialisation, attitudes supporting corporal punishment were significantly associated with higher male parent perpetration of child maltreatment at baseline. Further, respectful behaviour modelling was associated with reduced male parent perpetrated child maltreatment. However, these results did not meet our threshold criteria for large enough effects to account for multiple testing. Therefore, these findings may not be robust and should be interpreted with caution. We did not see a significant link between father perpetrated child maltreatment at baseline and father's biological relationship to the child, female parent perpetrated child maltreatment, parenting support of education, food provision, and living in a peri-urban community location.

Table 11. The effect of baseline predictors of child maltreatment by male parents (child-report)

Predictors	β	standardised β	SE	p	p$_{Adjusted}$
Child Level Variables					
Attitudes towards equitable gender socialisation	0.13	0.09	0.05	0.008	0.129
Parent Level Variables					
Parent substance use	*0.78*	*0.15*	*0.18*	*<0.001*	*<0.001*
Parent-Child Level Variables					
Father relationship to child	1.41	0.10	0.60	0.020	0.318
Father present in household	*2.17*	*0.18*	*0.51*	*<0.001*	*<0.001*
Parent support of education-Male	-0.10	-0.08	0.04	0.024	0.388
Child maltreatment-Female	-0.09	-0.07	0.05	0.069	1.000
Attitudes supporting corporal punishment-Boy	0.31	0.07	0.15	0.041	0.661
Respectful behaviour-modelling-Male	*-0.54*	*-0.17*	*0.11*	*<0.001*	*<0.001*
Respectful behaviour-modelling-Female	*-0.45*	*-0.11*	*0.14*	*0.002*	*0.031*
Partner Relationship Level Variables					
Partner conflict	*1.25*	*0.35*	*0.12*	*<0.001*	*<0.001*
COVID impact on partner relationships	*3.56*	*0.24*	*0.53*	*<0.001*	*<0.001*
Family/Community Level Variables					
Food provision	-0.48	-0.11	0.16	0.003	0.056

COVID negative impact on family	*1.83*	*0.16*	*0.41*	*<0.001*	*<0.001*
Community Level Variables					
Community physical violence	*1.38*	*0.15*	*0.33*	*<0.001*	*0.001*
Community location (peri-urban/rural)	-0.89	-0.08	0.39	0.022	0.345
Geographical region (Amuru/Wakiso)	*1.37*	*—*	*0.38*	*<0.001*	*0.005*

4.4.5 Partner Conflict

Table 12 shows that parent substance use, engagement in child maltreatment, and COVID impact on partner relationships at baseline predicted increased partner conflict. On the other hand, living in the geographic region of Wakiso relative to Amuru was associated with reduced partner conflict. We further see that positive parenting by male and female parents, parenting support of education by male and female parents, respectful behaviour modelling by male parents, access to basic necessities, and community peri-urban location is associated with reduced partner conflict. However, given the small effect sizes, these findings are not robust. There was no significant association between partner conflict and community physical violence and attitudes supporting corporal punishment for girls.

Table 12. The effect of baseline predictors on Partner Conflict

Predictors	β	standardised β	SE	p	pAdjusted
Parent Level Variables					
Parent substance use	*0.44*	*0.31*	*0.05*	*<0.001*	*<0.001*
Parent-Child Level Variables					
Positive parenting-Male	-0.03	-0.16	0.01	<0.001	<0.001
Positive parenting-Female	-0.03	-0.13	0.01	0.001	0.009
Parent support of education-Male	-0.04	-0.13	0.01	0.001	0.010
Parent support of education-Female	-0.04	-0.12	0.01	0.002	0.029
Child maltreatment-Male	0.10	0.36	0.01	<0.001	<0.001
Child maltreatment-Female	0.06	0.27	0.01	<0.001	<0.001
Attitudes supporting corporal punishment-Girl	-0.10	-0.08	0.04	0.028	0.414

Respectful behaviour-modelling-Male	-0.12	-0.14	0.03	<0.001	0.003	
Partner Relationship Level Variables						
COVID impact on partner relationships	*0.92*	*0.22*	*0.15*	*<0.001*	*<0.001*	
Family/Community Level Variables						
Basic Necessities	-0.15	-0.16	0.03	<0.001	<0.001	
COVID negative impact on family	0.32	0.10	0.12	0.007	0.098	
Community Level Variables						
Community physical violence	0.19	0.07	0.09	0.041	0.618	
Community location (peri-urban/rural)	-0.25	-0.08	0.11	0.025	0.373	
Geographical region (Amuru/Wakiso)	*-0.45*	*—*	*0.11*	*<0.001*	*<0.001*	

4.4.6 Intimate Partner Violence (IPV) Victimisation

Table 13 shows that being a female parent, having COVID-related stress, attitudes supporting corporal punishment for boys, communicating about sexuality, family vulnerability, and living in the Wakiso geographic region was associated with increased IPV victimisation. Having more infants in the household and having a greater impact of COVID-19 on partner relationships was associated with reduced IPV victimisation. The table also shows that parental education, stress, depression, exposure to childhood violence, positive parenting, child maltreatment, attitudes supporting corporal punishment, and IPV perpetration, coercion and negotiation is linked to increased IPV victimisation. Additionally, parental literacy, access to basic necessities were linked to reduced IPV victimisation. Nevertheless, given the effect sizes for these results were small, findings should be interpreted with caution. There was no significant association between peri-urban community location and IPV victimisation.

Table 13. The effect of baseline predictors on Intimate Partner Violence (IPV) Victimisation

Predictors	β	SE	p	$p_{Adjusted}$	IRR	95% CI_{Lower}	95% CI_{Upper}
Parent Level Variables							
Female parent	*0.73*	*0.02*	*<0.001*	*<0.001*	*2.07*	*2.00*	*2.15*
Parent education	-0.07	0.01	<0.001	<0.001	0.93	0.92	0.94
Parent literacy	-0.08	0.01	<0.001	<0.001	0.92	0.91	0.94
Parenting stress	0.04	0.00	<0.001	<0.001	1.04	1.04	1.05

Variable	β	SE			OR	LCI	UCI
Parent depression	0.08	0.00	<0.001	<0.001	1.09	1.08	1.09
Parent exposure to childhood violence as a child	0.02	0.00	<0.001	<0.001	1.02	1.01	1.02
COVID-related stress	*0.25*	*0.03*	*<0.001*	*<0.001*	*1.29*	*1.23*	*1.35*
Parent-Child Level Variables							
Positive parenting-Adult	0.02	0.00	<0.001	<0.001	1.02	1.02	1.02
Child maltreatment-Parent	0.05	0.00	<0.001	<0.001	1.05	1.04	1.06
Attitudes supporting corporal punishment-Total	0.09	0.01	<0.001	<0.001	1.09	1.08	1.11
Attitudes supporting corporal punishment-Boy	*0.10*	*0.01*	*<0.001*	*<0.001*	*1.11*	*1.10*	*1.12*
Attitudes supporting corporal punishment-Girl	0.03	0.00	<0.001	<0.001	1.04	1.03	1.04
Communication about sexuality-Parent	*0.44*	*0.02*	*<0.001*	*<0.001*	*1.56*	*1.50*	*1.61*
Partner Relationship Level Variables							
COVID impact on partner relationships	*-0.77*	*0.02*	*<0.001*	*<0.001*	*0.46*	*0.44*	*0.49*
Partner coercion-perpetration	0.04	0.00	<0.001	<0.001	1.04	1.03	1.04
Partner coercion-victimisation	0.04	0.00	<0.001	<0.001	1.04	1.04	1.04
Partner negotiation-perpetration	0.04	0.00	<0.001	<0.001	1.04	1.04	1.05
Partner negotiation-victimisation	0.02	0.00	<0.001	<0.001	1.02	1.01	1.02
Family/Community Level Variables							
Basic necessities	-0.07	0.01	<0.001	<0.001	0.93	0.92	0.94
Number of infants in the household	*-0.13*	*0.02*	*<0.001*	*<0.001*	*0.88*	*0.85*	*0.90*
Family vulnerability	*0.18*	*0.01*	*<0.001*	*<0.001*	*1.20*	*1.19*	*1.21*
Community Level Variables							
Community location (peri-urban/rural)	0.04	0.02	0.020	0.460	1.04	1.01	1.08
Geographical region (Amuru/Wakiso)	*0.12*	*0.02*	*<0.001*	*<0.001*	*1.13*	*1.09*	*1.16*

4.4.7 Intimate Partner Violence (IPV) Perpetration

Table 14 shows that having COVID-related stress and impact on partner relationships, having family vulnerabilities, and living in the Wakiso geographic region was associated with increased IPV perpetration. On the other hand, being a female parent was associated with reduced IPV perpetration at baseline. The table also displays that parental stress, depression, exposure to violence as a child, child maltreatment, attitudes supporting corporal punishment, respectful behaviour importance, and IPV coercion and negotiation were linked to increased IPV perpetration, but with a small effect size. Likewise, positive parenting, and access to basic necessities were linked to reduced IPV perpetration with a small effect size. We do not see an association between living in a peri-urban community location and IPV perpetration at baseline.

Table 14: The effect of baseline predictors on Intimate Partner Violence (IPV) Perpetration

Predictors	β	SE	p	p_Adjusted	IRR	95% CI_Lower	95% CI_Upper
Parent Level Variables							
Parent gender (female)	*-0.25*	*0.02*	*<0.001*	*<0.001*	*0.78*	*0.75*	*0.81*
Parent stress	0.03	0.00	<0.001	<0.001	1.03	1.03	1.03
Parent depression	0.05	0.00	<0.001	<0.001	1.05	1.05	1.06
Parent exposure to violence as a child	0.05	0.00	<0.001	<0.001	1.06	1.05	1.06
Parent COVID-related stress	*0.21*	*0.03*	*<0.001*	*<0.001*	*1.24*	*1.17*	*1.31*
Parent-Child Level Variables							
Positive parenting	-0.03	0.00	<0.001	<0.001	0.97	0.97	0.97
Child maltreatment	0.01	0.00	<0.001	<0.001	1.01	1.01	1.02
Attitudes supporting corporal punishment	0.04	0.00	<0.001	<0.001	1.04	1.03	1.05
Attitudes supporting corporal punishment for boys	0.08	0.01	<0.001	<0.001	1.08	1.07	1.10
Attitudes supporting corporal punishment for girls	0.08	0.01	<0.001	<0.001	1.08	1.06	1.10
Respectful behaviour importance	0.04	0.01	<0.001	<0.001	1.04	1.03	1.06

Partner Relationship Level Variables

COVID impact on partner relationships	0.40	0.02	<0.001	<0.001	1.50	1.43	1.56
Partner coercion perpetration	0.04	0.00	<0.001	<0.001	1.04	1.04	1.04
Partner coercion victimisation	0.03	0.00	<0.001	<0.001	1.03	1.03	1.03
Partner negotiation perpetration	0.05	0.00	<0.001	<0.001	1.05	1.05	1.06
Partner negotiation victimisation	0.05	0.00	<0.001	<0.001	1.05	1.05	1.05
Family/Community Level Variables							
Basic necessities	-0.06	0.01	<0.001	<0.001	0.94	0.93	0.95
Family vulnerability	0.17	0.01	<0.001	<0.001	1.19	1.17	1.20
Community Level Variables							
Community location (peri-urban/rural)	-0.04	0.02	0.038	0.753	0.96	0.92	1.00
Geographical region (Amuru/Wakiso)	0.13	0.02	<0.001	<0.001	1.14	1.10	1.19

4.5 Implementation results

Attendance data were analysed from 26 clusters of 1,231 participants (664 females, and 567 males) in the intervention (PfR) arm. The total number of participants reporting PfR programme attendance was higher than those interviewed at baseline due to the high interest of other community members in taking part in the intervention. We also analysed data from 77 PfR facilitators who were assessed on the quality of their programme delivery. Descriptive statistics and regression analyses for attendance and quality of implementation are conducted at participant level and facilitator level respectively. Subsequent results report will include a thorough description of data cleaning for implementation data, analyses of facilitator and attendance data merged into participant data for both control and intervention group.

4.5.1 Enrolment and participation in PfR

Attendance results for PfR intervention clusters suggest high participation (Table 15). About nine out of ten of the participants recruited in the intervention arm enrolled in PfR (1,076 out of 1,231 participants or 87.4%). Participants attended on average two thirds of the overall sessions (M = 10.61 out of 16 sessions, SD = 5.80). Geographical and sex distribution of PfR participants was even with roughly half being from Amuru (48.8%) and being female parents (53.9%). Six out of ten of the participants attending came from a rural community (730 or 59.3%). Further data cleaning will merge baseline participant data with implementation data to analyse interrelationships.

Table 15. PfR Overall Implementation Descriptive Statistics

Variable	Descriptive statistics
Enrolment to PfR, n %	1,076 (87.4%)
PfR sessions attended, M (SD)	10.61 (5.80)
Geographical region Amuru, n (%)	601 (48.8%)
Female parents, n (%)	664 (53.9%)
Community location peri-urban, n (%)	501 (40.7%)

We conducted regression analyses to examine enrolment and attendance rates by demographic characteristics. Close to 100% of participants in Amuru District enrolled compared with 76 out of 100 participants in Wakiso (Table 16) (β = 4.15, SE = 0.59, OR = 63.39, 95% CI [20.09, 199.99]) (Table 17). Mean attendance was also higher for Amuru District (β = 0.61, SE = 0.02, IRR = 1.83, 95% CI [1.77, 1.90]) (Table 17), with participants attending close to 14 out 16 sessions, whereas Wakiso average attendance was approximately 50% of the Programme. Enrolment was higher for female parents, having a 90.5% enrolment rate, than fathers, with 84.0% enrolment (β = 0.61, SE = 0.17, OR = 1.85, 95% CI [1.31, 2.60]). Additionally, female parents also attended slightly more sessions, with an average of 11 compared with an average of 10 sessions for fathers (β = 0.14, SE = 0.02, IRR = 1.15, 95% CI [1.11, 1.19]). Community enrolment was lower for peri-urban participants (83.4%) compared with rural communities (90.1%) (β = -0.60., SE = 0.17, OR = 0.55, 95% CI [0.39, 0.77]). Attendance in peri-urban communities was more than half the Programme, whilst in rural communities it was close to 75% of the Programme (β = -0.21, SE = 0.02, OR = 0.81, 95% CI [0.78, 0.84]).

Table 16. Enrolment to, and Attendance of, PfR Sessions by Region, Sex and Location

	Enrolment Percentage	Mean Attendance (out of 16)	Attendance SD
Amuru District	99.5%	13.82	3.22
Wakiso District	75.9%	7.54	6.04
Female parents	90.5%	11.29	5.55
Fathers	84.0%	9.80	5.98
Peri-urban community	83.4%	9.33	6.05
Rural community	90.1%	11.48	5.45

Table 17. Logistic Regression Analysis of PfR Enrolment

	$β$	SE	p	Adjusted p	OR	95% lower CI	95% upper CI
Geographical region (Amuru/Wakiso)	4.15	0.59	< 0.001	< 0.001	63.39	20.09	199.99
Sex (Female parents)	0.61	0.17	< 0.001	0.004	1.85	1.31	2.60
Community location (peri-urban/rural)	-0.60	0.17	0.001	0.004	0.55	0.39	0.77

Table 18. Poisson Regression Analysis of PfR Session Attendance

	$β$	SE	p	Adjusted p	IRR	95% lower CI	95% upper CI
Geographical region (Amuru/Wakiso)	0.61	0.02	< 0.001	< 0.001	1.83	1.77	1.90
Sex (Female parents)	0.14	0.02	< 0.001	< 0.001	1.15	1.11	1.19
Community location (peri-urban/rural)	-0.21	0.02	< 0.001	< 0.001	0.81	0.78	0.84

4.5.2 Quality of delivery in PfR

We conducted analyses of quality delivery of 77 PfR facilitators. The median age of PfR facilitators was 33.52 years. There was almost even distribution of facilitators by location and sex, with 54.3% of them in Amuru and 54.4% of them being female. Six out of ten facilitators implemented in rural communities. Facilitators were assessed on three different skills: modelling behaviour (M = 11.95, SD = 3.32; out of a possible total of 18), collaborative facilitation (M = 12.11, SD = 5.11; out of a possible total of 21), and group management and leadership (M = 23.14, SD = 7.10; out of a possible total of 35). (Table 19).

Table 19. PfR Facilitator Level Descriptive Statistics

Variable	Descriptive statistics	Min/Max
Facilitator age, M (SD)	33.52 (16.10)	0/69
Geographical region Amuru, n (%)	38 (54.3%)	—
Facilitator female, n (%)	42 (54.4%)	—
Community location peri-urban, n (%)	28 (40.0%)	—
Modelling Behaviour, M (SD)	11.95 (3.32)	1/18
Collaborative Facilitation, M (SD)	12.11 (5.11)	0/21
Group Management and Leadership, M (SD)	23.14 (7.10)	4/35
Quality of PfR delivery, M (SD)	47.11 (14.85)	5/72

Average quality of delivery for facilitators was 47.11 out of 75 possible points

Table 20 Quality of PfR Delivery by Region, Sex and Community Location

	Total Score (Mean out of 75)	SD	Age mean	Age SD
Amuru region	54.09	10.22	26.60	16.75
Wakiso region	40.34	16.27	42.41	11.93
Female Facilitator	44.38	15.42	35.38	14.73
Male Facilitator	50.33	13.68	31.29	17.55
Peri-urban community	45.21	15.84	33.21	18.07
Rural community	50.30	13.77	34.75	14.54

Quality of delivery using the PfR-Facilitator Assessment Tool observation measurement was higher for Amuru District than Wakiso (β = 0.93, SE = 0.23, p<0.001) (Table 20). Additionally, older facilitators were associated with poorer quality of delivery (β = -0.46, SE = 0.13, p=0.002). Location of the communities, either peri-urban or rural (β = 0.34, SE = 0.25, p = 0.733), and facilitator gender (β = -0.40, SE = 0.23, p=0.361) were not associated with different quality of PfR delivery.

Table 21. Linear Regression Analysis of PfR Facilitators Quality of Delivery

	standardized β	SE	P	Padjusted
Geographical region (Amuru/Wakiso)	0.93	0.23	<0.001	<0.001
Community location (peri-urban/rural)	0.34	0.25	0.183	0.733
Facilitator female	-0.40	0.23	0.090	0.361
Facilitator age	-0.46	0.13	<0.001	0.002

Note: β is standardised regression coefficient; for numeric variables both variables have been standardised.

4.6 Cost analysis results

The objective of the cost analysis was to estimate the financial costs of setting up and implementing the UPRISE study in order to inform investment requirements for scale up of the intervention. Cost data were collected from the payer's perspective thereby excluding participant costs. Although the financial costs of the setup and implementation of the project were the focus of the preliminary cost analysis, the economic costs in terms of the opportunity cost, volunteer time for the facilitators and any donated items or space would be estimated for the overall cost analysis involving the second funder of the project.

The setup and implementation costs were grouped into;

  i.   Start-up costs including costs required for coordinating recruitment, community mobilization, and facilitator training
  ii. Programme delivery costs including staff-time, transportation, and other materials for home-based individual consultations, parent-group sessions, and supervision sessions
  iii. Administrative costs to manage the implementation.

The cost data was collected from project accounts at the CHDC offices, the field office accounts and field staff records. The project and field accounts data were collected using MS Excel based tools with specific activities as per the aforementioned cost categories. The field staff (facilitator) time and cost data were collected using a cost assessment tool designed for the study.

The cost estimates were calculated using a micro-costing approach; multiplying resource use by unit costs. All costs were presented in United States Dollars.

The analysis of alternative salary and income data for the facilitators were based on their type of job, cadre and salary estimates from the Public Service Salary scales for Government employees, while those in private employment were based on prevailing job market estimates. These costs however would apply to the overall cost analysis involving funds from the Oak Foundation.

4.6.1 Project cost categories
A preliminary analysis of the financial costs of setup and implementation of the project was done using three cost categories. These were; start-up costs including costs required for coordinating recruitment, community mobilisation, and facilitator training; programme delivery costs including staff-time, transportation, and other materials for home-based individual consultations, parent-group sessions, and supervision sessions; and lastly, administrative for implementation and management of the project. Although the project was funded by both the Evaluation Fund and the Oak Foundation, the details of this cost analysis focused on the elements that were financed by the former.

4.6.2 Financial costs for setup and implementation
From the analysis, we found that the overall financial cost of the project was $432,886 and 43% of this ($184,286) came from the Evaluation fund. From this fund, the average cost across the cost three

categories was $61,429. As the costs from the Evaluation fund were mainly for the setup and research activities, they contributed to both the intervention and control arms in both Amuru and Wakiso districts and as such could not be disaggregated for comparison by arm and location. Additionally, the economic costs in relation to the facilitators applied to the analysis of the funding from Oak Foundation as they were tagged to the wages component for the faciliators.

The financial costs for the setup of the UPRISE project from the Evaluation fund are displayed in table 22.

Table 22: Financial costs for setup and implementation in United States Dollars

Type of costs	Start-up	Percentage	Programme	Percentage	Admin	Percentage	Cost totals
Training, venue, food	N/A	N/A	15,742	95%	N/A	N/A	15,742
Ethics	700	5%	N/A	N/A	N/A	N/A	700
Subscription fees	720	5%	N/A	N/A	N/A	N/A	720
Baseline data collection	8,262	56%	N/A	N/A	24,408	16%	32,670
IT and Equipment	5,000	34%	N/A	N/A	N/A	N/A	5,000
Communication and dissemination	N/A	N/A	N/A	N/A	27,726	18%	27,726
Salaries for the PI and other key staff	N/A	N/A	N/A	N/A	76,791	50%	76,791
Telecommunications	N/A	N/A	880	5%	N/A	N/A	880
Indirect costs/ overheads	N/A	N/A	N/A	N/A	24,057	16%	24,057
Totals	**14,682**	**100%**	**16,622**	**100%**	**152,982**	**100%**	**184,286**

The cost drivers were administration or research costs which took up 83% of all costs. In the administration costs category, salaries for the Principal Investigator, Project cordinator and trainer, Co-Principal Investigators, Statistician, Economic Analyst, Research Assistants and Accounts took up the biggest portion at 61%. The cost drivers by type of cost or activity per cost category are displayed in figure 13.

Figure 13: Setup and implementation costs by category in United States Dollars
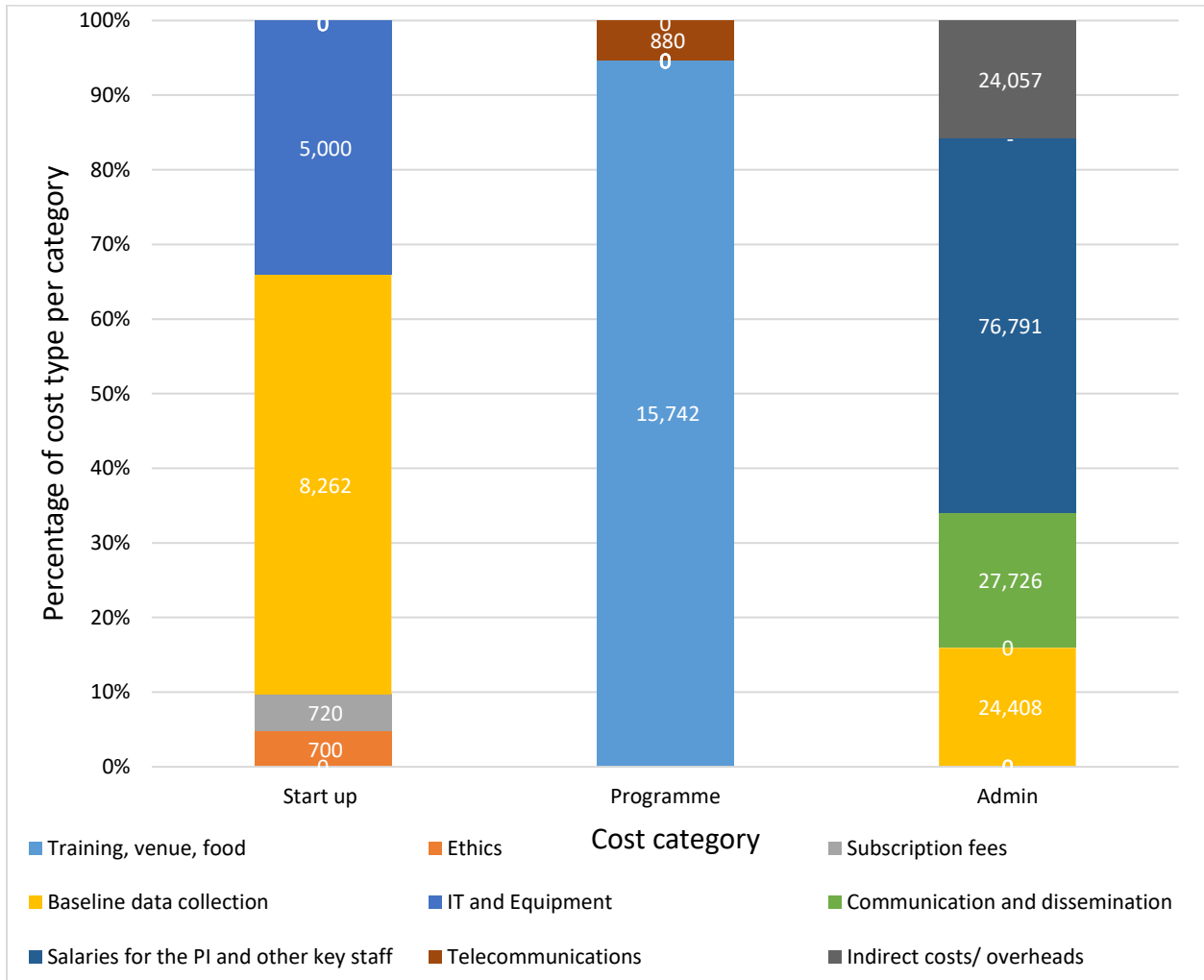
4.7 Qualitative results

4.7.1 Facilitators training needs

Facilitators' perceptions of own needs

In both Amuru and Wakiso, facilitators across all categories, namely: younger, older, male, female, rural and urban understood and described their training needs in terms of individual skills and knowledge gaps to be addressed with further training. The capacity gaps identified broadly indicated a level of consciousness of personal limitations, flexibility and willingness to learn. For instance, a younger male said, "I need more training at a higher level to upgrade my skills so that I become a better facilitator" (Facilitator, Amuru).

Similar views were expressed by facilitators from Wakiso who argued that more refresher trainings would make them better facilitators. The FGDs also revealed that providing refresher trainings would progressively grow facilitators' skills and motivate them to do more, as implied in a comment by one parent: "make follow up on them while conducting sessions to motivate them" (Parent, Wakiso). From both locations, the consistent call for a tailored training to close skills and knowledge gaps, reflects the facilitators' ability to self-evaluate, recognize and admit individual strengths or weaknesses and specify areas of further support and how this could be provided.

Participants' perceptions of facilitators' training needs

Besides the facilitators' apparent objectivity and ability to self-evaluate and define personal learning areas, the participants' evaluation was equally valuable in determining facilitators need for further skills development or growth path in the role. Responses from parents suggested that they had recognised what skills and knowledge gaps might be closed through further training, with some recommending to "take them for refresher courses" (Parent, Wakiso). Participants observed that facilitators' levels of knowledge and competencies to facilitate sessions varied, but overall skills gaps existed in their ability to read fluently in the local language, Luganda and Luo. Nearly all the facilitators in Amuru were literate (could read and write with minimal difficulties) in English and or the native language, unlike Wakiso.

Participants valued the pairing of facilitators and particularly saw strengths in how they supported and helped in each other during the session. In both locations, participants recognised the facilitators' skills levels, ability to collaborate and admired their ability to model good behaviour. They also appreciated facilitators ability to adhere to the manual during sessions:

> Their knowledge was good and they shared and supported each other. They would clarify and refer to the book and would ask us our opinion. They had skills and followed the manual and were interested and committed. Their conduct has been good – they respect themselves and set a good example (Parent, Amuru).

Nonetheless, participants emphasised that facilitators would benefit from continuous support-supervision or mentorship "visit facilitators periodically and provide them with support" (Parent, Wakiso). This suggests that in the parents view, close supervision is probably the most critical aspect to be added to complement facilitator training as it provides space for self-reflection/evaluation, continuous assessment of competencies, and all rounded feedback by supervisors.

Experiencing the programme first as though a parent

Facilitators valued the training model that allowed them to experience the entire programme as though they were the parental participants before they could begin training others. As one younger female respondent put it:

> Yes, I was a participant right in the beginning when they started training us to become facilitators...It is important that facilitators first start like participants, to give them a foundation by listening to those who know better (Facilitator, Amuru).

From their responses, it appears that the element of *'facilitator as participant'* was helpful in correctly applying their knowledge and interpretation of the content in the manual as they both reflected on experiences shared by others and their own experiences as parents:

> "that experience of participating [as a parent] supplements the knowledge and information in the manual and enables us to apply the knowledge correctly" (Facilitator, Amuru).

In their view, starting as a participant anchors their teaching on experience and testimonies, and builds one's level of confidence as a trainer, "training built our confidence levels" (Facilitator, Wakiso).

Previous experience as facilitator

Findings from both Amuru and Wakiso indicate that most facilitators did not come into the programme with previous experience directly related to training, facilitation or teaching adults. However, many had associated experience in Village Savings and Loan Associations (VSLAs), working with farmer groups, volunteering with NGOs, church-based work, healthcare work and local leadership that prepared them to take up leadership and facilitator roles probably because they were already used to working in groups:

> I have a certificate in theology and right now studying for diploma. I am a pastor…. I have been a peer educator for Kaladima Health Centre III, Awer Health Centre II and also on health education for youth… (Male Facilitator, Amuru).

Reflections on content delivery

Both peers and professionals from rural and urban clusters in the study districts apparently found it easy to deal with the content due to joint delivery of sessions. The peers who were paired up with professional facilitators, mostly felt supported and encouraged to work at the same level, especially in Wakiso. In many instances, the facilitators respected each other. In addition, many cited the topics that reflected real life situations and allowed them to work with competence. On many occasions, they apparently drew from experience:

> The topic on 'the cup' and the pregnancy code touched me closely. I taught as if I was teaching my own experience. I wanted people to learn from me and what I went through. It was easy because I felt, I had lived through it (Facilitator, Amuru).

Interests and motivation for becoming facilitator

According to the findings, facilitators had different motivations and different interests for accepting the role. Many, were identified by the community and accepted because they felt trusted and recognised, which highlighted the significant role of the community in facilitator recruitment:

I accepted to become a facilitator because I have been working in the community under the GWEDG project and again giving back to the community (Facilitator, Wakiso).

The community are always well informed about the local situation and can actually tell who might make a good facilitator based on their knowledge of one another.

Challenges of being a facilitator
Although many topics were said to have been easy to facilitate from both study districts, some few were considered rather challenging:

My child in twenty years was a bit difficult for me, because I found delivering the message was difficult because children at that age require a lot (Facilitator, Amuru).

Apart from that, collaborative facilitation was also affected by facilitators who "choose topics that are complicated for them, just to try and impress participants" (Facilitator, Amuru). This finding was un anticipated as one would have expected that facilitators declined to take up complicated topics if unsure. Participants also expressed challenges dealing with participants who were experiencing relationship or marital problems, as they tended to carry their squabbles into the sessions.

Unavoidable environmental factors and weather conditions occasionally interfered with the session plans, which slowed down delivery. In other instances, poverty was cited as major structural challenge that affects parents and their ability to apply the learning, which frustrated facilitators:

Some participants at first thought we were deceiving them but when they saw you (supervisors) they knew we had got the knowledge from some people somewhere (Facilitator, Wakiso).

4.7.2 Supervision of facilitators

Supervision of facilitators during implementation was conducted by both CHDC and SOS CV (the implementing partners). Each team (CHDC and SOS CV) conducted a maximum of four supervision visits per week in the different clusters. In order to cater for all the study variables, clusters were drawn into four broad categories to cover locations (rural/urban) and the facilitator type (peers/professional). A supervision plan was drawn for each session (1 to 16); in all clusters, at least one category of facilitators was supervised as follows: a) Rural/peer facilitators, b) Rural/professional facilitators, c) Urban/peer facilitators, and d) Urban/professional facilitators. This ensured that each facilitator in all categories (rural, urban, professional, and peers) were supervised and debriefed or given feedback at least once.

During the supervision visits, the teams joined participants during sessions and observed how they were being delivered. The supervisors gave debriefed the facilitators soon after the sessions. Facilitators in both Amuru and Wakiso appreciated these supervision visits and reported that it gave them confidence to do their work, but it also convinced participants to take the sessions more seriously:

Some participants at first thought that we were deceiving them but when they saw you (supervisors), they knew that we had got the knowledge from some people somewhere (Facilitator, Wakiso district).

> I think the SOS and CHDC have been supervising us well and it must have helped them to evaluate the characters, knowledge and skills/ conduct of the facilitators and see whether to retainer change (Facilitator, Amuru district).

Facilitators observed that supervision visits were beneficial as it encouraged participants to attend and noted that presence of supervisors added value to the programme. Participants equally appreciated the supervision visits and called for more to enable facilitators do their work better. However, some facilitators reported that they were at first sceptical about the supervision visits by CHDC and SOS thinking that they were a smokescreen for faulting finding. with some receiving slightly more if the supervisors felt the need to support them more. Facilitators appreciated supervision visits because they received technical and moral support, and brought the feeling that the programme appreciated their role.

Frequency

Facilitators in both Amuru and Wakiso were supervised for a minimum of three visits, while some were happy with the number of visits, others felt that they should have had more supervision:

> I think we need to be monitored consistently and I think for the case of my area the supervision was not enough (Facilitator, Amuru district).

Some made specific recommendations on how frequent the supervision visits should be:

> Supervision should be done fortnight to avoid facilitators relaxing (Facilitator, Wakiso district).

Other participants also reported that frequent visits were very important in ensuring the constant provision of training supplies/resources such as flip charts, markers and masking tape, among others.

However, having many groups with limited supervision staff *viz vi* several parental groups holding sessions on the same day and time of the week meant less supervision. For example, in Wakiso, several groups had their sessions between Wednesday and Saturday making it difficult to supervise more than two groups per day. In Amuru too, at least three groups met in the afternoons of Friday, Monday and Wednesday.

Nature of feedback

Feedback was provided to facilitators soon after the sessions. The supervisors sat with all the four facilitators (in the cluster) and discussed how the sessions went on, what went on well and addressed the challenges observed during the session. Facilitators received feedback on their facilitation skills, adherence to the manual, organizing the venue, co-facilitation and sharing of activities, use of illustrations, and proper completion of the registers and other forms. This feedback was useful in at least two ways. First, it helped facilitators to improve on the way they were delivering the sessions. Second, the facilitators felt it gave them a special status, and that it demonstrated how valuable and central they were to the programme.

4.7.3 Targeting vulnerable families and the youth

First, the general perspective from the participants in both districts was that violence was so widespread in their communities and therefore all parents need to be targeted:

> All parents are vulnerable and need to be targeted some of the participants in the programme were the very people who used to report violence cases to the LCs (Facilitator, Wakiso).

Participants with this view argued for widening of participation to increase inclusiveness in the programme since the behaviour and practices being promoted by PfR concerned everyone:

> Everybody, even a new born child, up to an adult can benefit – because the knowledge is important for every category of people. Don't leave anyone behind because if that person fails [to parent properly or continues to perpetuate violence] they can say they were excluded (Parent, Amuru).

Nonetheless, participants emphasised that the PfR intervention had been h very timely and stabilised particular families by encouraging attitudes, conduct and practices that reduce the multiple and interrelated risks factors of VAC, Violence against women (VAW), spousal conflicts, and harsh parenting that was a common feature of those families:

> There were families which were on the verge of breaking down but are now doing well after attending the programme (Facilitator, Wakiso).

Some participants related the lessons from some of the sessions to their personal experiences and circumstances, such as the poor relationships with their adolescent children, and realised that they were actually in the vulnerable category:

> For example, session 14 touched me and I felt the pain. It made me reflect that if I behave like that parent it would also affect the future of my children. It also reminded me of what I went through. Even though I wanted to study, there was no money. Even the parents, could have talked to me with kindness, but sometimes they were rough (Facilitator, Amuru).

An unexpected category of vulnerable families was identified as those that did not speak the dominant local language of the area. Such families could be of migrants and were reportedly often excluded from participating in community activities, including village saving groups. This problem was reported in Wakiso and greatly marginalised such groups, "some participants were from different ethnic backgrounds and could not understand English or Luganda" (Parent, Wakiso). Though language was not a major issue in Amuru, ability to read and write in both English and Luo was considered very important among participants. During session observations, several participants were found taking lessons from their counterparts or the facilitators in the alphabet and learning to read and write their names. This enabled many to sign the attendance forms in print instead of thumb-printing.

Participants made several proposals they felt would work to ensure that the most vulnerable in the community are not left behind. In both Amuru and Wakiso, the general perspective was that, engaging the LCs in identifying and mobilising vulnerable families would be instrumental especially because:

They know the people in their areas, it is important to target local leaders because they also have violence in their homes (Facilitator, Wakiso).

Door-to-door mobilisation is also considered a useful outreach approach as it ensures that participants who may already feel excluded from community life for some reason, are identified, verified, encouraged and supported to join, as had been adopted in the mobilisation for PfR:

The mobilisers came up to here – our home. I took interest because of the kind of information the programme was bringing. In the sensitization they said the programme is about proper upbringing of children – so I thought it would be good for me (Facilitator, Amuru).

Another strategy was that the current facilitators and parents (participants) also be engaged in mobilising the most vulnerable families on the basis of their experiences and ability to demonstrate the positive life changes. It was suggested that parental participants with the most compelling testimonies of change and who were the most vulnerable before PfR be identified and designated role models within the community as "other vulnerable families would be easy to convinced about the benefits of participating in PfR." (Parent, Wakiso). These changes are mostly identifiable in the testimonies and examples of new activities adopted during home practice. For instance, it was revealed that there are some noteworthy changes:

Men used not to help their wives with chores – especially cooking, but now they are doing it more. Some used to drink a lot, but now they are reducing. Conflicts in the home are fewer (Local leader, Amuru).

Male and youth involvement in PfR was repeatedly identified as a powerful mechanism for targeting vulnerable families. This is mainly because males (fathers) are often considered reluctant parents while the youth come with the burden of anti-social behaviour. Both factors interact at household/ familial levels, increasing family vulnerabilities and inability to withstand inter-personal relationship shocks:

Talk to the fathers together with their wives. Bring couples together in the meeting – so they understand the benefit (Facilitator, Amuru).

4.7.4 Disseminating PfR messages beyond groups
Disseminating PfR messages to the wider community and individuals not participating in the programme was mainly through take home activities by participants; and participants-facilitators' interactions with community members, their partners, relatives and children. After almost every session, there was a home activity which participants had to implement with the people they stay with or neighbours during the week. In so doing, non-participants received PfR messages indirectly.

A facilitator in Wakiso narrated how he has been encouraging participants to pass on the knowledge to their partners, neighbours and other community members. In some cases, participants went as far as conducting some of the activities/role plays that they had learnt about during sessions:

One participant shared PfR message to the neighbour's children using the activity of breaking the cup/plate (Facilitator, Wakiso).

> I used to collect all the flip charts we used during the sessions and take them to my husband and use them to talk about the sessions we had (Female participants, FGD, Wakiso).

In Amuru, some positive changes were identified among men who were said to be making deliberate efforts to support their spouses:

> Men used not to help their wives with chores – especially cooking, but now they are doing it more. Some used to drink a lot, but now they are reducing. Conflicts in the home are fewer (Facilitator, Amuru).

Other activities participants did with the community they live in was playing with their children, engaging in 'a tug of war', discussing the gendered box, and the circle of friends:

> Some participants used to talk to their partners about the sessions when they went back home. They gave testimonies about talking to their relatives and partners (Facilitator, Wakiso).

In other cases, facilitators passed the PfR messages to community members themselves:

> I briefed fellow head teachers about the benefit of the PfR programme., and about the importance of talking to parents and sensitize them that they can support their children schooling without putting in money (Facilitator, Wakiso).

> Yes, neighbours and relatives they benefitted. They saw how we were behaving and doing things and wished they were on the programme. We would draw lessons from the training and guide them. Many are now supporting the education of their children (Facilitator, Amuru).

The PfR messages apparently reached beyond the intervention and control groups. Most post participants revealed that their neighbours, relatives, spouses and family members – who were not participating in the programme, actually "liked the home practice exercises and implemented most of them" (Facilitator, Amuru). The aspects of the programme that both participants and their communities received with positivity were those that encouraged male participation in home chores and being supportive to their spouses:

> The aspect they liked most was about helping the women with house work… washing clothes, fetching water, collecting firewood and parental care (Facilitator, Wakiso).

However, the session which tended to challenge men for "putting most of their time in drinking alcohol – the single sex groups did not like it at all" (Facilitator, Amuru). It was probably taken as too critical of men. Relatedly, in Wakiso, it was argued that involving current participants in outreaches to communities who did not partake of the programme, would most likely popularise the messages:

> Facilitator had a neighbour who was drinking too much but she got courage to talk to both the husband and wife. The man listened and now the family is happy, there is change. He has been sharing the more messages from the programme too (Facilitator, Wakiso).

Hence, empowering participants to talk to other members of the community, involving schools, churches and cultural institutions could potentially encourage non-participants to accept the PfR messages:

For me after training, I went to my church and I got about 20 people and trained them. I have seen some changes in their families (Facilitator, Wakiso).

Participants also reported visiting peoples' home and disseminating PfR messages especially regarding child abuse (beating children and denying food) and partner violence. Some participants reported that they had become resource persons within the community because of the PfR messages they passed over to other people and the guidance they give against child abuse and partner violence:

I see that I have value within the community because I am like a counsellor (Male Participant, Wakiso).

The effect is being felt in the community even due to change in the behaviours of the neighbours e.g. a man called *Jorom* did not participate in the programme and he never used to help his wife with chores, but because his brother took part, he is following the same line (Parent, Amuru).

Interestingly some local leaders from both districts not only attended the parental sessions, but also mobilized parents to attend the weekly sessions and disseminated PfR messages across their communities.

I mobilized and sensitized the community in my area about the coming of SOS and asked them to support the program…As the LC 1 I have been moving in the entire village to confirm what is going on with the program (Local leader, Amuru).

Similarly, technical officers within the district also the supported the dissemination activities in different ways. They encouraged local leaders to support the implementing organization and mobilized communities to attend both the study and the implementation.

I am happy with the parenting program in Busukuma, when I go for my routine mobilization I encourage everyone to attend the parenting sessions so that all parents have the skills (Technical officer).

4.7.5 Contextual differences between Wakiso and Amuru districts

Facilitative and hindering contextual factors

We found that Wakiso and Amuru shared many similarities with regard to factors that hindered or facilitated PfR intervention delivery, although factors unique to each could also be identified.

Facilitator characteristics

Facilitator characteristics was identified both as a enabling and hindering factor in both districts. The facilitators in the two locations were aged between 20 - 63 years, with majority married for at least five or more years. However, a few of the facilitators were single parents or widows while others had separated from their spouses due to spousal conflicts and violence. All facilitators were living in the same households with their children. Most of the facilitators in Wakiso were in some form of employment

whereas in Amuru the majority were engaged in subsistence farming. These characters can both hinder and facilitate participation and uptake of the programme messages. For instance, the older facilitators are often known to cling to certain normative cultural values more than the younger counterparts. During sessions, this often filters through and affects their (older) facilitators' ability to challenge inequitable gendered norms and practices in line with PfR messages:

> We need to start with changing the attitudes of men when it comes to gender norms. I realize that if men are still in the box, and the women are out, those women will be divorced. But it is easier if the man is out of the box to influence the woman to change. That is why we need to first target the men (Facilitator, Wakiso).

In Amuru, more than 10 female facilitators attended their training with babies, and with another child who served as a baby sitter, to help with the baby, while only 2 facilitators for Busukuma had babies. Amuru had fewer facilitators in the professional category and more peers than Wakiso. All facilitators showed interest in the training des despite sessions sometimes coinciding with the planting or festive seasons and re-opening of the economy. Facilitators often tried to work together and ensure that the sessions were delivered as planned:

> We shared roles and took turns. This went well. He is older and that also helped because he is more mature and experienced. I am more educated than him and that also helped (Facilitator, Amuru).

Overall, Wakiso seemingly had more facilitators who were more confident to deliver the intervention. However, a few of them could not read both Luganda and English while all the facilitators for Amuru could read and write in at least one of the two languages (Acholi or English). The facilitators who were weak at reading or/and writing were paired with those who were strong for support. Those that had other social attributes provided supportive roles during the delivery. However, the very weak facilitators were replaced, although these were very few. All materials and manuals were translated in both Luo and Luganda to make it easy for both the facilitators and participants.

Mobilisation for weekly sessions
In both districts, it was revealed that sometimes mobilising parents for the weekly sessions was a challenge. However, the specific reasons for this varied for Amuru and Wakiso. In Amuru most parents were engaged in peasant farming, and mobilising them to attend sessions was more difficult during the planting season and in the morning hours, as well as weekends, but they would usually be available later in the day. Unlike parents in Amuru, parents in Wakiso had a wide range of commitments, and there was no specific time of the day when they would be more available, as some were traders who run their businesses all day, others venders who moved between markets, others worked away from the village, while others were stay home mother but with many caregiving responsibilities, while some men were boda boda riders (motorcycle taxi). These contextual variations between Amuru and Wakiso necessitated different strategies for mobilising participants. In Amuru, facilitators often reached out to participants by word of mouth through asking participants to inform others. This was often successful because most participants were often within the village, whether they were at work, find each other and often belonged

to the same wider family or clan. In Wakiso, the facilitators needed to complement word of mouth with phone calls since it was not easy find participants in their homes.

Despite these challenges, facilitators continued to work and attributed their motivation to the induction:

> We received a very good training that has changed my marriage. The only way I can pay back is by availing time to deliver the sessions in the community (Facilitator, Wakiso).

Some respondents viewed the facilitator role and induction as priceless despite the competing demands they are sometimes faced with:

> You gave us something that none can take away from us. We move with it and it influences the way we relate with others in the community, church and home. The best way to appreciate is to commit this period and volunteer. Otherwise, the facilitation role needs a lot of time and commitment (Facilitator, Wakiso).

Due to the level of recognition, respect and acceptance of facilitators by the community for their roles and contributions to parenting, many are now considered role models. This is also an important facilitative element for the programme as it points to the visibility of the programme and the community uptake or ownership:

> Because of the role of being a facilitator and what we are doing in the community, we have now received new names. I am now called teacher, madam, health worker by all people including very educated people invite me for private discussion about their marriage (Facilitator, Wakiso).

Work and other social pressures

The facilitators had other social/ work commitments requiring their attention almost all of the time. This meant that they had to find a balance between earning a living and volunteering for PfR, which often did not come across as easy. However, they showed commitment, by always being there on time and giving reasons for their absence where that was unavoidable. Thus, facilitator commitment could be said to have largely contributed to participants' commitment and interests in continuing with the programme despite other pressures on their time. This could also explain the low dropout, and postponements of sessions in both districts. Most participants attended both single and mixed sessions with very few absentees although late coming was identified as a key factor in the delay of sessions and late ending:

> They were committed and the way they answered questions showed they were interested. Few absentees and they would give reasons (e.g. burials, sickness). Some would come early and some late, but many were early despite other commitments like harvest and protecting crops from fire. No drop outs. No postponements, but we sometimes moved time to allow the other facilitator to join us (Facilitator, Amuru).

Location – rural vs urban and adherence to local cultural conventions

There was a marginal difference between rural and urban clusters in terms of participant and interests. Also, the rural participants apparently took most of the messages more seriously and applied these in their practices as seen from the testimonies and attendance entries by the facilitators. This was happening

in the context of stronger adherence to normative cultural values and practices associated with rural locations among both participants and facilitators:

> Even amongst the facilitators especially the male facilitators, the norms were still strong. In addition, both male and female facilitators hardly shared testimonies with the facilitators (Facilitator, Wakiso).

> There were two participants who died and one before the completion and another one after going through the training. We postponed one session because we lost a member and we could not conduct training on Wednesday but opted for Friday (Facilitator, Amuru).

New groups

Although all the groups were newly formed, they with time developed a sense of community and acceptance of this each. The team spirit strengthened cohesion, encouraged support and concern for the other. In essence the groups became a support network in which participants tabled problems, sought advice and resolved conflicts. On many occasions, they came together to support a bereaved member, which led to some of the session postponements previously mentioned. Towards the end of the intervention, many of the groups had set systems/ mechanisms for their sustainability such as turning the clusters into VSLAs. They simply fitted their new arrangements, e.g. the savings into the existing PfR structures following the same schedules:

> Our group didn't exist before although we all knew each other before. We used to meet for savings so it became easy as if it existed before. But this is a new group and the knowledge we are getting has made us stronger than before – during the savings. The savings had gone on for two years (Facilitator, Amuru).

Hence, the groups got all well despite being new; there was respect and sharing. During both single and mixed sessions, participants with the tendency to dominate were advised to allow others to also contribute and they listened. There were similar group experiences and dynamics in Wakiso. However, mixed groups generally worked well more because couples were together and open to sharing experiences:

> They would get up and tell the group what the partner is doing wrong. We would discuss and go away with solutions. When the women were alone, they had some doubts whether the men were learning the same things because they were still mean to them. So, when we brought them together, they realized we were teaching the same things and the men were told openly and they accepted to change (Parent, Amuru).

In Amuru, however, one urban group faced challenges upon regrouping. In this particular case, the men decided against participating in the mixed group with the argument that they preferred to learn without their wives paying attention to all their views and utterances. The women on their part viewed the men's refusal to regroup as an excuse and mere evasion. So, the women continued on their own and all the male and female facilitators of that cluster joined hands to group facilitate all the seven sessions (10 to 16). The

men's behaviour and attitudes calls for a further interrogation and analysis on the rationale for this element of dissent.

CHAPTER FIVE: PfR RESEARCH UPTAKE AND SCALE UP EFFORTS

We developed a structured approach to UPRISE research uptake through two planning processes to ensure coordinated and sustained engagement and communication with the different stakeholders and users. First, we had from the onset incorporated research uptake in the initial proposal planning and budgeting. Second, together with the other grantees, CHDC participated in the Evaluation Fund sponsored capacity building training sessions delivered by a consultant. These sessions involved conducting stakeholder analysis to assess their level of interest, ambition and influence regarding violence prevention, re-focusing research uptake objectives, reviewing the impact pathway, and re-designing of research uptake activities and messaging to meet the needs of the different stakeholders. This process has been highly successful, resulting in increased number of products and dissemination of UPRISE with different audiences. To-date, we have the following products and engagements in print media, TV, radio, online and webinars:

Held 4 advocacy breakfast meetings at different level to discuss PfR in a careful manner (being consistent in our wording)

Written 7 media articles in the Ugandan National News Papers in the area of parenting and violence prevention

Held 1 Radio programme to advocate for evidenced parenting interventions and PfR programme

Published 2 peer reviewed papers, one on involving fathers, the other on the development theory of PfR as an evidence-based parenting programme

Written 3 blogs and 1 research brief for policy makers

Held 2 advocacy meetings online with the Parenting Agenda consortium

Held 3 PfR sessions with staff of the MGLSD for a period of 3 months

participated in international webinars/ web podcast as panellists on evidence-based parenting programmes on 2 different occasions – one by SVRI, the other Spring Impact

Co-authored with Spring Impact a briefing article on 'Sharing Lessons on the Journey to Scale' and participated in a webinar attended by over 70 agencies across the globe

Participated as a presenter/panellist during the 2021 State of the Art in Engaging Men and Boys in Health and Development: A Technical Marketplace organised by the Interagency Gender Working Group's Male Engagement Task Force (METF). Presented about engaging fathers in the PfR programme.

In addition, between from 2020, the project received technical support from Spring Impact, a UK based capacity building institution, through funding from Oak Foundation, to develop strategy for future scale-up of PfR programme. CHDC's main challenge with scaling up of the PfR programme related the uncertainty around readiness, identification of ideal partners and how to engage partners. A total of 10 participatory online workshops were held focusing on sharing key concepts and experiences on scaling, discussing replication readiness and potential routes to scale, developing a replication model and developing systems for scale-up. Other activities included identification and categorisation of ideal partners, and clarifying CHDC's role and the roles of implementing partners in relation to what was identified as the PfR core. Spring Impact has led drafting of the capacity building report. The key lessons

and outcomes of this process are (i) realised that with several NGOs implementing the PfR model (e.g. SOS CV, CVRP F's cluster CBOs in central and Western Uganda, and demand likely to grow, now was the opportune moment to develop a clear vision for how PfR can be scaled. Having a scale up strategy in mind would ensure that all future PfR activities are supportive of reaching the long-term vision (ii) mindset change about the level of evidence required to scale up; the research team realized that it was important to listen to the implementers and policy makers (MGLSD and local government) to have the programme scaled up by organizations that were doing family strengthening interventions and support local government to integrate PfR in their routine community development work that engage with caregivers (iii) identifying the essential components of the intervention and the systems required to scale up. Through the process of identifying the systems and essential component for scale, the team worked with an intermediary organization (Child Rights and Violence Prevention Fund) to have the PfR manual developed into smaller versions (modules) that were suitable for their communities but ensuring that the essential components are maintained, and (iv)rethinking and appreciating the role and capacity of the CHDC and her research partners vis a vis other stakeholder at scale. CHDC has been able to define and draw strategies of supporting organizations taking PfR to implement it with fidelity without actual presence of the research team. Organizations that have benefited from the scaling processes include SOS Bugiri location, SOS Gulu location, CRVP F consortium of 11 agencies in central and western Uganda, AMREF – Africa, and the Gender Ministry, who have requested for the delivery of PfR to their staff.

CHAPTER SIX: DISCUSSION, CONCLUSION AND RECOMMENDATION

We implemented the UPRISE in two districts of Uganda, between September 2021 and February 2022. The study uses an effectiveness-implementation hybrid type 2 design. A cluster randomised controlled trial (cRCT) examines the effectiveness, cost-effectiveness, and effect of different implementation modalities of the Parenting for Respectability (PfR) programme on the reduction of violence against children and gender-based violence in comparison to those receiving a 2-hour lecture on parenting. The main goal of the current report is to describe baseline results and the feasibility and impact of two different implementation modalities (peer vs professional, rural v urban) in terms of programme delivery. We enrolled female and male parents in the intervention arm (PfR) from Amuru district (N=635) and Wakiso district (N=619), while the comparison arm (PiN) enrolled 612 in Amuru and 515 in Wakiso, and conducted a baseline survey of these parents, and a sample of 880 of their children aged 10-15 years.

Baseline results reveal that child maltreatment, in particular physical violence and emotional violence, are a common problem in both Wakiso and Amuru districts. We found that parents were the main perpetrators of physical and emotional violence against children, confirming findings from previous studies (MGLSD 2017). In addition, our results show that being an older parent and female was a key risk factor for perpetrating physical and emotional violence. There are two possible reasons for why mothers are the most likely perpetrators of violence in the study settings. First, since most spend more time with children as the main caregivers, there is a higher probability of abusing a child multiple times than fathers, particularly in the absence of alternative discipline skills. Second, as our previous study suggests, mothers prefer harsh discipline methods such as spank or slap because it is quick to administer, unlike alternative methods which mothers claim require time and patience to implement, which their busy schedule with multiple domestic chores cannot permit. The finding that older parents are most likely abusers could be attributed to the fact that at this stage, teens tend to challenge parents for more independent while parents who may have limited understanding of how to handle this delicate developmental stage tend to use harsh discipline methods to enforce respect. We found that partner conflict, in particular intimate partner violence was high, and was associated with being female, having COVID-related stress, substance abuse, engaging in child maltreatment, and being resident in Amuru district. However, having a partner predicted lower levels of child maltreatment than being single. This finding suggests the importance of addressing spousal relationships to reduce both VAC and IPV. Although studies on parenting interventions to reduce VAC are increasing, few specially combine VAC and IPV programming to address the link between them. There is need to pay special attention to IPV in rural areas.

A total of 208 facilitators were recruited from among parents and categorized as professional and peer to deliver the sessions in pairs. This delivery model was acceptable among the parents, and the facilitators welcomed their role and appreciated the training they received, which allowed them to experience the programme as parents would. Our analysis of parental participation, and impact of facilitators shows that enrollment and attendance of PfR sessions by region was higher in Amuru at 95% than Wakiso 75.9%, with women generally attending more than men. Also, rural participants registered a higher attendance than peri-urban across the two study districts. Results on analysis of quality of delivery of the programme suggest that gender of facilitator was not associated with quality of delivery, but age was, with older facilitators associated with less quality delivery, which is confirmed by qualitative findings in which the older facilitators were known to cling to certain normative cultural values which affected their ability to challenge inequitable gendered norms and practices in line with PfR messages. Results also show that delivery was better by facilitators from Amuru than those in Wakiso, and this might partly explain the

higher attendance of the programme in Amuru. However, as expected it was more difficult to mobilise urban parents than rural, in part because of the cosmopolitan nature of residents and the nature of occupation in urban areas, while rural parents tended to have time to attend sessions in the afternoons after garden work. Yet, we learnt from the results on mobilisation efforts that, in all study settings, including rural areas, it is crucial to identify and understand the multifaceted nature of family vulnerabilities in order not to leave out the vulnerable families, while in the more urban areas, parents who do not speak the dominant language of the area may be inadvertently left out by parenting programmes which over emphasises the use of local language.

Based on the overall cost analysis, investment in the scale up of the UPRISE project would be feasible and beneficial for Uganda and other countries especially if policy makers and other partners used the evidence from initial studies such as this one. The roll-out and implementation would not vary much across different geographical locations in Uganda save for area-specific costs such as accommodation and transportation costs during the training of facilitators. As much as human resource costs covered most of the administrative costs, these are research costs that could be re-distributed across cost centres for implementation activities during a scale up of the intervention. The costs of beneficiaries of the UPRISE project were considerably outweighed by the long-term benefits of reduced violence towards the children and couples which are expected to last a lifetime.

These findings may be somewhat limited by the analysis conducted. Since we are yet to collect follow-up data current analysis is limited to baseline and participation data only, and therefore we have no results yet to demonstrate the effectiveness of the UPRISE on primary outcomes. Another source of uncertainty is whether the final cost-effectiveness analysis will demonstrate if PfR is worth the investment. A note of caution, therefore, is related to the fact that these results are not all robust due to the analysis conducted. Furthermore, the current study did not collect data to answer one key question – comparison of delivery via existing vs new groups – due to the failure to identify suitable groups that fitted the design and structure of PfR groups. The cRCT design did not allow for flexibility with the nature of groups, and although this challenge was discussed with Evaluation Fund and the project was amended accordingly, this is a missed opportunity, given many government programmes are delivered through existing community groups. However, these results contribute to the expanding literature on VAC and IPV, and provide empirically-based and critical information to policymakers, donors, and implementers on delivery modalities and potential costs for parenting programmes, which is crucial when planning scale-up of evidence-based parenting programmes in Uganda. These results will contribute to the ongoing discussions of a national parenting agenda being implemented by the Gender Ministry in collaboration with CHDC and a consortium of about 70 agencies implementing parenting interventions. In particular, the findings will feed into the development of the national standards for parenting programmes, and the national parenting manual, led by CHDC and supported by UNICEF.

We recommend analyses of end line and follow-up data from the UPRISE cluster randomised controlled trial to demonstrate the effectives of the programme in reducing the primary outcome. Analysis of participation and intervention effects using the CACE analysis method maybe particularly helpful for studies involving parent / family centered interventions. Qualitative data could provide more nuanced information on programme feasibility and impact.

References

1. WHO, *Global Status Report on Violence Prevention* 2014, World Health Organisation: Geneva.
2. Uganda Bureau of Statistics (UBOS) and ICF, *Uganda Demographic and Health Survey 2016*. 2018: Kampala, Uganda and Rockville, Maryland, USA: UBOS and ICF.
3. Hillis, S., et al., *Global Prevalence of Past-year Violence Against Children: A Systematic Review and Minimum Estimates.* Pediatrics, 2016. **137**(3): p. e20154079.
4. The Republic of Uganda, *Uganda Violence against Children Survey: Findings from a National Survey 2015*, M.o.G.L.a.S. Development, Editor. 2017, Ministry of Gender, Labour and Social Development: Kampala.
5. Ravi, S. and R. Ahluwalia, *What explains childhood violence? Micro correlates from VACS surveys.* Psychology, Health & Medicine, 2017. **22**(sup1): p. 17-30.
6. World Health Organization, *Preventing violence: Evaluating outcomes of parenting programmes*. 2013, WHO Press: Geneva.
7. Knaul, F.M., F. Bustreo, and R. Horton, *Countering the pandemic of gender-based violence and maltreatment of young people: The Lancet Commission.* Lancet, 2020. **395**(10218): p. 98-99.
8. Hillis, S.D., J.A. Mercy, and J.R. Saul, *The enduring impact of violence against children.* Psychology, Health & Medicine, 2017. **22**(4): p. 393-405.
9. Pereznieto, P., et al., *The Cost and Economic Impact of Violence Against Children*, O.D. Institute., Editor. 2014: London.
10. Guedes, A., et al., *Bridging the gaps: a global review of intersections of violence against women and violence against children.* Global health action, 2016. **9**(1): p. 31516.
11. Heise, L.L. and A. Kotsadam, *Cross-national and multilevel correlates of partner violence: an analysis of data from population-based surveys.* The Lancet Global Health, 2015. **3**(6): p. e332-e340.
12. Capaldi, D.M., et al., *A Systematic Review of Risk Factors for Intimate Partner Violence.* Partner abuse, 2012. **3**(2): p. 231-280.
13. Cork, C., et al., *Randomized Controlled Trials of Interventions Addressing Intimate Partner Violence in Sub-Saharan Africa: A Systematic Review.* Trauma Violence Abuse, 2018: p. 1524838018784585.
14. Gardner, F., et al., *Parenting for preventing risk of child maltreatment in low- and middle-income countries: Updated systematic review and meta-analysis.* forthcoming.
15. Singla, D.R., E. Kumbakumba, and F.E. Aboud, *Effects of a parenting intervention to address maternal psychological wellbeing and child development and growth in rural Uganda: A community-based, cluster-randomised trial.* The Lancet Global Health, 2015. **3**(8): p. e458-e469.
16. Shenderovich, Y., et al., *Delivering a Parenting Program in South Africa: The Impact of Implementation on Outcomes.* Journal of Child and Family Studies, 2019. **28**(4): p. 1005-1017.
17. Bacchus, L.J., et al., *Exploring opportunities for coordinated responses to intimate partner violence and child maltreatment in low and middle income countries: a scoping review.* Psychology, Health & Medicine, 2017. **22**(sup1): p. 135-165.
18. Panter-Brick, C., et al., *Culturally compelling strategies for behaviour change: a social ecology model and case study in malaria prevention.* Social science & medicine, 2006. **62**(11): p. 2810-2825.

19. Siu, G.E., J. Seeley, and D. Wight, *Dividuality, masculine respectability and reputation: how masculinity affects men's uptake of HIV treatment in rural eastern Uganda.* Soc Sci Med, 2013. **89**: p. 45-52.

20. Wamoyi, J. and D. Wight, *'Mum never loved me.' How structural factors influence adolescent sexual and reproductive health through parent-child connectedness: a qualitative study in rural Tanzania.* African journal of AIDS research : AJAR, 2014. **13**(2): p. 169-178.

21. Siu, G.E., et al., *Men's involvement in a parenting programme to reduce child maltreatment and gender-based violence: Formative evaluation in Uganda.* The European Journal of Development Research, 2017. **29**(5): p. 1017-1037.

22. Watkins, E., et al., *Implementing multifactorial psychotherapy research in online virtual environments (IMPROVE-2): study protocol for a phase III trial of the MOST randomized component selection method for internet cognitive-behavioural therapy for depression.* BMC Psychiatry, 2016. **16**(1): p. 345.

23. Moncher, F., Prinz, R., *Treatment fidelity in outcome studies.* Clinical psychology review, 1991. **11**: p. 247-266.

24. Borrelli, B., et al., *A new tool to assess treatment fidelity and evaluation of treatment fidelity across 10 years of health behavior research.* J Consult Clin Psychol, 2005. **73**(5): p. 852-60.

25. Lachman, J.M., et al., *Parenting for Lifelong Health Facilitator Assessment Tool*. 2017.

26. Webster-Stratton, C. and K.C. Herman, *Disseminating Incredible Years Series early-intervention programs: Integrating and sustaining services between school and home.* Psychology in the Schools, 2010. **47**(1): p. 36-54.