



# Enabling Girls to Advance Gender Equity (ENGAGE) Baseline Report

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## Executive summary

The Enabling Girls to Advance Gender Equity (ENGAGE) project seeks to empower girls and civil society organization (CSO) leaders to empower traditional and religious leaders, male authority figures, and other duty-bearers to shift norms and attitudes around child marriage and increase gender equality, eventually reducing the prevalence of child marriage and other harmful traditional practices, and contributing to improved outcomes in the areas of girls' education and sexual and reproductive health (SRH). ENGAGE is implemented in two districts in southern Malawi, Phalombe and Thyolo. ENGAGE consists of three intervention components: 1) training adolescent girls to form and lead local girls' clubs to collectively discuss various issues related to child marriage, girls' health and education and to rally for change in their communities around these issues; 2) building the capacity of CSOs to engage with stakeholders and hold community leaders accountable, creating an enabling environment to reduce child marriage; and 3) an SMS/Radio campaign to build community support to end child marriage and enhance gender equity. Led by Rise Up, ENGAGE also includes the Girls Empowerment Network of Malawi (GENET), the International Center for Research on Women (ICRW), Youth Tech Health (YTH), and YONECO of Malawi.

ICRW is evaluating the effects of the girls' intervention and the CSO intervention when each are conducted separately and when they are conducted together against a comparison arm. All four study arms will receive the SMS/Radio campaign, which therefore will not be evaluated. The primary hypothesis is that both evaluated interventions will positively change community norms and attitudes around child marriage among adult decision-makers, and that the combination of the girls' empowerment intervention and the CSO intervention will have a greater effect on these outcomes than will either intervention on its own. At baseline, ICRW surveyed 1492 decision-makers for adolescent girls, including their parents, grand parents, maternal and paternal aunts and uncles, and other decision-makers in four traditional authorities (TAs) in the two study districts, Chiwalo and Nazombe (in Phalombe) and Changagta and Mchiramwera (in Thyolo). These decision-makers were asked questions on their attitudes towards child marriage, girls' education, adolescent girls' sexual and reproductive health and rights, initiation camps<sup>1</sup>, and gender norms, as well as questions to assess social norms in these communities. Additionally, respondents were asked about decisions they have made or will make for one particular reference girl involving her marriage, education, and initiation camp attendance.

This report shares the baseline findings for the ENGAGE project and implications for implementation of the project based on these findings.

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<sup>1</sup> A right of passage for pubescent girls in southern Malawi traditionally involving forced sexual initiation.

At baseline, adult decision-makers, especially women, were found to have generally low knowledge of marriage laws in Malawi. Still, most expressed strong opposition to child marriage, even in circumstances where girls were unable to afford school fees or became pregnant. Additionally, when asked who would make the final decision about when and whom their reference girl would marry, most adults stated that she herself would make the final decision. Finally, there was not strong evidence of normative expectations that adults should marry girls young or of sanctions for failing to do so. Instead, it seems that the communities studied may already be undergoing normative shifts away from support for child marriage. Together, these findings demonstrate that adult decision-makers are already highly-sensitized to the issue of child marriage, more so than was anticipated prior to the baseline study. It is possible that some respondents may have altered their stated opinions to more closely align with their understanding of “ideal” responses. The form of bias this introduces to the results is called social desirability bias. This potential bias was anticipated and measures to mediate it were taken.

In terms of girls’ education, encouragingly, attitudes were strongly positive and gender-equitable across all sites at baseline, with adult decision-makers across the four sites nearly universally agreeing that all girls had a right to be educated and that there was value to a girl being educated and few stating that girls’ education would interfere with her household chores or marriage. Mothers and fathers were most often identified as the people making the final decisions related to reference girls’ school enrollment. Overall, respondents nearly universally agreed that their reference girl should remain in school; the majority thought that their reference girl *should* complete secondary education, though fewer thought their reference girl was *likely* to complete higher education.

In terms of participation in initiation camps, there was less consistency in responses across the four sites. Overall, about one in three adult decision-makers agreed that the initiation camps were necessary to prepare girls for marriage, however, the percentage agreement was significantly higher in all three intervention sites compared to the comparison site, Nazombe. Perspectives on whether the camps should stop, continue as they were, or be changed differed between the four sites—a slim majority of adults in Nazombe felt that the camps should stop, opinion was nearly evenly divided between individuals who felt the camps should stop and those that felt they should continue in Chiwaló, a small majority felt that the camps should be continued in Mchiramwera, and a larger majority felt that the camps should be continued in Changata. Of those who felt that camps should be changed, the top three ways in which they felt the camps should change were to have no sexual acts performed during or after the camp, to have no focus on men’s sexual pleasure, and for the participants to be older.

For those respondents whose reference girl had already attended a camp, across all four sites, the person who made the final decision that the girl would attend the camp was most often mothers, followed by grandmothers. The majority of these respondents were in agreement with the decision for their



reference girl to attend the camp. Of those decision-makers whose reference girls had not yet attended an initiation camp, perspectives on whether she *should* attend one in the future differed by site.

There are several important implications for programming based on these findings:

- Leverage the CSO capacity-building interventions to address prudential reasons for child marriage (like pregnancy and lack of economic alternatives), through the types of programs that are selected to receive additional funding;
- Given that both leaders and the general population of these communities are clearly already highly sensitized and vocally opposed to child marriage, acknowledge and build on the progress to date by increasing knowledge of the laws to empower both girls and the decision-makers to use them to support their goals to delay marriage;
- Talk directly with girls to understand *their* perceptions of who makes decisions regarding their marriages;
- Tailor messaging and support to the key decision-makers for each type of decision (mothers and fathers for education decisions and mothers and grandmothers for camp participation).
- Explore what happens at the initiation camps in more depth. Though we know what proportion of respondents in each TA support the camps, because we do not know the content of the camps in that particular TA or community, we do not know whether these results indicate support for camps that put girls at risk of forced sex and harmful practices or whether camps in that TA or community have already shifted away from harmful practices and now focus more on topics such as fertility awareness.

The results of this baseline study not only provide insight for the implementation of the ENGAGE intervention components, but will also be critical at endline in order to ensure that changes in the intervention arms are properly adjusted to account for any existing differences at baseline.

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## Introduction

The Enabling Girls to Advance Gender Equity (ENGAGE) project seeks to empower girls and civil society organization (CSO) leaders to empower traditional and religious leaders, male authority figures, and other duty-bearers to shift norms around child marriage and increase gender equality, eventually reducing the prevalence of both child marriage and other related harmful traditional practices, and contributing to improved outcomes in the areas of girls' education and sexual and reproductive health (SRH). ENGAGE employs a multi-pronged approach to empower adolescent girls to increase their autonomy and decision-making agency, advance more gender equitable social norms, and build CSO capacity to hold duty-bearers accountable for ending child marriage.

The ENGAGE project consists of the Public Health Institute (PHI), Rise Up, the Girls Empowerment Network of Malawi (GENET), the International Center for Research on Women (ICRW), Youth Tech Health (YTH) and YONECO of Malawi.

ENGAGE consists of the following interventions, which are being implemented simultaneously across four traditional authorities (TAs) in the Phalombe and Thyolo districts in Southern Malawi.

- Training and peer-based clubs for adolescent girls: GENET works with girls ages 15-17 to empower them to collectively gain a greater role in decisions pertaining to their education, health, and autonomy. These girls then engage girls ages 10-18 through girl clubs to discuss child marriage and related issues in their own communities, and mobilize them to speak out for their rights.
- Training and engaging local CSOs: Rise Up will hold a week-long training of, and then provide support to, a cadre of CSO leaders, who will be trained to engage with stakeholders, hold community leaders accountable, and do other activities to support an enabling environment to end child marriage; and
- SMS/Radio campaign strategy: YTH and YONECO will implement an SMS and radio campaign strategy to build community support to end child marriage and enhance gender equity by engaging key target groups, including men and boys, traditional and religious authorities, government officials, and girls themselves.

ICRW will evaluate the first two of the three ENGAGE interventions using a quasi-experimental pre-test/post-test study design. This report presents the findings from the baseline (pre-test) survey.

## Background

Child marriage and forced early sex are widespread violations of human rights, impediments to health, education, and gender equity, and barriers to social and economic development (Erulkar, 2013; MacQuarrie, Nahar, Khan, & Sultana, 2015; Mathur, Greene, & Malhotra, 2003; Save the Children, 2011; UNICEF, 2005; Warner, Stoebenau, & Glinski, 2014). Girls who marry early have little decision-making power within the home, a greater likelihood of school dropout and illiteracy, lower labor force participation and earnings, and less control over productive household assets. Girls forced into early marriage are also at greater risk of gender-based violence, and face higher rates of HIV/STIs than older peers (Mathur et al., 2003; Parsons et al., 2015; Raj, Saggurti, Balaiah, & Silverman, 2009; Warner et al., 2014). They are often less educated and less able to negotiate use of family planning methods or other critical decisions within and outside of their marital relationship (MacQuarrie et al., 2015; Mathur et al., 2003; Mensch, Bruce, & Greene, 1998; Upadhyay, Dworkin, Weitz, & Foster, 2014; Warner et al., 2014).

Malawi continues to have the 11<sup>th</sup> highest rate of child marriage in the world, with nearly half of all girls marrying before the age of 18 (UNICEF, 2017). Girls in Southern Malawi also experience harmful traditional practices--especially during the initiation camps<sup>2</sup> commonly held during puberty-- including *kusasa fumbi*, or forced sexual initiation (Skinner, Underwood, Schwandt, & Magombo, 2013; The Guardian, 2014). These practices increase the risk of HIV infection, unwanted pregnancy, and maternal death (Skinner, Underwood, Schwandt, & Magombo, 2013). The complex nature of these practices and the lack of data documenting their impacts on girls has historically been a significant barrier to addressing them systematically.

In 2011, Rise Up's Let Girls Lead initiative partnered with GENET to launch the "Stop Child Marriage" pilot program in the Chiradzulo District in Southern Malawi. As part of the pilot, GENET and Rise Up trained more than 200 girls in leadership, advocacy, storytelling, laws and policies, communications, community-organizing, and gender equity. GENET and Rise Up also enabled civil society leaders and organizations to reduce the cultural acceptance and prevalence of child marriage and harmful traditional practices through the creation and implementation of local bylaws prohibiting these harmful practices within the traditional authority system. The pilot aimed to ensure that girls stayed in school, had greater access to family planning information and services, and delayed marriage and child bearing. Since the launch of the "Stop Child Marriage" pilot in Chiradzulo District, girls have successfully advocated with 60 village chiefs

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<sup>2</sup> These camps are a contested coming of age rite for girls in Malawi. Girls go to the camps to learn about how to be women. Traditionally, one element of these camps was forced sexual contact with an older man, called a "hyena." While this practice continues, there are now alternate versions of the camps which do not include this practice. Discussing the initiation camps remains highly sensitive.





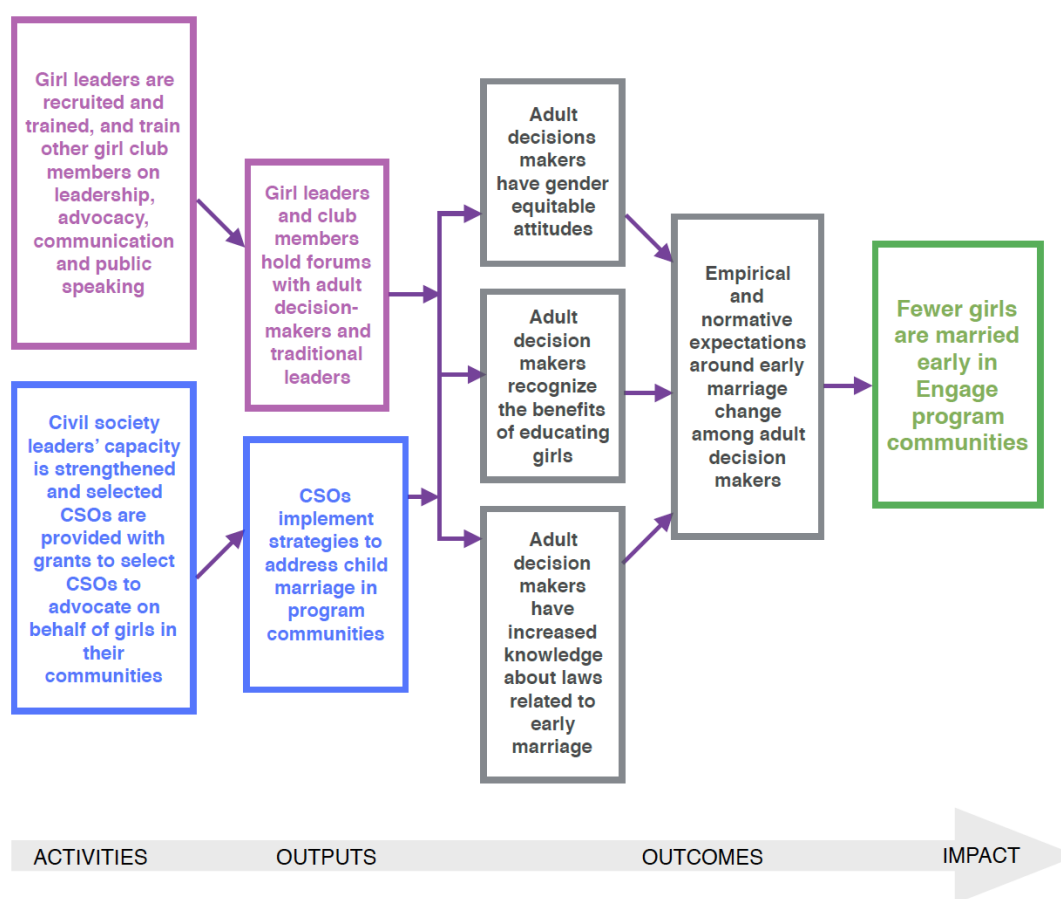
to ratify and enact bylaws that protect thousands of adolescent girls from early marriage: up to an 80% reduction in child marriage has been reported, with several communities declared “child marriage free” based on the number of child marriages declined or rejected by village chiefs (UN Foundation, 2013).

Even more encouragingly, Malawi’s government has recently made dramatic strides in setting laws to end child marriage at a national level. In 2015, parliament passed a law that banned marriage before the age of 18 without parental consent, and in April 2017, President Peter Mutharika signed into law a constitutional amendment removing the parental consent loophole (Girls Not Brides, 2017). However, it is uncertain whether local administrators are enforcing these and other laws at the district and TA levels. As such, ENGAGE seeks to expand the empowerment and enabling environment building techniques used in the “Stop Child Marriage” pilot and rigorously evaluate the effects these techniques have on shifting attitudes towards child marriage among decision-makers for adolescent girls and, ultimately, reducing child marriage rates.

## Rise Up and GENET’s Interventions

Through ENGAGE, Rise Up and GENET will empower girls and CSO leaders to shift community norms and attitudes among adults who take part in making important decisions for girls in their families and communities. The theory of change for ENGAGE is presented visually in **Figure 1**. The overall goal of the project is to reduce child marriage through social norm change. The process of social norm is preceded by addressing gender inequitable attitudes among community members and leaders, and helping community members see and accept the benefits of educating girls. As part of this process community members need to understand the laws related to child marriage as well as the reason for these laws –the effect early marriage has on girls, their families, and their communities.

Figure 1. The ENGAGE Theory of Change



The intervention with girls, led by GENET, is presented in the violet boxes in **Figure 1**. The intervention will give the girl leaders the knowledge, skills and confidence to conduct advocacy activities in forums with adult decision-makers in their communities, including traditional leaders. They will participate in activities and discussions that will build their self- esteem and their understanding of gender and gender roles, human rights, the effects of child marriage, and gender-based violence. These girl leaders will then have the information, skills, and confidence to lead similar activities with their club members, therefore amplifying the reach of the program.

The CSO intervention, led by Rise Up and represented in the blue boxes in the figure in **Figure 1**, involves building the capacity of CSO leaders, and providing small grants to select CSOs to implement programs at the community and district level. The specifics of these programs will be designed by the CSOs



themselves, so as to be community-based and led, however the supported programs will all work towards the objective of reducing child marriage through the same means as the girls.

## Evaluation of ENGAGE

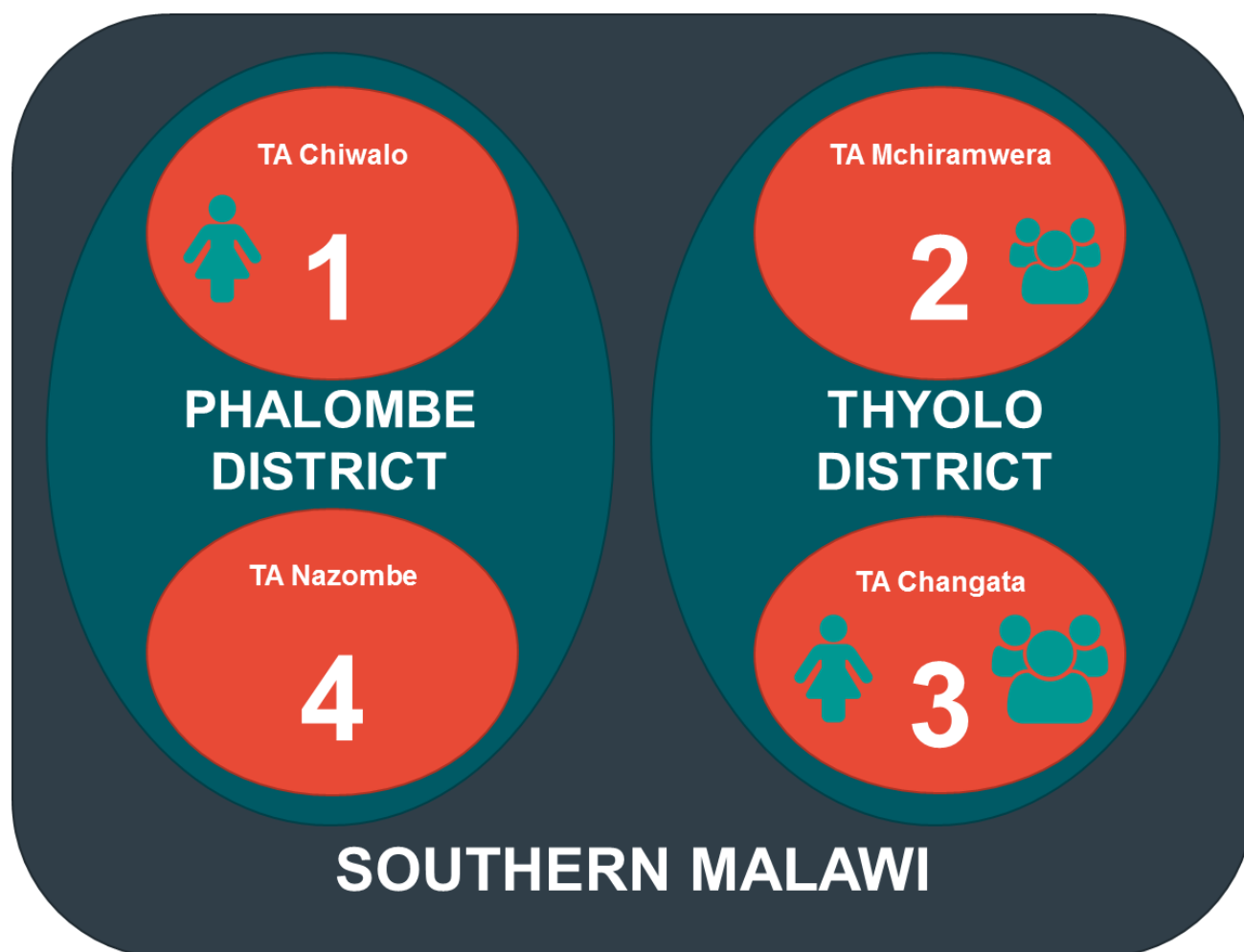
### Objectives

The evaluation of ENGAGE aims to assess the effectiveness of the two interventions on outcomes related to child marriage. The primary objective is to evaluate whether and how the different interventions are effective in changing attitudes and social norms around child marriage among adult decision-makers. The evaluation will allow for the comparison of the effectiveness of the different interventions against a comparison area where no intervention will take place, as well as between the different interventions: empowering girls only, building the capacity of CSOs only, or the combination of both. The primary hypothesis is that both interventions will positively change community norms and attitudes around child marriage among adult decision-makers, and that the combination of the girls' empowerment intervention and the CSO intervention will have a greater effect on these outcomes than will either intervention on its own.

### Methodology

The ENGAGE evaluation consists of four study arms, as shown in **Figure 2**. The girls' intervention will be implemented in Arm 1, the CSO intervention will be implemented in Arm 2, both interventions will be implemented in Arm 3, and Arm 4 is the comparison arm. The two arms where the CSO intervention will be implemented were purposefully selected to be in the same district due to the high likelihood that some CSOs will be working district-wide.

Figure 2. ENGAGE Study Arms



### Overall evaluation

The full evaluation includes both quantitative and qualitative components. For the quantitative work, ICRW will conduct baseline and endline cross-sectional surveys targeting adult male and female decision-makers for girls between the ages of 10 and 17 who were either unmarried or had been married within the last year. Survey questions with these decision-makers focus on their attitudes towards child marriage, girls' education, gender norms, sexual and reproductive health for adolescents, and the initiation camps that occur in southern Malawi. Decision-makers are also asked about specific decisions regarding marriage, initiation camps and education that they have made or will make for a particular adolescent girl, including questions on who else will take part in this decision, and who will have the final



say. At endline, ICRW will return to these communities to administer another survey to assess any changes that have occurred regarding these survey topics.

The qualitative work will occur at midline and endline, and will include interviews and focus groups with program participants to explore ways in which the program builds adolescent girls' agency; focus groups with community members to understand social norms; and interviews with key stakeholders. The quantitative and qualitative work will be used in a contribution analysis, which will help to understand the impact of the interventions in these communities.

ICRW is not evaluating the SMS campaign, since it will be equally implemented in all four arms.

## **Baseline Survey**

This report focuses on the results of the cross-sectional baseline survey data that were collected within the four study TAs from late May to early August, 2017. ICRW implemented this research with team members from the Millennium Consulting Group (MCG).

### *Sample*

We collected data from adults age 18 and older who were decision-makers for girls in their community ages 10 to 17. These adults are the end target population of the intervention activities aimed at shifting attitudes and social norms that perpetuate child marriage.

### *Key Measures*

Key indicators for this evaluation assess social norms around child marriage and respondent attitudes towards child marriage and girls' education. Respondents were asked other questions related to their attitudes towards child marriage, their knowledge of current child marriage laws, the benefits of education for boys and girls. In addition, respondents were asked demographic information such as age, education, employment status, and religious affiliation.

## **Questions about a reference girl, age 10 to 17**

One key module for this survey was designed to gain information about a reference girl aged 10 to 17. We asked questions about a specific girl so as to understand specific behaviors and decisions that were made with regard to major decisions in her life. Respondents also answered questions about the specific decisions they plan on making (or have made) for particular girls regarding their marriage, education and attendance at initiation camps, including who else will be involved and who will have the final say in those decisions. Additionally, questions were asked about their attitudes towards the initiation camps (including



whether they thought the camps should be stopped or changed and, if so, how), their beliefs regarding traditional gender roles, and their attitudes about access to family planning for girls before marriage and about their attitudes towards pre-marital sex.

### **Plan International's Child Marriage Acceptability Score**

We incorporated Plan's Child Marriage Acceptability module, using a tool that had previously been used in Malawi, into our survey to understand attitudes about child marriage. In 2015, as part of its Asia Child Marriage Initiative, Plan International commissioned the development of an index that would score communities on the presence of structural or environmental factors associated with child marriage acceptability. They also developed a 23-item score to assess child marriage acceptability at the individual level. This score was reported on its own and used as the basis for determining the weighting of the structural or environmental factors that comprised the community-level index (Plan International & Coram International, 2015).

The individual score is calculated using six questions about the ideal, lowest acceptable, and highest acceptable age for girls and boys to marry and the respondent's level of agreement with 17 statements about child marriage, gender roles within marital relationships, and the acceptability of physical punishment for girls who dishonor their family. These statements are measured on a seven-point Likert scale from "Strongly agree" to "Strongly disagree." Each item is scored on a scale from 1 (least accepting of child marriage) to 7 (most accepting of child marriage), ultimately resulting in a score between 23 and 161.

Because the score was developed for use in countries where dowry is paid, one statement in the original scale stated "Younger brides require a lower dowry than older brides." This statement is not relevant in Malawi, so a comparable statement, "Younger brides require a higher bride price than older brides," was substituted.

For comparability, the scores presented in the body of this report were calculated exactly as originally designed. However, we have identified several gaps in the documentation of scale scoring as well as several recommendations we feel would improve the scale's conceptual validity in **Appendix 2**.

### **The Sexual Double Standard and Normative Romantic Relations sub-scales of the Gender Norms Scale developed for the Global Early Adolescent Study**

These measures will help determine whether and how this intervention changes adults' attitudes towards adolescents' romantic relationships. We used questions recently validated among a sample of youth in Malawi from the Global Early Adolescent Study (GEAS), which is an international study run by the Johns Hopkins Bloomberg School of Public Health and the World Health Organization "with the goal of

understanding the factors in early adolescence that predispose young people to subsequent sexual health risks and promote healthy sexuality” (“Global Early Adolescent Study,” 2017). As part of this study, researchers undertook extensive qualitative research in the form of narrative interviews with adolescents and parents in sites around the world in order to identify gender norm themes applicable internationally. Once coded and reduced to a set of quantitative questions, the instrument was then tested for face-validity, piloted, and re-piloted with adolescents aged 10-14 in sites around the world. The final, complete tool consists of 44 questions and contains three subscales: the Sexual Double-Standard scale, the Normative Romantic Relations scale, and the Masculine Sexual Prowess scale. The scale has been validated in Blantyre, Malawi, which was one of the Phase I study sites, in partnership with the University of Malawi College of Medicine.

All items from the Sexual Double-Standard scale and the Normative Romantic Relations scale were included in the ENGAGE baseline questionnaire. However, because these scales were developed for use among adolescents and have not (to our knowledge) been tested with adult respondents, and, due to a survey design error, the response categories for the scale items were collapsed from the original, 5-item Likert scale (Agree a lot, Agree a little, Neither agree nor disagree, Disagree a little, Disagree a lot) to a binary response (Agree/Disagree), these findings are not directly comparable to any previous study and are not presented as scales in the main body of the text. Instead, our results and confirmatory factor analysis are presented in **Appendix 1**. At endline, the scale will be implemented as originally designed with Likert responses, which will provide more comparable results than those presented here.

### **Social Norms Questions**

Finally, in addition to attitudes, this evaluation also aimed to elicit information to determine the existence and the effects of norms related to child marriage in these communities. We followed Dr. Christina Bicchieri’s diagnostic process to assess the presence or absence of social norms related to child marriage (Bicchieri, Lindemans, & Jiang, 2014). This involves the measurement of five key components:

1. Prudential reasons, defined as reasons that a behavior may be advantageous or a “rational” choice (in this case, incentivizes to marry girls before the age of 18);
2. Personal normative beliefs, defined as the respondent’s personal beliefs about what they or people in general *should* do (in this case, whether or not girls *should* marry before the age of 18);
3. Empirical expectations, defined as the respondent’s belief about what others do (in this case, whether or not most girls marry before the age of 18);

4. Normative expectations, defined as the respondent's belief about what other people expect them to do (in this case, whether other people expect them to marry their daughters/nieces/granddaughters before the age of 18); and
5. Sanctions, defined as the anticipated consequences (positive or negative) of defying other's expectations (in this case, the anticipated consequences of choosing not to marry daughters/nieces/granddaughters early).

Individual questions were modeled after previous work done by CARE in Ethiopia as part of their Adolescent Reproductive Health and Nutrition (Abdiboru) project (CARE, 2017).

### *Data Analysis*

For this report, the analysis focuses on showing frequencies of the outcomes of interest by site and gender. For the endline report, we will look at changes in the outcome of interest using a difference-in-difference analysis, by TA.

### *Ethical review and approval*

IRB approval was sought and received from both ICRW's internal IRB and from Malawi's National Commission for Science and Technology.

### *Sampling and recruitment strategies*

Selection of study sites was a collaborative process that involved the donor, implementation partners, local and regional stakeholders, and our research team. There were several steps, starting with the selection of districts for the ENGAGE project, followed by the selection of traditional authorities (TAs), which are the next geographic unit after the district, and then group village heads (GVHs), villages, households and individuals that participated in the study.

#### **Selection of ENGAGE districts**

The two districts selected for ENGAGE were chosen by the implementation partners for several reasons. One of the major reasons was the high prevalence of child marriage in the southern districts, and specifically in the districts of Phalombe and Thyolo. Other reasons for choosing these districts included proximity to Blantyre (from which GENET operates), feasibility of implementation in these districts, and lack of significant influx of current interventions on similar issues for young people.

#### **Selection of Traditional Authorities within each district**



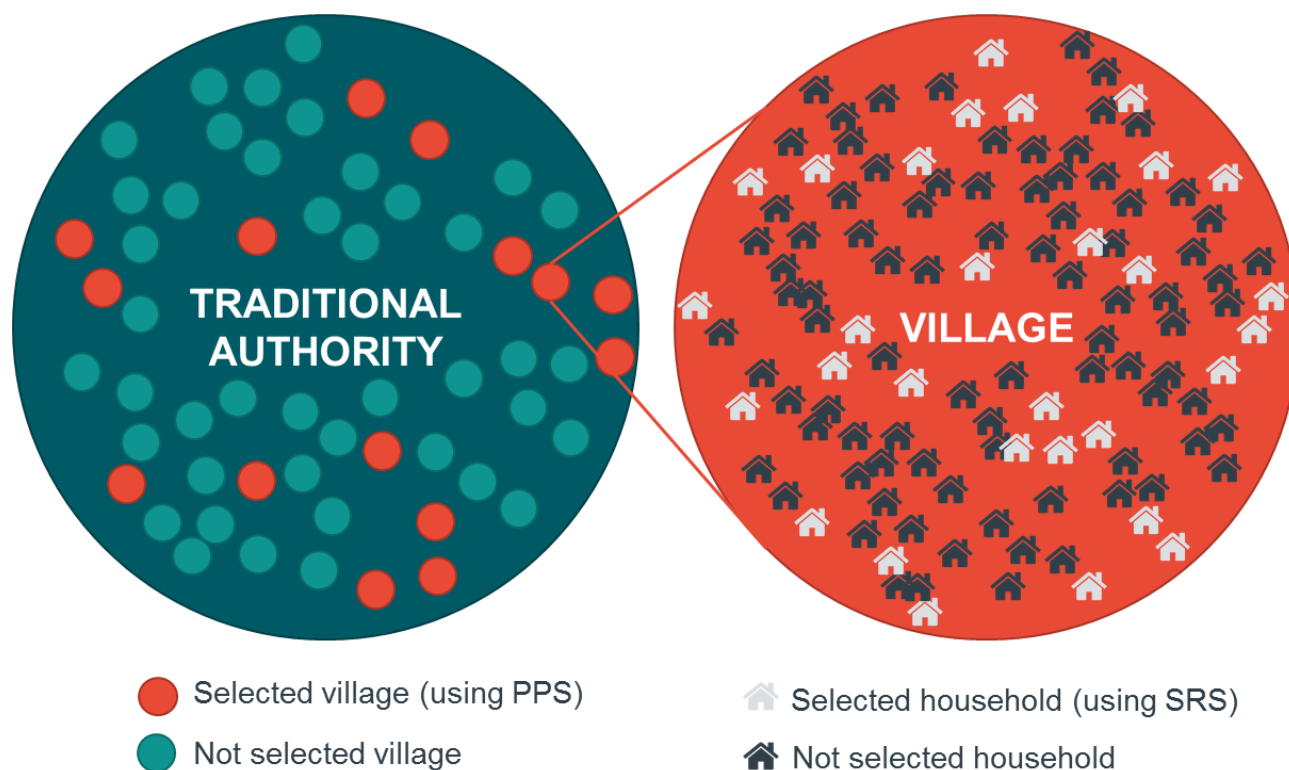


Within each district, there are between seven and 15 traditional authorities. Based on the number of girls needed to be reached in each district, and knowing the rough population estimates of the TAs, the ENGAGE team believed that two TAs would be needed per district for implementation of the girls and the CSOs interventions. To reduce bias, the process of selecting the TAs was as random as possible. The larger ENGAGE team first met with the District Executive Committee (DEC) to confirm the number of existing TAs in each district (as geographic boundaries are prone to change in these districts), and certain characteristics that may make certain TAs less amenable to intervention and research. With the DEC, the research and implementation team created criteria on which to judge whether a TA was eligible for possible inclusion in ENGAGE. The main purpose was to have a list of eligible TAs that were similar in characteristics. The list of criteria included characteristics such as similarities in wealth, ethnicity, prevalence of child marriage, etc. Once the final list of eligible TAs was proposed, within each district, the DEC randomly selected two TAs. Once the two TAs were randomly selected, the team randomly assigned an arm to that TA (see **Figure 2**).

### **Selection of villages, households and individuals**

Sampling was conducted following the same procedure in all four TAs. First, population estimates for each village in the TA were obtained. Then, 15 villages were randomly selected in each TA using probability proportional to size (PPS), which accounts for the variation in the number of households and allows for self-weighted sampling. In each of the 15 selected villages, 30 households were randomly selected to participate in the study, with the goal of completing 25 surveys in each village. **Figure 3** provides a visual representation of this sampling procedure.

Figure 3. Sampling procedure within each TA



### Sample size

We recruited approximately 375 participants per Arm (N=1,500). Sample size estimates were calculated using STATA/SE v12.0 accounting for a variety of assumptions, which can be found in **Appendix 4**.

### Selection of households and individual study participants

With the selection of the specific villages complete, the first step of sampling for the baseline quantitative survey included an extensive household mapping/listing exercise to identify all the households in study villages where the study population resides. This exercise was conducted with the assistance of the group village headmen and village chiefs, who are aware of the approximate location of all households under their jurisdiction. In consultation with the village chief, the team visited all households and ascertained general interest in the study and eligibility of various household members.

Once the team visited all the households in the study community, the study team created a list of eligible households. Eligible households are those households which include at least one eligible respondent. To be eligible, respondents must be at least 18 years old, self-report as a decision-maker for at least one



unmarried or recently married (within one year) girl in the community between 10 and 17 years old, and must have lived in the community for at least one year.

We then randomly numbered the listed households, and the study team began with the first household on the list and worked their way down until they recruited the number of targeted participants in that study area. When there was more than one eligible respondent in a household, the data collection team assigned each eligible household member a number, wrote down the numbers, and picked one at random from a bag to select the interviewee.

At first, the team attempted to institute a gender quota to obtain equal numbers of male and female respondents. To do so, the randomly selected households were each assigned a target gender from which eligible respondents would be chosen. Only if there were no eligible respondents of that gender would the team pick a respondent of the opposite gender. In this case the team member would report to the field supervisor so that another randomly chosen house would have the assigned gender changed to retain gender parity.

However, in the first few days of data collection in TA Chiwalo (the first TA), the team discovered there were a greater number of eligible women than eligible men because many spent long periods of time away from home for work, had multiple families in multiple villages (and even across the border in Mozambique), or had left their families due to divorce or death. Despite attempting to purposefully return to villages later in the evening and on different days to gather more men, the team was not able to maintain the gender quota. As such, there were more female respondents than male overall.

#### *Training of data collectors, data collection and data cleaning*

A two-person ICRW team, along with key staff from MCG, trained the team of data collectors in early June 2017. The week-long training focused on the overview of the study, human subjects' research ethics, reviewing the survey protocol and all related materials including: (a) questionnaires; (b) household listing tool; (c) screening tool; and the (d) informed consent forms.

MCG conducted mapping and data collection activities in the districts between May and August of 2017. For a full list of GVHs and villages visited along with dates, the number of households in each village, and the total numbers of male and female interviews per village, please see **Appendix 5**. Data was collected on tablets by a team of local enumerators in the local Chichewa language.

Following data collection, the MCG and ICRW teams worked to clean the data. The MCG team also provided a report with a series of observations for Rise Up and GENET. These observations included other child marriage and girls' education interventions occurring in the TAs, lists of by-laws regarding child marriage at the district, TA, and village level, chiefs with favorable and unfavorable attitudes towards

ending child marriage, transportation and safety concerns, potential seasonal issues (limited transportation in the rainy season or absence from villages during rice growing season), and the location and times of major market days in each TA.

## Results

Data tables can be found in **Appendix 3**.

### Sample demographics

In total, 1492 respondents were interviewed across the four study sites. Despite efforts to ensure men equal opportunity be surveyed, described above, the sample obtained was about 73 percent female overall, and the most heavily female in Mchiramwera (Arm 2) at 84.3% (significantly higher than the comparison arm, Nazombe; OR = 2.5,  $p = 0.000$ ). Respondents ranged in age from 18 to 92, with a median age of 37. Compared to respondents from Nazombe (comparison arm), where the median age was 38 years, respondents from Chiwalo (Arm 1) were significantly younger (median age = 35;  $\beta = -0.4$ ,  $p = 0.000$ ) while respondents from Changata (Arm 3) were significantly older (median age = 40;  $\beta = 0.3$ ,  $p = 0.003$ ).

Overall, the majority of respondents had completed primary school but not beyond (63.9%), while about one in four (23.5%) had no formal education. Just one in eight (12.6%) had completed secondary education or higher. There were no significant differences in respondents' highest level of education by study site. Overall female respondents had attained significantly lower levels of education than male respondents ( $\beta = -0.9$ ,  $p = 0.000$ ).

Overall, about 62 percent of respondents had paid employment within the past year, however, compared to employment in Nazombe (comparison arm), employment in Mchiramwera (Arm 2) was significantly higher at 69.9 percent (OR = 1.7,  $p = 0.001$ ). Compared to male respondents, female respondents were also significantly less likely to have had paid employment in the past year (OR = 0.7,  $p = 0.004$ ).

Across all sites, the most common religion among respondents was non-Catholic and non-Seventh Day Adventist/Baptist Christian (64.7% overall). In Chiwalo (Arm 1) and Nazombe (comparison arm), the second most common religion was Catholic (17.1% and 13.8%, respectively), while in Mchiramwera (Arm 2) and Changata (Arm 3), the second most common religion was Seventh Day Adventist/Baptist (18.1% and 42.2%, respectively).

The majority of respondents in all sites identified as Lomwe, however, a higher percentage (5.9%) of respondents identified as Nyanja in Chiwalo (Arm 1), while a higher percentage of respondents identified as Mang'anja in Mchiramwera (Arm 2; 13.6%) and Changata (Arm 3; 15.9%).

The majority of respondents in all sites were currently married (68.1%), however, relatively higher percentages were widowed in Changata (Arm 3; 18.0%) and divorced or separated in Mchiramwera (Arm 2; 20.8%).

Respondents were asked a series of questions about actual decisions they had made or would be involved in making for one girl between the ages of 10 and 17. The selection of this reference girl is described in more detail above. The majority of reference girls were the respondents' daughters (58.9%) followed by granddaughters (18.8%). The median age of the reference girls was 14 years (no significant difference by site). The majority of the reference girls were currently enrolled in school (93.0%) and had never been married (98.1%). To date, about 39 percent had already participated in an initiation camp. Controlling for differences by age, reference girls in Changata (Arm 3) were significantly less likely to have already participated in an initiation camp (OR = 0.5,  $p = 0.005$ ) compared to those in Nazombe (comparison arm).

## Child marriage

### *Knowledge of laws in Malawi*

Respondents were asked several factual questions about child marriage laws in Malawi to assess the accuracy of their legal knowledge related to this topic. Though knowledge levels do not consistently vary by site, they do vary consistently by gender, with women consistently having approximately 40 percent lower odds of correct knowledge about these facts compared to men.

Overall, less than one in twenty (4.4%) adult decision-makers in these four sites know that the legal age of marriage is the same for both boys and girls in Malawi. When accounting for differences by site and by gender, knowledge of this fact is significantly higher in Changata (Arm 3; OR = 3.2,  $p = 0.003$ ) and significantly lower among women (OR = 0.6,  $p = 0.034$ ).

Additionally, just two in five (39.0%) adult decision-makers in these four sites know that a girl has a legal right to refuse a marriage that her parents or guardians support, even if she is below the age of 18. When accounting for differences by site and by gender, knowledge of this fact is significantly lower in Chiwalo (Arm 1; OR = 0.3,  $p = 0.001$ ) and among women (OR = 0.6,  $p = 0.000$ ).

Finally, about one in four adult decision-makers in these four sites (23.5%), know that the legal minimum age of marriage for girls in Malawi is 18, even with parental consent. When accounting for differences by

site and gender, knowledge of this fact is significantly higher in Mchiramwera (Arm 2; OR = 2.3,  $p = 0.000$ ) and lower among women (OR = 0.6,  $p = 0.001$ ).

### *Attitudes towards child marriage*

Attitudes towards child marriage were assessed through individual questions as well as a child marriage acceptability index. In general, respondents were strongly opposed to child marriage across all four sites, though responses to the individual questions demonstrate slightly more favorable attitudes towards child marriage in Changata and some inconsistent differences by gender (women are more likely to say a girl should have a say in when she marries but also more likely to say that a girl should marry if she becomes pregnant). Scores on the child marriage acceptability index were similar to a previous study conducted in Malawi.

More than nine out of every ten (92.3%) adult decision-makers across the four sites agree that it is wrong to marry a girl before the age of 18, however, controlling for differences in attitudes by gender, adult decision-makers in Changata (Arm 3) are significantly less likely than those in Nazombe (comparison arm) to agree (OR = 0.5,  $p = 0.008$ ).

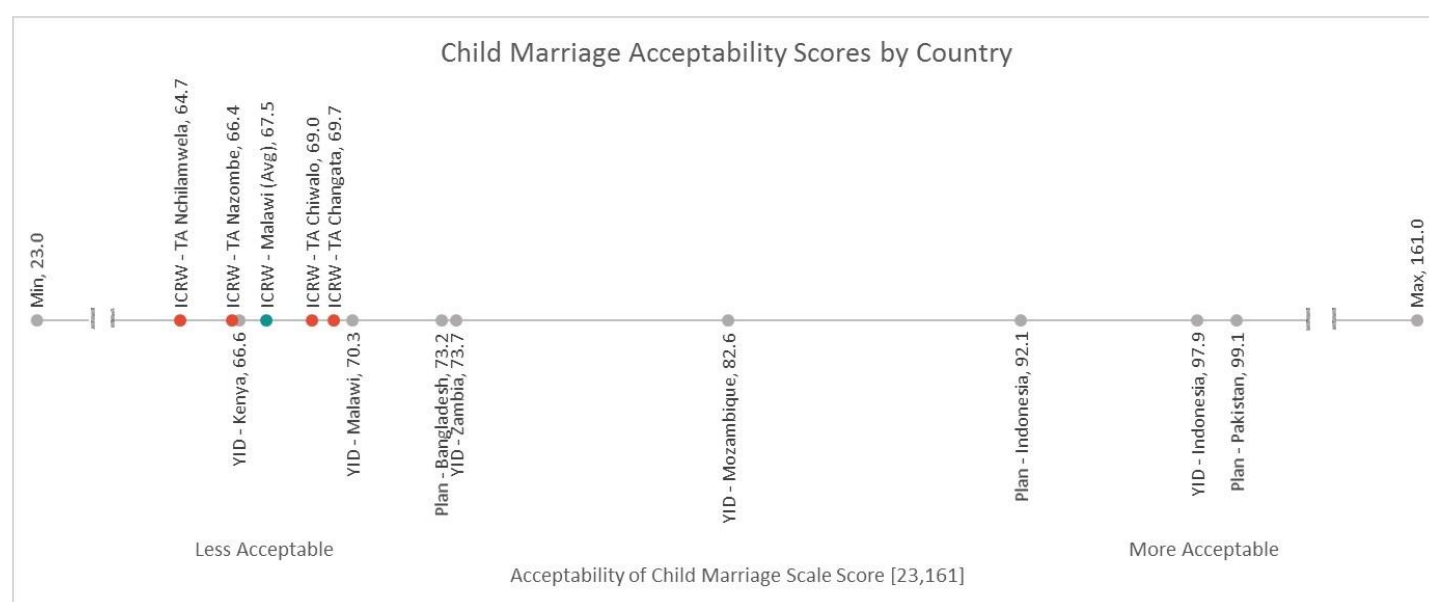
Similarly, about 95 percent of adult decision-makers agree that a girl should have a say in who she marries and nearly 90 percent agree that a girl should have a say in when she marries, but both are significantly lower in Changata (OR = 0.3 and 0.5, respectively) and the latter is also significantly lower in Mchiramwera (OR = 0.4,  $p = 0.001$ ) compared to Nazombe when controlling for differences in attitudes by gender. By gender, women were significantly more likely than men to say that a girl should have a say in when she marries (OR = 1.5,  $p = 0.022$ ) when controlling for differences in attitudes by site.

When asked whether girls should marry in particular circumstances, just 8.5 percent of adult decision-makers felt that girls should marry if they lacked money for school fees, with no significant differences by site or gender. About one in four (25.6%) felt that girls should marry if they became pregnant, with significantly higher agreement in Changata (OR = 1.4,  $p = 0.034$ ) and among women (OR = 1.5,  $p = 0.006$ ) when considering both site and gender.

Using the Child Marriage Acceptability score developed by Plan International, which assigns each respondent an “acceptability score” on a scale from 23 (least accepting of child marriage) to 161 (most accepting of child marriage), the average score was 69.0 in Chiwalo (Arm 1), 64.7 in Mchiramwera (Arm 2), 69.7 in Changata (Arm 3), and 66.4 in Nazombe (comparison arm), for an overall average score of 67.5

across the four sites.<sup>3</sup> These scores are similar, though slightly lower, than those found in a previous study conducted in Malawi (KIT, 2016), which found an overall score of 70.3. Accounting for both site and gender, female respondents ( $\beta=0.4$ ,  $p = 0.002$ ) and respondents in Changata ( $\beta = 0.5$ ,  $p = 0.013$ ) were significantly more accepting of child marriage, while respondents in Mchiramwera were significantly less accepting of child marriage ( $\beta = -0.3$ ,  $p = 0.022$ ).

**Figure 4. Child Marriage Acceptability Scores by Country**



Plan scores reported in *Getting the Evidence: Asia Child Marriage Initiative Summary Report* available at: <https://plan-international.org/publications/getting-evidence-asia-child-marriage-initiative>. YID scores reported in baseline presentation available at: <http://www.kit.nl/health/wp-content/uploads/sites/4/2017/02/Preliminary-findings-YID-Nov-2016.pdf>.

## Social norms and child marriage

In addition to attitudes, this evaluation also aimed to elicit information to determine whether norms related to child marriage exist in these communities. In this study, we employ Dr. Christina Bicchieri's diagnostic process to assess whether social norms related to child marriage are present in the intervention communities (Bicchieri et al., 2014).

<sup>3</sup> For comparability, we strove to calculate and present the score in this report exactly as it was originally designed. However, we have identified several gaps in the documentation of scale scoring as well as several recommendations we feel would improve the scale's conceptual validity in **Appendix 2**.

First, we must understand if there are strong prudential reasons for girls to marry in these communities, which would indicate that child marriage could be a “rational” choice made because it is in the adult decision-makers’ best interest. We do find strong evidence of prudential reasons for child marriage in these communities, including pregnancy (84.9%), a lack of education and job opportunities (78.2%), and financial reasons (60.7%). Less common prudential reasons for child marriage include resolving family disputes (49.7%) and the perception that marrying girls young can help resolve financial problems in the family (17.6%), prevent sexual violence, assault, and harassment (10.1%), or provide them security (8.0%).

Next, we must determine if adult decision-makers have strong personal normative beliefs supportive of child marriage, which would indicate that child marriage could be, for them, a moral rule. This does not appear to be the case. As discussed above, more than nine out of every ten (92.3%) adult decision-makers across the four sites agreed that it is wrong to marry a girl before the age of 18 and nearly 90 percent agreed that a girl should have a say in when she marries.

Given that there are strong prudential reasons for child marriage in these communities, almost nine in ten adult decision-makers (89.3%) across the four sites express the empirical expectation that most girls in their community marry before the age of 18. However, empirical expectations are not sufficient to demonstrate the presence of a *social* norm. Critically, there must also be strong normative expectations or sanctions that encourage decision-makers to marry their daughters early, because of their perception that others expect them to and will punish them if they do not. In these communities, despite the presence of strong empirical expectations, there is less evidence of normative expectations and even less evidence of sanctions across most sites. More specifically, agreement with the normative expectation that “Most people in this community expect girls to marry before the age of 18” is just 53.2 percent overall, while disagreement is 46.8 percent, and agreement with the statement about sanctions, “If I don’t ensure my daughters and/or nieces are married early, my family will not be respected in the community,” is just 36.4 percent.<sup>4</sup> Taken together, the presence of strong prudential reasons for child marriage and the weak evidence of normative expectations and sanctions indicate that social norms may not be the primary driver of child marriages in these communities. This finding is explored further in the discussion, below.

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<sup>4</sup> The possible exceptions to this finding are Changata (Arm 3), where normative expectations and sanctions were significantly higher, and Chiwalo (Arm 1), where sanctions were significantly higher.



### *Future intentions related to marriage decisions for reference girl*

Because the vast majority (98.1%) of reference girls had never been married, we are only able to describe adult decision-makers' future intentions related to marriage decisions for their reference girls with certainty.

In all sites, the largest percentage of respondents stated that the final decision of *when* to marry would be made by the reference girl herself (44.5% overall). In three out of the four sites, the next most common decision-makers were either mothers (13.1% overall) or fathers (10.0 % overall). Only in Mchiramwera (Arm 2) were maternal and paternal uncles more commonly selected as the final decision makers for when the reference girl would marry compared to mothers and fathers (maternal uncles 21.5%, paternal uncles 11.1% in Mchiramwera). Notably, female respondents (of any relation to the reference girl) were more likely to say that the decision would be made by her mother, while male respondents (of any relation to the reference girl) were more likely to say that the decision would be made by her father. Across all sites, the majority, or about three in four respondents (76.1%), said that their reference girl would make the final decision of *whom* to marry.

Decision-makers for unmarried reference girls were also asked at what age she should marry and at what age she was likely to marry. Overall, the median age decision-makers thought their reference girl should marry was 24, with just 0.7 percent saying they thought their reference girl should marry before the age of 18. Additionally, just 3.3 percent overall felt that their reference girl was likely to marry before the age of 18, though this percentage was significantly higher in Changata (Arm 3; OR = 3.4, p = 0.003) compared to Nazombe (comparison arm).

## Girls' education

### *Attitudes towards girls' education*

In general, attitudes towards girls' education were strongly positive and gender-equitable across all sites.

Adult decision-makers across the four sites nearly universally agreed that all girls had a right to be educated (99.5%) and that there was value to a girl being educated (98.7%). Furthermore, more than nine in ten (91.2%) agreed that the value of educating a girl outweighed the costs. Specifically, three out of every four adult decision-makers (75.0%) felt that educating a girl provides her with better job prospects, and 62.4 percent believed that it improves their family's standing (significantly higher in Mchiramwera at 74.3%). Moreover, very few adult decision-makers said that educating a girl prevents her from performing chores (0.7%), or from caring for family (5.7%), or that educating a girl reduces her marriage

prospects (1.3%). Just one in ten (10.4%) adult decision-makers across the four sites agreed that it was more important that sons have education than daughters, with no significant differences by site or gender.

### *Education decisions for reference girl*

Because the vast majority (93.0%) of reference girls were currently enrolled in formal schooling, we are only able to describe decisions related to in-school reference girls with certainty. Of the reference girls that were currently enrolled in school, nearly 91 percent were enrolled at the primary level, 9.2 percent were enrolled at the secondary level, and 0.1 percent were enrolled in higher education.

For reference girls currently enrolled in school, of all people involved in making decisions related to their schooling, mothers were the most commonly involved (75.0%), followed by fathers (52.2%), grandmothers (25.0%), and the girl herself (24.9%). Mothers (34.9%) and fathers (33.5%) were most often identified as the people making the final decisions related to reference girls' school enrollment. As was the case for decisions related to marriage, female respondents (of any relation to the reference girl) were more likely to say that final decisions related to their reference girl's education would be made by her mother, while male respondents (of any relation to the reference girl) were more likely to say that the decisions would be made by her father.

Overall, respondents nearly universally agreed that their reference girl should remain in school (99.8%). The majority of respondents thought that their reference girl *should* complete secondary education (61.1%), followed by higher education (35.2%), though fewer thought their reference girl was *likely* to complete higher education (27.3%).

## **Sexual and reproductive health (SRH)**

### *Attitudes towards adolescent sexuality*

Though agreement was very low across the board with the statements "It is acceptable for girls to have sex before marriage" (3.8%) and "It is acceptable for boys to have sex before marriage" (4.1%), it was significantly higher in Changata (Arm 3) compared to Nazombe (comparison arm) for both statements (OR = 2.5 & 2.8, respectively;  $p = 0.008$  and  $0.002$ , respectively), with no significant difference by gender. More than nine out of ten (92.7%) adult decision-makers agreed with the statement "Unmarried girls who get pregnant are naughty" (no significant differences by site or gender).

Attitudes towards adolescent sexuality and the appropriateness of adolescent relationships were also measured using two sub-scales developed for the Global Early Adolescent Study (GEAS). This was a new application of the scales, which have been validated in the Malawian context but were designed to be administered to adolescent respondents, as opposed to adults. The results of these scales and tests of the scales' validity in adult populations are presented in **Appendix 1**.

#### *Attitudes towards girls' access to SRH services*

Overall, about 45 percent of adult decision-makers across the four sites agreed with the statement "All girls have a right to access contraceptives/family planning services." However, when asked about specific subgroups of girls, they were much more likely to agree that married adolescent girls should have access to contraception or family planning services (94.6%) than to agree that unmarried adolescent girls should have access (37.9%). Compared to adult decision-makers in the comparison site (Nazombe), those in Mchiramwera (Arm 2) were significantly less likely to agree that all girls have a right to access contraceptives (OR = 0.7,  $p = 0.034$ ), and those in Changata (Arm 3) were significantly more likely to agree that unmarried adolescent girls should have access to contraception or family planning services (OR = 1.5,  $p = 0.042$ ). Women were significantly more likely to agree that married adolescent girls should have access to contraception compared to men (OR = 2.1,  $p = 0.007$ ).

Overall, about four out of every five (79.7%) adult decision-makers agreed that "Giving unmarried girls access to contraceptives makes them promiscuous," though the percentage of adult decision-makers that agreed was significantly lower in Mchiramwera and Changata at 76.7 percent and 74.7 percent, respectively.

Overall, about two out of five adult decision-makers (39.6%) said they would like contraceptives or family planning services to be available to girls in their community and about 65 percent said they were aware of family planning services available to adolescent girls in their community.

### Initiation camps

#### *Attitudes towards initiation camps*

Almost all adult decision-makers (97.1%) had heard of initiation camps. Most were familiar with traditional camps (73.0%) as opposed to Christian camps (27.0%), however, the percentage that said they were most familiar with Christian camps was higher in Changata (Arm 3) at about 34 percent. Overall, more than eight in ten (80.8%) adult decision-makers estimated that most or all girls in their community

participated in the initiation camps, with significantly higher agreement in Mchiramwera (Arm 2) and Changata (Arm 3).

Overall, about one in three adult decision-makers (34.2%) agreed that the initiation camps were necessary to prepare girls for marriage, however, the percentage agreement was significantly higher in all three intervention sites compared to the comparison site, Nazombe, where agreement was just 25.1 percent (OR = 1.6, 1.5, and 2.2, respectively;  $p = 0.011, 0.039, 0.000$  respectively). There were no significant differences by gender after controlling for site. Similarly, 36 percent of all adult decision-makers agreed with the statement “If a girl does not attend an initiation camp, she is unfit to marry.” However, in this case, in addition to significantly higher agreement in Mchiramwera (Arm 2) and Changata (Arm 3), women were also significantly more likely to agree than men (OR = 1.4,  $p = 0.014$ ).

Respondents were also asked if they agreed that girls must have sex after attending an initiation camp. Overall, about 11 percent agreed, with no significant differences by site or gender. However, respondents who indicated they were most familiar with traditional camps were significantly more likely to agree that girls must have sex after attending an initiation camp (OR = 1.7,  $p = 0.048$ ) than those who were most familiar with Christian camps.

Perspectives on whether the camps should stop, continue as they were, or be changed differed between the four sites. In Nazombe (comparison arm), the largest percent of adults (51.4%) felt that the camps should stop. In Chiwalo (Arm 1), opinion was nearly evenly divided between individuals who felt the camps should stop (43.6%) and those that felt they should continue (41.2%). In Mchiramwera (Arm 2), a small majority felt that the camps should be continued (50.0%), while in Changata (Arm 3), a large majority (72.4%) felt that the camps should be continued. Between 10.6% (in Mchiramwera) and 15.2% (in Chiwalo) of adult decision-makers felt that the camps should be changed. Of those who felt that camps should be changed, the top three ways in which they felt the camps should change were to have no sexual acts performed during or after the camp (54.3%), to have no focus on men’s sexual pleasure (45.1%), and for the participants to be older (37.0%).

#### *Camp participation decisions for reference girl*

Overall, nearly 39 percent of decision-makers’ reference girls had already attended an initiation camp, though participation was significantly lower in Changata (OR = 0.5,  $p = 0.005$ ) even after accounting for differences in the ages of reference girls by site. Among those whose reference girl had already attended a camp, the median age of attendance was 10 years in Chiwalo (Arm 1) and Nazombe (comparison arm) and significantly higher at 13 years in Mchiramwera (Arm 2) and Changata (Arm 3). In all four sites, when asked who made the final decision that the girl would attend the camp, the most common response was mothers (48.4%), followed by grandmothers (21.9%) and then fathers (14.2%). The majority of

respondents (88.8%) were in agreement with the decision for her to attend the camp. In particular, about 74 percent were in agreement with her camp attendance because “it [was] a part of [their] culture” and about 52 percent were in agreement because “the camps teach important facts/skills.” Of those who were not in agreement with their reference girl’s camp attendance, the most common reason was “it is bad/wrong” (60.0%) followed by “she was too young” (33.8%).

Of those decision-makers whose reference girls had not yet attended an initiation camp, perspectives on whether she *should* attend one in the future differed by site. In Chiwalo (Arm 1) and Nazombe (comparison arm), fewer than 30 percent in each site thought she should attend a camp. In Mchiramwera (Arm 2), almost half (49.1%) of respondents thought she should, while in Changata (Arm 3), 80.5 percent thought she should. Of those who thought their reference girl should attend a camp, the most common reasons given were “it is part of our culture” (76.8%) and “the camps teach important facts/skills” (56.5%) and the median age they said she should attend was 15 years (range from age 10 to age 20). Of those who did not think their reference girl should attend a camp, the most common reasons given were “it is bad/wrong” (55.2%) and “it is not part of my religion/culture” (32.4%).

Of those decision-makers whose reference girls had not yet attended an initiation camp, in addition to eliciting their perspective on whether their reference girl *should* attend an initiation camp, we also asked whether they thought their reference girl *would likely* attend one in the future. Again, perspectives differed by site, with the smallest percentages thinking she would attend a camp in Nazombe (comparison arm, 22.1%) and Chiwalo (Arm 1, 28.3%), followed by Mchiramwera (Arm 2, 58.4%) and the largest percentage in Changata (Arm 3, 85.7%). Of those who thought their reference girl would attend a camp, the median age they thought she would do so was 15, but ranged from age 10 to age 20. Of those who did not think their reference girl would attend a camp, the most common reason was their own refusal (50.1%), followed by family pressure to stop this practice (23.9%). Notably, only 2.8 percent said they thought their reference girl would not attend an initiation camp due to community pressure to stop the practice.

## Limitations

There are several limitations on this study. Given the sampling methodology, which did not require gender parity, there are a greater number of female respondents due to the greater likelihood of encountering female respondents at home. Men were reported to often travel long distances (for example, to Mozambique) for work, meaning they were away for days or weeks at a time. However, unless men are exerting decision-making authority from afar, this likely means that our sample effectively captured those most likely to be present and making decisions in girls' lives.

It is clear from our analyses that opposition to child marriage was already stronger than expected based on previous discussions with community stakeholders and programmatic experience in nearby districts. This suggests that communities have already been sensitised to issues around child marriage, as evidenced by new, local bylaws that penalize marriage before the age of 18 and by attitudes of community leaders, which were anecdotally observed during data collection. It is therefore possible that participants have already begun to change their views on child marriage or, if they have not, that they at least understand that they are expected to be opposed to child marriage and may therefore change their responses (social desirability bias).

We made every effort to reduce social desirability bias through a variety of best practices. Enumerators were trained to ensure that interviews were conducted in a place and manner that maximized the respondents' trust and confidence that their answers were confidential. Enumerators were also trained to avoid implying any judgement of a respondents' response during the interview. Scripts were used before sensitive questions to reiterate confidentiality and allow the respondent to skip questions if desired. Finally, questions about attitudes towards child marriage were asked in different ways, both overtly and more subtly, generally and more specifically, to triangulate information about a respondent's attitude and to avoid relying solely on questions with potentially obvious desired responses. With all of these safeguards in place, we are confident that we addressed the most common reasons respondents might alter their answers. However, there is always some chance that some respondents still did. Fortunately, it is unlikely that any remaining bias differs between sites, so what remains will not affect the evaluation of the different intervention arms, except that there is little room for improvement to be measured on certain indicators.



## Discussion

### Implications for programming

#### The role of social norms

ENGAGE interventions are premised on the assumption that social norms are the primary driver of child marriage in these communities of Malawi. Through the baseline data, we have found that this may not be the case. At the very least, there is strong evidence that child marriages are still resulting from pregnancy, a lack of education and job opportunities for girls, and for financial reasons. It is likely that girls and their guardians are making “choices” related to marriage in a decision-making environment constrained by few opportunities for girls’ personal advancement and economic independence, providing strong incentives for girls to be married early.

The CSO capacity-building interventions provide one potential avenue to address these more prudential reasons for child marriage, through the types of programs that are selected to receive additional funding.

Beyond the need to address these prudential reasons for child marriage, there is opportunity to engage with social norms in these communities by acknowledging and building on the progress to date. Both leaders and the general population of these communities are clearly already highly sensitized and vocally opposed to child marriage. Given that the survey population had such low understanding of national and local laws, both GENET and Rise Up have an opportunity to increase knowledge of the laws and to empower both girls and the decision-makers to use the laws to support their goals to delay marriage.

In this environment, where normative expectations and sanctions appear to already be relaxing, ENGAGE interventions are well-placed to translate these shifts in expectations into actual behavior change by, for example, engaging receptive leaders as vocal opponents of child marriage and/or leveraging public opinion to hold duty-bearers accountable.

#### The role of decision-makers

Although anecdotal information from Malawi suggested that uncles are key decision-makers for young girls, the data suggest that mothers, fathers, grandparents, and the girls themselves are all more likely than uncles to be perceived as key decision-makers for girls. More specifically, respondents perceived that decisions related to education were most often made by mothers and fathers, while decisions related to camp attendance were most often made by mothers and grandmothers. They also predicted that most often, future decisions related to when and whom to marry would be made by their reference

girls themselves. Though potentially surprising, this last finding is in keeping with other work ICRW has conducted, which has shown that adults often perceive marriage decisions, and, in particular, the decision to marry early, to be the responsibility (or fault) of the girl herself. The ENGAGE program teams should spend more time unpacking this finding by talking directly with girls to understand *their* perceptions, for example, do they feel they are in control of their marriage decisions? Do they have meaningful alternatives to marriage once they finish or drop out of school? Do they feel pressured to marry early by adults or their peers? This will help design program strategies and messaging that are properly targeted, for example, if girls do feel they have control over their marriage decisions but feel pressured to marry early by their peers, as opposed to a situation where they feel like their only option is marriage or if they feel like the decision is being made for them by a parent or other adult. For decisions related to education and camp attendance, ENGAGE program teams can tailor messaging and support to the key audience.

This finding reinforces the importance of tailoring activities to different types of decision-makers. It would be useful to triangulate these findings with additional information from girls and other stakeholders about how decisions are made about girls' education, opportunities, and marriage.

### **Initiation camps**

The data from in all four communities indicate that adults are mixed in terms of their perceptions of the relevance, importance, and role that initiation camps should play in girls' lives. Some adults believe they should be continued while some think changes should be made in content, especially around the role of sex and sexual pleasure, and others believe they should be stopped altogether. The sites in which opinions vary provide an opportunity for GENET and Rise Up to engage girls, decision-makers, and other stakeholders in meaningful, guided conversations or debates to understand more about their perspectives of the camps and to leverage these discussions as a platform for change. However, it is important to note that, compared to the other sites, Changata seems to be much more unanimously in favor of the camps. Respondents there had the highest agreement that camps are necessary to prepare girls for marriage, that their reference girl should attend, and that if their reference girl did not attend, she would be unfit to marry. Most participants from this TA believe that camps should continue. In this environment, more sensitization will be need and care must be taken to avoid community backlash against interventions related to the camps and open discussions or debates would likely not be appropriate or have the desired impact on community attitudes.

Additionally, it will be important for ENGAGE program teams to explore what happens at the camps in more depth. Though we know what proportion of respondents in each TA support the camps, because we do not know the content of the camps in that particular TA or community, we do not know whether these results indicate support for camps that put girls at risk of forced sex and harmful practices or



whether camps in that TA or community have already shifted away from harmful practices and now focus more on topics such as fertility awareness. The ENGAGE program team might consider exploring the differences between camps in Chiwalo, where respondents had much less favorable attitudes toward the camps, and Changata, where most respondents supported their continuation.

## Recommendations for dissemination with district stakeholders

There is a wealth of information from this baseline survey that can be shared with stakeholders at the district level. However, we want to carefully share key data with communities so as not to cause any unintended responses that would impact programming or the evaluation. We recommend sharing the following with each district, in a simple, digestible display using charts and graphs:

- Sample characteristics
- Child marriage
- Existing knowledge of laws
- A few key questions related to overall attitudes
- Attitudes toward girls' education

Some information regarding the initiation camps may also be shared, if caution is taken to ensure that the findings are understood and interpreted properly. In particular, stakeholders may wish to know the reference girl participation rates, which is fine as long as they are not presented as representative of the percentage of girls that participate in the TA or district as a whole. Additionally, attitudes related to whether camps should stop, change, or continue as is can be shared, with the caveat that, as we do not know the content of each initiation camp, we cannot say whether supportive attitudes are indicative of improved camp content or support of harmful practices.

Each of the above statistics can be reported at the district and the TA level.

## Future Evaluation Activities

There are several implications from this baseline data collection process relevant to future data collection efforts.

First, the quantitative social norms findings show the importance of further inquiry related to this topic at midline, particularly the necessity of conducting qualitative fieldwork. This will help us better understand if and how social norms are causally influencing child marriage in these communities. In particular, we will



be able to use focus group vignettes to directly observe if and how marriage decisions change in response to different social expectations.

Understanding the differences between sites at baseline also allows us to account for these differences in our analysis at endline, so we can accurately attribute change over time in our key outcomes of interest. At endline, we will use a contribution analysis approach, combining our quantitative and qualitative findings with monitoring data, to triangulate the likely change in key outcomes that can be attributed to the ENGAGE intervention.

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Figure 5: MCG Data Collection Team





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## Appendices

### Appendix 1: Attitudes towards adolescent sexuality and relationships

This study attempted to measure adult decision-makers' attitudes towards adolescent sexuality and relationships using two sub-scales developed for the Global Early Adolescent Study (GEAS), the Sexual Double Standard sub-scale and the Normative Romantic Relations sub-scale. These items were developed for use among adolescents and have not (to our knowledge) been tested with adult respondents. In addition to the different respondent population, due to a survey design error, the response categories for the scale items were collapsed from the original, 5-item Likert scale (Agree a lot, Agree a little, Neither agree nor disagree, Disagree a little, Disagree a lot) to a binary response (Agree/Disagree). Therefore, these findings are not directly comparable to any previous study and are not presented as scales in the main body of the text.

#### **Sexual Double Standard sub-scale**

Our study found very high agreement with each of the nine scale items, ranging from 84.6% agreement with the statement "Girls should avoid boys because they trick them into having sex" to 97.0% agreement with the statement "Boys feel they should have girlfriends because their friends do." The sub-scale score was calculated by adding together the responses to all nine questions (0 for Disagree and 1 for Agree) and dividing by the total number of items (9) to obtain a score between 0 and 1. Overall, the mean sub-scale score was 0.92 indicating the presence of a very strong sexual double standard, though the score was significantly lower in Changata (Arm 3). There were no significant differences in the individual items or overall scale score by gender of the respondent.

#### **Normative Romantic Relations sub-scale**

In comparison to our findings related to the Sexual Double Standard sub-scale, we found more variation in agreement with the five items comprising the Normative Romantic Relations sub-scale. Interestingly, though there was far less agreement with the statement "It is normal for a girl to want a boyfriend" than the statement "It is normal for a boy to want a girlfriend" (9.6% and 65.0%, respectively), there was higher agreement with the statement "A girl should be able to have a boyfriend if she wants to" compared to the statement "A boy should be able to have a girlfriend if he wants to" (39.9% and 28.0%, respectively). As with the Sexual Double Standard sub-scale, the sub-scale score was calculated by adding together the responses to all five questions (0 for Disagree and 1 for Agree) and dividing by the total number of items (5) to obtain a score between 0 and 1. Overall, the mean scale score was 0.31, but was

significantly lower in Mchiramwera (Arm 2), indicating less accepting attitudes towards relationships among adolescents. Again, there were no significant differences by gender.

### Confirmatory factor analysis

The fit of the scales was assessed using confirmatory factor analysis of a tetrachoric correlation matrix of the fourteen binary items. Based on the previous work establishing these two sub-scales, a two-factor solution was specified. The factor loadings for individual items were as expected, with good ( $> 0.3$ ) loading of all items except the first two items in the Sexual Double Standard sub-scale. The first item, “Girls should avoid boys because they trick them into having sex,” loaded poorly ( $< 0.3$ ) onto both factors. The second item, “Girls who have boyfriends are irresponsible,” cross-loaded onto both factors.

**Table A1.1 Confirmatory Factor Analysis Results**

	% Agreement	Factor Loadings	
		Factor 1	Factor 2
Sexual Double Standard scale items			
Girls should avoid boys because they trick them into having sex.	84.6		
Girls who have boyfriends are irresponsible.	91.5	0.4820	-0.3313
Boys have girlfriends for fun more than love.	87.8	0.7608	
Girls are the victims of rumors if they have boyfriends.	95.7	0.7689	
Boys tell girls they love them when they don't.	94.6	0.8938	
Boys have girlfriends to show off to their friends.	96.8	0.9659	
Boys feel they should have girlfriends because their friends do.	97.0	0.9734	
Boys lose interest in a girl after they have sex with her.	85.9	0.5898	
Boys fool girls into having sex.	96.8	0.7464	
Normative Romantic Relations scale items			
It is normal for a girl to want a boyfriend.	9.6		0.8017
It is normal for a boy to want a girlfriend.	65.0		0.5873
A girl should be able to have a boyfriend if she wants to.	39.9		0.7328
A boy should be able to have a girlfriend if he wants to.	28.0		0.9014
It is ok for a boy and a girl to be together alone.	10.1		0.3805

Overall, these findings provide evidence that these scales may be suitable to adaptation to an adult population, due to the general consistency of factor loading with that found in previous research with adolescent respondents. The exceptions are the statements “Girls should avoid boys because they trick them into having sex” and “Girls who have boyfriends are irresponsible.” The former may be a result of the different age of the respondent population, as this item was found to load well in a scale validation study conducted as part of the GEAS in Blantyre, Malawi, so it is unlikely that the poor loading can be attributed to the cultural context. The latter may be an issue of conceptual conflation. At endline, the scale will be implemented as originally designed with Likert responses, which will provide more



comparable results than those presented here. If the results are similar, this will provide additional evidence in support of the adaptation of the scale to an adult population.



## Appendix 2: Recommendations for use and improvement of Plan's Child Marriage Acceptability score

### Documentation of decisions made during scale cleaning and construction

During cleaning and construction of the scale, we encountered three circumstances where the documentation of how to score certain responses or response combinations was unclear.

First, for items 1 (Ideal age of marriage for girls) and 3 (Lowest acceptable age of marriage for girls), there was no specified score for individuals who said that ideally girls would never marry or that there was no age that was too young for girls to get married, respectively. We chose to score individuals who said that ideally girls would never marry as one for item 1 and to score those who said that no age was too young for girls to marry as seven for item 3.

Second, for items 2, 4, and 6, when calculating the disparity between the ages given for girls compared to boys, it was unclear whether to use the absolute value of the difference, irrespective of whether the girl or boy's age was higher, or if not, what score to give individuals who gave a higher age for girls than for boys. We chose not to use the absolute value, and instead to score individuals who gave a higher age for girls than for boys with those who gave the same age for both boys and girls (a score of one).

Finally, the questions used to derive items 3 (Lowest acceptable age of marriage for girls) and 5 (Highest acceptable age of marriage for boys) are both based on responses to questions worded "In your opinion what is too old/young for girls/boys to get married?" Thus, the age given in response to such a question is not, in fact, the lowest or highest acceptable age. To derive the lowest and highest acceptable age, we therefore added one to the age given as "Too young for girls/boys to get married" to determine the lowest acceptable age and subtracted one from the age given as "Too old for girls/boys to get married" to determine the highest.

### Thoughts about conceptual validity

There are two ways in which we feel that this scale would benefit from revisions based upon the conceptual validity of the questions.

First, given that the scale is meant to measure individual attitudes towards child marriage, we feel that item 19, "Younger brides often require a lower dowry than older brides" is misleading, because it is likely to be true or false in a given community irrespective of a respondent's personal opinion. For example, one can imagine that a respondent living in an area where this statement is true would respond "Agree" or "Strongly Agree," simply because they are aware of the community's practices, not necessarily because

they agree with them. For this reason, we would recommend that this item be removed from the scale, especially because this information will not be lost, as it is also documented in the structural/environmental indicators captured at the community level. Removing this item from the individual questionnaire will also make the scale more comparable in contexts where dowry is not a common practice.

Second, we feel that the last three items, number 21 (“It is sometimes ok to physically beat or punish a girl if she dishonours her family”), 22 (“A wife should be subservient to her husband”), and 23 (“Men should be the heads of their household”), should be omitted from the scale as they are not direct measures of attitudes towards child marriage. While they are likely related, these questions conflate attitudes towards violence and gender roles within marital relationships with attitudes towards child marriage itself, making the conceptual nature of the score less precise.

### **Thoughts about scale length**

Lastly, during training of the data collectors and piloting of the tools, several members of the data collection team noted participant fatigue with the length of this scale. Specifically, they felt there were many questions that sounded similar, and that they felt they had already answered. If possible, it would be worth attempting to shorten the scale, or separate the scale into attitude-based and more fact-based questions, so it is clearer to participants the types of questions being asked.



### Appendix 3. Data Tables

The tables begin on the following page.

**Table A3.1. Baseline demographic characteristics of respondents by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	N	%	N	%	N	%	N	%	N	%
<b>Sex</b>										
Male	133	35.5	59	15.7	101	27.2	117	31.6	410	27.5
Female	242	64.5	316	84.3	271	72.8	253	68.4	1082	72.5
<b>Age (years)</b>										
Mean	39.0		40.0		43.0		40.9		40.7	
Median	35		37		40		38		37	
Range	[18, 84]		[18,92]		[18, 85]		[18,86]		[18, 92]	
<b>Respondent's highest level of education</b>										
None	90	24.0	78	20.8	97	26.1	85	23.0	350	23.5
Primary	244	65.1	248	66.1	226	60.8	235	63.5	953	63.9
Secondary	39	10.4	46	12.3	46	12.4	44	11.9	175	11.7
Higher	2	0.5	3	0.8	3	0.8	6	1.6	14	0.9
<b>Paid employment, past 12 months</b>										
No	165	44.0	113	30.1	135	36.3	159	43.0	572	38.3
Yes	210	56.0	262	69.9	237	63.7	211	57.0	920	61.7
<b>Religion</b>										
Catholic	64	17.1	48	12.8	46	12.4	51	13.8	209	14.0
Seventh Day Adventist/Baptist	26	7.0	68	18.1	157	42.2	36	9.7	287	19.2
Other Christian	275	73.5	242	64.5	168	45.2	280	75.7	965	64.7
Muslim	7	1.9	9	2.4	1	0.3	1	0.3	18	1.2
None	2	0.5	0	0.0	0	0.0	0	0.0	2	0.1
Other	0	0.0	8	2.1	0	0.0	2	0.5	10	0.7
<b>Ethnicity</b>										
Chewa	16	4.3	5	1.3	5	1.3	7	1.9	33	2.2
Lomwe	327	87.4	285	76.0	275	73.9	350	94.6	1237	83.0
Mang'anja	3	0.8	51	13.6	59	15.9	3	0.8	116	7.8
Ngoni	2	0.5	9	2.4	7	1.9	1	0.3	19	1.3
Nyanja	22	5.9	1	0.3	2	0.5	3	0.8	28	1.9
Sena	1	0.3	6	1.6	1	0.3	1	0.3	9	0.6
Yao	3	0.8	3	0.8	0	0.0	3	0.8	9	0.6
Khokhola	0	0.0	15	4.0	23	6.2	2	0.5	40	2.7
<b>Marital status</b>										
Never married	8	2.1	12	3.2	5	1.3	3	0.8	28	1.9
Currently married	271	72.3	233	62.1	242	65.1	270	73.0	1016	68.1
Widowed	45	12.0	52	13.9	67	18.0	39	10.5	203	13.6
Divorced/separated	51	13.6	78	20.8	58	15.6	58	15.7	245	16.4

**Table A3.2. Baseline demographic characteristics of respondents' reference girl by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	N	%	N	%	N	%	N	%	N	%
<b>Relationship to respondent</b>										
Daughter (adopted or biological)	174	46.4	253	67.5	227	61.0	225	60.8	879	58.9
Granddaughter	60	16.0	61	16.3	87	23.4	72	19.5	280	18.8
Sister	61	16.3	24	6.4	24	6.5	38	10.3	147	9.9
Niece (maternal)	36	9.6	21	5.6	17	4.6	22	5.9	96	6.4
Niece (paternal)	11	2.9	6	1.6	6	1.6	8	2.2	31	2.1
Cousin	6	1.6	3	0.8	5	1.3	0	0.0	14	0.9
Other	27	7.2	7	1.9	6	1.6	5	1.4	45	3.0
<b>Age (years)</b>										
Mean	13.5		13.5		13.3		13.6		13.5	
Median	14		14		13		14		14	
Range	[10,17]		[10,17]		[10,17]		[10,17]		[10,17]	
<b>Currently enrolled in school</b>										
No	27	7.2	28	7.5	24	6.5	26	7.0	105	7.0
Yes	348	92.8	347	92.5	348	93.5	344	93.0	1387	93.0
<b>Ever married</b>										
No	369	98.4	368	98.1	363	97.6	363	98.1	1463	98.1
Yes	6	1.6	7	1.9	9	2.4	7	1.9	29	1.9
<b>Has participated in a sexual initiation camp</b>										
No	212	56.5	226	60.3	251	67.5	181	48.9	870	58.3
Yes	141	37.6	142	37.9	118	31.7	178	48.1	579	38.8
<i>Refused</i>	22	5.9	7	1.9	3	0.8	11	3.0	43	2.9

**Table A3.3a. Baseline knowledge of child marriage laws by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
Knows that legal age of marriage is the same for both boys and girls in Malawi	1.9	[0.9,3.8]	3.2	[1.7,5.8]	9.4	[5.7,15.2]	3.2	[1.9,5.4]	4.4	[3.2,6.0]
Knows that girl has legal right to refuse marriage	24.0	[14.9,36.3]	41.1	[35.6,46.7]	43.5	[36.9,50.4]	47.6	[42.7,52.4]	39.0	[35.4,42.8]
Knows legal minimum age of marriage is 18 even with parental consent	21.3	[17.2,26.2]	34.1	[30.0,38.5]	26.1	[20.9,32.0]	19.7	[14.9,25.7]	25.3	[22.9,27.9]
Knows legal minimum age of marriage is 18 without parental consent	14.4	[10.8,19.0]	12.5	[9.8,15.9]	11.0	[8.2,14.7]	17.0	[12.4,22.9]	13.7	[11.9,15.8]

**Table A3.3b. Baseline knowledge of child marriage laws by sex, Malawi, 2017**

	Male n = 410		Female n = 1082		Total n = 1492	
	%	CI	%	CI	%	CI
Knows that legal age of marriage is the same for both boys and girls in Malawi	5.9	[3.8,8.8]	3.9	[2.7,5.5]	4.4	[3.2,6.0]
Knows that girl has legal right to refuse marriage	46.6	[40.0,53.3]	36.1	[32.9,39.5]	39.0	[35.4,42.8]
Knows legal minimum age of marriage is 18 even with parental consent	30.2	[25.6,35.3]	23.5	[20.9,26.2]	25.3	[22.9,27.9]
Knows legal minimum age of marriage is 18 without parental consent	20.7	[17.4,24.5]	11.1	[9.2,13.3]	13.7	[11.9,15.8]

**Table A3.4a. Baseline attitudes towards child marriage by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Agree that...</b>										
It is wrong to marry a girl before the age of 18	91.6	[87.7,94.4]	93.9	[90.9,95.9]	88.9	[83.9,92.6]	94.6	[91.9,96.4]	92.3	[90.5,93.7]
A girl should have a say in who she marries	95.2	[92.6,96.9]	95.7	[93.4,97.2]	92.4	[88.8,94.9]	97.8	[96.0,98.8]	95.3	[94.1,96.3]
A girl should have a say in when she marries	90.6	[86.5,93.6]	87.2	[84.3,89.5]	87.9	[83.9,91.0]	93.7	[89.7,96.2]	89.8	[88.1,91.3]
A girl who has no money for school fees should marry	9.7	[6.2,14.8]	4.5	[2.6,7.7]	11.9	[9.0,15.4]	7.9	[5.0,12.3]	8.5	[6.9,10.3]
A girl who gets pregnant should marry	26.6	[20.5,33.9]	23.7	[18.3,30.2]	29.6	[25.1,34.4]	22.4	[16.0,30.5]	25.6	[22.6,28.8]

**Table A3.4b. Baseline attitudes towards child marriage by sex, Malawi, 2017**

	Male n = 410		Female n = 1082		Total n = 1492	
	%	CI	%	CI	%	CI
<b>Agree that...</b>						
It is wrong to marry a girl before the age of 18	94.1	[91.2,96.1]	91.6	[89.3,93.3]	92.3	[90.5,93.7]
A girl should have a say in who she marries	95.4	[92.0,97.4]	95.3	[93.9,96.3]	95.3	[94.1,96.3]
A girl should have a say in when she marries	87.5	[83.6,90.6]	90.7	[88.9,92.2]	89.8	[88.1,91.3]
A girl who has no money for school fees should marry	8.1	[5.8,11.2]	8.6	[7.0,10.5]	8.5	[6.9,10.3]
A girl who gets pregnant should marry	20.7	[16.8,25.2]	27.5	[24.4,30.8]	25.6	[22.6,28.8]

**Table A3.5a. Baseline marriage decision-makers, desired timing, and anticipated timing for unmarried reference girls by site, Malawi, 2017**

	Chiwalo n = 369		Mchiramwera n = 368		Changata n = 363		Nazombe n = 363		Total n = 1463	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Who will make the final decision about when she will marry?</b>										
She herself	45.0	[40.3,49.7]	47.8	[44.3,51.4]	36.1	[31.7,40.7]	49.0	[40.6,57.6]	44.5	[41.7,47.3]
Her maternal uncle	8.4	[4.8,14.4]	21.5	[16.6,27.3]	9.9	[6.8,14.3]	6.6	[3.3,12.7]	11.6	[9.5,14.1]
Her paternal uncle	1.1	[0.4,2.6]	11.1	[8.8,14.0]	11.0	[7.4,16.1]	3.0	[1.2,7.3]	6.6	[5.3,8.1]
Her grandfather	1.1	[0.4,2.6]	1.4	[0.4,4.7]	2.8	[1.5,5.1]	2.2	[1.1,4.5]	1.8	[1.2,2.8]
Her father	10.3	[7.6,13.8]	4.6	[2.8,7.4]	12.7	[8.5,18.6]	12.7	[7.5,20.6]	10.0	[8.0,12.5]
Her brother	1.1	[0.4,2.6]	0.8	[0.3,2.4]	1.4	[0.5,3.6]	0.6	[0.1,2.2]	1.0	[0.6,1.6]
Her grandmother	6.2	[3.9,9.9]	3.3	[1.7,6.2]	5.0	[2.1,11.4]	5.0	[3.3,7.4]	4.9	[3.6,6.6]
Her mother	16.5	[13.2,20.4]	7.6	[5.1,11.1]	17.9	[12.7,24.7]	10.5	[7.1,15.1]	13.1	[11.1,15.4]
Her sister	1.9	[0.8,4.3]	0.0		0.6	[0.1,2.1]	0.6	[0.1,2.1]	0.8	[0.4,1.4]
Her maternal aunt	0.5	[0.1,2.1]	1.1	[0.4,2.6]	0.8	[0.3,2.4]	1.4	[0.4,4.2]	1.0	[0.5,1.7]
Her paternal aunt	0.3	[0.0,2.0]	0.0		0.8	[0.3,2.4]	0.0		0.3	[0.1,0.7]
Other	7.6	[4.4,12.8]	0.8	[0.3,2.4]	1.1	[0.5,2.7]	8.5	[4.4,15.9]	4.5	[3.1,6.6]
<b>Who will make the final decision about who she will marry?</b>										
She herself	77.8	[74.0,81.1]	76.4	[72.0,80.2]	74.4	[70.1,78.3]	75.8	[71.0,79.9]	76.1	[74.0,78.0]
Her maternal uncle	5.7	[2.8,11.3]	10.1	[7.2,13.9]	4.4	[2.8,7.0]	2.8	[1.2,6.4]	5.7	[4.4,7.5]
Her paternal uncle	0.3	[0.0,2.0]	1.4	[0.5,3.5]	1.1	[0.5,2.7]	0.0		0.7	[0.4,1.3]
Her grandfather	0.5	[0.1,2.1]	1.1	[0.3,3.4]	1.7	[0.9,3.2]	0.8	[0.3,2.4]	1.0	[0.6,1.7]
Her father	4.6	[2.5,8.4]	4.9	[3.1,7.5]	6.1	[4.3,8.5]	4.7	[2.5,8.6]	5.1	[3.9,6.5]
Her brother	0.3	[0.0,2.0]	0.0		0.3	[0.0,2.0]	0.6	[0.1,2.1]	0.3	[0.1,0.7]
Her grandmother	1.1	[0.3,3.4]	0.5	[0.1,2.1]	2.8	[1.7,4.4]	2.2	[1.0,4.9]	1.6	[1.1,2.5]
Her mother	2.7	[1.4,5.1]	4.6	[2.7,7.9]	8.0	[5.5,11.4]	2.5	[1.1,5.4]	4.4	[3.4,5.7]
Her sister	0.0		0.0		0.3	[0.0,2.0]	0.0		0.1	[0.0,0.5]
Her maternal aunt	0.3	[0.0,2.0]	0.3	[0.0,2.0]	0.6	[0.1,2.2]	1.1	[0.3,3.4]	0.5	[0.3,1.2]
Her paternal aunt	0.0		0.0		0.0		0.0		0.0	
Other	6.8	[3.5,12.6]	0.8	[0.3,2.4]	0.6	[0.1,2.1]	9.6	[5.1,17.6]	4.4	[2.9,6.7]
<b>Median age respondents think she should marry (years)</b>										
	25		24		25		24		24	
<b>Median age respondents think she is likely to marry (years)</b>										
	23		23		23		23		23	
<b>Percentage of respondents who think she should marry before age 18</b>										
	0.5	[0.1,2.1]	0.8	[0.3,2.4]	0.6	[0.1,4.0]	0.8	[0.3,2.4]	0.7	[0.4,1.3]
<b>Percentage of respondents who think she is likely to marry before age 18</b>										
	3.8	[2.3,6.4]	2.2	[0.8,5.6]	5.6	[3.7,8.2]	1.7	[0.9,3.3]	3.3	[2.5,4.4]



**Table A3.5b. Baseline marriage decision-makers, desired timing, and anticipated timing for unmarried reference girls by sex, Malawi, 2017**

	Male n = 402		Female n = 1061		Total n = 1463	
	%	CI	%	CI	%	CI
<b>Who will make the final decision about when she will marry?</b>						
She herself	44.0	[39.0,49.2]	44.7	[41.7,47.7]	44.5	[41.7,47.3]
Her maternal uncle	9.5	[6.6,13.3]	12.4	[10.2,15.1]	11.6	[9.5,14.1]
Her paternal uncle	6.5	[4.3,9.6]	6.6	[5.1,8.5]	6.6	[5.3,8.1]
Her grandfather	5.0	[3.3,7.3]	0.7	[0.3,1.7]	1.8	[1.2,2.8]
Her father	20.4	[15.7,26.1]	6.1	[4.4,8.5]	10.0	[8.0,12.5]
Her brother	1.2	[0.5,2.9]	0.8	[0.4,1.7]	1.0	[0.6,1.6]
Her grandmother	2.2	[1.0,4.7]	5.8	[4.3,7.9]	4.9	[3.6,6.6]
Her mother	6.2	[4.3,8.8]	15.7	[13.2,18.7]	13.1	[11.1,15.4]
Her sister	0.0		1.0	[0.6,1.9]	0.8	[0.4,1.4]
Her maternal aunt	0.7	[0.2,3.3]	1.0	[0.6,1.9]	1.0	[0.5,1.7]
Her paternal aunt	0.0		0.4	[0.1,1.0]	0.3	[0.1,0.7]
Other	4.2	[2.4,7.4]	4.6	[3.1,6.9]	4.5	[3.1,6.6]
<b>Who will make the final decision about who she will marry?</b>						
She herself	73.9	[70.5,77.0]	76.9	[74.4,79.3]	76.1	[74.0,78.0]
Her maternal uncle	5.2	[3.5,7.7]	5.9	[4.5,7.9]	5.7	[4.4,7.5]
Her paternal uncle	0.2	[0.0,1.8]	0.8	[0.4,1.6]	0.7	[0.4,1.3]
Her grandfather	2.2	[1.2,4.1]	0.6	[0.3,1.2]	1.0	[0.6,1.7]
Her father	11.2	[8.4,14.8]	2.7	[1.9,4.0]	5.1	[3.9,6.5]
Her brother	0.7	[0.2,2.4]	0.1	[0.0,0.7]	0.3	[0.1,0.7]
Her grandmother	0.7	[0.2,2.4]	2.0	[1.3,2.9]	1.6	[1.1,2.5]
Her mother	1.0	[0.4,2.5]	5.7	[4.4,7.5]	4.4	[3.4,5.7]
Her sister	0.0		0.1	[0.0,0.7]	0.1	[0.0,0.5]
Her maternal aunt	0.5	[0.1,2.0]	0.6	[0.2,1.4]	0.5	[0.3,1.2]
Her paternal aunt	0.0		0.0		0.0	
Other	4.2	[2.4,7.4]	4.5	[2.9,7.1]	4.4	[2.9,6.7]
<b>Median age respondents think she should marry (years)</b>						
	25.0		24.0		24.0	
<b>Median age respondents think she is likely to marry (years)</b>						
	24.0		23.0		23.0	
<b>Percentage of respondents who think she should marry before age 18</b>						
	0.0		0.9	[0.5,1.8]	0.7	[0.4,1.3]
<b>Percentage of respondents who think she is likely to marry before age 18</b>						
	2.5	[1.4,4.6]	3.6	[2.6,5.1]	3.3	[2.5,4.4]

**Table A3.6. Baseline attitudes towards girls' education by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>All girls have a right to be educated</b>										
Disagree	0.0		0.0		0.8	[0.2,3.4]	0.5	[0.1,2.1]	0.3	[0.1,0.9]
Agree	99.7	[98.0,100.0]	100.0		99.2	[96.6,99.8]	99.2	[97.7,99.7]	99.5	[98.9,99.8]
Unsure	0.3	[0.0,2.0]	0.0		0.0		0.3	[0.0,2.0]	0.1	[0.0,0.6]
<b>There is value to a girl being educated</b>										
Disagree	0.5	[0.1,2.1]	0.5	[0.1,2.1]	2.2	[0.9,5.2]	1.9	[1.1,3.3]	1.3	[0.8,2.0]
Agree	99.2	[97.7,99.7]	99.5	[97.9,99.9]	97.8	[94.8,99.1]	98.1	[96.7,98.9]	98.7	[97.9,99.2]
Unsure	0.3	[0.0,2.0]	0.0		0.0		0.0		0.1	[0.0,0.5]
<b>The value of educating a girl outweighs the costs</b>										
Disagree	10.1	[6.0,16.6]	6.7	[4.8,9.2]	6.7	[4.2,10.6]	6.5	[4.0,10.5]	7.5	[5.9,9.5]
Agree	87.2	[81.5,91.3]	92.8	[90.4,94.6]	93.0	[89.4,95.5]	91.9	[88.8,94.2]	91.2	[89.4,92.7]
Unsure	2.7	[1.5,4.6]	0.5	[0.1,2.1]	0.3	[0.0,2.0]	1.6	[0.7,3.6]	1.3	[0.8,2.0]
<b>Benefits of educating a girl (multiple responses allowed)</b>										
Better job prospects	76.1	[71.3,80.3]	72.5	[68.8,75.9]	75.0	[69.1,80.1]	76.5	[71.3,81.0]	75.0	[72.6,77.3]
Improves family standing	58.1	[51.7,64.1]	74.3	[69.4,78.7]	59.7	[51.4,67.5]	57.3	[51.7,62.7]	62.4	[59.2,65.4]
Good for the community	30.9	[26.5,35.7]	31.3	[27.6,35.3]	23.7	[19.4,28.5]	18.9	[14.5,24.2]	26.2	[24.0,28.5]
It is her right	19.1	[16.2,22.3]	20.6	[16.8,24.9]	21.5	[16.7,27.3]	21.4	[17.5,25.8]	20.6	[18.6,22.8]
Education is inherently valuable	17.2	[13.3,21.9]	16.6	[13.5,20.2]	20.4	[15.7,26.2]	27.0	[20.1,35.2]	20.3	[17.8,23.1]
Better marriage prospects	11.8	[9.4,14.8]	10.7	[8.0,14.2]	5.9	[4.4,7.9]	8.9	[5.6,14.0]	9.3	[7.9,11.0]
<b>Disadvantages of educating a girl (multiple responses allowed)</b>										
Financial burden	19.4	[11.1,31.7]	16.1	[12.5,20.5]	11.7	[7.7,17.4]	20.2	[11.6,32.6]	16.8	[13.2,21.2]
Inability to care for family	5.6	[3.0,10.5]	2.4	[1.3,4.5]	7.4	[4.5,11.8]	7.4	[4.4,12.2]	5.7	[4.3,7.5]
Reduces marriage prospects	1.3	[0.4,4.1]	0.0		3.0	[1.6,5.6]	0.8	[0.3,2.4]	1.3	[0.8,2.1]
Inability to perform chores	1.1	[0.3,3.4]	0.3	[0.0,2.0]	0.8	[0.2,3.4]	0.8	[0.3,2.4]	0.7	[0.4,1.5]
<b>It is more important that sons have education than daughters</b>										
Disagree	89.1	[84.4,92.5]	91.7	[88.8,93.9]	85.2	[79.8,89.4]	90.5	[87.0,93.2]	89.1	[87.1,90.9]
Agree	9.6	[6.8,13.4]	8.3	[6.1,11.2]	14.2	[10.1,19.7]	9.5	[6.8,13.0]	10.4	[8.8,12.3]
Unsure	1.3	[0.5,3.5]	0.0		0.5	[0.1,3.9]	0.0		0.5	[0.2,1.1]

**Table A3.7. Baseline education decision-makers and desired and anticipated educational attainment for in-school reference girls by site, Malawi, 2017**

	Chiwalo n = 348		Mchiramwera n = 347		Changata n = 348		Nazombe n = 344		Total n = 1387	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Reference girls' current level of enrollment</b>										
Primary	92.2	[87.0,95.5]	89.9	[85.6,93.1]	89.1	[83.9,92.7]	91.3	[87.3,94.1]	90.6	[88.5,92.4]
Secondary	7.8	[4.5,13.0]	9.8	[6.8,14.0]	10.9	[7.3,16.1]	8.4	[5.7,12.4]	9.2	[7.5,11.3]
Higher	0.0		0.3	[0.0,2.1]	0.0		0.3	[0.0,2.1]	0.1	[0.0,0.6]
<b>Who are all of the people involved in making decisions related to her school enrollment? (multiple responses allowed)</b>										
She herself	28.2	[22.6,34.7]	25.1	[20.7,30.2]	26.6	[20.4,33.9]	19.5	[12.2,29.8]	24.9	[21.7,28.4]
Her maternal uncle	13.8	[10.0,18.9]	13.6	[9.7,18.7]	6.7	[4.5,10.0]	8.7	[5.9,12.8]	10.7	[9.0,12.8]
Her paternal uncle	5.5	[3.8,7.8]	5.2	[3.4,7.9]	7.3	[4.6,11.4]	5.5	[2.9,10.3]	5.9	[4.6,7.5]
Her grandfather	8.6	[6.0,12.4]	8.7	[6.5,11.5]	10.8	[8.1,14.4]	10.8	[8.4,13.8]	9.7	[8.4,11.3]
Her father	53.3	[46.9,59.6]	49.4	[45.9,52.9]	50.6	[47.3,53.8]	55.4	[50.3,60.4]	52.2	[49.8,54.5]
Her brother	10.7	[7.6,14.8]	4.9	[2.9,8.3]	3.8	[2.1,6.8]	6.4	[4.4,9.3]	6.5	[5.2,8.0]
Her grandmother	23.1	[18.5,28.4]	25.1	[20.8,30.0]	26.9	[21.9,32.5]	24.8	[20.8,29.2]	25.0	[22.7,27.4]
Her mother	69.5	[63.1,75.1]	81.2	[75.4,85.9]	73.1	[66.5,78.8]	76.4	[72.0,80.3]	75.0	[72.2,77.7]
Her sister	12.7	[9.1,17.5]	6.1	[4.2,8.8]	7.0	[4.8,10.1]	8.2	[5.2,12.7]	8.5	[7.0,10.3]
Her maternal aunt	8.9	[6.4,12.4]	8.7	[6.4,11.6]	7.6	[4.8,11.9]	7.0	[4.5,10.7]	8.1	[6.7,9.7]
Her paternal aunt	2.9	[1.8,4.7]	3.5	[1.8,6.6]	3.5	[2.0,6.1]	2.0	[1.0,4.1]	3.0	[2.2,4.0]
Other	8.6	[6.0,12.4]	2.6	[1.2,5.6]	2.3	[1.4,3.8]	1.5	[0.6,3.8]	3.8	[2.9,5.0]
<b>Who makes the final decisions related to her school enrollment?</b>										
She herself	5.2	[3.2,8.3]	10.1	[7.8,13.0]	4.6	[2.9,7.3]	3.2	[1.3,7.5]	5.8	[4.6,7.2]
Her maternal uncle	4.6	[2.5,8.4]	2.0	[0.9,4.6]	1.7	[0.7,4.4]	2.9	[2.0,4.2]	2.8	[2.0,4.0]
Her paternal uncle	0.6	[0.1,2.2]	1.2	[0.5,2.8]	1.4	[0.5,3.7]	0.9	[0.3,2.6]	1.0	[0.6,1.7]
Her grandfather	4.0	[2.3,6.8]	2.6	[1.3,5.2]	4.6	[2.7,7.8]	6.1	[4.6,8.0]	4.3	[3.4,5.5]
Her father	35.6	[30.4,41.2]	30.0	[25.4,34.9]	31.6	[28.0,35.4]	36.6	[31.9,41.6]	33.5	[31.1,35.9]
Her brother	2.9	[1.8,4.6]	0.9	[0.3,2.5]	0.3	[0.0,2.1]	2.9	[1.6,5.1]	1.7	[1.2,2.4]
Her grandmother	8.0	[5.4,11.8]	7.8	[5.5,10.9]	10.3	[8.6,12.4]	10.8	[8.4,13.7]	9.2	[8.0,10.6]
Her mother	30.5	[23.5,38.5]	40.3	[35.1,45.9]	37.1	[32.1,42.3]	31.7	[27.0,36.7]	34.9	[32.0,37.9]
Her sister	4.6	[2.6,8.0]	2.0	[1.1,3.6]	4.0	[2.5,6.5]	2.6	[1.4,4.9]	3.3	[2.5,4.4]
Her maternal aunt	1.7	[0.9,3.3]	1.7	[0.7,4.4]	2.0	[0.9,4.5]	1.2	[0.4,3.7]	1.7	[1.1,2.6]
Her paternal aunt	0.0		0.3	[0.0,2.1]	1.1	[0.4,3.6]	0.3	[0.0,2.1]	0.4	[0.2,1.1]
Other	2.3	[1.2,4.3]	1.2	[0.5,2.8]	1.1	[0.5,2.7]	0.9	[0.3,2.5]	1.4	[0.9,2.1]
<b>Agree that she should remain in school</b>										
	99.7	[97.9,100.0]	100.0		99.4	[97.8,99.9]	100.0		99.8	[99.3,99.9]
<b>Level of schooling respondents think she <i>should</i> complete</b>										
Primary	4.3	[2.4,7.7]	2.0	[0.8,5.0]	6.0	[3.6,9.9]	2.6	[1.5,4.5]	3.7	[2.8,5.1]
Secondary	61.8	[55.9,67.3]	53.6	[45.6,61.4]	63.8	[58.5,68.8]	65.1	[54.6,74.4]	61.1	[57.3,64.7]
Higher	33.9	[29.0,39.2]	44.4	[36.3,52.8]	30.2	[24.4,36.7]	32.3	[23.4,42.7]	35.2	[31.5,39.1]

**Level of schooling respondents  
think she *is likely to* complete**

Primary	12.1	[8.2,17.5]	8.1	[4.9,13.0]	13.5	[10.4,17.4]	9.9	[6.8,14.1]	10.9	[9.1,13.0]
Secondary	64.7	[57.0,71.6]	56.5	[49.1,63.6]	61.2	[57.0,65.2]	64.8	[55.9,72.8]	61.8	[58.2,65.2]
Higher	23.3	[18.1,29.5]	35.4	[27.9,43.8]	25.3	[21.1,29.9]	25.3	[17.7,34.8]	27.3	[24.0,30.9]

**Table A3.8. Baseline attitudes towards adolescent sexuality and girls' access to sexual and reproductive health services by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Agree that...</b>										
It is acceptable for girls to have sex before marriage.	4.0	[2.3,6.9]	1.1	[0.4,2.6]	7.0	[4.8,10.2]	3.0	[1.8,4.9]	3.8	[2.9,4.9]
It is acceptable for boys to have sex before marriage.	4.8	[2.9,7.8]	1.6	[0.8,3.1]	7.3	[5.0,10.5]	2.7	[1.7,4.3]	4.1	[3.2,5.2]
Unmarried girls who get pregnant are naughty.	95.4	[92.9,97.1]	90.7	[88.6,92.4]	91.7	[88.9,93.8]	93.2	[90.3,95.3]	92.7	[91.5,93.8]
<b>Agree that...</b>										
All girls have a right to access contraceptives/family planning services.	43.4	[36.3,50.8]	38.9	[33.2,44.9]	47.2	[41.8,52.6]	48.8	[41.7,55.8]	44.5	[41.3,47.8]
Unmarried adolescent girls should have access to contraception/family planning services.	39.3	[32.8,46.2]	32.5	[27.9,37.5]	44.6	[38.3,51.2]	35.1	[29.2,41.6]	37.9	[34.9,41.0]
Married adolescent girls should have access to contraception/family planning services.	96.0	[92.7,97.8]	94.7	[91.8,96.6]	91.4	[84.3,95.4]	96.4	[92.3,98.4]	94.6	[92.6,96.1]
Giving unmarried girls access to contraceptives makes them promiscuous.	84.6	[80.1,88.3]	76.7	[72.4,80.6]	74.7	[70.0,78.8]	82.8	[78.9,86.0]	79.7	[77.6,81.6]
I would like contraceptives/family planning services to be available to girls in my community.	39.2	[33.7,44.9]	37.5	[33.3,41.9]	41.2	[35.1,47.6]	40.5	[34.6,46.7]	39.6	[36.8,42.4]
<b>Aware of family planning services available to unmarried adolescent girls in their community</b>										
	61.6	[56.7,66.3]	66.4	[60.5,71.9]	70.2	[62.8,76.6]	62.2	[56.4,67.6]	65.1	[62.1,67.9]

**Table A3.9. Baseline attitudes towards initiation camps by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Heard of initiation camps</b>	93.3	[90.5,95.4]	98.1	[96.2,99.1]	99.2	[97.7,99.7]	97.6	[95.1,98.8]	97.1	[96.1,97.8]
<b>Of those who had heard of initiation camps...</b>	<b>n = 350</b>		<b>n = 368</b>		<b>n = 369</b>		<b>n = 361</b>		<b>n = 1448</b>	
<b>Kind of initiation camps most familiar with</b>										
Traditional	74.8	[67.8,80.7]	77.4	[71.2,82.6]	66.1	[58.5,73.0]	74.0	[69.7,77.8]	73.0	[69.9,76.0]
Christian	25.2	[19.3,32.2]	22.6	[17.4,28.8]	33.9	[27.0,41.5]	26.0	[22.2,30.3]	27.0	[24.0,30.1]
<b>Respondent's perception of how many girls in their community participate in initiation camps</b>										
None	0.6	[0.1,2.3]	0.0		0.0		0.3	[0.0,2.1]	0.2	[0.1,0.6]
A few	22.3	[16.2,29.8]	3.0	[0.8,10.5]	0.5	[0.1,3.9]	15.1	[10.6,20.9]	10.0	[7.9,12.5]
Some	15.0	[11.0,20.1]	4.3	[2.5,7.4]	5.1	[3.6,7.3]	12.0	[9.0,15.8]	9.0	[7.6,10.7]
Most	55.5	[48.1,62.6]	74.2	[68.7,79.0]	76.7	[71.9,80.9]	69.8	[63.8,75.2]	69.3	[66.3,72.0]
All	6.6	[4.3,10.1]	18.5	[14.7,23.0]	17.6	[13.3,22.9]	2.8	[1.4,5.5]	11.5	[9.8,13.5]
<b>Agree that...</b>										
The initiation camps are necessary to prepare girls for marriage.	35.4	[29.4,41.9]	33.7	[28.2,39.7]	42.3	[38.4,46.3]	25.1	[20.6,30.3]	34.2	[31.6,36.8]
If a girl does not attend an initiation camp, she is unfit to marry.	21.1	[17.3,25.5]	46.6	[38.9,54.4]	54.2	[48.4,59.9]	20.9	[17.0,25.5]	36.0	[33.2,38.9]
Once a girl has attended an initiation camp, she must have sex.	13.9	[9.7,19.5]	10.4	[6.3,16.7]	12.7	[9.5,16.8]	8.8	[5.8,13.1]	11.4	[9.4,13.8]
<b>Think that the initiation camps should be...</b>										
Stopped	43.6	[34.6,53.0]	39.4	[31.9,47.5]	15.4	[12.0,19.7]	51.4	[42.5,60.2]	37.2	[33.4,41.2]
Continued	41.2	[33.2,49.7]	50.0	[42.2,57.8]	72.4	[66.0,77.9]	35.1	[27.7,43.4]	50.0	[46.2,53.7]
Changed in some way	15.2	[11.6,19.7]	10.6	[7.3,15.1]	12.2	[8.3,17.5]	13.5	[9.3,19.2]	12.8	[10.8,15.2]
<b>Of those who said the initiation camps should be changed...</b>	<b>n = 52</b>		<b>n = 39</b>		<b>n = 45</b>		<b>n = 48</b>		<b>n = 184</b>	
<b>camps should be changed (multiple responses allowed)</b>										
No sexual acts performed during or after	59.6	[47.7,70.5]	28.2	[17.0,43.0]	57.8	[41.7,72.4]	66.7	[51.4,79.1]	54.3	[46.7,61.8]
No focus on men's sexual pleasure	36.5	[26.3,48.2]	46.2	[34.2,58.6]	33.3	[18.7,52.1]	64.6	[50.2,76.8]	45.1	[37.7,52.7]
Participants should be	48.1	[33.3,63.2]	51.3	[34.3,68.0]	22.2	[13.9,33.6]	27.1	[15.2,43.5]	37.0	[29.6,44.9]
Less focus on men's sexual pleasure	13.5	[6.0,27.5]	15.4	[6.6,31.9]	8.9	[3.1,23.0]	6.3	[2.4,15.0]	10.9	[7.0,16.5]
More focus on men's sexual pleasure	1.9	[0.3,12.6]	5.1	[1.4,17.6]	20.0	[10.2,35.4]	2.1	[0.3,12.0]	7.1	[4.0,12.3]
No focus on coming of age	5.8	[2.0,15.6]	0.0		6.7	[2.3,18.0]	4.2	[1.3,12.6]	4.3	[2.3,8.0]
More focus on coming of	1.9	[0.3,13.1]	0.0		2.2	[0.3,14.2]	2.1	[0.3,15.3]	1.6	[0.5,5.1]
Less focus on coming of	3.8	[1.0,14.1]	0.0		0.0		0.0		1.1	[0.3,4.2]
Less focus on	3.8	[1.0,13.8]	0.0		0.0		0.0		1.1	[0.3,4.2]
No focus on menstruation	0.0		0.0		2.2	[0.3,16.1]	0.0		0.5	[0.1,4.0]
More focus on	0.0		0.0		0.0		2.1	[0.3,13.6]	0.5	[0.1,3.9]
Other	7.7	[3.6,15.9]	15.4	[9.5,23.9]	13.3	[4.6,33.0]	14.6	[7.3,27.1]	12.5	[8.6,17.9]

**Table A3.10a. Baseline decision-makers for and agreement with initiation camp attendance for reference girls who have *already* attended by site, Malawi**

	Chiwalo n = 141		Mchiramwera n = 142		Changata n = 118		Nazombe n = 178		Total n = 579	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>Age reference girl attended camp (years)</b>										
Mean	10.6		12.9		12.8		10.5		11.6	
Median	10		13		13		10		12	
Range	[3, 15]		[5,16]		[7,17]		[6,16]		[3,17]	
<b>Who made the final decision that she would attend the initiation camp?</b>										
She herself	9.9	[5.1,18.3]	9.9	[5.7,16.6]	1.7	[0.4,6.4]	10.7	[6.5,17.0]	8.5	[6.2,11.4]
Her maternal uncle	3.5	[1.6,7.9]	0.0		0.8	[0.1,5.9]	1.1	[0.3,4.6]	1.4	[0.7,2.6]
Her paternal uncle	0.0		0.7	[0.1,5.1]	0.0		0.6	[0.1,4.1]	0.3	[0.1,1.4]
Her grandfather	0.7	[0.1,5.0]	0.7	[0.1,5.1]	4.2	[1.6,10.5]	1.1	[0.3,4.2]	1.6	[0.8,3.1]
Her father	12.1	[7.5,18.8]	10.6	[6.6,16.5]	15.3	[8.2,26.7]	18.0	[13.7,23.2]	14.2	[11.4,17.4]
Her brother	0.0		0.0		0.0		0.0		0.0	
Her grandmother	16.3	[10.8,24.0]	21.8	[16.0,29.0]	25.4	[18.3,34.2]	24.2	[19.3,29.8]	21.9	[18.9,25.3]
Her mother	51.1	[42.5,59.6]	54.2	[47.7,60.6]	48.3	[37.9,58.8]	41.6	[33.5,50.2]	48.4	[44.2,52.5]
Her sister	1.4	[0.4,5.0]	0.7	[0.1,5.1]	0.8	[0.1,6.1]	0.0		0.7	[0.3,1.8]
Her maternal aunt	0.7	[0.1,5.3]	1.4	[0.4,5.0]	1.7	[0.4,6.3]	0.6	[0.1,4.1]	1.0	[0.5,2.3]
Her paternal aunt	0.7	[0.1,5.2]	0.0		1.7	[0.4,6.5]	1.7	[0.5,5.4]	1.0	[0.5,2.3]
Other	3.5	[1.9,6.5]	0.0		0.0		0.6	[0.1,4.2]	1.0	[0.5,2.1]
Total	100.0		100.0		100.0		100.0		100.0	
<b>Agreed that she should attend the initiation camp</b>										
	84.4	[73.9,91.2]	93.0	[86.4,96.5]	98.3	[93.8,99.6]	82.6	[74.4,88.5]	88.8	[85.2,91.6]
<b>Of those who agreed that she should attend the camp...</b>										
	n = 119		n = 132		n = 116		n = 147		n = 514	
<b>Reason why respondent wanted her to attend (multiple responses allowed)</b>										
It is part of our culture	67.2	[56.7,76.3]	83.3	[73.8,89.9]	73.3	[62.3,82.0]	72.1	[63.6,79.2]	74.1	[69.3,78.4]
She would have been shunned for not attending	2.5	[0.9,6.5]	12.1	[6.6,21.2]	4.3	[1.7,10.4]	8.8	[5.2,14.6]	7.2	[5.1,10.0]
She would have been seen as unmarriageable	0.8	[0.1,5.8]	0.8	[0.1,5.5]	2.6	[0.6,10.1]	0.7	[0.1,4.6]	1.2	[0.5,2.9]
The camps teach important facts/skills	59.7	[49.5,69.1]	43.9	[33.6,54.9]	54.3	[46.8,61.6]	49.7	[42.0,57.4]	51.6	[47.0,56.0]
She must do so to become a woman	7.6	[3.8,14.4]	5.3	[2.8,9.9]	10.3	[6.2,16.8]	0.7	[0.1,5.0]	5.6	[3.9,8.0]
Other	9.2	[4.5,18.0]	5.3	[3.2,8.8]	0.9	[0.1,6.0]	5.4	[2.6,10.9]	5.3	[3.6,7.7]

Of those who disagreed that she should attend the camp...

	n = 22		n = 10		n = 2		n = 31		n = 65	
<b>Reason respondent did not want her to attend (multiple responses allowed)</b>										
She was too young	45.5	[25.9,66.5]	50.0	[19.2,80.8]	50.0	[5.1,94.9]	19.4	[8.3,39.0]	33.8	[22.4,47.6]
It is bad/wrong	54.5	[32.5,75.0]	60.0	[27.4,85.7]	50.0	[5.1,94.9]	64.5	[46.4,79.3]	60.0	[47.0,71.7]
It is dangerous to her health	13.6	[3.2,43.3]	10.0	[1.5,45.3]	0.0		22.6	[9.5,44.6]	16.9	[8.6,30.7]
She didn't want to go	4.5	[0.7,24.6]	0.0		0.0		0.0		1.5	[0.2,10.1]
It is illegal	0.0		10.0	[1.5,45.3]	0.0		0.0		1.5	[0.2,10.4]
It was too costly	4.5	[0.7,24.6]	0.0		0.0		0.0		1.5	[0.2,10.1]
Not part of my religion/culture	13.6	[5.0,32.1]	10.0	[1.1,51.5]	0.0		22.6	[8.5,47.7]	16.9	[8.6,30.5]
Other	13.6	[4.1,37.0]	10.0	[1.5,45.3]	0.0		9.7	[2.5,31.1]	10.8	[4.8,22.2]

Table A3.10b. Baseline decision-makers for and agreement with initiation camp attendance for reference girls who have *not yet* attended by site, Malawi,

	Chiwalo n = 212		Mchiramwera n = 226		Changata n = 251		Nazombe n = 181		Total n = 870	
	%	CI	%	CI	%	CI	%	CI	%	CI
Thinks she <i>should</i> attend an initiation camp in the future*	27.4	[19.4,37.2]	49.1	[42.6,55.6]	80.5	[75.9,84.4]	22.7	[13.8,34.8]	47.4	[43.1,51.9]

Of those who think she should attend an initiation camp in the future...

	n = 57		n = 109		n = 202		n = 41		n = 409	
<b>Reason respondent wants her to attend</b>										
It is part of our culture	57.9	[43.8,70.8]	86.2	[78.6,91.4]	77.7	[70.0,83.9]	73.2	[55.2,85.8]	76.8	[71.9,81.1]
She will be shunned for not attending	3.5	[0.9,13.1]	17.4	[11.3,25.9]	3.0	[1.2,7.2]	4.9	[1.3,16.3]	7.1	[5.0,9.9]
She will be seen as unmarriageable	3.5	[0.5,21.2]	0.9	[0.1,6.5]	2.5	[1.0,6.3]	2.4	[0.3,18.4]	2.2	[1.0,4.6]
The camps teach important facts/skills	80.7	[70.1,88.2]	44.0	[37.3,51.0]	56.9	[49.4,64.1]	53.7	[33.3,72.9]	56.5	[51.5,61.3]
She must do so to become a woman	14.0	[8.0,23.6]	2.8	[0.9,7.9]	8.4	[5.5,12.7]	4.9	[1.2,18.1]	7.3	[5.3,10.1]
Other	0.0		2.8	[0.9,7.9]	3.5	[1.6,7.4]	2.4	[0.3,16.9]	2.7	[1.5,4.9]
<b>Age respondent thinks she should attend (years)</b>										
Mean	14.8		15.0		15.5		13.8		15.1	
Median	15		15		15		14		15	
Range	[10,20]		[11,20]		[10,20]		[10,18]		[10,20]	



**Of those who think she should not attend an initiation camp in the future...**

ture...	n = 151		n = 113		n = 49		n = 140		n = 453	
Reason respondent does not want her to attend										
She is too young	6.0	[2.8,12.3]	35.4	[29.4,41.9]	39.6	[26.6,54.2]	2.9	[1.1,7.2]	16.0	[13.0,19.5]
It is bad/wrong	57.0	[42.1,70.7]	53.1	[39.5,66.3]	35.4	[22.0,51.6]	61.9	[51.3,71.4]	55.2	[48.2,62.0]
It is dangerous to her health	16.6	[11.5,23.3]	14.2	[8.7,22.1]	16.7	[8.1,31.2]	15.8	[11.7,21.1]	15.7	[12.8,19.2]
She didn't want to go	4.6	[2.5,8.3]	6.2	[3.0,12.4]	4.2	[1.1,14.4]	11.5	[7.8,16.8]	7.1	[5.3,9.5]
It is illegal	3.3	[1.2,8.7]	5.3	[2.6,10.5]	0.0		0.0		2.4	[1.3,4.5]
It is too costly	9.3	[4.8,17.3]	5.3	[2.6,10.7]	10.4	[3.1,29.4]	8.6	[5.8,12.7]	8.2	[5.8,11.5]
Camp is too far	0.0		0.0		0.0		0.7	[0.1,5.3]	0.2	[0.0,1.6]
Not part of my religion/culture	35.8	[25.6,47.4]	24.8	[17.9,33.2]	22.9	[12.4,38.5]	38.1	[25.1,53.1]	32.4	[26.3,39.1]
Other	8.6	[4.9,14.7]	6.2	[2.7,13.5]	6.3	[2.3,16.1]	5.0	[2.9,8.7]	6.7	[4.7,9.4]

**Thinks she *will likely* attend an initiation camp in the future**

28.3	[20.6,37.5]	58.4	[51.0,65.4]	85.7	[80.2,89.8]	22.1	[13.9,33.3]	51.4	[46.9,55.9]
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**Of those who think she will likely attend an initiation camp in the future...**

....	n = 60	n = 132	n = 215	n = 40	n = 447
Age respondent thinks she will likely attend (years)					
Mean	14.8	15.0	15.5	13.9	15.2
Median	15	15	15	14	15
Range	[10,20]	[11,20]	[10,20]	[10,18]	[10,20]

**Of those who think she will not attend an initiation camp in the future...**

	n = 152		n = 94		n = 36		n = 141		n = 423	
Reason why not										
Respondent's refusal	44.1	[34.3,54.4]	52.1	[40.2,63.8]	58.3	[33.6,79.5]	53.2	[42.1,64.0]	50.1	[43.9,56.4]
Family pressure to stop this practice	20.4	[14.3,28.2]	31.9	[24.7,40.1]	13.9	[6.2,28.3]	24.8	[15.8,36.7]	23.9	[19.5,28.9]
Her own refusal	11.2	[7.9,15.6]	9.6	[5.3,16.6]	13.9	[5.5,31.1]	14.2	[9.7,20.3]	12.1	[9.6,15.1]
Community pressure to stop this practice	7.2	[2.8,17.2]	0.0		0.0		0.7	[0.1,5.2]	2.8	[1.2,6.8]
Other	17.1	[10.1,27.4]	6.4	[2.9,13.4]	13.9	[3.7,40.3]	7.1	[3.4,14.3]	11.1	[7.6,15.9]

\* n = 862 for this question due to 8 respondents' refusals

**Table A3.11. Baseline social norms indicators by site, Malawi, 2017**

	Chiwalo n = 375		Mchiramwera n = 375		Changata n = 372		Nazombe n = 370		Total n = 1492	
	%	CI	%	CI	%	CI	%	CI	%	CI
<b>PRUDENTIAL REASONS: Agree that...</b>										
Marriage of girls under 18 years may happen because of pregnancy in this community.	79.2	[71.4,85.3]	90.1	[86.4,92.9]	83.9	[76.9,89.0]	86.5	[81.0,90.5]	84.9	[82.0,87.4]
Marriage of girls under 18 years mostly happens because there is a lack of education and job opportunities.	81.1	[78.0,83.8]	74.4	[69.5,78.8]	80.4	[76.0,84.1]	76.8	[69.2,82.9]	78.2	[75.6,80.5]
Marriage of girls under 18 years sometimes happens for financial reasons.	62.4	[57.6,67.0]	64.5	[59.7,69.1]	58.9	[51.8,65.6]	57.0	[51.0,62.9]	60.7	[57.9,63.5]
Marriage of girls under 18 years may happen to resolve family disputes.	40.0	[36.0,44.2]	62.4	[57.1,67.4]	52.7	[49.0,56.4]	43.5	[37.9,49.3]	49.7	[47.3,52.0]
Marrying girls young can help resolve financial problems in the family.	17.6	[13.6,22.4]	16.0	[11.1,22.6]	17.5	[12.6,23.8]	19.5	[13.9,26.5]	17.6	[15.0,20.6]
Marrying girls young can help prevent sexual violence, assault, and harassment	14.4	[10.0,20.3]	6.1	[4.0,9.3]	10.5	[8.0,13.6]	9.2	[6.7,12.5]	10.1	[8.4,11.9]
Marrying girls at a young age can help provide them security.	9.6	[6.5,13.9]	7.2	[5.1,10.1]	7.8	[5.4,11.1]	7.3	[5.3,9.9]	8.0	[6.7,9.5]
<b>PERSONAL NORMATIVE BELIEFS: Agree that...</b>										
It is wrong to marry a girl before the age of 18	91.6	[87.7,94.4]	93.9	[90.9,95.9]	88.9	[83.9,92.6]	94.6	[91.9,96.4]	92.3	[90.5,93.7]
A girl should have a say in when she marries	90.6	[86.5,93.6]	87.2	[84.3,89.5]	87.9	[83.9,91.0]	93.7	[89.7,96.2]	89.8	[88.1,91.3]
<b>EMPIRICAL EXPECTATIONS: Agree that most girls in their community marry before the age of 18</b>										
	85.1	[79.3,89.4]	94.1	[89.6,96.7]	95.1	[89.7,97.8]	82.7	[76.9,87.3]	89.3	[86.9,91.3]
<b>NORMATIVE EXPECTATIONS: Agree that most people in their community expect girls to marry before the age of 18</b>										
	53.6	[45.0,61.9]	48.5	[43.5,53.6]	62.6	[55.9,68.9]	48.1	[42.7,53.5]	53.2	[49.9,56.4]
<b>SANCTIONS: Agree that if they don't ensure their daughters and/or nieces are married early, their family will not be respected in the community</b>										
	54.0	[45.8,61.9]	31.1	[26.4,36.2]	36.8	[31.8,42.0]	23.9	[18.4,30.4]	36.4	[33.4,39.6]

## Appendix 4: Sample Size Calculations

The following assumptions were used to generate our study sample size: alpha at less than or equal to 0.05, power at 80%, a non-response rate (for our primary outcome questions) at 5%, and a design effect of 1.5 to account for intra-cluster correlation. The primary outcome indicator value was unknown so 50% was used to ensure the most conservative estimate. Based on previous research we can anticipate a decrease of at least 13 percentage points in the outcome variable. Finally, to ensure we have the power to detect difference for cross-arm comparison, we multiplied the final number of participants by four (for the four arms) to get the total sample size. All numbers in the table are rounded.

Table A4.1: Primary considerations for the sample size calculation for quantitative household survey sample

Proportion of population at baseline	Minimum detectable change (baseline – endline or between arms)	Starting sample size	With design effect = 1.5	With 5% non response rate	Total (X 4 for all arms, to account for multi arm design, then rounded)	Number of villages per arm (25 participants per village)	Total number of villages (25 participants/village)
0.50	0.13	243	365	372	1,500	15	60

## Appendix 5: List of GVHs and Villages visited in each TA

Mapping and listing of households in study villages happened during the week before, and the weeks after the training of data collectors in June 2017. The data collection was conducted over 69 days. Listing took a total of 41 days and administration of questionnaires took a total of 28 days. The team visited each TA during the following dates:

- TA Chiwalo: May 28th – June 4th, June 11th – 19th
- TA Nazombe: June 20th – July 1st
- TA Changata: July 2nd - 25th
- TA Mchiramwera: July 26th – August 11th

**Table A5.1: TA Chiwalo, Total Number of Households and Interviews Per Village**

			Total Interviews		
GVH Name	Village Name	Total Households	Female	Male	Total
Nambazo	M'Bwana	105	14	11	25
	Nankhungu	94	14	11	25
	Pangani	251	18	7	25
Chinani	Kolowiko	120	16	9	25
Nambera	Lihaka	39	17	8	25
	Makwinja	299	15	10	25
Mulambe	Yona	49	19	6	25
Chimbalanga	Nanchopwa	80	17	8	25
Mpinda	Mpinda	88	18	7	25
	Mvokhiwa	101	15	10	25
Nthambula	Newiri	125	12	13	25
Chiwalo	Kanjedza	81	19	7	26
	Katolozwe	114	15	9	24
	Mukalakala	140	18	8	26
Mtemanyama	Thomiha	53	15	9	24
<b>Total</b>		<b>1,739</b>	<b>242</b>	<b>133</b>	<b>375</b>

**Table A5.2: TA Nazombe, Total Number of Households and Interviews Per Village**

			Total Interviews		
GVH Name	Village Name	Total Households	Female	Male	Total
Mwalala	Chiduba	218	22	3	25
	Samile	164	18	7	25
	Makumbi	221	16	9	25
Nazombe	Kamoto	129	18	6	24
	Kapito	106	16	9	25
	Makhonja	196	11	11	22
	Yuwa	203	18	7	25
	Thom	235	18	7	25
	Msikita	212	19	6	25
	Mtepa	277	20	5	25
	Thamanda	142	19	6	25
	Phodogoma	265	17	8	25
Namalima	Namalima	285	15	9	24
Maoni	Nowa	79	10	15	25
Misomali	Misomali	211	16	9	25
<b>Total</b>		<b>2,943</b>	<b>253</b>	<b>117</b>	<b>370</b>

**Table A5.3: TA Changata, Total Number of Households and Interviews Per Village**

			Total Interviews		
GVH Name	Village Name	Total Households	Female	Male	Total
Nkhaka	Chafa	1027	19	6	25
	Chikumba	612	16	9	25
Nkalozwa	Chalingana 1	504	19	6	25
	Gwedeza	155	17	8	25
	Kotokwa	225	17	8	25
	Loti	228	18	7	25
	Mwalo	392	16	9	25
	Nkalozwa	318	16	9	25
Kweruza	Chalingana 2	531	17	7	24
	Kweruza 1	461	21	3	24
	Singano	89	21	3	24
Chagunda	Namalanga	592	19	6	25
	Motheliwa	182	18	7	25
	Changata	246	17	8	25
	Gubudu	277	20	5	25
<b>Total</b>		<b>5,839</b>	<b>271</b>	<b>101</b>	<b>372</b>

**Table A5.4: TA Mchiramwera, Total Number of Households and Interviews Per Village**

			Total Interviews		
GVH Name	Village Name	Total Households	Female	Male	Total
Chilembwe	Amos	286	21	4	25
Phalira	Phalira	430	20	5	25
Kabambe	George	177	20	5	25
Kautuka	Kautuka	705	22	3	25
Mchiramwera	Magombo	442	22	2	24
	Matchuwana	560	17	8	25
	Mpiyama	276	21	4	25
	Mchiramwera	679	20	5	25
Mbeluko	Mbeluko	553	21	4	25
Mpando	Mpando	372	24	1	25
	Naphazi	320	23	3	26
	Tembenu	201	20	5	25
Musowa	Musowa	206	23	2	25
Kwanjana	Nansanya	261	22	3	25
Nkolokosa	Nkolokosa	295	20	5	25
		<b>5,763</b>	<b>316</b>	<b>59</b>	<b>375</b>