Theatre for Change's Tiphunzire! Project

Baseline Study Report

Girls Education Challenge (GEC)

Evaluation Team

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THEATRE FOR A CHANGE

Table of Contents

List of Acronyms

AoC	Agent of Change
EGRA	Early Grade Reading Assessment
EGMA	Early Grade Mathematics Assessment
GEC	Girls Education Challenge
HHS	Household Survey with Parents
I/S	In-School Girls
KAP	Knowledge, Attitudes, and Practices
MoEST	Ministry of Education, Science and Technology of Malawi
O/S	Out of School Girls
POPS	Perceptions of Parents Scale
SRH	Sexual and Reproductive Health
SRHR	Sexual and Reproductive Health Rights
SSQ	Semi-structured Questionnaire (with Girls)
TfaC	Theatre for a Change

1. Introduction

A significant barrier that keeps girls out of school in Malawi is poor sexual reproductive health. According to the USAID-funded Girls' Attainment in Basic Literacy and Education (GABLE), girls in secondary schools consider school a place where "failure occurs"[1]. In Malawi, almost 9% of girls who dropped out of school in 2010 did so because of early marriage and pregnancy, citing also embarrassment around menstruation as a reason for missing school[2].

In response to the UK Department for International Development (DFID)-funded Girls Education Challenge (GEC), Theatre for a Change (TfaC) developed and implemented *Tiphunzire*! (Let's learn!), a project that centres its activities in the creation of empowering learning environments for marginalized girls. TfaC Malawi is an independent organization registered in Malawi and linked to TfaC UK through a federation agreement that unites their vision, mission and objectives. TfaC UK was founded in 2003 and has been active in Malawi since 2007.

The core assumption of Tiphunzire! is that gender norms as well as inadequate SRH practices significantly affects the livelihoods and life aspirations of girls and women alike. By improving the knowledge of sexual and reproductive health and rights at an early stage, a girl can strengthen their self-esteem and confidence to make the best use of education. Partnering with the Malawian Ministry of Education, Science and Technology (MoEST), TfaC Malawi has trained over 350 young female teachers to be 'Agents of Change' (AoC) to deliver girl-friendly education in 225 schools across 10 districts in Malawi.

The Tiphunzire! (Let's Learn) Project was implemented in two phases. During Phase 1 AoCs were deployed in 36 schools across 6 districts. During Phase 2 the project scaled-up and AoCs were deployed in 189 schools across 10 districts. AoCs run two after-school girls' clubs per week with both in-

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[1] Kendall, N. 2006. "Strengthening Gender and Education Programming in the 21st Century." *EQUIP 2 Working Paper*. Washington, DC: AED
[2] Theatre for a Change (2013) Baseline Study Report. Lilongwe: TFAC.

school and out-of-school girls. They engage communities through the community listening club, which runs once every month. They further support child protection mechanisms in schools and train fellow teachers in gender inclusive approaches.

The four key outputs of TfaC's GEC Project are:

1. Teachers receive training and demonstrate the ability to teach literacy and numeracy and SRHR education in participatory and interactive ways, delivering girl-friendly education across Malawi.

2. Marginalised girls at risk of dropping out of school demonstrate increased participation and confidence at school. Out-of-school girls enrol in school as a result of project activities.

3. Parents and communities have a more supportive attitude towards girls attending school / education.

4. Schools are safer for girls and actively promote their participation in the classroom.

Executive Summary

1.2 Research Design & Scope of Baseline Study

The impact evaluation will analyse both quantitative and qualitative data on different stakeholder characteristics through a longitudinal study on a cohort of marginalised girls in both a treatment and control group. The longitudinal study will assess access, retention, and learning outcomes in numeracy and literacy over the 2.5 years of the project. Additionally, the external evaluation will track the attendance of a representative cohort of girls joining the programme in Year 2. For this cohort, the study will also examine key outcomes relating to value attributions (e.g. self-confidence and schooling) as well as knowledge, attitudes and practices of SRHR.

Rather than answering evaluation questions, the purpose of this Baseline Report is to describe the pre-implementation scenario of Phase 2 of the intervention and to provide TfaC, its partners and stakeholders with an

understanding of the obstacles and opportunities to improving early grade literacy, numeracy, and life skills of marginalized girls.

The study also aimed to ensure that the selection of participant and non-participant schools fulfills the necessary criteria for establishing a robust foundation to analyze project impact through Difference-in-Difference techniques.

The baseline took place with 60 treatment schools and 30 control schools across the 10 districts.

1.3 Key Baseline Findings: Treatment vs. Control Schools

Overall, across all key measures the baseline results found the populations of both treatment and control to be equally matched and comparable at baseline level.

1.3.1 Literacy

This study assesses literacy through the Early Grade Reading Assessment (EGRA)[3] subtest of oral reading fluency as this provides a measure of overall reading competence[4]. In the context of EGRA, oral reading fluency is understood as 'the ability to translate letters into sounds, unify sounds into words, process connections, relate text to meaning, and make inferences to fill in missing information'[5]. A comparison between each treatment standard group and relevant control standard group, using unpaired t-tests, on the nine EGRA subtasks revealed no statistically significant difference[6] between any of the sub-groups meaning they are comparable groups for the impact evaluation.

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[3] EGRA was developed and tested by the Research Triangle Institute (RTI International). The Malawian version reads in Chichewa and is used by the MoEST in the national assessment of literacy in Malawi.

[4] RTI International. Early Grade Reading Assessment Toolkit, 2009

[5] Hasbrouck & Tindal. Oral Reading Fluency: 90 Years of Measurement. 2006

[6] Statistical significance at the $p \leq 0.5$ level.

Table 1. Summary Oral Reading Fluency Results

	Control (Std. Dev)			Treatment (Std. Dev.)		
	Std. 5	Std. 6	O/S	Std. 5	Std. 6	O/S
Subtask: **Connected text oral reading fluency** (correct words per minute) **–** Subtask 7	42.6 (15.9)	48.9 (13.1)	47.7 (18.3)	41.9 (16.2)	49.6 (13.8)	51.1 (12.9)

The Malawi National EGRA (2010) was conducted on Standards 2 and 4 and therefore is not a useful comparison. The National EGRA Assessment found that learners in Standard 4 scored an average of 11. 66 correct words per minute on oral reading fluency. This is, as to be expected, as there is a significant increase reading ability between Standard 5 and 4.

1 in 6 in-school girls cannot read and 1 in 3 out-of-school girls cannot read. These are girls who scored zero in the EGRA oral reading fluency subtest and have therefore been identified as non-readers.

Mchinji, Chikwawa, and Lilongwe Rural East have the lowest average score for Standard 5 in oral reading fluency, whilst Salima has markedly stronger scores for Standard 6. Lilongwe Rural East mean oral reading fluency score is lower than most other districts at a statistically significant level.

1.3.2 Numeracy

In order to assess numeracy skills amongst the cohort of marginalized girls, this study administered the full Malawi Early Grade Mathematics Assessment (EGMA)[7] on 423 girls in the treatment group and 140 in the control group, respectively. The overall score on EGMA for the relevant groups are outlined in the table 3. No significant difference was found between control and treatment schools on the overall EGMA score meaning they are comparable groups for the impact evaluation.

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[7] EGMA was developed and tested by the Research Triangle Institute (RTI International). The Malawian version reads in Chichewa and is used by the MoEST in the national assessment of numeracy in Malawi.

The Malawi National EGMA (2010) was conducted on Standards 2 and 4 and therefore is not directly comparable to our results. The average overall score for Standard 4 was 61.9%.

Table 2. Mean EGMA Subtask Scores by Group Baseline (Phase 2 Cohort)

	Treatment (Std. Dev)			Control (Std. Dev)		
Measured in % Correct	Std. 5	Std. 6	Out of School	Std. 5	Std. 6	Out of School
Overall	75.69% (12.9)	81.57% (10.8)	71.48% (13.7)	75.22% (13.2)	81.37% (12.6)	74.56% (12.7)

1.3.3 Attendance

On average, a girl attends 86% of school days with standard deviation of 14.2%. This means that of the average 21 days of school days in the month, a girl will miss an average of 3 days (±2 days).

Control schools in Standard 6 fared 4% better than their treatment counterparts, while Standard 5 in treatment schools fared 6% better. However, there were no statistically significant differences between treatment and control groups, which suggest that the groups are nonetheless comparable. Table 3 shows these results.

Table 3. Attendance Rates (%)

	Standard 5 (*n*=175)	Standard 6 (*n*=213)	Total (*n*=388)
	% Attended (Std. Dev)		
Control (*n*=85)	82.1 (10.4)	88.9 (7.8)	86.3 (10.6)
Treatment (*n*=303)	88.1 (12.5)	84.6 (14.2)	86.2 (14.2)
Total (*n*=388)	**87.1 (12.5)**	**85.5 (14.2)**	**86.2 (14.2)**

* Denotes significantly different results at the p < 0.05 level
** Denotes significantly different results at the p < 0.01 level

In line with the assumptions of the theory of change, the study also found that girls who attended school more frequently scored higher on the literacy subtest of oral reading fluency. This is to be expected, as girls who attend school more frequently have a higher chance of learning basic literacy skills.

This relatively small variation of the spread could account for the lack of significant correlations between attendance and other key output variables. It may also suggest the existence of a critical number of days a girl can reasonably miss school without sacrificing school performance, at least in terms on numeracy. In such a case, factors other than quantity of days alone can explain better performance. These may include teaching quality, individual characteristics, or the overall learning environment. We address these variables below.

1.3.4 Self-confidence, Self-efficacy, and School Belonging

Self-esteem and efficacy are expected to increase among the girls who participate in TfaC activities. It is expected that the project will support girls to feel psychologically stronger; more empowered and also better able to deal with the challenges of going to school and succeeding in school as a girl. We have therefore measured base rate levels of self-esteem, feeling of belonging in school, academic self-efficacy, and the power that girls perceive they have to make their own decisions.

All scores have been reported so that a higher score indicates higher agreement on a 5-point scale. Overall, the psychological measures present the same picture across treatment and control schools. No significant differences are found on any of the psychological indicators between treatment and control groups.

Table 4. Psychological Measures Treatment vs. Control

	Treatment		Control	
	In School (n = 288)	**Out of School (n = 22)**	**In-school (n = 87)**	**Out-of school (n = 11)**
Self-esteem	3,66	3,78	3,74	3,85
School belonging	4,13	4,08	4,10	4,02
Academic self-efficacy	4,30	N.A.	4,30	N.A.
Power to make own decisions	3,81	4,23	3,72	3,73

The study found that the relationship a girl has with the father figure in the household had a significant impact on her self-esteem. In the context of

Malawian society where males hold more powerful positions in communities and in the household, it makes intuitive sense for their involvement and perceived views to matter for a girl's self-construal. In this case, a fathers' involvement has a positive effect on a girls' self-esteem.

Academic Self-Efficacy & Self-Esteem. Out-of-school girls feel equally capable of learning and exhibiting learning behaviors as their in-school peers. However, they feel like a "failure" more often than in-school girls. In other words, out-of-school girls feel equally capable of learning as in-school girls (as indicated by the lack of a significant difference in self-efficacy scores), but the fact that they are out of school makes them feel like they failed on a personal level (as indicated by the marginally significant difference on the self-esteem item 'I feel inclined to feel like a failure').

This suggests that access to school is also contingent on intrinsic sources of self-esteem, which may be entirely independent of their perceived ability to succeed in school. During focus groups, for example, teachers indicated that many out-of-school girls are demotivated to join a younger cohort of students as they need to return to the standard level at which drop-out occurred. These findings highlight that the self-perceived ability to succeed in school (a manifestation of self-efficacy), as demonstrated in improved learning outcomes, is not enough to encourage re-enrolment. Other factors must also matter in the formation of self-esteem and how they manifest into the effective will to join school. These may include intrinsic motivation, socialization with peers, the household environment and belonging. These variables will be discussed throughout this report.

Parental Involvement. While composition of the household had no effect on girls' self-esteem, the *relationship* that a girl has with the male and female parental figures in the household, and in particular the role of the father, matters significantly for her self-esteem (p < .05). High paternal school involvement positively affects girls' self-esteem. In the context of Malawian society where males often hold more powerful positions in communities and in the household, it makes intuitive sense for their involvement and perceived views to matter for a girl's self-construal. In this case, a fathers'

involvement has a positive effect on a girls' self-esteem. This is particularly interesting and suggests the project could target fathers more actively in order to promote girls' self-esteem.

1.3.5 Child Protection & School Safety

Very few head teachers were knowledgeable about child protection policies at their school. 31.7% of schools in the treatment group report not having a Child Protection Policy. During school visits, a number of head teachers expressed they did not know what this was and that if there was a case of abuse, they assume it would be reported to them. There is no strong difference in the perceived level of safety for girls and boys in school amongst respondents. However, there is a consistent percentage (8%-11%) of girls who report feeling unsafe at school and on the way to- and from school. During SSQs, both in-school and out-of-school girls gave anecdotal accounts of teachers that have sexually abused students resulting in unwanted pregnancies and school drop-out. They also mentioned that these cases often go unreported. This underscores the importance of the institutionalization of child protection mechanisms in schools, the development of effective reporting mechanisms of abuse, and the strengthening of the perceived ability of the students to report such instances when they occur.

1.3.6 Sexual and Reproductive Health of Girls

It should be noted that self-reported assessments can lead to biases of underreporting when topics are very sensitive. This could have been the case for this module, where particular SRH practices and behaviours were discussed. To mitigate this potential bias, absolute privacy was ensured during the interview, interviewers were always female and a refusal to answer was given as a response option.

Pregnancy. Of the 222 girls that have started menstruating at the time of the study, 4% reported having given birth at least once. Of interest is the fact that out-of-school girls reported to have given birth at earlier ages than their peers that are in-school. Pearson chi-square tests show that these differences are significant at the $p<0.05$ level. For in-school girls, pregnancies most commonly occurred during teenage years (15-17). While these differences

were not significant for this sub-group, initial results stress that education is a successful mechanism to delay early pregnancy.

Sexual activity. Sexual activity can and does start at young ages. 5% of the total girls present reported themselves to be sexually active. 69% of these reported to having had sex for the first time during their young teens between the ages of 12 and 14, followed by the teenage years (25%) and 6% during their middle-childhood. The highest frequency observed for the age at first sexual intercourse was 14 years old. In-school teenagers are 3% significantly more sexually active than their out-of-school counterparts ($X(1) = 24.5$, $p<0.05$). These differences are small but nonetheless significant.

Attitudes towards Family Planning. Based on self-reporting of sexual activity, the study calculated that 88% of sexually active girls have an unmet need of family planning. 64% of sexually active girls feel that they are able to deny sexual intercourse to their partners if they wish to do so. However, a staggering 21% feel that they are not able to do so and 14% refused to answer. This module identifies a group of marginalized girls that could be subject to external pressures to have sex outside of their consent. A total of 86% of currently sexually-active girls who know about a contraceptive method report that they can comfortably ask their partner to use a condom during sexual intercourse. However, 7% feel they cannot.

Knowledge of HIV and AIDS and HIV Prevention. 89% of the total girls surveyed reported to have heard of HIV and AIDS. Of the girls who have heard about this illness, 78% know that condoms reduce the risk of HIV and AIDS infection.

Menstruation. More than a third of in-school girls who have started their periods (n=216) reported to face difficulties to attend school during menstruation (37%). A number of reasons were given, ranging from infrastructure barriers, to social, personal and traditional barriers. Inappropriate school facilities are a significant barrier to attending school. Of those who indicated discomfort to attend school during menstruation (*N=87)* 11% of girls reported that this discomfort was because their toilets are unclean and 7% mentioned that toilets are inappropriate, offer no paper towels, soap or privacy. Menstruation is also a burden to socialization. 5%

reported to be in a bad mood during their periods, 4% are victims of bullying for it, and 7% find it shameful to have their periods and prefer to stay at home during those days. At a personal or emotional level, 16% complain of abdominal pains, 6% to a feeling of uncleanliness, and 7% find it difficult to access sanitary towels. Traditional reasons were largely absent although 2% complained that their parents or guardians do not allow them to go to school during menstruation.

Knowledge of- and access to - contraceptive methods. When asked if they knew of any method of contraception, an average of 56% of girls interviewed could not mention any method whether modern, traditional or otherwise. Regarding access to contraception, the study used reported access to condoms as the preferred proxy and found that 41% of the total girls who know about any method of contraception are unable to obtain condoms if they wanted to.

1.4 Summary Conclusions

Treatment vs. Control, key comparisons:

- Overall, the Year 2 Baseline established that the control and treatment group are comparable on key items tracked in the longitudinal study, namely: attendance, literacy, numeracy, self-esteem, school belonging, and academic self-efficacy.

Literacy:

- There is a significant presence of non-readers in both Standard 5 and Standard 6, and the gap is twice as broad for out-of-school girls. 15% of in-school girls and 33% of out of school girls in the treatment group scored 0 on the EGRA subtest of oral reading fluency indicating they cannot read. Girls Clubs need to actively support girls to acquire basic reading skills in order to enable them to access and engage with school. This is particularly important for out of school girls who will be encouraged to re-enroll and have largest number of non-readers.

Numeracy:

- In-school girls outperformed out-of-school girls at statistically significant levels in most sub-tasks, as to be expected. However, out of school girls outperformed in-school girls in solving word problems. This suggests that out of school girls could be applying numeracy skills in daily life tasks such as working at a market and managing the household. This supports TfaC's work to integrate real world numerical problems in girls clubs as these exercises can be easily contextualized by in-school and out-of-school girls.

- Quantity discrimination, addition and subtraction skills need to be more actively supported for out-of-school girls given their relatively poorer performance. Given the difference between them and their in-school peers, formal schooling may otherwise be the only way an out-of-school girl can acquire these skills.

Attendance:

- Full attendance will yield better learning outcomes. Girls who attended school more frequently scored higher on the literacy subtest of oral reading fluency.

- A girl misses an average of 3 days (±2 days) per month during the post-harvest season. Reasons for missing school can include child work (75% of the total sample is involved in some form of child work whether economic or non-economic), and menstruation (37% reported to having trouble attending school during menstruation).

- Attendance is not correlated with overall numeracy skills. In-school girls are, however, better at non-basic subtractions and additions suggesting that attendance to school might be, after all, the only way a girl may acquire these skills.

Self-esteem and SRH knowledge, attitudes and practices:

- High self-esteem correlates to safer and consensual sexual behaviour. The study found that self-esteem significantly affects a number of

SRH behaviours including condom usage and attitudes towards contraceptives. Girls who indicated that a condom had been used at their last sexual encounter, scored higher on self-esteem than girls who indicated this had not been the case. Further, a significant effect was also found for the item 'can you ask your partner to use a condom if you wanted him to'. Girls that answered 'yes' scored higher on self-esteem than girls who answered 'no'.

- Higher self-esteem relates to improved attitudes towards family planning. With regards to contraceptive use, girls who, when asked if they would use contraceptives to prevent pregnancy, and gave an explicit answer (either yes or no) had higher self-esteem than girls who were unsure.

- Higher self-esteem relates to better SRH knowledge. Girls who indicated that they were aware of methods that exist to prevent pregnancy possessed higher self-esteem than girls who indicated not to know. These findings strongly support the assumption that higher self-esteem underpins healthier sexual and reproductive health practices.

Self-Esteem and Parental Involvement:

- The study found that the relationship a girl has with the father figure in the household had a significant impact on her self-esteem. In the context of Malawian society where males hold more powerful positions in communities and in the household, it makes intuitive sense for their involvement and perceived views to matter for a girl's self-construal. In this case, a fathers' involvement has a positive effect on a girls' self-esteem.

Parents and Communities:

- The study further found that 85% of parents and caregivers who exhibited lower SRHR knowledge were unable to meet their basic needs without charity. Lower income brackets therefore are more

vulnerable to ill sexual health. Marginalization and risk-of-drop out is therefore more likely for girls in lower income brackets.

Other considerations:

- School visits and focus group discussions with community members, AoCs, and teachers, highlighted that some communities expect material support from Theatre for a Change and need more information about the nature and coverage of the project. While this is outside the scope of the intervention, misperceived community expectations can impact the sustainability of the project in intervention sites.

- 75% of students are involved in some form of child work. 67% of in-school girls devote a significant amount of hours of their day to house work, which may include cleaning or caring for smaller children. These activities can compete with participation in project activities such as Girls' Clubs. AoCs can therefore tap on more parental support from the parents of project participants to ensure their attendance to project activities.

- Understanding and establishing child protection policies remain a challenge to many schools. This largely due to problems of information as well as collective action. AoCs can indeed raise awareness about child protection but full implementation requires active support from TfaC partners, including local school management structures (such as school management committees and the MoEST).

2. The Design of the Impact Evaluation

While experimental designs are known to be amongst the most effective methods to measure the impact of interventions, they are often not suited for programs that purposively select intervention sites based on criteria other than randomization. In the case of TfaC's intervention, where intervention schools were selected based on the perceived needs of intervention sites,

randomization is not possible. Participation into TfaC's program is also to a large extent determined by the AoC and the Head Teacher, who selects participants based to a full list of eligibility criteria that yields a status or degree of marginalization. Accounting for these factors, this impact evaluation has therefore selected the Difference-in-Difference (DID) methodology, which is ideally suited for programs where treatment assignment was not often random and which incorporates self-selection of participants.

To apply a DID approach, the longitudinal study will assess the following dependent variables on two cohorts of both in-school and out-of-school marginalized girls:

- Access to- and retention in school: measured by attendance data obtained through multiple, triangulated methods for the cohort in Phase 1.

- Literacy: taken from the scores on the oral reading fluency subtest of the Early Grade Reading Assessment (EGRA) for the cohort in Phase 1.

- Numeracy: taken from a calculation of overall scores of the Early Grade Mathematics Assessment (EGMA) for the cohort in Phase 1.

- Control variables: including items of self-confidence, self-efficacy and knowledge, attitudes and practices of SRH or the cohort in Phase one and two.

A detailed description of the methodology of the Baseline Study can be found in Appendix D. A detailed description of the instruments used in the study and their development is included in Appendix A.

3. Results & Findings

3.1 Attendance and Cohort Composition

The level of attendance is the proportion of days attended in a given period of time. Given the fact that the baseline evaluation was designed to take place at the beginning of the academic year, the study used historical

attendance records as proxy of the attendance level. These were the records of the final month of the previous academic year, which corresponds also to the post-harvest season. They were found in school registers or attendance books that were made available by head teachers in baseline schools.

The average attendance was calculated to be 86% with small variations between standard level and treatment status (See Appendix D for district disaggregation). Control schools in Standard 6 fared 4% better than their treatment counterparts, while Standard 5 in treatment schools fared 6% better. However, independent sample t-tests revealed no significant differences along treatment status in any of the sub-groups. This suggests that the subgroups are nonetheless fit for difference-in-difference techniques. Figure 1 shows these results:

Figure 1. Attendance for Standard 5 and 6 (Control vs. Treatment) June 2014
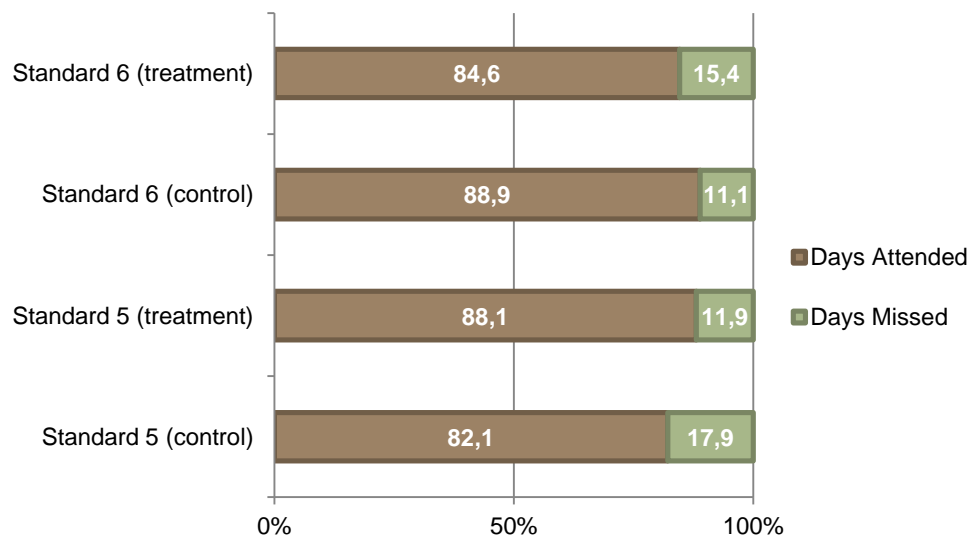
The average age of girls for Standard 5 is 12 years old and 13 years old for Standard 6. As shown in the Table 5, the age of the participants did not differ between treatment and control groups.

Table 5. Age Averages per Standard Level

	Out-of-School (*n*=44)	Standard 5 (*n*=174)	Standard 6 (*n*=187)
Control	14	12	13
Treatment	14	12	13
Grand Total	**14**	**12**	**13**

3.3 Early Grade Reading Assessment

The results for the Early Grade Reading Assessment (EGRA) are summarized in the following table for relevant groups. This study assessed literacy through the EGRA subtest of oral fluency as this provides a measure of overall reading competence[8]. In the context of EGRA, oral fluency is understood as 'the ability to translate letters into sounds, unify sounds into words, process connections, relate text to meaning, and make inferences to fill in missing information'[9]. Students are scored on the number of correct words read per minute for connected text oral reading fluency.

The Malawi National EGRA was conducted on Standards 2 and 4 and therefore is not a useful comparison. The National EGRA (2010) Assessment found that learners in Standard 4 scored an average of 11. 66 correct words per minute on oral reading fluency. The University of Oregon's Centre for Teaching and Learning, attempted to establish an international benchmark by grade level. For Grade 6, the equivalent standard group, the benchmark is set at 150 words per minute for oral reading fluency. Obviously, Malawi is a markedly different context and this benchmark is not relevant to the given context.

15% of in-school girls and 33% of out of school girls in the treatment group scored 0 on the EGRA subtest of oral reading fluency indicating that 1 in 6 o-in-school girls cannot read and 1 in 3 out-of-school girls cannot read. Girls Clubs need to identify non-readers at its onset and actively support them in the acquisition of basic reading skills in order to enable them to access and engage in school. This is particularly important for out-of-school girls who will be encouraged to re-enroll.

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[8] RTI International. Early Grade Reading Assessment Toolkit, 2009
[9] Hasbrouck & Tindal. Oral Reading Fluency: 90 Years of Measurement. 2006

Table 6. Mean EGRA Subtask Scores by Group Baseline Phase 2 Cohort (*N* = 592)

	Control			Treatment		
	Std. 5	**Std. 6**	**O/S**	**Std. 5**	**Std. 6**	**O/S**
1. Letter-naming fluency **(correct letters per minute)** Identify up to 100 randomly distributed upper and lowercase letters in up to one minute	48.9	58.5	59	50.8	57.1	58
2. Initial sound awareness **(correct number of firsts sound in word identified)** Assessed girls' ability to identify the first sound of words read out loud by an enumerator.	6.2	7.3	6.2	6	8	8.4
3. Syllable segmentation **(correct number of phonemes identified)** A word is read out loud by the enumerator and students are tested on their ability to separate the syllables.	8	8.6	9.3	8.3	8.6	11.4
4. Letter-sound knowledge **(correct letters read per minute)** Girls were asked to read a list of up to 100 syllables for one minute. This subtask was added to the Malawian EGRA as Chichewa is a syllabic language and has been traditionally taught using this method[10].	37.6	50.9	43.8	39.1	44.1	48.1
5. Familiar word fluency **(words read correct per minute)** Girls are given 50 common simple words with instructions to read as many as they can in one minute.	31.3	40.7	37.9	35.6	38.1	38.4
6. Nonsense word reading fluency **(nonsense words read correctly per minute)** Students were asked to read as many words they could in one minute from a list of nonsense words.	23	26.1	26.6	28	25.8	31.4
7. Connected text oral reading fluency **(correct words per minute)** This test asks children to read aloud a narrative passage of local relevance within one minute. Measure of overall reading competence.	42.6	48.9	47.7	41.9	49.6	51.1
8. Reading comprehension of connected text **(percent correct out of 5 comprehension questions)** Students were asked to answer five basic comprehension questions, which are read out loud by the enumerator. The comprehension questions are based on the passage read for oral reading fluency.	48%	54%	28%	58%	62%	62%
9. Listening comprehension **(percent correct out of 5 comprehension questions)** In this test a short story is read to students. They are then asked five comprehension questions about the story.	65%	76%	62%	66%	78%	64%

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[10] Syllabic method usually involves teaching students to read groups of syllables at times (e.g. ma-me-mi-mo-mu) instead of letter sound and then joining syllables together to make words.' EGRA Malawi National Baseline 2010. USAID.

In order to assess literacy of girls, this study administered the full Malawi Early Grade Reading Assessment (Chichewa EGRA 2010) to 457 girls in the treatment group and 135 girls in the control group, respectively.

Comparison between Treatment and Control. A comparison between each treatment standard group and relevant control standard group, using independent sample t-tests, on the nine EGRA subtasks revealed no statistically significant difference between the groups[11]. This indicates that our populations are equivalent in terms of literacy skill and are therefore comparable groups for this study.

Figure 2. Mean Oral Reading Fluency by Standard Level
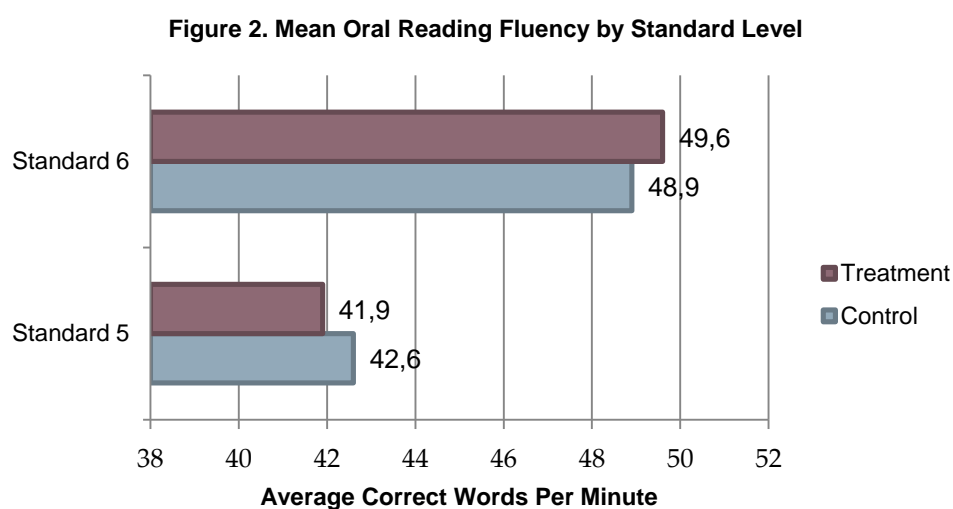
District Comparison. An analysis of the differences in mean oral reading fluency between district shows that Mchinji, Chikwawa, and Lilongwe Rural East have the lowest average score for Standard 5 in oral reading fluency, whilst Salima has markedly stronger scores for Standard 6. There are statistically significant differences between the mean oral reading score for Standard 5 in Lilongwe Rural East and most other districts. All other comparisons yielded no statistically significant difference to other districts.

Out-of-school girls. Out-of-school girls consistently out-performed in-school girls in a number of subtasks, including oral reading fluency. Whilst, this is

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[11] Statistical significance at the $p \leq 0.5$ level.

unexpected, 69% [12] of out-of-school girls dropped-out of school after Standard 5 and seemingly retain most of their learning in literacy from their time in school. It is likely that this gap will diverge by the midline and endline, after in-school girls have completed later levels of schooling.

3.3.1 Literacy Learning Targets

The additionality of the intervention will be assessed through the literacy learning targets outlined following at Midline and Endline.

Table 7. Learning Targets Summary (Based on Figure 9, M&E Framework)

Cohort Sub-group(Current Standard Level)	Year 2 Learning Target (Mid-line)	Year 2 Learning Target (End-line)
Out-of School	+2.4 wpm	+4 wpm
In-school (Standard 5)	+4.14 wpm	+4.84 wpm
In-school (Standard 6)	+7.3 wpm	+4.2 wpm

The learning targets were calculated following the GEC's Outcome Targets: Learning Guidance (2013). This is broken down in the table following. The target set represents the additional number of words per minute at midline over and above change in the control group from the baseline. The targets are outlined in table 15.

Table 8. Standard Deviations for EGRA Learning Targets

Standard Level to Set Target	Intervention Cohort (current standard)	Standard Deviation (total words per minute)	Learning Target Multiplier Midline / Endline
Standard 1	Out-of-school	8	0.3 / 0.5
Standard 6	Standard 5	13.8	0.3 / 0.2
Standard 7	Standard 6	24.2	0.3 / 0.2
Standard 8	Standard 7	20.9	0.2

3.4 Early Grade Mathematics Assessment

The EGMA results for the relevant groups are reported in the table following. The Malawi EGMA test is comprised of 8 subtasks. It is designed to measure the rate at which students develop critical early math skills. The 8 subtasks are outlined below.

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[12] Out of School Girls surveyed by highest standard completed (Standard 1: 3%, Standard 4: 27%, Standard 5: 42%, Standard 6: 18%, Standard 7: 6%, Standard 8: 3%)

Table 9. Mean and Standard Deviation EGMA Subtask Scores by Group Baseline (Phase 2 Cohort)

	Control			Treatment		
Measured in % Correct (Standard Deviation)	**Std. 5**	**Std. 6**	**O/S**	**Std. 5**	**Std. 6**	**O/S**
3.Number recognition Students are asked to identify a list of numbers.	90.89 (13.52)	94.76 (9.13)	83.12 (18.15)	87.38 (15.33)	92.68 (10.27)	87.04 (14.09)
4.Quantity discrimination Students are asked to distinguish between smaller and larger numbers.	86.96(14.88)	90.95(13.16)	81.25(18.93)	82.78(20.97)	91.73(12.89)	78.57(23.05)
5.Pattern recognition Students are shown three or four numbers in a number sequence and a placeholder for a next or missing number. The child is asked to name the missing number.	58.57 (27.20)	68.73 (24.79)	62.50 (26.23)	61.67 (27.26)	68.43 (23.80)	65% (25.31)
6. Word problems Students are asked to answer basic word problems utilizing both addition and subtraction.	73.21 (22.29)	77.78 (19.11)	93.75 (11.18)	71.44 (20.56)	77.18 (18.61)	86.54 (16.17)
7.1 Addition Level 1 The first set consists of five items that we would expect the child to be able to calculate mentally and answer fluently. All of the numbers used in this subtest are single-digit and do not involve the bridging through the number 10.	89.29 (24.41)	93.33 (19.34)	81.25 (37.57)	89.16 (21.79)	94.67 (16.75)	93.57 (10.96)
7.2 Addition Level 2 The second set, also comprising five items, involves double-digit numbers as well as bridging through tens and, in one case, hundreds.	56.79 (30.70)	66.98 (28.55)	40 (30.98)	59.46 (26.76)	68.49 (26.20)	61.48 (32.31)
8.1 Subtraction Level 1 The first set consists of items that we would expect the child to be able to calculate mentally and answer fluently. The numbers used in this subtest are all single-digit and do not involve bridging through the number 10.	88.21 (23.13)	96.19 (11.84)	80 (34.25)	92.33 (18.32)	93.16 (15.25)	80.71 (32.42)
8.2 Subtraction Level 2 The second set, also comprising five items, involves double-digit numbers as well as bridging through tens and, in one case, hundreds.	60% (26.67)	64.52 (32.48)	50 (35.02)	56.99 (29.30)	64.92 (29.71)	60 (32.34)
Overall	**75.69 (13.24)**	**81.57 (12.57)**	**71.48 (12.71)**	**75.22 (12.94)**	**81.37 (10.83)**	**74.56 (13.72)**
N	**55**	**62**	**16**	**219**	**186**	**26**

These subtasks are described in more detail in the EGMA Toolkit developed by RTI and USAID (2009). The overall score for the EGMA test is the average percentage correct from subtests 3-8. The Malawi National EGMA (2010) was conducted on Standards 2 and 4 and therefore is not directly comparable to our results. The average overall score for Standard 4 was 61.9%, which as to be expected is lower than our mean score for Standard 5.

Comparison between Treatment and Control. No significant difference was found between control and treatment schools on the overall EGMA score. There is however a significant overall difference ($p < .05$) between in schools girls and out-of-school girls, with in-school girls slightly outperforming (78.22%) out-of-school girls (73.30), as to be expected.

The fact that out-of-school girls out perform in-school girls on the subtask of word problems could be explained by the fact that 69% of the out-of-school girls completed Standard 5 or later as discussed earlier. In addition to that, they are likely to work at the market and/or manage a household. They might therefore have more experience with this particular type of mathematics, which taps into the type of mathematics skills that are needed in daily life.

In general the EGMA scores are relatively high. We suspect that this might be due to the fact that enumerators were not instructed to limit the extent to which students were allowed to use counters or paper and pencil. This will be consistently applied at Midline and Endline to ensure reliability of the numeracy assessment.

3.4.1 Numeracy Learning Targets

The additionality of the intervention will be assessed through the numeracy learning targets outlined following at Midline and Endline.

Table 10. Learning Targets Summary (Based on Figure 9, M&E Framework)

Cohort Sub-group (Current Standard Level)	Year 2 Learning Target (Mid-line)	Year 2 Learning Target (End-line)
Out-of School	+ 3.3%	+5.5%
In-school (Standard 5)	+3.25%	+2.17%
In-school (Standard 6)	+7.86%	+5.24%

These were calculated using the table below as advised by the GEC's Outcome Targets: Learning Guidance (2013). The target set represents the additional overall score measured in percentage correct at midline over and above change in the control group from the baseline.

Table 11. Standard Deviations for Learning Targets

| Standard Level to Set Target	Intervention Cohort (current standard)	Standard Deviation (Overall Score, %)	Learning Target Multiplier Midline / Endline
Standard 1	Out-of-school	11.0	0.3 / 0.5
Standard 6	Standard 5	10.83	0.3 / 0.2
Standard 7	Standard 6	26.2	0.3 / 0.2
Standard 8	Standard 7	21.8	0.2

3.5 Child Labor and Child Work

Child labor (regular participation in the labor force to earn a living or supplement household income) is a widespread and persistent problem in Malawi. A child labor survey from the Ministry of Labor in Malawi found that 37% of the children between ages of 5 and 15 were involved in child labor[13]. Of these, 57% were girls. Canagarajah and Coulombe (1997) found that poverty is significantly correlated with the decision to send children to school, and there is a significant negative relationship between going to school and working[14].

28.4% (n=409) of girls in treatment schools are economically active. These are girls that worked for pay in cash or in-kind, or as unpaid workers for family gain during a specific period of time. Of these, 75% are paid in cash, 18% in both cash and in-kind, and 7% in-kind only. In this module, there were surprisingly no significant differences between in- and out-of-school girls. Figure 3 shows the periodicity of the work.

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[13]Ministry of Labor (2010) Child Labor Survey. National Action Plan on Child Labor for Malawi 2010 -2016.
[14]Canagarajah & Coulombe (1997) Child Labor and Schooling in Ghana. Policy Research Working Paper 1844. The World Bank: Washington DC.

Figure 3. Peridocity of Work
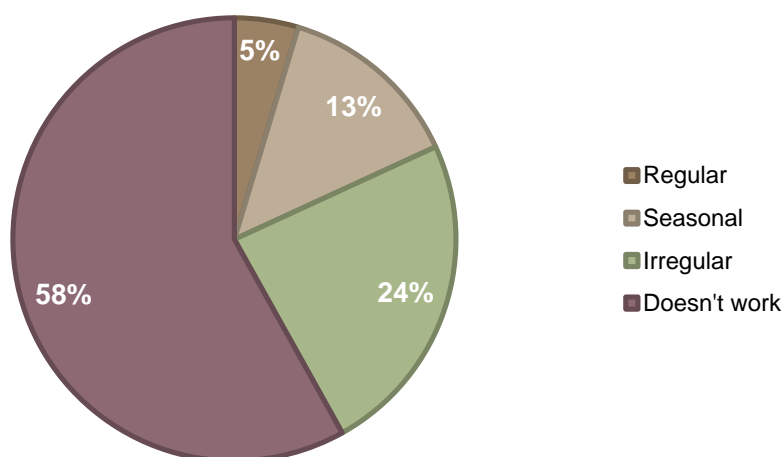
This analysis, however, excludes non-economic work like house chores or caring for smaller children. These are the most common chores given to girls in Malawi and are a form of child work when done on a daily basis for a significant period of time. In this case, the study found that 67% (n=409) of girls at treatment schools devote more than five hours a day to child care, house duties or both. The following table shows the proportion of girls that are either economically active, engage in five or more hours of housework or both.

Table 12. Proportion of Girls by type of work activity (economic and non-economic)

		House Work	
		< 5hrs	≥ 5hrs
Economically Active	Yes	7%	21%
	No	25%	47%

Only 25% of girls are not economically active and do not significantly contribute to house chores. 7% of girls work for either cash or in-kind and significantly contribute to house chores. 47% invests more than 5hrs a day in house chores but is not economically active and 21% work at home only.

Noteworthy of these results is the fact that no significant differences were found when comparing in- and out- of school girls in their economic activity

or amount of time invested into house chores. This is not to say that child labour is not a significant barrier to attending school but that factors other than economic pressure alone affect the chances that a girl is enrolled in school or not. This came in contrast to the Baseline of Year 1, where it was found that housework had significantly prevented out-of-school girls from re-enrolling, so this issue will be further explored during the mid-line process.

3.6 Knowledge, Attitudes and Practices (KAP) of Sexual and Reproductive Health

This module analyses descriptive statistics on the knowledge, attitudes and practices of Sexual and Reproductive Health of a sample of 409 girls in treatment and control schools. The questions were based in the standard women questionnaire of USAID's Demographic and Health Survey[15] and adapted to suit the guidelines of research on children and vulnerable groups.

Self-reported assessments can lead to biases of underreporting when topics are very sensitive. This could have been the case for this module, where particular SRH practices and behaviours were discussed. To mitigate this potential bias, absolute privacy was ensured during the interview, interviewers were always female and a refusal to answer was given as a response option.

Pregnancy. Girls who are already mothers face an extraordinary burden to attend school as they often need to provide for their children, pushing them towards employment, child care and, in some cases, early marriage. Of the 222 girls that were present at the time of the study and had begun menstruating, 4% have admitted to giving birth at least once. Of interest is the fact that out-of-school girls (*N=27)* reported to have given birth at earlier ages than their peers that are in-school (11% vs. 3%). Pearson chi-square tests show that these differences are significant at the $p<0.05$ level. For in-school girls (*N*=195), 11% of pregnancies occur during teenage years (15-17). While

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[15] USAID (2014) Woman's Questionnaire. Demographic Health Survey. Available at http://dhsprogram.com/What-We-Do/Survey-Types/DHS-Questionnaires.cfm [02.05.2014]

these differences were not significant for this sub-group, initial results stress that education is a successful mechanism to delay early pregnancy.

Unwanted pregnancies. 2.2% of the total girls present at the time of the survey (9 cases in total) reported to have given birth at some point of their lives. 100% of this sub-group reported that they did not want to get pregnant at the time i.e. all of the pregnancies were unwanted.

Marriage. In focus group discussions, out of school girls shared that marriage significantly affected their ability to choose to go back to school. Teachers insisted that parents can marry a daughter away to ease the burden of poverty or make social relations. All 405 girls were asked if they were married or living with a man as if married. None of the girls reported to have been married or in union at the time of the survey. Of the pregnancies that occurred, they did so out of union. These results, however, may underreport the incidence of unions that fall outside a common livelihood given that 5% of the girls surveyed reported to be sexually active.

Sexual activity. Sexual activity can and does start at young ages. However, only 5% of the total girls present (*N=408*) reported to be sexually active. In-school teenagers (15-17) are 3% significantly more active than their out-of-school counterparts ($X (1) = 24.5$, $p<0.05$). During focus group discussions, in-school girls reported that many of their friends had 'boyfriends' and active sexual relationships.

These differences are small but nonetheless significant. On the one hand, in-school girls can be more exposed to continuous socialization with male peers in environments such as schools. Girls often go to schools and return home with friends beyond direct parental supervision. This provides a social space where sex can occur. On the other hand, out-of-school girls tend to spend much of their time at home under a closer supervision of their parents, making sexual activity relatively more unlikely. Given the fact that early pregnancy is found to be one of the most cited reasons for school dropout, these findings are not completely surprising. Future focus group discussions can serve to validate the nature of these hypotheses.

Age at first sexual intercourse. 69% of those girls that are sexually active (*N=* 19*)* reported to having had sex for the first time during their young teens between the ages of 12 and 14, followed by the teenage years (25%) and 6% during their middle-childhood. The highest frequency observed for the age at first sexual intercourse was 14 years old. The next figure shows the frequency count by age at first sexual intercourse.

Figure 4. Age at first Sexual Intercourse (Frequency Count)
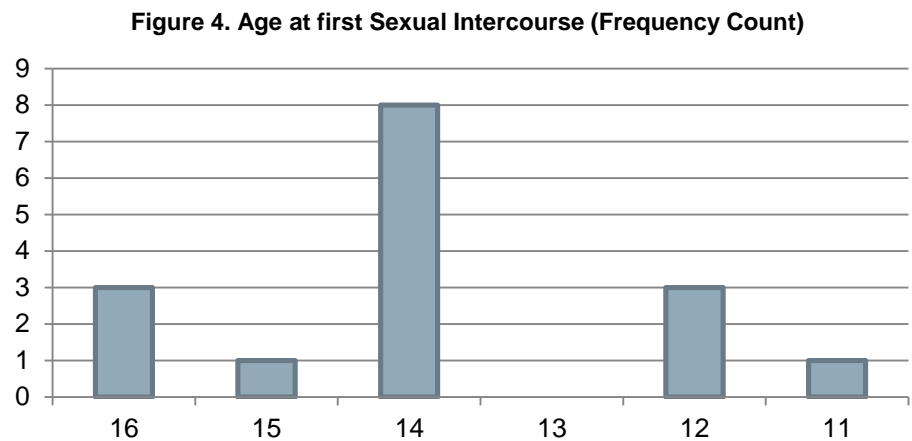
Mutual consent. Mutual consent is an important aspect of a healthy sexual life and core aspect of SHR rights. 64% of sexually active girls (*N=* 19*)* feel that they are able to deny sexual intercourse to their partners if they wish to do so. However, 21% feel that they are not able to do so and 14% refused to answer. This module identifies a group of marginalized girls that could be subject to external pressures to have sex outside of their consent. We recommend that future focus group discussions address which cultural or psychosocial barriers most affect this type of sexual behavior.

Family planning. Ensuring that sexually active girls can avoid pregnancy will be key to keeping girls in school. An unmet need for family planning exists when sexually active girls wish to delay pregnancy and are not using any form of contraceptive method. The study calculated the unmet need for family planning by considering the percentage distributions of girls who have started menstruation and are sexually active, are not using contraception but wish to delay pregnancy for at least one year into the future. 88% are estimated to have an unmet need of contraception (*N=* 19*)*.

Knowledge of contraceptive methods. It is often the case that the unmet need of contraception is caused by lack of knowledge of available contraceptive methods. When asked if they knew of any method of contraception, an average of 56% of girls interviewed (*N*= 409*)* could not mention any method whether modern, traditional or specific. These results stress the importance of including modules of appropriate use of contraceptive methods in SRH curricula imparted in schools and challenges abstinence as the sole and preferred method for family planning that is currently advocated in schools.

In focus group discussions, girls most commonly identified their mothers to be their primary source of sexual education. Pearson chi-square tests show that 60% of girls whose mothers had not completed primary school (*N*= 48*)* know significantly less about contraceptive methods than those whose mothers completed at least primary school (X (1) = 435.6, p<0.05). A mother that is more educated is more likely to know a wider range of contraceptive methods and is therefore better able to educate their daughters about effective contraception use.

Future use of contraception. Of the girls that know of any method of contraception (*N*= 171*)*, 73% concluded that they intend to use contraception at any time in the future. The number of girls that intend to use contraception is significantly higher among in-school girls perhaps due to a higher exposure to knowledge about family planning obtained in schools.

Access to contraception. Condoms are by far the most widespread modern contraceptive method and the preferred method to avoid HIV and AIDS and other sexually transmitted diseases. The study used this method as the preferred proxy to measure access to contraception and found that 41% of the total girls who know about any method of contraception are unable to obtain condoms if they wanted (*N*= 174*)*. These results seem to be independent of sub-group type according to Pearson chi-square tests.

Knowledge of HIV and AIDS and HIV Prevention. 89% of the total girls surveyed reported to have heard of HIV and AIDS (*N*= 405*)*. Of the girls who

have heard about this illness, 78% know that condoms reduce the risk of HIV and AIDS infection, whereas 11% thinks that it does not reduce the risk, and 11% were unsure.

Attitudes towards family planning. In spite of these results, effective use of contraception shall also depend on the willingness of a girls' partner to engage in safe sex. A total of 86% of currently sexually active girls who know about a contraceptive method (*N*= 17*)* can comfortably ask their partner to use a condom during sexual intercourse. However, 7% feel they cannot.

Menstruation. Many researchers and policy makers have argued that menstruation could be causing girls to miss a significant number of school days. UNICEF has estimated that girls might be missing as much as 20% of school days due to menstruation[16]. In a focus group discussion with girls in a school in Blantyre, a student reported that,

> "…*sometimes we find it difficult to come to school when we are having our monthly menstruations since it happens that we do not have the necessary materials such as napkins and sanitary pads to help us. Sometimes the menses begin while we are at school and some boys laugh at us*".

More than a third of in-school girls who have started their periods (n=216) reported to face difficulties to attend school during menstruation (37%). Allowing for multiple response options, girls were asked why it was difficult for them to attend school during menstruation. The findings highlight a number of reasons, ranging from infrastructure barriers, to social, personal and traditional barriers.

Inappropriate school facilities are a significant barrier to attending school. Of those who indicated discomfort to attend school during menstruation (*N=87)* 11% of girls reported that this discomfort was because their toilets are unclean and 7% mentioned that toilets are inappropriate, offer no paper towels, soap or privacy.

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[16] UNICEF (2012) Aspen Design Summit Report: UNICEF Menstruation Challenge. New York: NY.

Menstruation is also a burden to socialization. 5% reported to be in a bad mood during their periods, 4% are victims of bullying for it, and 7% find it shameful to have their periods and prefer to stay at home during those days.

At a personal or emotional level, 16% complain of abdominal pains, 6% of uncleanliness, and 7% find it difficult to access sanitary towels. Traditional reasons were largely absent although 2% complained that their parents or guardians do not allow them to go to school during menstruation.

These findings highlight the stigma and marginalization associated with hygiene issues and the importance of addressing menstrual hygiene management needs through Girls' education programming. They suggest that improvements made towards the provision of gender-sensitive facilities, access to management materials, provision of information about menstruation and menstrual hygiene management, and support from others during menstruation can significantly reduce the obstacles that keep girls out of school.

3.7 Health and Special Needs

One of the main priorities of TfaC has been to improve protection of girls from violence, abuse, exploitation and discrimination. Children with disabilities are particularly prone to discrimination from the very individuals and institutions with an obligation to protect them, including families, health and education services. The study focused on the impairment component of disability, which is defined by the World Health Organization International Classification of Functioning, Disability and Health (ICF) as 'a loss or abnormality in body structure or physiological function'[17]. Specifically this module measured hearing, vision, physical and intellectual impairment. The study considered an impairment to exist only when girls reported "a lot" or "unable" to a set of screening questions that was used to identify girls at risk of the different impairments (e.g. "do you have difficulty walking or climbing stairs?").

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[17] The United Nations (2008). Convention of the Rights of Persons with Disabilities and Optional Protocol.

Of the 409 girls surveyed, 11% of girls suffer from at least one physical or mental impairment. Seeing and hearing impairments were the most common forms. Blantyre, Chikwawa and Salima have a relatively higher incidence of visual impairments than other districts (See Appendix D for a full disaggregation by district).

Sub-group comparisons between participants and non-participants show a higher incidence of disabilities in treatment schools for hearing and mobility. Only in terms of concentration control schools fared worse. However, Pearson chi-square tests show that these differences are not significant. The figure below shows the proportion of girls by impairment type in relation to the total sampled population of 409.

Figure 5. Proportion of participant and non-participant girls by impairment type
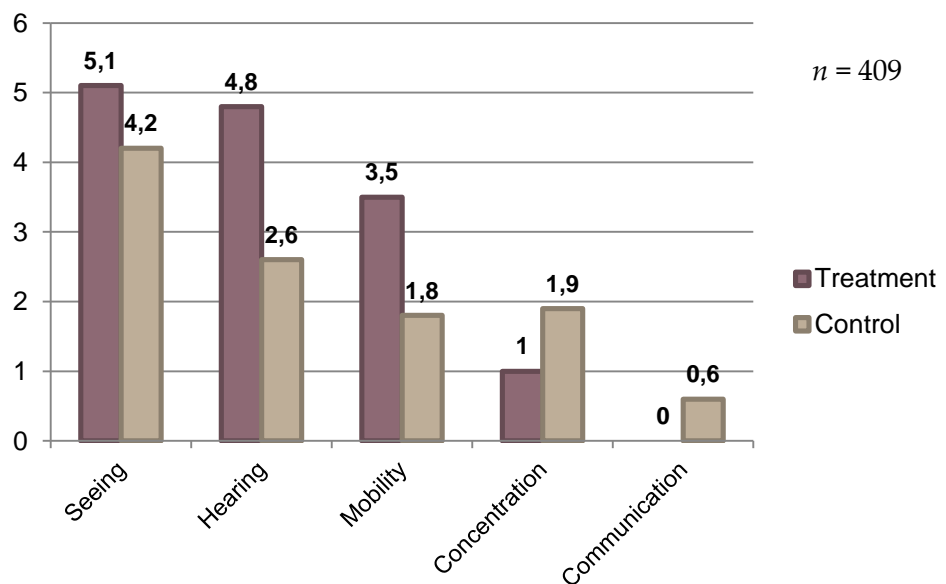
The study also considered a potential unmet need for reading glasses and used one question from the USA's National Eye Institute Visual Function Questionnaire[18] to estimate this need. The results show that 1 in 4 girls could be in need of reading glasses. These results are summarized in Table 13:

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[18] National Eye Institute (1999) Visual Function Questionnaire. Available at: https://www.nei.nih.gov/sites/default/files/nei-pdfs/vfq_ia.pdf [Accessed on 02.07.2014]

Table 13. Proportion of Girls that could need Reading Glasses
(% of girls that manifested mild, moderate, severe and very severe pain or discomfort around the eyes)

	No discomfort	Discomfort
Out-of-School Girls (n=44)	**82.8%**	**17.2%**
Control	100.0%	0.0%
Treatment	68.8%	31.3%
Standard 5 Girls (n=174)	**75.3%**	**24.7%**
Control	73.0%	27.0%
Treatment	75.9%	24.1%
Standard 6 Girls (n=187)	**75.3%**	**24.7%**
Control	71.4%	28.6%
Treatment	76.6%	23.4%
Grand Total (n=409)	**75.8%**	**24.2%**

Disability and Mother's education. 76.4% of the girls experiencing at least one form of disability have mothers with either no schooling or only primary school education. The incidence of disability decreases substantially as mothers go up in their level of education. These findings supports the claim that educated mothers may be able to identify the early stages of disability in their children and therefore pursue services and may be less at risk of disability themselves (see Appendix D for the prevalence of disability by mother's education).

3.8 Self-Esteem, Self-Efficacy, and Motivation

Self-esteem and efficacy are expected to increase among the girls who participate in TfaC activities. It is expected that the project will make them feel psychologically stronger, more empowered and also better able to deal with the challenges of going to school and succeeding in school as a girl. We have therefore measured base rate levels of self-esteem, feeling of belonging in school, academic self-efficacy, and the power that girls perceive to have to make their own decisions.

Overall, the psychological measures present the same picture across treatment and control schools. No significant differences are found on any of the psychological indicators between treatment and control groups.

3.8.1 Self-esteem

Even though the results that we find, based on the composite measure of the 10 items from the Rosenberg self-esteem scale, are not as dramatic as expected with a mean score that is on the higher end of the scale, there is room for improvement. Importantly, the results reveal no statistically significant differences between either in or out-of-school girls, neither for treatment nor control schools. No differences emerge between districts or regions either. When examining the single items of the scale, it should however be noted that the only item on which the out-of-school girls score (marginally) significantly higher than in-school girls is the item: 'I am inclined to feel that I am a failure' ($p = .06$).

Table 14. The Rosenberg Self-Esteem Scale

	In-school girls	Out-of-school girls
1. On the whole, I am satisfied with myself.	4.13	4.18
2. At times, I think I am no good at all.*	3.61	3.76
3. I feel that I have a number of good qualities.	3.80	3.70
4. I am able to do things as well as most other people.	4.03	4.06
5. I feel I do not have much to be proud of.*	3.15	3.42
6. I certainly feel useless at times.*	3.89	4.03
7. I feel that I am a person of worth, at least on an equal plane with others	3.80	3.81
8. I wish I could have more respect for myself.*	2.49	2.58
9. All in all, I feel inclined to feel that I am a failure.*	**3.86**	**4.27**
10. I take a positive attitude toward myself.	4.00	4.24

* indicates negatively phrased items. Scores should therefore be interpreted in the different direction: the higher the score, the lower the self-esteem.

3.8.2 School belonging

As previous research has found that marginalized girls feel unwelcome at school, the IE measured the degree to which girls feel that they belong to the school.

The mean scores presented in Table 24 are based on a composite score of four items:

- I feel close to people at this school.

- I feel part of this school.

- I am happy to be at this school.

- The students at this school are against me. (reverse coded)

This measure of school belonging is based on self-reported responses from girls to the above items. There are no statistically significant differences between treatment and control schools in school belonging. Interestingly, there are also no differences between in and out-of-school girls on any single item, nor on the overall average. This may be explained by the fact that the out-of-school girls that were interviewed had only recently dropped out of school. They were invited to participate in the interview by the AoC or the head teacher, as a recent dropout. The fact that it was possible for the AoCs or head teachers to invite these particular girls to the school for the interview means that they were still in the vicinity and had ties to the teachers that were strong enough for them to be located, contact and be found willing to participate in the baseline study.

A significant difference (p< .05) in school belonging was found between the districts, with Blantyre scoring the highest and Dedza the lowest. In other words, Dedza scores significantly lower than all other districts, except for Ntcheu, Nkhotakota and Chikwawa in the extent to which girls feel that they are a part of their school. There is no significant overall difference between the Central and Southern region.

3.8.3 Academic self-efficacy

One of TfaC's key indicators is the level of self-efficacy that girls perceive in not only their SRH behavior, but also in their academic achievement. For this reason, we measured self-efficacy in the academic domain specifically on the basis of four items:

- I feel like I can raise my hand in class whenever I want

- I feel confident in my ability to learn

- I feel capable of learning the material in school.

- I am able to achieve my goals in school.

There are no differences between treatment and control schools, or between districts or regions. Girls overall scored relatively high, with an average score between the scale points of 4 (agree) and 5 (strongly agree). This measure of self-efficacy relied on self-reported responses to the above items.

Of particular interest is also the lack of a significant difference in the scores of in- and out-of-school girls. This means that the out-of-school girls feel equally capable of learning and exhibiting learning behaviors as their in-school peers. This finding is remarkable, given the fact that they do feel like a failure more often than in-school girls. Out-of-school girls feel equally capable of learning as in-school girls (as indicated by the lack of a significant difference in self-efficacy scores), but the fact that they are out of school makes them feel like they failed on a personal level (as indicated by the marginally significant difference on the self-esteem item "I feel inclined to feel like a failure'). This finding speaks against findings that were reported previously that one of the reasons for girls to drop out of school is that they feel they are 'too dumb'. Based on these results, as well as input from focus groups, it seems to be more the case that they feel equally capable of learning as girls that are still in school. They however seem to feel like they failed, because they were forced to drop out of school for external reasons, whereas other girls were able to pursue their education.

3.8.4 Motivation

Table 15. Motivation Treatment vs. Control

Item *Why do you try to do well in school?*	Treatment (n= 288)	Control (n= 87)
External regulation (2 items) *E.g., …because that's what I'm supposed to do*	3,37	3,30
Introjected regulation (2 items) *E.g., …so teachers think I'm a good student*	3,58	3,54
Externally driven-motivation	**3,48**	**3,42**
Identified regulation (1 item) *…because it's important to me to try to do well in school*	3,8	3,72
Intrinsic regulation (1 item) *…because I enjoy doing my school work well*	3,75	3,71
Internally driven motivation	**3,78**	**3,72**

Potential negative consequences of intrinsic motivation. The self-determination literature emphasizes that goals will be perceived more easily if motivation is intrinsically driven (e.g., out of curiosity and interest). Be that as it may, the Baseline results suggest that in the Malawian context, there is also an important negative consequence of enhancing girls' intrinsic motivation. Intrinsic motivation is negatively correlated with school belonging. In other words, the more girls are interested in learning and thus have an academic motivation that is driven by internal reasons, the less they feel accepted and a part of the school.

This may be another indication that the problem with girls' education in Malawi is not necessarily due to girls' lack of motivation, but rather that girls who are motivated to do well in school because they want to, feel like they are the exception and may have more difficulty being accepted by peers, for whom it is more typical to be motivated for learning for external reasons (e.g., getting a reward). This would imply that in order for intrinsically motivated girls to be accepted and feel as if they belong in school they would need to be supported by others who are intrinsically motivated.

Table 16. Motivation and School Belonging

Correlations with	School belonging
Item *Why do you try to do well in school?*	
External regulation (2 items) *E.g., …because that's what I'm supposed to do*	n.s.
Introjected regulation (2 items) *E.g., …so teachers think I'm a good student*	-.10*
Externally driven motivation	**n.s.**
Identified regulation (1 item) *…because it's important to me to try to do well in school*	-.18**
Intrinsic regulation (1 item) *…because I enjoy doing my school work well*	-.11*
Internally driven motivation	**-.17****

* Denotes significantly different results at the $p < 0.05$ level
** Denotes significantly different results at the $p < 0.01$ level

Parental Involvement & Autonomy Support. Girls were asked to indicate the degree to which they perceive both of their parents (parental figures) to be involved with them and to be supportive of their autonomy. Autonomy supportive parents for example explain to their children why they should behave a certain way. This parenting style stands in contrast to controlling parenting. Controlling parents instead simply make their children obey without explanation. The items to measure the influence of parenting styles were taken from the Perception of Parents scale (PoP). Based on the self-determination literature, it can be expected that autonomy-supportive parenting will result in a higher quality of life, but also a more intrinsic motivation for learning in the child, since their own interests are encouraged.

First of all, it should be noted that the home situation of in school and out-of-school girls differs substantially. Especially if there is no father figure in the household, the chance that the girl is not in school is higher than if there is any father figure in the home. This pattern holds across both regions. However, there is a significantly ($p < .05$) higher percentage of in-school girls in the Southern region who do not have a father figure in their lives than in the Central region.

Table 17. Parental Involvement & Autonomy Support

	Central region		Southern region		Total sample (N = 408)
	In school	Out of school	In school	Out of school	
Girls living with both biological parents	45%	22%	30%	30%	39%
Girls living with neither biological parent	27%	17%	31%	20%	28%
Girls living without any mother figure	5%	13%	8%	10%	6%
Girls living without any father figure	40%	60%	54%	60%	46%
Girls living with a sibling	24%	8%	22%	30%	22%

However, girls' self-esteem does not seem to be affected by the mere composition of the household.

The relationship that the girl has with the male and female parental figures in the household (in particular the father) matters significantly for her self-esteem. High paternal school involvement positively affects girls' self-esteem. This finding is of particular relevance for TfaC's Output 3, in which the role of the parents is addressed explicitly. See table 18 (next page).

Table 18. Involvement & Self-Esteem

			Self-esteem
Involvement	Paternal*	**High** Some fathers want to know what their children are doing.	3.75
		Low Some fathers don't want to know what their children are doing.	3.48
	Maternal*	**High** Some mothers ask their children what they did in school that day	3.71
		Low Some mothers don't ask their children what they did in school that day	3.55
Autonomy support	Paternal*	**High** Some fathers try to understand why their children don't do what they're supposed to right away	3.77
		Low Some fathers get very upset if their children don't do what they're supposed to right away	3.49
	Maternal	**High** Some mothers explain to their children about the way they should behave.	3.70
		Low Some mothers make their children behave because they are the boss.	3.57

Denotes a significant difference at the p < .05 level.

3.8.5 Teacher Autonomy Support

In order to assess whether the classroom environment also supports the development of an intrinsic motivation, respondents also indicated to what extent they perceive their teacher to be autonomy supportive. Similar as to controlling versus autonomy supportive parenting, autonomy supportive teachers give feedback when mistakes are made and encourage students to persist at difficult activities which are neither too easy nor too difficult for them. Moreover, autonomy-supportive teachers provide feedback to students in a way that is not evaluative of the person (e.g., "you are not smart enough", but rather: "your need to work harder if you want to do well"). They give a rationale for the behavior that they are requesting of students and set up cooperative learning opportunities.

To measure the differences in these styles of teaching, learners were asked if they thought that their teachers (in general, not AoCs) think it is okay if students make mistakes. Or, if they always get angry when students make mistakes.

Overall, the girls indicated equal percentages of teachers to be perceived as autonomy supportive or more controlling across treatment and control schools. The study also found a significant difference on self-esteem and external motivation between high and low autonomy supportive teachers.

The finding is different to what was expected. Girls who report a classroom environment with a low level of autonomy support (a more controlling teaching style in which mistakes are not tolerated) score higher on self-esteem than girls with high autonomy supportive teachers. Moreover, girls who indicate that their teacher is higher on autonomy supportiveness are also higher in external motivation.

In order to validate and explain either of these findings, data will be collected at the midline and end-line that will clarify the effect of the quality of relationship between students and their teachers, student learning expectations and how autonomy supportive and controlling teachers are perceived by learners. This will be done through both interview and survey measures.

This module does not aim to validate a given teaching style but to create a variable that can help interpret self-esteem variations amongst participants of the study.

3.8.6 Benefits of primary school

All parents were asked what they see as the key benefits of obtaining a primary education. The same benefits were listed for the education of a boy and of a girl. Pearson Chi-square tests revealed that there were no significant differences between the perceived benefits of completing primary school for either boys or girls at treatment and control schools.

Despite the fact that differences are not significant, the trend towards higher scores among the parents at treatment schools indicate that they might have been already slightly sensitized to the importance of education in general, as compared to parents at control schools (e.g., see the scores for languages, mathematics, vocational skills, and critical thinking skills). The finding results from the fact that the AoC had already been placed at the school. She

had started to recruit Girls' Club participants during the month before the Baseline was conducted and had thus invited parents to participate in the study, which she had already been in touch with.

Table 19. Perceived Benefits of Primary School

Item	Treatment		Control	
	When asked for boys (N = 66)	When asked for girls (N = 66)	Boys (N = 17)	Girls (N = 17)
Find better job	61%	42%	53%	47%
Provide support to household parents	35%	42%	24%	47%
Chance to go to secondary school	49%	47%	59%	53%
Learn to read and write	42%	44%	47%	47%
Learn other languages	30%	32%	12%	12%
Learn math	30%	30%	18%	24%
Learn vocational skills	32%	26%	12%	24%
Develop moral discipline	23%	27%	24%	35%
Critical thinking skills	21%	29%	6%	18%
Make a better marriage	18%	20%	0%	0%
Learn to be a good parent	12%	14%	6%	6%
Better hygiene	17%	24%	0%	12%
Social interaction skills	12%	14%	6%	0%

Table 20. Disadvantages of Primary School

	Treatment (N = 66)	Control (N = 17)
Expensive	8%	12%
Lose child's labor	3%	6%
Bad manners	5%	12%
Child not willing to work	6%	6%
Late marriage / difficult to find husband	5%	12%
Migrates from village	3%	0%
Makes the girl unhappy	2%	12%
No disadvantages	90%	88%

Parents at treatment schools already tend to perceive fewer disadvantages to a girl's education than parents at control schools. Although none of these differences are significant, this suggests that the AoCs have already started to make a slight impact on their communities by drawing attention to the benefit of girls' education during their recruitment efforts. It is interesting to note however that at control schools, there are over 1 in 10 parents (12%) who indicate they feel that children get bad manners when they go to school and that they will get married later or will have more difficulty finding a

husband and who feel that it will make the girl unhappy. The reasons for why they think this is the case and if these ideas persist despite the project could be explored in focus groups with parents at the Midline.

3.9 Household Characteristics

The Household Survey was carried out on non-representative sample of 84 households. The Household Survey probes into the home environment of marginalized girls.

Occupations of Head of Households. 80.72% of household heads are unemployed. This is broken down in the figure following. Most Head of Households rely on seasonal occasional work. Parents' livelihood activities dictate how consistently they can support their children's education. Households facing increased economic pressures are more vulnerable to discontinue a child's education.

Early-marriage is one way to alleviate such hardship for parents of girls as it reduces the burden of child-care. Cultural practices such as *Lobola* (*bride price*) provide an immediate economic incentive to families of girls facing economic difficulties. *Lobola* was raised in two focus groups with AoCs (Chikwawa and Dedza) as an economic benefit brought up by community members when discussing early-marriage.

Figure 7. Head of Household Employment
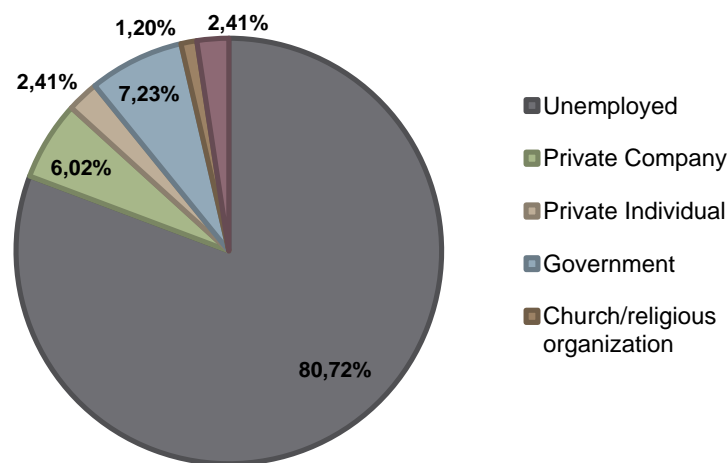
Parents' Level of Education. Most mothers did not progress to secondary school (55.1% of mothers and 26.7% of fathers list primary school as the

highest level of education attained). The gender gap is as expected based on historic enrolment in Malawi. Daughters whose parents have not completed higher levels of school are particularly vulnerable to drop out of school. As shown in our discussion of SRH, the level of education a parent completed has an effect on the SRH knowledge of their daughters.

Table 21. Parent's Highest Level of Education

N = 408	Mothers	Fathers
No School	11.8 %	8.2%
Primary School	51.1%	26.7%
Secondary School	16.2%	20.8%
Technical College	1.5%	5.4%
University	0.5%	0.3%
Don't Know	18.9%	38.7%

Sexual and Reproductive Health Knowledge. Parents and caregivers exhibited fairly high knowledge of contraceptive measures and HIV and AIDS prevention. 85% of parents and caregivers who exhibited lower SRHR knowledge were unable to meet their basic needs without charity. Lower income brackets therefore are more vulnerable to ill sexual health knowledge.

Parents' Expectations of the Project. School visits and focus group discussions with community members, AoCs, and teachers, highlighted that school communities expect material support from Theatre for a Change. In some communities this is a misperception of the project aims and activities whilst in others, members argued it was the only way to improve the girls' access to primary school. While this is outside the scope of the intervention, misperceived community expectations can impact the sustainability of the project in intervention sites. In a number of schools, for example, there was a pervasive assumption that the project would yield material benefits for the girls to enable them continue on to secondary school.

One AoC focus group participant reported:

'Some of the head teachers were like; these pupils when they join the club TfaC will be helping them with notebooks, school uniforms, bags and all these things, so those were the expectations'[19]

Another AoC focus group participant reported:

'So what these parents do, is that they encourage their children to work hard in school with the hope that if TfaC managed to pay for the learners at primary school, then definitely it will also pay for their school fees once they are in secondary school. So, the children will be thinking that TfaC will give them school fees when they go to Secondary School'[20]

3.10 Satisfaction with School Services

Perceived Teaching and Classroom Quality. Most households surveyed indicated that they were satisfied with teaching quality. However, 19% of households were not satisfied with the quality of teaching. Parents and caregivers will be actively mobilized by AoCs throughout the intervention. There is a strong consensus amongst parents surveyed that classroom facilities are unsatisfactory at school. Given the lack of desks and chairs and high the classroom sizes this is unsurprising. Parents recognize the need for improved classroom facilities.

Table 22. Satisfaction with School Services (n = 84)

	Yes	No	Don't Know
Is the teaching satisfactory at her school?	77.11%	19.28%	2.41%
Are the classrooms satisfactory at her school?	39.76%	53.01%	6%

3.11 Cost of Education and Reported Poverty

Reported Poverty. The household survey found that 75% of households are unable to meet their basic needs without charity. The study also asked respondents how difficult it has been over the past year to afford school. Although primary education is free in Malawi, there are necessary costs, which fall on households such as school uniforms, and school supplies. A

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[19]*Agent of Change Focus Group*. Dedza. October 15, 2014
[20] ibid

study by the World Bank conducted in 2004 found that 'parents do still incur expenses for exercise books and writing materials, in order to supplement state supplies, which are often inadequate. In addition, there are other school expenses that parents are required to meet, such as sports fees, transport, and water'[21]. Schools also sometimes ask parents directly for monetary support.

Mussa (2009) conducted a study on the Rural-urban differences in parental spending on children's primary education in Malawi. The study found that 'the level of household income in rural and urban areas positively and significantly impacts both the participation of parents in school and expenditure decisions'[22]. Given the fact that 80% of household heads are unemployed the targeting of the intervention accurately captures a marginal group at risk of dropout.

Table 23. Difficulty Affording Schooling (n = 84)

	Very Difficult	Somewhat Difficult	Not very Difficult	Not difficult at all
In the past year, how difficult has it been to afford her schooling?	54.22%	13.25%	19.28%	12.05%

Monetary Support to School. 22.9% of parents reported providing monetary support to their child's school in the last 12 months, and 16.9% of parents reported providing monetary support to their child's teacher in the same period. As discussed this is not uncommon in Malawi despite primary school being free. This is an added burden on a high number of households who face the consequences of unemployment and inability to meet their basic needs without charity.

3.12 Value of Education

Girls' Right to School. TfaC aims to enable parents and communities to have a more supportive attitude towards girls attending school. The household survey found that 33.73% of parents surveyed believe a child's sex is

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[21] Kattan & Burnett(2004). *User Fees in Primary Education.* The World Bank.
[22] Mussa (2009) pg. 3

important when deciding whether they attend school. Whilst the majority of parents stated that it was unimportant (59%), the high degree of those who believe it was important can be a contributing factor to future dropout.

Of those parents who stated that a child sex was important when deciding whether they should attend school, 25% were in Ntcheu, 28% were in Lilongwe Rural West, 14% were in Blantyre, and a further 28% were in Lilongwe Rural East. These areas are relatively more urban than other intervention sites.

Attitudes towards Girls Education. Despite the fact that most parents would like their children to complete secondary school or higher (87%), there are a number of attitudes towards girls' education that may discourage a girl to continue school. Marriage for example, is not seen as a barrier to continuing education. However, findings suggest that early marriage is a significant cause of dropout in Malawi23. Nearly 9% of girls who dropped out of school in Malawi in 2010 did so because of early-marriage24. There is a clear misperception that girls can continue education if married. 75% of households surveyed believed that it would still make sense for their daughter to continue her education if married.

55% of parents feel that a boy is more likely to use his education when he leaves school. This suggests that there is a pervasive perception that although education may be good for both genders, it is more useful to a boy. This supports a core assumption of the GEC, namely that support for boys' education is stronger than that for girls' education amongst parents. Part of this response is due to the fact that boys have more and higher paying job opportunities than girls in Malawi and therefore parents may feel boys education is of more use.

3.13 School Assessment and Child Protection

We conducted a school assessment on all 63 schools that were visited. This assessment aimed at evaluating school facilities and the degree of gender

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[23] Girl Up (2010) Situation Analysis: nearly 50% of girls are married by the age of 18 and less than a quarter of girls finish primary school.

[24] Save the Children (2005) *State of the World's Mothers 2005: The Power and Promise of Girls' Education*. Washington, D.C.: Save the Children.

sensitivity of school services. Enumerators filled in the checklist based on structured observations conducted during school visits and with the support of the AoC and/or the head teacher. The results of the school assessment are reported in Appendix D.

3.13.1 School Facilities

Most schools in both treatment (71.4%) and control (76.1%) groups do not have enough tables and chairs for students. Classrooms are crowded; particularly in lower standard levels before dropout has had an effect on enrollment.

Toilet facilities are not comfortable for students to use and 42.9% in treatment schools are not sensitive to the needs of girls, particularly if they are menstruating. Further, 66.7% are not in sanitary condition and do not have water to wash hands. An in-school girl in a focus group held in Lilongwe, stated:

'I do not go to school when I am menstruating because it is not clean'[25].

An enumerator reported, after conducting a questionnaire with a participant that:

'When menstruating she does not come to school because she feels she has little utensils to clean herself with'[26].

Results of the girls' questionnaire supported this view with 36.9% of respondents, who have started menstruating, across both treatment and control groups reporting that they found it difficult to attend school during their period. 58% of girls who reported they had difficulty, attending school during their period found toilets uncomfortable to use. The table following reports girls' perceptions on the comfort of toilets in schools. Almost half of all respondents feel toilets are uncomfortable to use.

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[25] FGD Notes. *In-School Girl*. Lilongwe Rural East. October 10 2014.
[26] In comments field on SSQ. Case C558IS56. Girls SSQ (2014).

3.13.2 Child Protection and School Safety

Child Protection. 31.7% of schools in the treatment group report not having a Child Protection Policy. During school visits, a number of head teachers expressed they did not know what this was and that if there was a case of abuse, they assume it would be reported to them.

School Safety. A large number of schools are not in enclosed compounds and are located in the middle of their communities where access to the school cannot be easily controlled. Enumerators considered this when evaluating the safety of the school compound. 40.5% of schools in the treatment group were therefore categorized as 'not-safe'. However, it was difficult to identify a high prevalence of incidences where girls felt unsafe. At the midline and endline we will examine this more closely through the School Safety Assessment (see Inception Report: Spider Map Activity).

In the questionnaire with girls we addressed perceived safety in and surrounding school. The results are shown in the table following.

Table 24. Safety in and Surrounding School (n = 408)

	Strongly Agree	Agree	No strong feeling	Disagree	Strongly Disagree
I feel safe in my school	34.07%	49.26%	8.33%	7.60%	0.74%
Girls are safe in my school	31.37%	49.75%	7.84%	9.31%	1.72%
Boys are safe in my school	32.60%	50.74%	8.33%	7.11%	1.23%
I feel safe on my way to school	32.84%	47.06%	8.82%	8.58%	2.70%
I feel safe on the way back from school	31.86%	46.08%	9.80%	9.31%	2.94%

There is no strong difference in perceived level of safety for girls and boys in school amongst respondents. There is a consistent percentage of girls who feel unsafe at school and on the way to and from school.

One out of school girl, when asked why she disliked school during a focus group stated:

'What I hate was the behavior of some male teachers who could propose to be in relationships with learners, for example, sometimes they could tell us to

mop in the staffroom and when you enter there they could start making moves on you which was very disappointing on my side so, I disliked that.'[27]

Another out of school girl explained:

'I left school because the teacher was proposing to me so, when I told my mother she told me that I should not go back to school because she did not want to see me being impregnated by the teacher so I had no choice but to leave school and currently I am just staying and it is a tear now but I will go back when that teacher is transferred.'[28]

These incidents reflect the strong need for working Child Protection Policies at schools.

4. Conclusions & Recommendations

This year Tiphunzire! expanded into 225 schools, a summary table outlining the implications between Year 1 and Year 2 is shown in the table following.

Table 25. Implications of the Scale Up

	Year 1	Year 2	Total in Project
Total Number of Schools	60	225	285
In-school Girls receiving intervention	1080	5670	6750
Out-of-School Girls receiving intervention	360	1890	2250
Number of Districts	6	10	10

Treatment vs. Control, key comparisons:

- Overall, the Year 2 Baseline established that the control and treatment group are comparable on key items tracked in the longitudinal study, namely: attendance, literacy, numeracy, self-esteem, school belonging, and academic self-efficacy.

Literacy:

- There is a significant presence of non-readers in both Standard 5 and Standard 6, and the gap is twice as broad for out-of-school girls. 15%

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[27]Out of School Girl Focus Group. Blantyre. October 12, 2014
[28] ibid

of in-school girls and 33% of out of school girls in the treatment group scored 0 on the EGRA subtest of oral reading fluency indicating they cannot read. Girls Clubs need to actively support girls to acquire basic reading skills in order to enable them to access and engage with school. This is particularly important for out of school girls who will be encouraged to re-enroll and have largest number of non-readers.

Numeracy:

- In-school girls outperformed out-of-school girls at statistically significant levels in most sub-tasks, as to be expected. However, out of school girls outperformed in-school girls in solving word problems. This suggests that out of school girls could be applying numeracy skills in daily life tasks such as working at a market and managing the household. This supports TfaC's work to integrate real world numerical problems in girls clubs as these exercises can be easily contextualized by in-school and out-of-school girls.

- Quantity discrimination, addition and subtraction skills need to be more actively supported for out-of-school girls given their relatively poorer performance. Given the difference between them and their in-school peers, formal schooling may otherwise be the only way an out-of-school girl can acquire these skills.

Attendance:

- Full attendance will yield better learning outcomes. Girls who attended school more frequently scored higher on the literacy subtest of oral reading fluency.

- A girl misses an average of 3 days (±2 days) per month during the post-harvest season. Reasons for missing school can include child work (75% of the total sample is involved in some form of child work whether economic or non-economic), and menstruation (37% reported to having trouble attending school during menstruation).

- Attendance is not correlated with overall numeracy skills. In-school girls are, however, better at non-basic subtractions and additions suggesting that attendance to school might be, after all, the only way a girl may acquire these skills.

Self-esteem and SRH knowledge, attitudes and practices:

- High self-esteem correlates to safer and consensual sexual behavior. The study found that self-esteem significantly affects a number of SRH behaviors including condom usage and attitudes towards contraceptives. Girls who indicated that a condom had been used at their last sexual encounter, scored higher on self-esteem than girls who indicated this had not been the case. Further, a significant effect was also found for the item 'can you ask your partner to use a condom if you wanted him to'. Girls that answered 'yes' scored higher on self-esteem than girls who answered 'no'.

- Higher self-esteem relates to improved attitudes towards family planning. With regards to contraceptive use, girls who, when asked if they would use contraceptives to prevent pregnancy, and gave an explicit answer (either yes or no) had higher self-esteem than girls who were unsure.

- Higher self-esteem relates to better SRH knowledge. Girls who indicated that they were aware of methods that exist to prevent pregnancy possessed higher self-esteem than girls who indicated not to know. These findings strongly support the assumption that higher self-esteem underpins healthier sexual and reproductive health practices.

Self-Esteem and Parental Involvement:

- The study found that the relationship a girl has with the father figure in the household had a significant impact on her self-esteem. In the context of Malawian society where males hold more powerful positions in communities and in the household, it makes intuitive sense for their involvement and perceived views to matter for a girl's

self-construal. In this case, a fathers' involvement has a positive effect on a girls' self-esteem.

Parents and Communities:

- The study further found that 85% of parents and caregivers who exhibited lower SRHR knowledge were unable to meet their basic needs without charity. Lower income brackets therefore are more vulnerable to ill sexual health. Marginalization and risk-of-drop out is therefore more likely for girls in lower income brackets.

Other considerations:

- School visits and focus group discussions with community members, AoCs, and teachers, highlighted that some communities expect material support from Theatre for a Change and need more information about the nature and coverage of the project. While this is outside the scope of the intervention, misperceived community expectations can impact the sustainability of the project in intervention sites.

- 75% of students are involved in some form of child work. 67% of in-school girls devote a significant amount of hours of their day to house work, which may include cleaning or caring for smaller children. These activities can compete with participation in project activities such as Girls' Clubs. AoCs can therefore tap on more parental support from the parents of project participants to ensure their attendance to project activities.

- Understanding and establishing child protection policies remain a challenge to many schools. This largely due to problems of information as well as collective action. AoCs can indeed raise awareness about child protection but full implementation requires active support from TfaC partners, including local school management structures (such as school management committees and the MoEST).

Our findings further suggest a number of project- level recommendations to improve the implementation of the Tiphunzire! project. The Evaluation team would make the following recommendations:

1. Strengthen AoC training on Community Outreach & Mobilization and re-visit this in the upcoming refresher training. Training should enable AoC's to be comfortable with communicating project aims in an accurate and transparent manner to school stakeholders.

2. Engage parents and guardians. This is important because parents ultimately decide if girl attends school or not and a high proportion of girls who participate in TfaC activities will actively support their guardians in housework outside of school hours.

3. Actively support non-readers to promote their full participation in project activities.

4. Appoint and empower one AoC at the District Level to better coordinate AoCs in the district and represent TfaC in the absence of the SHN Coordinator or the Project Team.

5. Strengthen existing committee structures that incorporate fathers' involvement in school. The Baseline report found that the *relationship* that the girl has with the male and female parental figures in the household (in particular the role of the father) matters significantly for her self-esteem. High paternal school involvement positively affects girls' self-esteem.

6. Address behavioral challenges and sensitize boys to sexual rights of girls through boys clubs. TfaC offers a number of boys clubs but these reportedly have low attendance. In order for girls to feel safe and capable of succeeding in school, boys need to be actively engaged and sensitized to issues surrounding a girls' right to education. The report found a number of instances of sexual abuse and bullying on the part of boys towards girl learners.

7. Communicate the need and importance of a Child Protection Policy and support schools to develop appropriate and transparent

reporting mechanisms to ensure safe learning environments for learners. School stakeholders should be informed about cases of abuse found in this study in order to promote the establishment of accessible child protection mechanisms.