

APPENDIX A: METHODOLOGY DETAILS

Quasi-experimental, multi-stage, stratified, disproportion random sampling was used to select schools to participate in this research.

Sampling Procedures

Nyanza Province

- Stratification of schools by district and academic performance was established in the following steps:
 - Schools in Nyanza province were listed by district and zone.
 - Schools in each zone were rank ordered and divided into thirds by academic performance of their pupils using mean scores attained on annually conducted, standardized national examinations (KCPE exams).
 - Four lists of schools were established for each zone. These comprised four separate sampling frames:
 - Potential target schools – to receive PSABH programme:
 - top performing school overall, i.e., top in the top third (referred to as top target).
 - top performing school in the bottom performance third (referred to as bottom target).
 - Potential control schools – not to receive PSABH programme:
 - second highest performing school overall, i.e., 2nd in the top third (referred to as top control).
 - bottom performing school in the second performance third (referred to as bottom control).
- Schools were randomly selected from each of the 4 lists using the following criteria:
 - < 20% from top and \geq 80% from bottom;
 - The number selected in each district was approximately proportional to the number of zones in the district; and,
 - Equal number of target and control in each of top and bottom groups in each district.
- Sixteen of the 160 schools in the full sample were chosen for in-depth qualitative data collection in wave 1. School selection ensured equal representation across target and control groups, ethnicity, and schools whose pupils scored at the top and bottom of standard academic evaluations (KCPE exams). The 16 schools comprised:
 - 8 target and 8 control schools;
 - 8 schools with predominantly Kisii and 8 with Luo pupils; and,
 - 8 top and 8 bottom performing schools.

Beyond this breakdown, schools were selected to maximize diversity and with attention paid to feasibility of access. To be eligible for selection schools had to:

- Have enough boys or girls in standard 7 and 8 to provide at least 5 boys or 5 girls for a focus group discussion; and,

- Be accessible to the research team which had to transport equipment from a central location to the school.

Four (two Kisii and two Luo) of the 8 target schools were selected based on ease of accessibility to participate in in-depth, wave 2 data collection.

Beginning with the 160 schools in the sample, schools were further sub-divided into the following variations:

Additional Teacher Schools

The objective in training additional teachers was to see if additional trained staff increased the amount of programming in the schools. From the schools which had already sent a full complement for training to the regular training sessions (i.e., 2 teachers and a community representative), 21 schools were originally invited to send an additional 2 teachers for training. Of these, only 10 schools were able to send the additional teachers for training.

Health Worker Schools

The objective in the Health Worker variation was to see whether a health worker could add to the amount and range of information on HIV prevention strategies brought to schools, particularly with respect to condoms as a prevention tool. Health workers whose geographic areas of responsibility covered 22 of the target schools were trained to deliver HIV prevention education in schools. Each health worker visited his or her designated school at least twice with the purpose of supporting teachers and providing information about prevention strategies directly to pupils.

Church Leader Schools

Churches sponsor a majority of schools in Nyanza Province. The objective of this variation was to see whether training a leader from the church that sponsored a school, at the same time that teachers from that school are trained, would encourage a coalition of school and church in prevention education that would be more effective in producing behaviour changes. Twenty-two of the control schools were selected to participate in this variation. Schools were selected to represent communities where different Christian churches predominated, where churches were already active in HIV programming, and where the participating school was sponsored by a church. For each of these schools, the head teacher, senior teacher and a church leader from the denomination that sponsored the school were invited, and funded, to participate in the 2 training courses. Only 10 of these schools sent the full complement (including a church leader) to the training sessions in January 2003. Concern over the poor attendance inspired trainers to hold a second session in June 2003 for which an additional 7 schools and 5 of the schools trained in January sent participants. Thus, there are a total of 17 schools which are identified as being part of the Church Leader variation. There were 3 schools which sent participants to one of the training sessions but did not include a church leader. Since these could no longer be identified as control schools, these schools were dropped from the Nyanza sample.

Target schools which, according to CfBT records, had received training and were not part of the Additional Teacher or Health Worker variation were now classified as Nyanza Basic schools. Control schools which, according to CfBT records, had not received training were now classified as Nyanza Control schools.

Rift Valley

Rift Valley was the selected site to test a cost sharing variation on the basic PSABH model. Schools in the region were invited to training, but were required to pay the costs for participants to attend, while the costs of the training itself were paid by CfBT.

Consequently, target schools in this sample were self-selected.

A total of 60 schools were part of the Rift Valley sample. These were divided into three variations, Rift Peer Supporter/Cost Share; Rift Teacher Only; and Rift Control.

Of the schools which self-selected into PSABH training and had a full complement of participants (2 teachers, a community representative and peer supporters), 20 were selected for evaluation purposes. These schools were matched as best as possible based on demographic characteristics with 20 schools that, at the start of the evaluation period, had not selected into training. An additional 20 schools that self-selected into training at a later date were assigned to a Teacher Only training group, i.e., they were not provided with peer supporter training until after the evaluation period.

Data Collection:

- All pupils in Standards 6 and 7 and, in most cases, two teachers (head teacher and preferably a senior female teacher) in each of the 160 selected schools were invited to complete surveys at wave 1 (November 2001-Nyanza; July 2002-Rift), wave 2 (February 2003-Nyanza, no wave 2 data collected for Rift) and wave 3 (October 2003-both Nyanza and Rift). At wave 2, the head teacher in one school did not permit pupils to participate in data collection. At both waves of data collection, teachers in two schools (not the same schools at each wave) refused to complete surveys. This produced pupil self-completion surveys in 160 schools in wave 1 and 159 in wave 2 and teacher self-completion surveys in 158 schools in wave 1 and 2.
- Zonal Inspectors were trained to complete School and Community Responsiveness Surveys based on personal observations and conversations with teachers, pupils, and community members. This data was collected in August 2002 and again in August 2003 in Nyanza and March 2003 in Rift. Following the second collection of SRS and CRS data, in Nyanza, there were 5 control schools that claimed to have sent a full-complement of teachers to both training sessions and that these teachers were training others in their respective schools. These schools were dropped from the sample.
- Zonal Inspectors were trained to collect pregnancy data based on interviews with teachers for all schools in Nyanza. Pregnancy data were collected in 156 schools.
- At wave 1, semi-structured, in-depth interviews were conducted at each of the 16 sites in Nyanza (8 target, 8 control) and 6 in Rift (4 target, 2 control). Interviewed were:
 - 1 head and 1 senior teacher with an attempt made to ensure at least one interview was with a senior female teacher; and,

- The chief or assistant chief and the head of the women's group or otherwise recognized influential woman in the community served by the school.
- In addition, a focus group was conducted with either 5 boys or 5 girls from standard 7 and 8. In Rift schools, two focus groups were held at each site (one with boys and one with girls). Participants for focus groups were selected on the advice of teachers based on their willingness to talk about issues related to HIV/AIDS and sexuality.
- At wave 2, semi-structured, in-depth interviews and focus group discussions were conducted at each of four selected sites in the same manner as wave 1 except that two focus groups were held at each site (one with boys and one with girls).
- At wave 3, semi-structured, in-depth interviews and focus group discussions were conducted at 3 sites in Rift (all peer supporter schools) and 8 in Nyanza (2 Church Leader, 2 Health Worker, 2 Basic Target and 2 Control). Separate focus groups were conducted with trained peer supporters from several schools at a central location, 3 each with boys and girls.
- All survey instruments and interview schedules can be found in Volume II.

It must be noted that not all data were collected for each data collection instrument in all schools. Reasons for missing data included: teacher refusal to have pupils participate in data collection, teacher refusal to participate in survey completion, oversight or misunderstandings on the part of zonal inspectors or Steadman Research staff with respect to which schools were scheduled for data collection, or difficulty in accessing a school at a particular time. Table 2 summarizes the number of schools and the number of individual participants for whom data were collected with each instrument at each wave.

Table 16: Final Samples for Data Analysis - Nyanza Province

Database	Number of Schools		Number of Pupils, Teachers, or Community Members Responding	
	Target	Control	Target	Control
Wave 1				
Pupil Survey* (PSC)	82	78	3420	3381
Teacher survey (TSC)	82	76	218	222
Teacher interviews	8	8	16	16
Community interviews	8	8	16	16
Pupil Focus Groups	8	8	40**	40**
Pregnancy Data	80	76	--	--
Mid-Wave				
School Responsiveness (SRS)	81	78	--	--
Community Responsiveness (CRS)	81	77	--	--
Wave 2				
Pupil Survey* (PSC)	81	78	3133	3266
Teacher survey (TSC)	80	78	154	160
Teacher interviews	4	0	8	0
Community interviews	4	0	8	0
Pupil Focus Groups	4	0	40**	0
Pregnancy Data	80	76	--	--

Database	Number of Schools					Number of Pupils, Teachers, or Community Members Responding				
	NBT	HW	AT	CL	NC	NBT	HW	AT	CL	NC
Variations Introduced										
Mid-Wave										
School Responsiveness (SRS)	51	22	10	17	50	--	--	--	--	--
Community Responsiveness (CRS)	51	22	10	17	50	--	--	--	--	--
Wave 3										
Pupil Survey*** (PSC)	49	22	10	17	50	2904	1355	560	929	3248
Teacher survey (TSC)	49	22	10	17	50	102	44	20	34	110
Teacher interviews	2	2	2	2	--	4	4	4	4	--
Community interviews	2	2	2	2	--	4	4	4	4	--
Pupil Focus Groups	2	2	2	2	--	20	20	20	20	--

Notes: Based on final ranking of schools as control or target.

* Only pupils 11-16 years of age; in wave 2, only pupils who reported attending school in 2002.

** 20 boys, 20 girls in 4 focus groups for each gender

*** Only pupils 11-17 years of age

Table 17: Samples for Data Analysis – Rift Valley

Database	Number of Schools			Number of Pupils, Teachers, or Community Members Responding		
	Target	Control		Target	Control	
Wave 1						
Pupil Survey (PSC)	21	19		1259	976	
Teacher survey (TSC)	21	19		63	58	
Teacher interviews	4	2		8	4	
Community interviews	4	2		8	4	
Pupil Focus Groups	4	2		40	20	
Mid-Wave						
School Responsiveness (SRS)	27	14		27	14	
Community Responsiveness (CRS)	26	14		26	14	
Variations Introduced						
Wave 3						
Pupil Survey* (PSC)	19	29	11	1581	2130	734
Teacher survey (TSC)	19	27	11	38	54	22
Teacher interviews	3	--	--	6	--	--
Community interviews	3	--	--	6	--	--
Pupil Focus Groups	3	--	--	30	--	--
Peer Support Focus Groups	--	--	--	30	--	--

* Only pupils 11-17 were included in wave 3 analysis.

Measures

Following are descriptions of the variables used in the multivariate analyses. Details of the exact coding and combination of survey questions to create each variable are contained in Volume II in the coding guides.

School and Community Characteristics

Characteristics of schools and communities were drawn from data obtained through the SRS and CRS and by aggregating pupil or teacher responses provided on Self-Completion surveys. The following school characteristics were examined as potential influences on uptake or results of the PSABH programme:

- Level of school resources or school SES – this indicator was created based on information on structural facilities such as classroom space, windows, desks;
- Mean KCPE scores of pupils in each school were divided into quintiles based on the school’s rating within the province (i.e., quintiles were established separately for Nyanza and Rift);
- Level of staffing as reflected in pupil/teacher ratios;
- Proportion of female teachers in the school;
- Religious sponsorship of schools; and,
- Dominant ethnic group of pupils within the school (based on 90% of pupils claiming a particular ethnic affiliation).

Table 18: School Profiles

Mean scores across all schools	Nyanza					Rift Valley		
	Control	Church Leader	Basic Target	Health Worker	Add'l Teacher	Control	Teacher Only	Peer Supporter Target
School SES (1-100) Range = 43-58	55	54	55	55	53	61	67	68
KCPE Score Range = 1-5	2.9	3.1	3.1	3.0	3.2	2.4	2.8	3.7
Pupil-Teacher Ratio Range = 9-112	40	40	46	45	40	52	38	53
Proportion of Female Teachers Range = 0-100	31	38	33	26	35	27	49	52
% no religious sponsor	30%	6%	14%	18%	0%	100%	90%	42%
% Catholic sponsor	26%	18%	43%	36%	40%	0%	0%	32%
% Mainline Protestant Sponsor	26%	53%	31%	46%	40%	0%	10%	16%
% Breakaway Traditional Sponsor	18%	24%	12%	0%	20%	0%	0%	10%
% schools with Luo pupils	56%	76%	57%	54%	50%	0%	0%	0%
% schools with Kisii pupils	36%	24%	29%	23%	40%	0%	0%	0%
% schools with Kikuyu pupils	0%	0%	0%	0%	0%	83%	62%	37%
% schools with mixed other pupils	8%	0%	14%	23%	10%	17%	38%	63%

[B-C1] To test the potential influence of churches on uptake or outcomes of PSABH, the following indicators of church activity were established using the CRS:

- Number of churches in the community;
 - Number of Catholic churches in the community;
 - Number of mainline Protestant churches in the community;

- Number of Breakaway or Traditional churches in the community.
- Number of churches in the community reported to have held meetings on HIV and AIDS:
 - Number of Catholic churches holding meetings;
 - Number of mainline Protestant churches holding meetings;
 - Number of Breakaway or Traditional churches holding meetings.

Table 19: Community Profiles

Mean number (or score) in each community	Range	Control	Target
Churches	1-9	3.55	3.40
Churches with HIV meetings	0-10	2.22	2.22
Catholic churches with HIV meetings	0-1	.63	.51
Protestant churches with HIV meetings	0-5	1.15	1.30
Breakaway/Traditional churches with HIV meetings	0-4	.45	.41

For school-level analysis, measures of programme implementation and general response to the programme were drawn from the TSC and PSC. Composite measures were created based on questions about the presence of activities encouraged in the PSABH training. These measures served two purposes. First, they provided a way to assess the degree to which various programme components were actually implemented. Second, recognizing that variations in participation in PSABH training and the transfer of teachers could affect the presence of PSABH promoted activities and that CfBT was not the only organization working to bring HIV/AIDS programming into schools, these measures provided a way to assess the degree to which HIV/AIDS programming was present in schools.

Measures of Programme implementation/response

Measure	Description
PSC & TSC	
Implementation	Two separate scales for teachers and pupils. Summation of all questions on the TSC and PSC about the presence and (where applicable) the frequency of use of components of PSABH . Items included: presence of question box, information corner, school health club, various books, teaching about HIV/AIDS in specific subjects. (0=no implementation, 10=all items implemented).
Teacher Attitudes	Summation of teacher responses to questions tapping their attitudes toward teaching about HIV and AIDS (e.g., teaching young people that condoms give protection only encourages sexual activity, the more information we give young people the better). (0=least favourable attitudes, 10=most favourable attitudes)
Barriers	Teachers' perceptions of practical barriers to teaching about HIV and AIDS (e.g. insufficient time, resources or training, parent objection, pupil shyness). (0= presence of all barriers to the maximum degree possible, 10= absence of any barriers)
Abstinence lessons	Two separate scales for whether teachers reported teaching and pupils reported receiving lessons on how to resist playing sex, controlling bodily urges, resisting pressure from friends, girl/boyfriend, an older

partner (0=no such lessons, 10=all lessons)

These measures provided indicators of the level or degree of programme implementation and teacher and pupil response.

Knowledge

The chart below summarizes the number and content of knowledge measures developed from responses to questions in PSC and TSC surveys. Several topical subsets of the total knowledge measure were created in order to tap different types of knowledge.

Consequently, some questions were used in several of the measures of knowledge. For example, condom questions were included in the total knowledge scale, the condoms for prevention scale and the prevention of transmission scale.

Table 20: Areas of Knowledge and Number of Questions for Each

Area of Knowledge	Pupil Self-Completion		Teacher Self-Completion	
	Wave 1	Wave 3	Wave 1	Wave 3
Total Knowledge (all items)	22	22	13	12
STD-HIV Relationship	4	4	-	-
Knowledge re Sexual Transmission	-	4	-	-
Condoms for Prevention	-	4	-	-

Attitude Measures

Measure	Description
Commitment to abstinence	Summation of items that inquired about intentions or actions that pupils had taken in order to avoid playing sex (e.g. refused, avoided going somewhere, could tell boy/girlfriend to wait until marriage, could have a boy/girlfriend for a long time and not play sex) (0=no intentions or actions to insure abstinence, 10=endorsed all intentions and have engaged in all actions to insure abstinence)

Measures of Communication

Measure	Description
Talk to female relatives	Summation of all items indicating if pupils prefer or have talked to female relatives about HIV/AIDS. (0= neither preferred nor have talked to any female relatives, 10= preferred and have talked to all possible female relatives)
Talk to male relatives	Summation of all items indicating if pupils prefer or have talked to male relatives about HIV/AIDS. (0= neither preferred nor have talked to any male relatives, 10= preferred and have talked to all possible male relatives)
Talk to other	Summation of all items indicating if pupils prefer or have talked to community members who are not relatives about HIV/AIDS. (0= neither preferred nor have talked to any community members, 10= preferred and have talked to all possible community members)

Measures of Actions Taken

Measure	Description
Pursue information	Summation of all items about seeking out information about HIV/AIDS. (0=not pursued any information, 10=indicated pursuit of each kind of information)
Commitment to pursuing information	Summation of all items about seeking out information about HIV/AIDS plus whether asked question, talked to teacher or parents, read about HIV or talked about HIV in Health club. (0=not active in pursuing information, 10=actively pursuing information)
Single Item Measures:	
Help friend	Whether pupils reported having helped a friend avoid playing sex (coded 0=no, 1=yes)
Refuse to play sex	Whether pupils could have played sex but refused in the past one (wave 1) or three (wave 3) months (0 = not refused; 1 = refused).
Not go	Whether, in the past 3 months, pupils had chosen not to go somewhere specifically because they wanted to avoid being pushed or forced into playing sex. (0 = not avoided; 1 = avoided)
Sexual debut	For pupils who were virgins as of January 2002, whether they had initiated playing sex by the time of the survey, i.e., during the year when PSABH was being implemented in the schools (0=no, 1=yes).
Recent sex	For pupils who were not virgins, whether they had engaged in sexual activity in the previous 3 months, i.e., during the programme (0=no, 1=yes)
Sexual Safety	Whether pupils choose to abstain or used a condom during last intercourse (0=no, 1=yes)
Condom use	Whether condoms were used at last intercourse (0=no, 1=yes)

Change Scores

For school-level data, change scores were calculated that comprised the difference between the measure at wave 1 compared to wave 3. These scores provided an indicator of the amount of change within the school from pre-programme data collection (wave 1) to data collection 18 months later (wave 3).

Data Analysis

Data Checking

Data were checked for reliability and validity prior to conducting data analysis. Data checking included the following steps.

- Responses to all questions were tested for construct validity by comparing responses on logical sequences or combinations of questions.
- Scales were created and tested using principal components factor analysis and analysis of internal validity using Cronbach's alpha. Construct validity was tested using correlations among similar indicators or indicators with well-established relationships.

- Frequency distributions were examined to assess the suitability of variables for use in t-tests, analysis of variance, and regression analyses.

Testing for Significant Gains in Target Schools

Analysis to determine whether PSABH produced significant changes in between variations consisted of examining the size and direction of change for each variable of interest and then using analysis of variance tests to determine whether the size of the change in one variation was significantly greater than in control schools or other variation schools. Composite measures for wave 3 data and change scores were used in these analyses.

For changes in pupils' scores, controls were imposed for:

- Gender of pupils;
- Whether pupils were virgins pre-programme or sexually experienced; and,
- Standard of pupil.

These established whether PSABH had differential effects for different groups of pupils.

Factors Influencing Uptake, Vulnerability and Response to HIV/AIDS

Hierarchical multivariate regression analyses were used to develop a profile of the uptake of PSABH in schools, factors that influenced greater or lesser programme implementation, and the influence of school uptake on knowledge, attitudes and behaviours. These analyses used aggregated measures from the PSC and TSC together with measures from the SRS, and CRS data combined in a school-level database and provided analyses of schools rather than individuals.

Procedures for Hierarchical analyses

Variables were clustered into blocks based on the concepts they represented, the time-ordering of their influence (e.g., programme implementation precedes outcomes), and analysis goals (e.g., a primary goal was to establish whether there were differences between target and control schools). Blocks of variables were then entered sequentially into regression analyses to establish whether and how various blocks influenced programme uptake and outcomes. The sequence of steps below provide an overview of each set of regression analyses and the blocks of variables that were entered. The series was conducted for both the wave 3 scores and the change scores (where these were available) to establish which blocks and individual variables influenced both the results at wave 3 and the amount of change between waves 1 and 3.

In order to explain (dependent variable)	Blocks of variables entered
Teacher attitudes and teaching barriers	<ol style="list-style-type: none"> 1. Variations 2. SES 3. School & community characteristics
Teacher implementation scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. SES 4. School & community

	characteristics
Pupil implementation scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher implementation 3. Teacher attitudes & barriers 4. SES 5. Scholl & Community characteristics
Teacher scores on teaching how to abstain	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. SES 5. School & community characteristics
Pupil scores on teaching how to abstain	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation 4. Teachers scores on teaching how to abstain 5. SES 6. School & community characteristics
HIV/AIDS Knowledge: Teacher total knowledge scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. SES 6. School & community characteristics
HIV/AIDS Knowledge: Pupil total knowledge scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher knowledge 6. SES 7. School & community characteristics
STD Knowledge: Pupil scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher knowledge 6. SES 7. School & community

	characteristics
Condom Knowledge: Pupil scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher knowledge 6. SES 7. School & community characteristics
Sex Knowledge: Pupil scores	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher knowledge 6. SES 7. School & community characteristics
Pupil Communication and Information: With female relatives, with male relatives, with other community members, pursuing information	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. SES 7. School & community characteristics
Pupil Commitment to pursuing information: pursuing information (as above) and whether asked question, talked to teacher or parents, read about HIV or talked about HIV in Health club	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. SES 7. School & community characteristics
Pupil Commitment to not playing sex	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. SES

	8. School & community characteristics
Pupil Sexual Debut during programme	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Pupil recent sexual activity	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Pupil helped a friend avoid a situation that might lead to sex	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Pupil could have played sex but refused	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain

	<ol style="list-style-type: none"> 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Pupil chose not to go somewhere in the last 3 months to avoid playing sex	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Pupil sexual safety: based on whether the pupil chooses to abstain or used a condom in the last sexual encounter	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. SES 9. School & community characteristics
Condom use by boys and girls	<ol style="list-style-type: none"> 1. Variations 2. Teacher attitudes & barriers 3. Teacher & pupil implementation; 4. Teacher & pupil teaching how to abstain 5. Teacher & pupil knowledge 6. Pupil commitment to pursuing information 7. Pupil commitment to not playing sex 8. Pupil sexual debut during programme, recent sexual activity,

	<p>helped a friend avoid a situation, chosen not to go somewhere</p> <p>9. SES</p> <p>10. School & community characteristics</p>
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The R² statistic for each block of variables, the standardized and unstandardized coefficients for each individual variable, and tests for multicollinearity were examined to establish the appropriate interpretation of regression results.

Analysis of Textual Data

There were five steps in the analysis process:

- (1) All textual data was read and coded based on the original interview/focus group questions.
- (2) Sections from all interviews dealing with the same topics were read to develop an understanding of the topics from the perspective of different community members.
- (3) Summaries based on these topics were prepared.
- (4) As cross-cutting themes began to emerge from the data, text was re-read and re-coded into thematic groupings and the themes and connections between them were elaborated.

Once the qualitative data had been ‘mined’ in this way, it was compared to results from teacher, pupil, school responsiveness and community responsiveness surveys.

Triangulation

Two modes of triangulation of data were used:

- (1) Results of analyses of each form of data collection were used to inform the next form of data collection.
Data collected in wave 1 surveys were used to create guides for in-depth interview and focus group discussions. Results from analyses of the in-depth material were used to create questions for the SRS and CRS. Results from analyses of the in-depth materials were used together with results from the SRS and CRS, to revise and add questions to the wave 2 PSC and TSC. Results from this analysis, a re-administered SRS and CRS in Nyanza and the wave 1 and SRS and CRS analysis in Rift were then used to update the surveys and interview guides for wave 3 analysis. In this way, each form of data informed the next wave of data collection and further tested conclusions drawn based on earlier waves of data collection.
- (2) All forms of data were combined in developing the analysis and conclusions in this report.

APPENDIX B: TABLES

This appendix contains tables that support results provided in the main body of the report. The letter used to identify each table (i.e. Table A) is identical to its corresponding figure in the body of the report (i.e. Figure A). Unless otherwise indicated in the table footnotes, results marked as significantly different are those where the wave 3-1 increase or decrease is significantly different for target compared to control schools. Positive results in the Wave 3-1 columns indicate an increase from wave 1 to 3; negative results indicate a decrease. The size of the values in the Wave 3-1 columns show the size of the change from wave 1 to wave 3.

Table A: Nyanza - Percentage and Change in Percentage in Teachers Responding

This term, HIV/AIDS has been addressed in	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Assemblies	88%	92%	73%*	81%*
Staff meetings	73%	83%	48%*	62%*
Classroom Work Displays	40%	60%	14%*	45%*
School Work Displays	29%	52%	4%*	35%*
Debates	41%	67%	15%*	38%*
Drama/Music Festivals	30%	46%	-4%*	23%*
Class Competitions	22%	31%	5%*	19%*

*p ≤ .01

Table B: Rift Valley - Percentage and Change in Percentage in Teachers Responding

This term, HIV/AIDS has been addressed in	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Assemblies	68%	84%	4%	4%
Staff meetings	73%	68%	12%*	-10%*
Classroom Work Displays	41%	71%	8%*	26%*
School Work Displays	23%	53%	4%	13%*
Debates	14%	42%	-30%*	-5%
Drama/Music Festivals	18%	53%	-15%*	1%
Class Competitions	18%	32%	1%	4%

Table C: Nyanza - For Teachers Who Have Taught Each of the Following Subjects, Percentage and Change in Percentage Addressing HIV/AIDS in:

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Religious Education	88%	91%	1%	8%*
Physical Education	52%	60%	3%	7%*
Music	65%	87%	14%*	23%*
Kiswahili	66%	60%	22%*	7%*
Home Science	91%	93%	12%	11%*
HIV/AIDS Lessons	87%	86%	-1%	-7%
GHC	76%	80%	13%*	11%*
English	67%	85%	13%*	28%*

*p ≤ .01

Table D: Nyanza - Percentage and Change in Percentage of Teachers Reporting Each of the Following:

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Scheme of Work for HIV/AIDS	40%	71%	7%	33%*
Infusion and Integration	64%	83%	30%*	51%*
HIV/AIDS is in Master Timetable	86%	89%	14%*	8%
Sexuality is included in the School Development Plan	33%	55%	-20%*	19%*

*p ≤ .01

Table E: Rift Valley - Percentage and Change in Percentage of Teachers Reporting Each of the Following:

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Scheme of Work for HIV/AIDS	54%	76%	18%	11%
Infusion and Integration	50%	82%	6%	30%*
HIV/AIDS is in Master Timetable	73%	92%	4%	7%
Sexuality is included in the School Development Plan	23%	42%	1%	20%

*p ≤ .01

Table F: Mean Scores for Implementation of PSABH in Schools

Indicator	Nyanza					Rift Valley		
	Control	Church Leader	Target	Health Worker	Additional Teacher	Control	Teacher Target	Peer Supporter Target
Number of schools	54	17	51	22	10	12	29	19
W3: Implementation of PSABH in school (teachers)	3.11	4.02	5.04	5.58	5.39	3.01	4.24	4.17
W3: Implementation of PSABH in schools (pupils)	3.83	4.50	4.95	5.06	5.49	3.01	4.09	4.38

Notes: Order of variations reflects those which are typically least to most different (left to right) from control schools. Shaded cells represent variations that are significantly different from control cells at p ≤ .05.

Table G: Mean Scores for Change in Implementation of PSABH in Schools

Indicator	Nyanza					Rift Valley		
	Control	Church Leader	Target	Health Worker	Additional Teacher	Control	Teacher Target	Peer Supporter Target
Number of schools	54	17	51	22	10	12	29	19
W1/W3 differences: Implementation of PSABH in schools (teachers)	1.22	1.85	3.34	3.49	3.36	.49	1.84	.96
W1/W3 differences: Implementation of PSABH in schools (pupils)	0.96	1.57	2.12	2.27	2.80	-.09	1.26	.82

Notes: Order of variations reflects those which are typically least to most different (left to right) from control schools. Shaded cells represent variations that are significantly different from control cells at p ≤ .05.

Table H: Nyanza - Percentage of Teachers Responding (Wave 2 and 3 only)

	Wave 3		Wave 3-2 increase (- decrease)	
	Control	Target	Control	Target
I have talked to pupils about				
How to resist playing sex	86%	89%	7%*	1%
How to control urges	72%	81%	14%*	5%*
How to abstain even when friends push you	86%	88%	8%*	2%
How to keep from playing sex even when BF/GF wants to	84%	81%	30%*	11%*
How to avoid playing sex with older men/women	73%	81%	16%*	20%*

*p ≤ .01

Table I: Rift Valley- Percentage of Teachers Responding (Wave 3 only)

	Wave 3 only	
	Control	Target
I have talked to pupils about		
How to resist playing sex	91%	84%
How to control urges	64%	63%
How to abstain even when friends push you	86%	90%
How to keep from playing sex even when BF/GF wants to	77%	79%
How to avoid playing sex with older men/women	68%	66%

Table J: Nyanza - Percentage of Pupils Responding (Wave 2 and 3 only)

	Wave 3		Wave 3-2 increase (- decrease)	
	Control	Target	Control	Target
The following have been talked about in school				
How to resist playing sex	63%	66%	3%	7%
How to control urges	50%	54%	2%	5%
How to abstain even when friends push you	51%	53%	5%	9%
How to keep from playing sex even when BF/GF wants to	55%	57%	6%	7%
How to avoid playing sex with older men/women	48%	52%	4%	9%

Table K: Rift Valley - Percentage of Pupils Responding (Wave 3 only)

	Wave 3 only	
	Control	Target
The following have been talked about in school		
How to resist playing sex	56%	71%
How to control urges	48%	59%
How to abstain even when friends push you	42%	61%
How to keep from playing sex even when BF/GF wants to	47%	66%
How to avoid playing sex with older men/women	41%	60%

Table L: Level of Pursuing Information for Pupils in Nyanza and Rift Valley

Indicator	Nyanza					Rift Valley		
	Control	Church Leader	Basic Target	Additional Teacher	Health Worker	Control	Teacher Target	Peer Supporter Target
Number of schools	54	17	51	22	10	12	29	19
W3: Level of pursuing information	5.02	6.34	6.30	7.37	6.57	4.40	5.80	6.36
W1/W3 differences: Level of pursuing information	0.62	2.12	2.04	2.64	2.43	.56	1.77	1.21

Notes: Shaded cells represent variations that are significantly different from control cells at $p \leq .05$.

Table M: Nyanza - Percentage and Change in Percentage of Teachers and Pupils With Correct Answers

	Pupils				Teachers			
	Wave 3		Wave 3-1 increase (- decrease)		Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target	Control	Target	Control	Target
You can prevent HIV by avoiding having sex	66%	69%	-5%*	-5%*	81%	92%	10%*	23%*

* $p \leq .01$

Table N: Rift Valley - Percentage and Change in Percentage of Teachers and Pupils With Correct Answers

	Pupils				Teachers			
	Wave 3		Wave 3-1 increase (- decrease)		Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target	Control	Target	Control	Target
You can prevent HIV by avoiding having sex	56%	77%	-9%	-7%	91%	82%	16%	12%

* $p \leq .01$

Table O: Nyanza and Rift Valley - Percentage of Pupils Who Initiated Sexual Activity in the Year Prior to Data Collection

	Rift				Nyanza					
	Wave 1		Wave 3		Wave 1		Wave 2		Wave 3	
	Control	Target	Control	Target	Control	Target	Control	Target	Control	Target
Girls	11%	5%	8%	5%	12%	16%	4%	7%	9%	9%
Boys	25%	14%	16%	12%	15%	19%	10%	10%	27%	21%

Table P: Nyanza and Rift Valley - Percent Change in Pupils Who Initiated Sexual Activity in the Year Prior to Data Collection

	Rift		Nyanza	
	Wave 3-1		Wave 3-1	
	Control	Target	Control	Target
Girls	-3%	0%	-3%	-7%
Boys	-9%	-2%	12%	2%

Table Q: Nyanza - Percentage and Changes in Percentage of Teachers With Correct Answers

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Other Knowledge/Belief Questions				
A condom can slip off and remain inside a girl	26%	28%	-	-
You can prevent HIV by:				
Using a condom correctly when playing sex	76%	84%	-2%	-5%

Table R: Rift Valley - Percentage and Changes in Percentage of Teachers With Correct Answers

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Other Knowledge/Belief Questions				
A condom can slip off and remain inside a girl	32%	40%	-	-
You can prevent HIV by:				
Using a condom correctly when playing sex	91%	94%	10%	25%

Table S: Nyanza- Percentage and Changes in Percentage of Pupils With Correct Answers

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
You can prevent HIV by:				
Using a condom correctly when playing sex	55%	56%	-9%*	-7%*
Other Knowledge/Belief Questions				
A condom can slip off and remain inside a girl	19%	19%	-4%	-6%
Using a condom reduces the likelihood of becoming infected	34%	37%	2%	6%

*p ≤ .01

Table T: Rift Valley - Percentage and Changes in Percentage of Pupils With Correct Answers

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
You can prevent HIV by:				
Using a condom correctly when playing sex	45%	56%	-20%*	-6%
Other Knowledge/Belief Questions				
A condom can slip off and remain inside a girl	26%	22%	-	-
Using a condom reduces the likelihood of becoming infected	39%	35%	-13%*	-13%*

*p ≤ .01

Table U: Nyanza - Percentage and Change in Percentage of Teachers Who Strongly Agree

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Teaching young people that condoms give protection only encourages them to have sex	68%	67%	6%	0%

Table V: Rift Valley - Percentage and Change in Percentage of Teachers Who Strongly Agree

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Teaching young people that condoms give protection only encourages them to have sex	50%	55%	-33%*	-10%

*p ≤ .01

Table W: Nyanza - Percentage and Change in Percentage of Pupils

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Agree that				
If you have sex you should use a condom to protect yourself	47%	53%	-3%*	0%
	Wave 3		Wave 3-2 increase (- decrease)	
	Control	Target	Control	Target
Answered 'Definitely yes or yes'				
I can tell my BF/GF about using a condom	55%	59%	7%*	8%*
If I must play sex I can make sure we use a condom	65%	68%	7%*	9%*

*p ≤ .01

Table X: Rift Valley - Percentage and Change in Percentage of Pupils

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Agree that				
If you have sex you should use a condom to protect yourself	42%	49%	-15%*	-3%
Answered 'Definitely yes or yes'				
I can tell my BF/GF about using a condom	56%	53%	-	-
If I must play sex I can make sure we use a condom	57%	60%	-	-

*p ≤ .01

Table Y: Nyanza - Percentage and Change in Percentage of Pupils Who Are Sexually Active Who:

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Boys				
Used a condom last time you played sex	29%	28%	-1%	1%
Girls				
A condom was used the last time I played sex	31%	30%	-7%	6%

Table Z: Rift Valley - Percentage and Change in Percentage of Pupils Who Are Sexually Active Who:

	Wave 3		Wave 3-1 increase (- decrease)	
	Control	Target	Control	Target
Boys				
Used a condom last time you played sex	26%	20%	2%	-3%
Girls				
A condom was used the last time I played sex	29%	28%	2%	14%

[B-C1][B-C1]Generally these were not significant and this influenced SES, so these were not entered into the regression analysis. Do we want to talk about this here?