

HIV/AIDS ACTIVITY IN THE SCHOOLS

This chapter addresses the first and third evaluation questions:

How successful has PSABH been in getting schools to take up various components of teaching about HIV and AIDS?

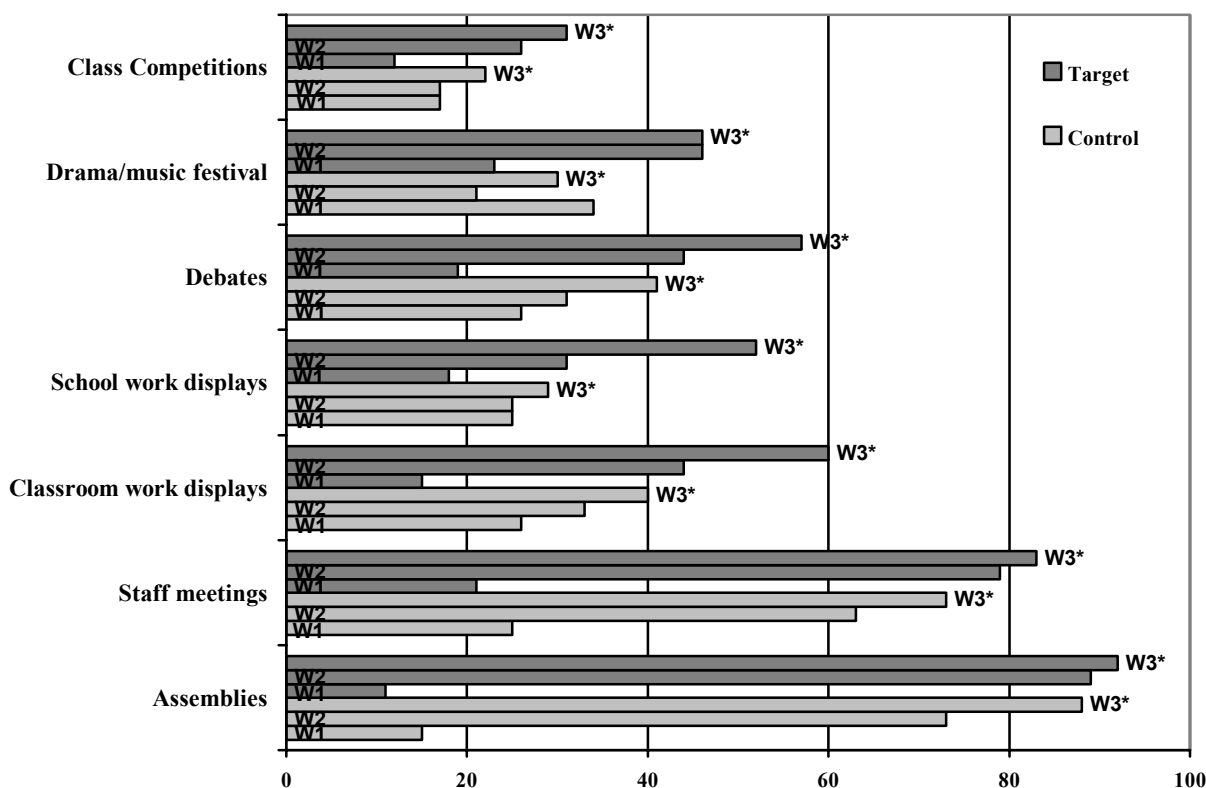
What additional effects do six variations in the basic training model (Church Leader, Health Worker, Additional Teacher, Teacher Only, Peer Supporter Target – ‘cost share’) have on programme uptake?

The chapter compares:

- Basic Target and Control schools in Nyanza Province over three time periods and Peer Supporter and Control schools in Rift Valley over 2 time periods¹;
- Teacher and pupil observations of HIV/AIDS programming in their schools as reported in the TSC and PSC;
- Overall implementation in schools in all variations (6 intervention groups, 2 control groups).

Where is AIDS addressed?

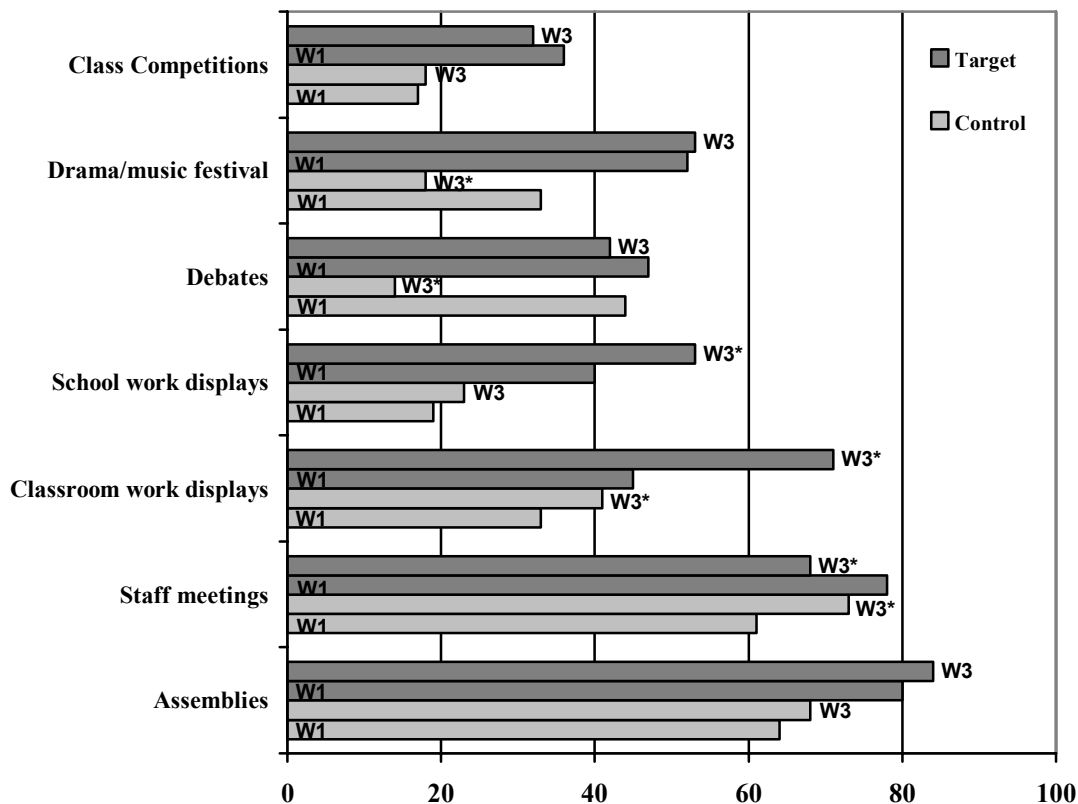
Figure A: Nyanza - Percentage of Teachers Responding ‘HIV/AIDS Has Been Addressed in’:



*increase from wave 1-3 significantly greater in target or control schools at $p \leq 0.01$

¹ Schools from Nyanza Basic Target and Rift Peer Supporter schools represent the schools that received the standard PSABH training modules.

Figure B: Rift Valley - Percentage of Teachers Responding ‘HIV/AIDS Has Been Addressed in’:



*increase from wave 1-3 significantly greater in target or control schools at $p \leq .01$

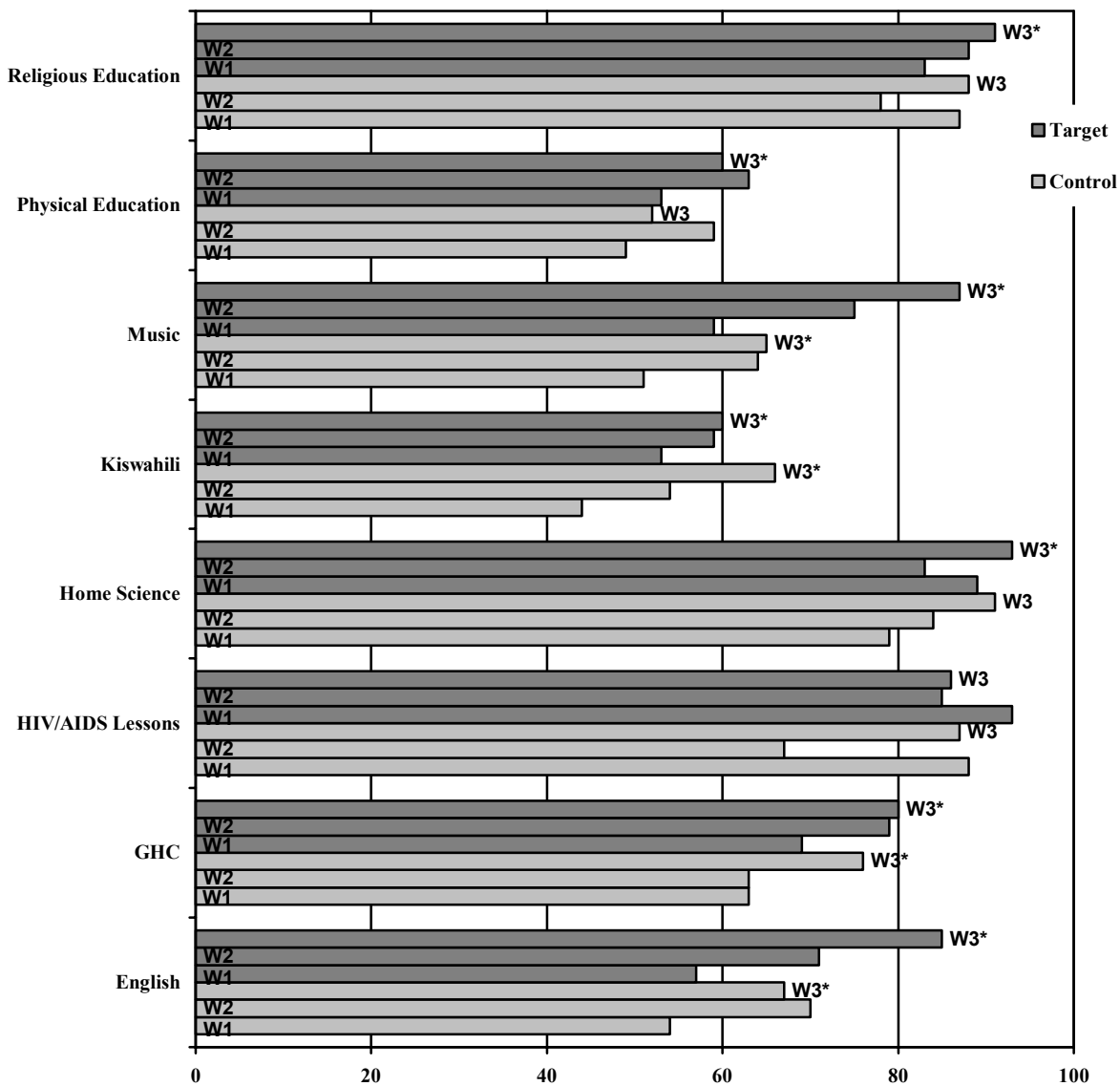
Every school (both target and control) was doing some form of HIV/AIDS education. Figure A shows that, in Nyanza, there were increases in AIDS content in a wide variety of school activities across the 3 waves of data collection with larger increases in target than in control schools. In Rift schools, however, the only activities that increased in target schools were classroom and school work displays (see Figure B). For both Rift and Nyanza it is important to note that the distance between control and target schools widened over the 3 phases of data collection demonstrating that while all schools were taking on HIV/AIDS activities, target schools were doing this to a greater extent than control schools. When comparing Nyanza and Rift it is important to note that for each of these activities levels were higher at wave 1 in Rift Valley than Nyanza in target schools, consequently, the possibility of change was less in Rift Valley.

In both Rift and Nyanza staff meetings and school assemblies were reported by the largest percentage of teachers followed by school work displays.

We erroneously reported a decrease in teaching about AIDS in specific classroom subjects at wave 2. Figure C presents the corrected results for wave 2 together with those for waves 1 and 3. What is evident is that for most subjects, there has been an increase from wave 1 to wave 3 in addressing AIDS in classroom subjects. The exception is in HIV/AIDS lessons and Home Science where there were no significant changes across the waves of data collection. This is not surprising since teaching about HIV and AIDS were already high in HIV/AIDS lessons and

Home Science before teachers were trained in PSABH. The most pronounced increases were in English and Music where 28% and 23% more teachers in target schools reported addressing AIDS in these subjects at wave 3 than at wave 1 (this compared to 13% and 14% respectively in control schools). Of note is that 80% or more of teachers in target schools reported addressing AIDS in each subject except Kiswahili and Physical Education. This compares to over 80% of teachers in control schools reporting the same in only 3 of the 8 listed subject areas (HIV/AIDS lessons, Home Science and Religious Education). While graphs have not been included for schools in Rift, the patterns closely parallel those in Nyanza.

Figure C: Nyanza - For Teachers Who Have Taught Each of the Following Subjects, Percentage Who Have Addressed HIV/AIDS in:



*increase from wave 1-3 significantly greater in target or control schools at $p \leq .01$

Increases are evident from wave 1 to wave 3 data collection in inclusion of HIV/AIDS in the scheme of work, in developing an infusion and integration scheme and in the inclusion of sexuality in the School Development Plan. These increases are significantly greater in target than control schools in both Nyanza and Rift Valley. Inclusion of HIV/AIDS in the master timetable was already relatively high prior to PSABH training in both target and control schools, consequently there has been less change in this area. The larger increases in Nyanza than Rift may be associated with the higher pre-programme levels seen in both control and target schools in Rift.

Figure D: Nyanza - Percentage of Teachers Reporting Each of the Following:

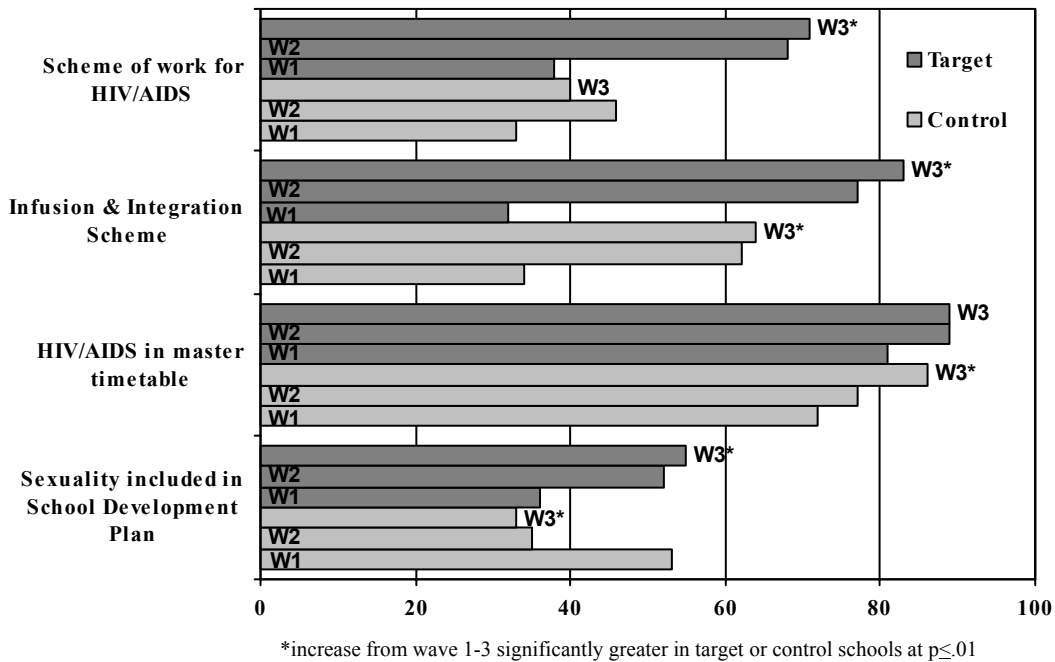
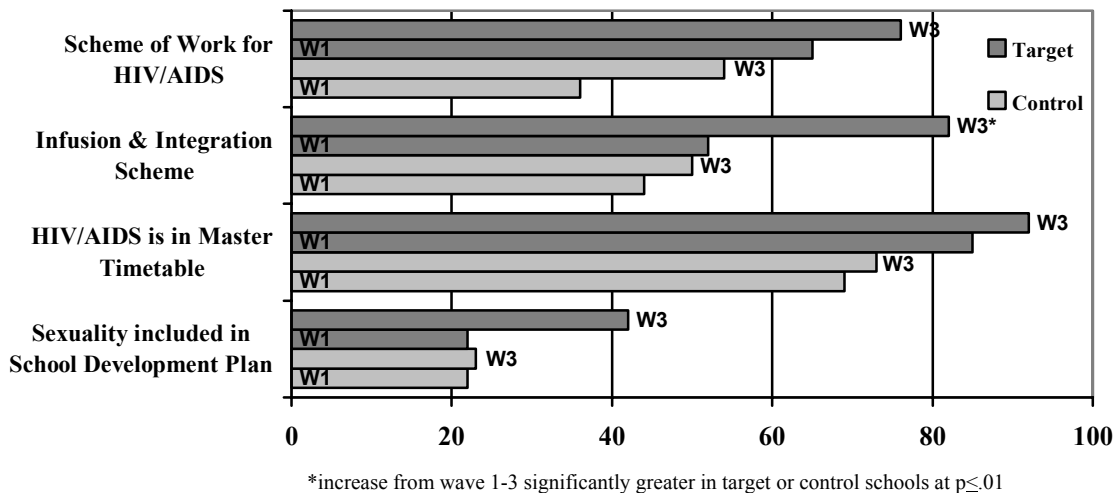


Figure E: Rift Valley - Percentage of Teachers Reporting Each of the Following:



Resources

In both Nyanza and Rift Valley there were large and significant differences between target and control schools at the final wave of data collection, as well as increases from wave 1 in teacher reports of the supply and use of resources for teaching about HIV/AIDS. This suggests that by October 2003 target schools had in hand, and were using, a variety of resources for teaching about HIV and AIDS.

Qualitative Results

At wave 2 the results from interviews with teachers and focus group discussions with pupils suggested that question boxes, health clubs and the teaching of AIDS in classroom subjects were not as consistently evident as suggested in the survey. Pupils commented that although these activities were present in the school for a while, they had disappeared. What must be remembered is that wave 2 data were collected in February 2003, less than 2 months after the beginning of a new school year and a time when all schools were struggling to accommodate the changes brought on by the declaration of free primary education.

By wave 3 data collection in October of the same school year, the situation had improved in most schools. Pupils and teachers participating in the qualitative data collection typically reported the presence and use of question boxes. Pupils commented that it was useful to hear the different questions that were asked, especially ones you would never think of. Schools took creative approaches to question boxes. In one school, for example, pupils participated in formulating the answers, in another parents as well as pupils placed questions in the box with answers to parents' questions discussed when they came to the school. Question boxes were most likely to be appreciated and praised by pupils.

Q: What do you like that goes on in the school concerning AIDS?

The fact that pupils ask questions and the teachers answer them (RBoys4: 1491-1493).

Question box has got very different questions even the ones you had never thought of that's why it's good (NBoys10: 1287-1288).

The question box is placed outside the office so that even parents can write and put questions any time...

Q: How often are the questions answered?

Twice on Monday and Wednesday...After 3.10 P.M...

In our school, they invite parents, pupils and teachers. Then the questions are answered in front of them (RGirlPS1: 1115-1145).

Of concern, however, is that some schools were having difficulty maintaining the question box activity either due to changes in available staff or destruction of the box itself.

The picture related to Health Clubs was less clear. It appears that the title "Health Club" may not have been used in all schools, with some having an 'AIDS Club' or including AIDS-related activities in other clubs. In at least two schools, however, pupils rated the health club as the place where the best learning took place since this was the setting where issues could be discussed and worked out.

*Q: I want to know one best [activity] that is going on well, better than the rest.
Health club.*

Q: Why do you feel it is the best?

*It is new and as it is new we have to like it because good things can come out of it...
It can help us know how to abstain from sex, how we can get AIDS and how we can prevent it (NBoys3: 1820-1840).*

The best part is the health club. In there we exchange ideas. This makes you change your behaviour. We are also taught about other diseases which we didn't know (NGirls10: 963-965).

Pupils did not comment on classroom teaching. Teachers' comments related primarily to the use of drama and songs in teaching about HIV and AIDS.

Programme Uptake Across Variations

Teacher and pupil responses to questions about where AIDS is addressed, school activities such as question boxes and health clubs, AIDS in classroom subjects and the availability and use of resources were combined into two implementation scales (see Appendix A), one based on teacher reports and the other on pupil reports.

Pupils in all variations in both Nyanza and Rift Valley, except the Church Leader, reported significantly higher rates of implementation than the control schools at wave 3 (see Figure F). In addition, increases in implementation from pre-programme (wave 1) to post-programme (wave 3) data collection were significantly greater in all variations except the Church Leader when compared to control schools (see Figure G). Although Church Leader schools had scores greater than the control schools, they were only significantly greater for wave 3 pupil implementation scores. This could be because Church Leader schools were the last to be trained and had very little time to implement the programme.

The ranking of target schools with respect to pupil implementation scores appears to reflect the time since training and the resources available in the school on a daily basis. In Nyanza, Church Leader schools (the variation with the shortest time for implementation) had the lowest implementation scores and Additional Teacher schools (one of the variations with the longest time for implementation and with 2 additional teachers regularly available in the school) the highest. In Rift Valley, Peer Supporter schools had higher scores than Teacher Only. Teacher implementation scores reflect primarily the target-control difference with little variation among the different target variations except for that of Church Leaders, which lagged behind in implementation.

Figure F: Nyanza and Rift Valley - Mean Scores for Implementation of PSABH Schools

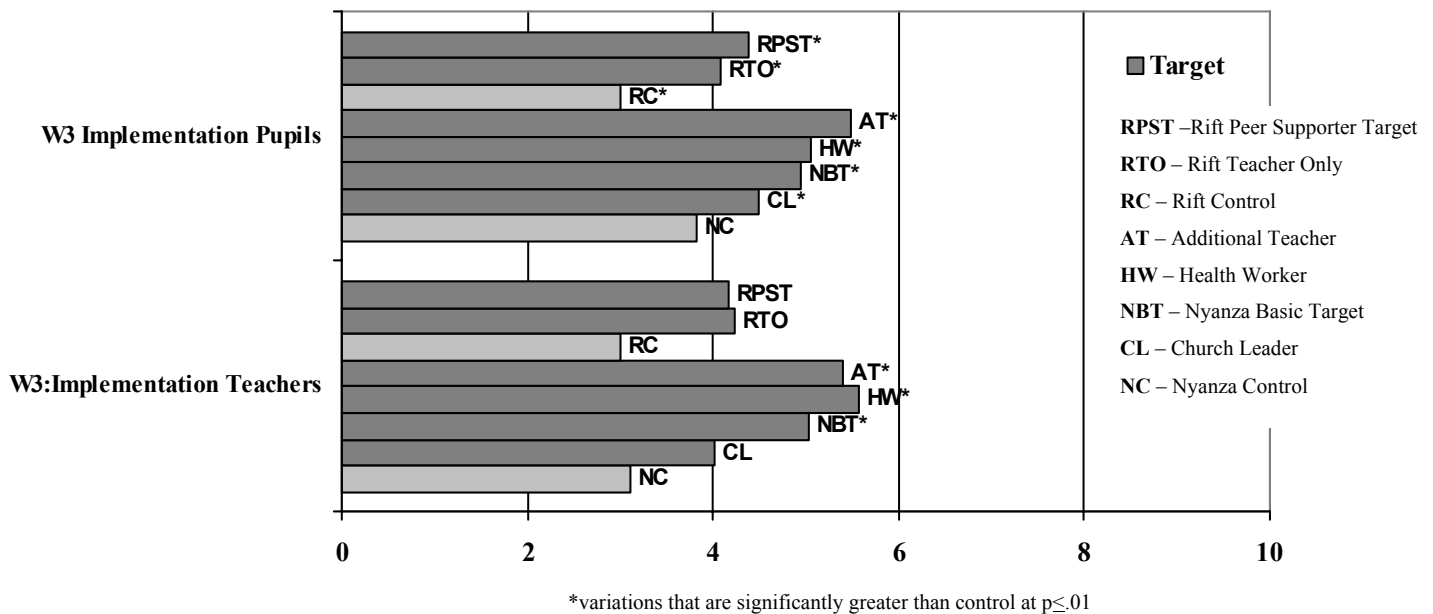
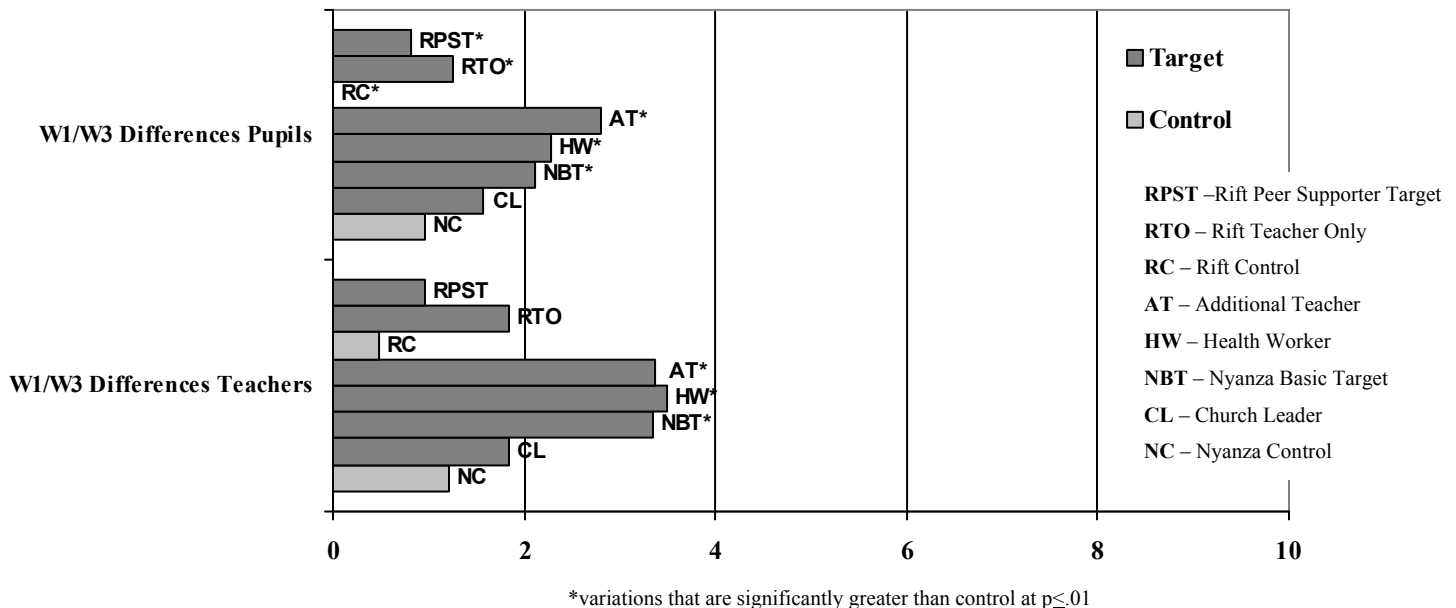


Figure G: Nyanza and Rift Valley - Mean Scores for Change in Implementation of PSABH Schools



The figures on the following pages further illustrate the kind of change that has occurred in the implementation of HIV and AIDS programming in target and control schools across the three waves of data collection. The graphs use data from Nyanza schools, but the pattern is the same in Rift Valley. The three graphs clearly illustrated that:

- There were no appreciable differences in the implementation of AIDS teaching and activities in control and target schools prior to PSABH training.

- The greatest gain in implementation was made within 6 months of training, i.e., by wave 2.
 - By this time, target schools pulled away from control schools and had significantly greater implementation of programming; **but**
 - Programming had increased in **both** control and target schools.
- The distance between target and control schools was maintained at wave 3 data collection; however, in both cases, schools obtained slightly lower scores (the difference was not statistically significant) than they did at wave 2.

Also of note is that although target schools pulled ahead of control schools in programme implementation by wave 2 and sustained this difference at wave 3, some overlap between target and control schools remained across both waves 2 and 3 (see shaded portion of graph for waves 2 and 3). Thus, at wave 3, 12% of control schools were doing as well as the upper half of target schools and 14% of target schools were doing as poorly as the lower half of control schools. It is this overlap, and the fact that in both groups there is a range of scores on implementation, that explains why, in multivariate analyses related to programme outcomes (analyses that consider both PSABH training variations and the degree of programme implementation), it is often the *score* a school received on implementation rather than whether a school was a target or control school that influenced outcomes

See separate file for chart

See separate file for chart

What influences uptake?

In examining the combined and separate influence of various factors that influence programme implementation, PSABH training and variation differences were found to have the most important influence on whether HIV/AIDS programming was present in schools and on the increase in programming from wave 1 to wave 3. This relationship held regardless of whether the responses of boys or girls were considered, pupils who were and were not yet sexually experienced, as well as across all ethnic groups and across schools with different levels of resources (e.g. school SES, staffing levels and proportion of female teachers) and school academic standing measured by performance on KCPE. The only additional factor that influenced the degree of implementation was teachers' ratings of the barriers to teaching about HIV and AIDS. In Nyanza schools, implementation was higher in schools where teachers reported fewer barriers to teaching (e.g., too little time, insufficient training, too few resources). Of note, is that these barriers had no effect on programme implementation in Rift Valley schools.

These results reflect a change between waves 2 and 3. At wave 2, several school and pupil characteristics influenced programme uptake. Almost all of these disappeared by wave 3. This suggests that, with time, the training provided to teachers by PSABH has produced parallel effects across different settings and that regardless of variation, implementation is significantly higher in schools with PSABH training.

Teaching About Abstinence

From focus group discussions in wave 1, we learned that youth wanted to learn specific strategies that would help them resist the biological, social and partner pressures that pushed or 'forced' them to play sex. In waves 2 and 3 we incorporated questions in both the pupil and teacher surveys to assess whether such teaching was occurring.

In wave 2 analysis it was found that a large majority of teachers in both target and control schools claimed to have talked to pupils about several strategies related to remaining abstinent and, similarly, a large majority of pupils reported having learned about such strategies. This pattern was also evident in the wave 3 data, with teaching and learning about each strategy increasing across the two waves of data collection.

Figure H: Nyanza - Percentage of Teachers Responding That They Have Talked to Pupils About:

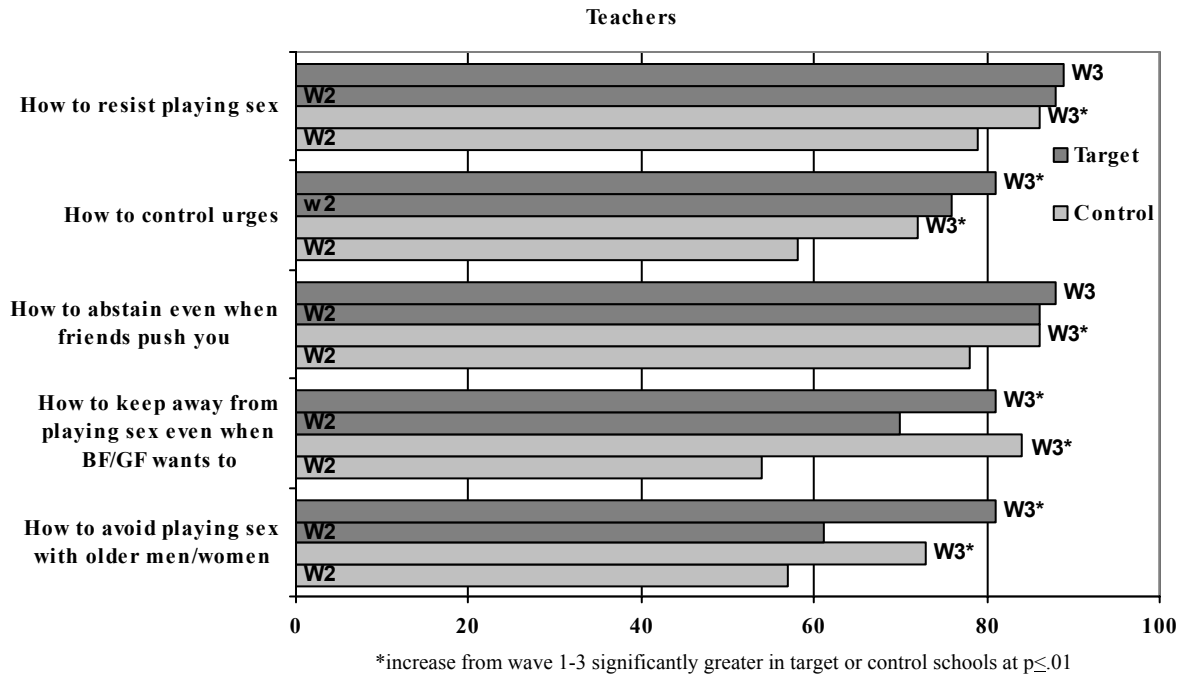


Figure I: Rift Valley - Percentage of Teachers Responding That They Have Talked to Pupils About (Wave 3 only):

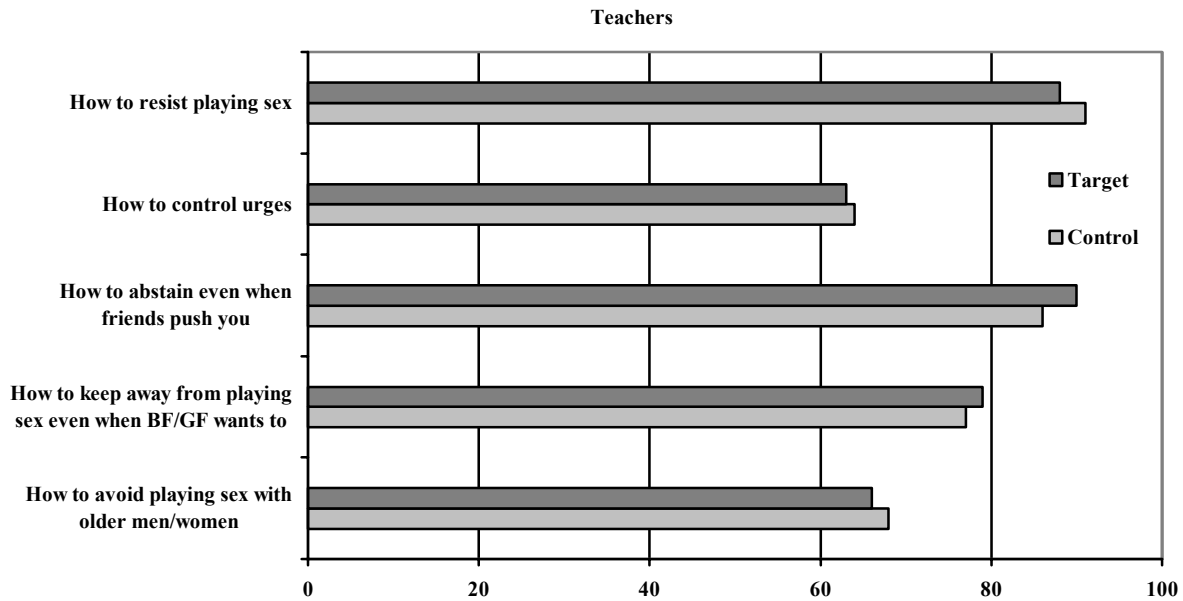


Figure J: Nyanza - Percentage of Pupils Responding that the Following Have Been Talked About in School:

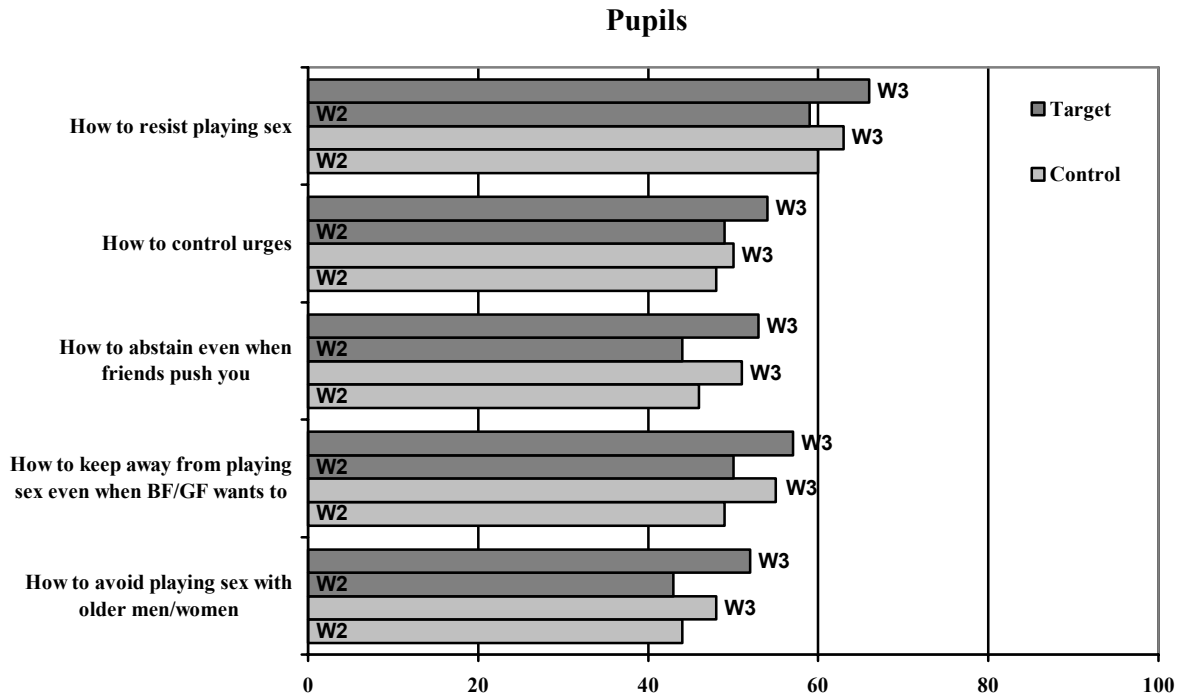
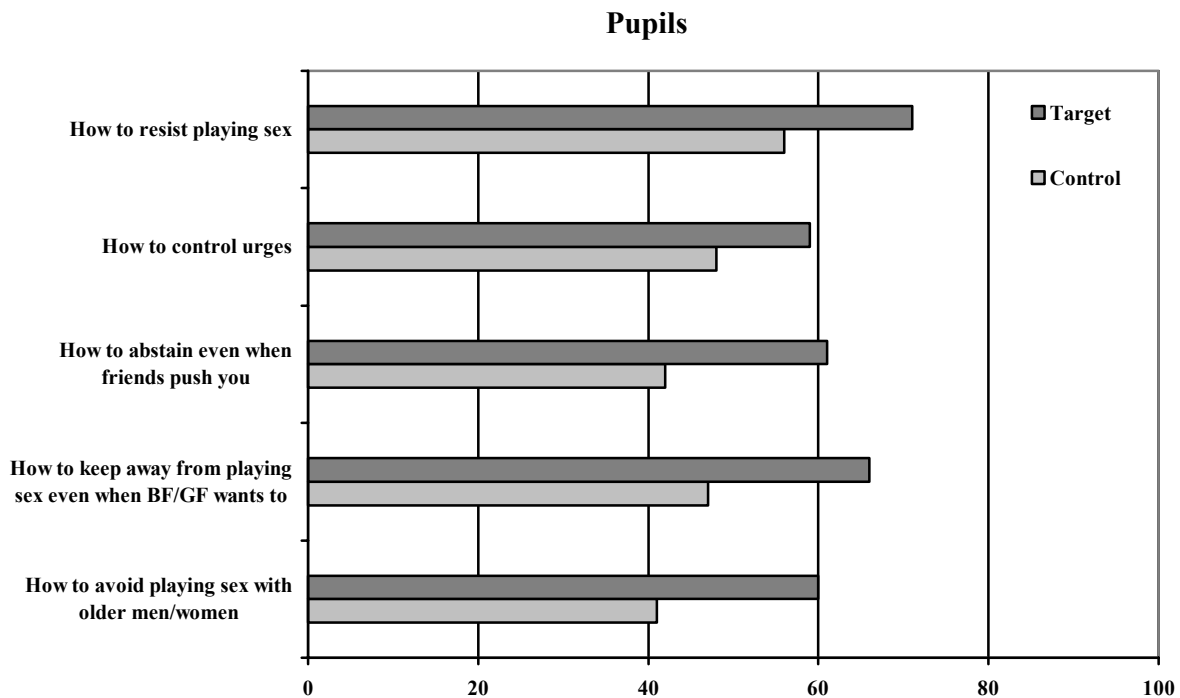


Figure K: Rift Valley - Percentage of Pupils Responding that the Following Have Been Talked About in School (Wave 3 only):



The shift from wave 2 to wave 3 in Nyanza was evident in focus group discussions. At wave 2, pupils often reported only occasional teaching about how to abstain.

Q: In class...have you talked about how students can abstain?

It was brought up once in class...the headmaster...taught us a little about abstinence...

Q: Do you think you should be taught about it in school?

It should be taught so... students can know that it is only by abstaining that they will be safe from HIV/AIDS (W2NBoys1: 816-829).

By wave 3, however, pupils reported being taught more of the specific strategies to help them abstain. Some of the more common ones reported by both Rift and Nyanza pupils included:

- Avoid the opposite sex:
 - Walk with same-sex friends rather than alone, walk away from girls/boys;
 - Avoid being with opposite-sex youth;
 - Just talk to opposite-sex youth, don't befriend them;
 - Avoid boyfriend-girlfriend relationships – just be friends;
 - Don't joke with or touch boys/girls;
 - Do not listen when boys say they love you.
- Re-direct sexual energy, stay busy:
 - Redirect sexual energies and desires into work such as digging, farming, household chores, fetching firewood, herding or other physical activities, i.e., football for boys;
 - Keep busy with homework;
 - Focus on school work, or future
 - Spend a lot of time at church;
 - When you are “in heat” girls should use a “maize cob” rather than playing sex.
- Avoid and deal with situations that could lead to playing sex:
 - Stay away from those with bad thoughts;
 - Report those who are forcing you;
 - Do not take money or gifts from others;
 - Live with relatives if your parents are pushing you into playing sex.
 - Avoid being out at night;
 - Boys stay away from places where girls wear skirts.
- Resist physical assault by poking or throwing soil in the eye, grabbing a man's/boy's penis and pulling hard, running and screaming so others will hear you.
- Think about how you will die if you get AIDS.

Youth still acknowledged the factors that pushed them into playing sex, such as:

- The bodily urges that emerge with adolescence:
 - Unanticipated erections that come just from seeing a girl and make you play sex;
 - When you hold beliefs such as “not playing sex will lead to a blocked penis” (Nboys5: 706).
- Pressure from others:
 - Spending time with people who don't go to school;
 - When peers pressure you;
 - When a teacher wants a pupil for sex.

- Tempting situations:
 - Going to dances and discos where girls and boys are close and touching each other;
 - When your parents treat you “softly” and let you go anywhere you;
 - Once they have already ‘tasted the sweetness’ it is difficult to stop want;
 - When money is offered.

While these situations were recognized as posing problems for remaining abstinent, pupils said it was possible to abstain if they applied the strategies listed earlier and particularly if:

- Your parents love you and give you everything you need so you don’t need a boyfriend;
- Your parents are strict with you;
- You focus on finishing school before you ever play sex;
- You are saved/go to church;
- You see people with AIDS and think about dying from AIDS.

Teachers reported considerable optimism about the effects of teaching specific strategies for abstinence noting that they *saw* the consequences:

- Pupils are:
 - Behaving better;
 - More likely to be seen working and walking in same-sex groups;
 - “Are very free, if there is something they feel is offensive towards their sexual rights they will bring it out” (NST10: 279);
 - Acting and speaking more responsibly about sexual activity and abstinence.
- There were fewer pregnancies;
- Girls were not attracted to men anymore.

Items related to teaching about abstinence were combined into measures of the number of topics teachers had spoken of that related to strategies for abstaining and the number of topics that pupils reported having been taught. The pattern that was evident in Figures J and K was also seen in the scale scores. Teachers reported teaching an average of 4-4.3 out of 5 topics across the variations; pupils reported learning an average of 3-3.5 out of the 5 topics.

When comparing variations, what was most evident was that pupils in the Additional Teacher schools were the most likely to report teaching about abstinence, with at least 10% more pupils in Additional Teacher schools reporting each of the specific items and the overall score on the abstinence teaching scale more than a point higher than in other schools. In Rift Valley schools, a similar pattern was evident for both the Teacher Only and Peer Supporter variations, but was most pronounced for in the Peer Supporter schools. Overall, however, it was the Additional Teacher schools that scored highest.

When variation was considered together with overall programme implementation, however, it was implementation that had the stronger effect on teaching and learning about abstinence. When both variation and implementation were considered together, the variation effect was no longer significant. The degree of overall HIV/AIDS programme implementation was found to have the strongest effect on teaching and learning about abstinence in Nyanza and learning about abstinence in Rift. In Nyanza, teaching about abstinence was also higher in schools where teachers reported fewer barriers to teaching about AIDS. Pupils in both Rift and Nyanza, gave

higher ratings to their learning about abstinence in schools with higher resourcing, as measured in school SES. In Rift, schools with higher KCPE ranking were also those where pupils reported more learning about abstinence.

Teacher Attitudes and Barriers to Teaching About HIV and AIDS

Important to consider as PSABH continues to be implemented and adjusted, are the survey and interview findings on teacher attitudes. What was evident in interviews was while some teachers still felt uncomfortable talking about sex, the training had made them much more open to doing so.

In responses to survey questions there were no apparent differences across variations or target and control groups in how teachers responded to questions inquiring about their attitudes toward teaching about HIV and AIDS. At wave 3, teachers were in clear agreement that teaching about HIV and AIDS was appropriate and necessary in upper primary grades. In terms of barriers, however, while teachers in target schools saw fewer barriers than those in controls, half or more of teachers in target schools continued to report insufficient training, lack of time to deal with the topic, and that parents were unsupportive. The only exception was that teachers in schools that had 4 trained teachers (i.e., Additional Teacher variation) were less likely to report lack of time or inadequate training.

At wave 2, teachers generally described themselves as struggling and overwhelmed by their HIV/AIDS teaching tasks, particularly when they were expected to speak to pupils about sex. By wave 3, however, teachers appeared to have ‘settled into’ their teaching tasks and generally spoke of how the training had provided them with the language, information and strategies for teaching their pupils.

*Q: So since being trained, is it easier for you to talk to pupils about sex?
Yes, it is easier to discuss. We are able to discuss with the pupils, though at times using some words in talking about it become a bit difficult. But we are able to go about it. (N HT11: 81-83).*

Pupil Responses

Pupils were responding positively to the curriculum. At waves 2 and 3 65-80% of pupils found the lessons about HIV/AIDS to:

- Be very useful;
- Have told them everything they needed to know;
- Have helped them make the right decisions; and,
- Have helped them protect themselves from disease.

Of note is that approximately 7-10% more pupils in Rift target schools rated the lessons in this way than did pupils in Nyanza Target schools (i.e. 70-90%).

Only a minority (30-40%) found the lessons:

- Difficult to understand;
- A bit shameful; and,
- Boring.

The feelings of pupils were the same in all schools and got stronger for the first group of responses (i.e. useful, help make right decision) from wave 2 to 3.

VARIATIONS: HEALTH WORKER AND CHURCH LEADER

Specific implementation tasks were expected of the Health Worker and Church Leader variations:

- Health workers were directed to visit schools 2-3 times during the year and specifically to provide support to teachers and pupils in dispelling myths and providing factual information about condoms.
- Church leaders were trained with teachers and other community representatives and expected to visit schools to speak to pupils about HIV and AIDS and to support prevention strategies that fit with their religious teachings.

This section addresses how well the health workers and church leaders carried out these expected tasks.

The data in this section come from Nyanza pupil reports of whether a health worker or church leader visited their school; whether HIV/AIDS, waiting to play sex, and condom use were discussed; and examples of the ‘messages’ that were conveyed for each of these topics. Since daily attendance at school varies and not all pupils are likely to be aware of visitors to the school, a school was considered to have a health worker or church leader visit if at least 70% of pupils completing a survey reported such a visit. Similarly, the visitor was considered to have covered a particular topic if at least 70% of the pupils who were aware of the visit reported the topic was covered.

Health Worker Visits

It was not uncommon for health workers to visit schools; however, health workers were said to have visited significantly more schools in the Health Worker variation than in the control schools and the basic target variation.

Table 4: Percentage of schools where a health worker visited

Variation	Number of schools	Percent
Nyanza Control	54	33%
Church Leaders	17	59%
Nyanza Basic Target	51	39%
Health Worker	22	91%
Additional Teacher	10	70%

In all schools where a health worker visited, there were no statistically significant differences in what was discussed. Health workers were most likely to talk about HIV and AIDS. While this was more likely in Health Worker variation schools, the difference between types of schools was not statistically significant. Waiting to play sex and condom use were not commonly spoken of by health workers in any of the schools despite the specific focus on these practical lessons in the training of health workers.

Table 5: Percentage of schools where each topic was discussed by health workers

Variation	Number of schools where a health worker visited	Topic Discussed		
		HIV/AIDS	Waiting to play sex	Condom use
Nyanza Control	18	72%	11%	17%
Church Leader	10	40%	10%	0%
Nyanza Basic Target	20	70%	10%	20%
Health Worker	20	75%	5%	15%
Additional Teacher	7	71%	0%	14%

While training of health workers by PSABH did increase the likelihood that they visited schools, it did not have an impact on the topics they spoke of or the messages they conveyed. All health workers, whether trained by PSABH or not, were equally likely to cover the topics of HIV and AIDS, waiting to play sex and condom use and the messages they conveyed under each of these topics were identical. Pupils were most likely to report that when discussing:

- HIV and AIDS, the visiting health workers spoke about abstinence for youth.
- Waiting to play sex, the visiting health workers spoke about abstinence, with reasons given for abstinence.
- Condoms, the visiting health workers provided personal, supportive messages with factual information about condoms.

In focus group discussions pupils reported that health workers talked mostly about abstinence and the treatment and care of people with HIV. What was evident from the focus group discussions was the connection between some health workers and religious organizations. Health workers used videos from churches in their visits and some were described as sent by medical missions.

Church Leader Visits

Church leaders were said to have visited significantly more schools in the Church Leader variation than in the control and basic target schools.

Table 6: Percentage of schools where a church leader visited

Variation	Number of schools	Percent
Nyanza Control	54	30%
Church Leaders	17	71%
Nyanza Basic Target	51	33%
Health Worker	22	46%
Additional Teacher	10	50%

Even more so than the health workers, church leaders rarely spoke about waiting to play sex or condom use. Pupils were most likely to report that visiting church leaders spoke about HIV and AIDS in control schools, followed by Additional Teacher and the basic target schools. In only 17% of the schools that had PSABH trained church leaders where the church leader actually visited the school did they speak about HIV and AIDS. While many of the church leaders were only trained in June, leaving two months of school for implementation prior to data collection, it

is curious that in schools in the other variations, pupils were more likely to report that visiting church leaders spoke of HIV and AIDS.

Table 7: Percentage of schools where each topic was discussed by visiting church leader(s)

Variation	Number of schools where a health worker visited	Topic Discussed		
		HIV/AIDS	Waiting to play sex	Condom use
Nyanza Control	16	50%	0%	0%
Church Leader	12	17%	0%	0%
Nyanza Basic Target	17	35%	12%	6%
Health Worker	10	20%	0%	0%
Additional Teacher	5	40%	0%	20%

The responses to statements about what the church leader said with respect to HIV, waiting to play sex and condoms illustrated the same results as the Health Worker variation. Pupils were most likely to report that when discussing:

- HIV/AIDS, visiting church leaders spoke about abstinence for youth.
- Waiting to play sex, visiting church leaders spoke about abstinence with reasons given for abstinence.
- Condoms, visiting church leaders provided personal, supportive messages with factual information about condoms.

In focus group discussions it was clear that church leaders placed AIDS within a religious context. In one case, a church leader explained that AIDS was a consequence of breaking the 6th commandment. Several promoted abstinence by saying that sex outside marriage was a sin. Church leaders also described condoms as dangerous because they had holes or were porous and allowed the virus through. In talking to teachers they told teachers not to mention condoms or to give pupils the facts and limitations on who should be using condoms. When ‘facts’ were described, they included: condoms don’t work, condoms have holes, and people use condoms and then get AIDS. Church leaders did stress to teachers that they must set a good role model and be careful in their relationships and in their interactions with pupils.

The importance of what church leaders said to some youth was clear in one focus group discussion where youth described the ‘best learning’ as coming from the church. In other focus group discussions church leaders were referred to as merely come to school to pray with pupils prior to exams or as repeating what was said in church. At least one head teacher put a great deal of importance and trust in what church leaders said. He said that church leaders had gone for seminars and knew a lot about HIV and AIDS. Because of this he looked to church leaders for “correct” information about AIDS.

As with health workers, schools in which church leaders were trained by PSABH were more likely to have church leaders visit. However, the topics they discussed and the content of their messages did not vary based on whether or not they participated in PSABH training. What should be noted is that trained church leaders had the least time of any group to act on their training since most were trained in June. Given the break between terms, they only had September and October to visit schools.

VARIATIONS: RIFT PEER SUPPORTER

Trained peer supporters are part of the standard or basic PSABH model. To test the effect that trained peer supporters have on programme implementation and outcomes, survey questions related specifically to this component of the programme were administered to pupils in 20 Rift Valley schools with trained peer supporters. The questions asked of these pupils were designed to assess how the peer supporters were perceived and received within the schools. Peer supporters themselves were queried with respect to their roles within the school at three points in time (pre-training, post-training and 9-months post-training). This chapter describes both quantitative and qualitative results based on reports given by both pupils and peer supporters.

Peer supporters reported playing an active role within their school as evidenced by their involvement in setting up school activities related to HIV and AIDS and communicating with pupils about the subject. The testimonies of peer supporters were confirmed by a majority of pupils. Interesting to note are differences in the percentage of peer supporters reporting engagement in select activities and pupils reports of such engagements. In this case, pupils were less likely to report that peer supporters were actively engaged in each activity. This is similar to reports from teachers and pupils on teaching about abstinence wherein teachers reported that they had taught about specific strategies of abstinence than pupils reported being taught about.

Table 8: Pupil reports of peer supporter activity and Peer supporter self-reported activity

	Pupil n	Percentage of Pupils report that PS ^a has...	PS n	Percentage of PS who say they have...
Answered question in question box	1412	64.3%	69	79.7%
Talked to pupil about HIV/AIDS	1432	81.1%	69	87.0%
Set up a school activity for pupils	1312	53.9%	69	71.0%
Held a school health meeting	1357	54.3%	69	69.6%
Talked about HIV/AIDS at school health club	1370	62.9%	69	91.3%
Helped a pupil avoid playing sex	1375	74.4%	69	91.3%

a. PS = Peer Supporter

Input from qualitative interviews with pupils suggested that peer supporters have been visible and actively engaged in activities related to HIV and AIDS within their respective schools. In focus groups pupils said that peer supporters had helped lead activities and answer questions for them. At times, peer supporters stepped up in the absence of teachers to lead activities or disseminate information.

They taught us on how AIDS starts the symptoms and they told us it is not good to play sex (RGirls1: 342-343).

*Q: When do they [peer supporters] teach you?
When the teachers has not yet come (RGirls4: 804-806).*

An attempt was also made to assess the degree to which pupils identified with peer supporters in terms of being similar, a credible source of information, easily approachable, highly regarded, and a role model. Results suggested that pupils perceived peer supporters as being similar to them, easy to talk to, knowledgeable and role models. For comparison purposes, pupils were also asked to rate teachers on these same characteristics. Results suggested that teachers were also identified similarly to peer supporters.

Table 9: Identification with peer supporters and teachers

Percentage of pupils who agree that either the peer supporter or teacher...	n	Peer Supporters	n	Teachers
Know a lot	1347	86.4%	1512	89.4%
Are like me	1512	44.3%	1512	38.6%
Is someone I can talk to	1400	81.0%	1016	86.0%
I would like to do what they do to stay safe	1377	76.8%	1497	71.2%
I wish I could act like they do	1348	79.8%	1493	72.8%

In terms of pupils having interacted directly with or taken part in activities led by peer supporters, a large proportion of pupils reported having asked a question about HIV/AIDS, talked about abstaining from sex or gone to a meeting and received information about condoms, all with or from a peer supporter. Pupils were less likely to have reported having spoken about being forced to play sex or discussing a personal problem with a peer supporter. Similarly, pupils reported active engagement with teachers to relatively the same degree as with peer supporters.

Table 10: Pupil self-reported interaction with peer supporters and teachers

Have you ever...	n	Peer Supporters	n	Teachers
Asked a question about HIV/AIDS	1512	69.3%	1459	72.6%
Talked about a personal problem	1512	44.8%	1399	48.8%
Talked about abstaining from sex	1512	60.1%	1377	57.4%
Talked about being forced	1512	36.4%	1396	34.5%
Participated in an activity led by	1512	48.1%	1332	48.3%
Went to a school health club meeting led by	1512	48.0%	1372	54.4%
Received information about condoms from	1512	50.9%	1372	54.4%

Pupils were also asked to assess both peer supporters and teachers in terms of helping or influencing them in either positive or negative ways. Both teachers and peer supporters were seen by a large proportion of pupils as being helpful, easy to understand and not dull or boring. Teachers were slightly more likely to have been identified as teachers of HIV/AIDS, conduits of knowledge, able to help pupils to make better decisions about playing sex. Note however, that peer supporters were also identified for their ability to do these things.

Table 11: Pupil Assessment of peer supporters and teachers

<i>Percentage of pupils who agree that...</i>	n	Peer Supporters	n	Teachers
Been very helpful	1388	87.2%	1472	93.9%
Taught me about HIV/AIDS	1388	80.7%	1457	90.6%
Are difficult to understand	1512	34.7%	1512	33.7%
Do not feel shameful talking to them	1351	69.6%	1396	75.7%
Are boring	1512	28.1%	1512	28.0%
Have learned a lot from them	1380	81.4%	1443	86.2%
Can make better decisions about playing sex because of them	1305	67.1%	1342	72.2%

In focus groups pupils reported liking the peer supporters because they give advice on and strategies for abstaining from sex, avoiding being forced to play sex and caring for PLWHA's. Pupils were also noted for their answering of questions in the question box. .

*Q: What are some of the things you like about peer supporters?
They give us good advice [on] what we can do when people are telling us to play sex, if they tell you to play sex you say no (RGirls2: 1140-1143).*

*Q: Have the answers from peer supporters helped you?
Yes.*

*Q: Like in what way have the answers helped you especially you.
To avoid playing sex...*

Helped me to stop playing sex...

Has helped me to avoid these issues...going round playing sex...

Has helped me to maintain personal hygiene like razor blade in the barbers shop (RBoys1: 1651-1672).

They teach us well (RGirls4: 1220).

A few youth were concerned that some peer supporters were too shy to reach out to their peers while others commented that the male peer supporters in their school were not setting such a good example by engaging in the very behaviours they tell pupils to refrain from.

If we ask them they shy off (RBoys4: 1477).

Sometimes they surely say do not play sex and when you find them they play sex...When they have taught people the truth they should also not do so in order for the others to follow (RBoys1: 1721-1726).

Peer supporters reported feeling quite comfortable communicating about specific topics. These included how HIV is transmitted, information about AIDS, ways to abstain from playing sex or showing love to someone without playing sex. Communicating about playing sex and condoms was identified as more problematic. Communication did appear to increase over time with respect to most topics. Important to note is that peer supporters became more comfortable discussing condoms over time. Reported comfort in discussing

all topics appeared to translate to active communication on the part of peer supporters within their schools with the exception of condoms.

Table 12: Peer supporter self-reported communication comfort and activity

I am comfortable talking about...	Pre-training	Post-training	9-months post-training
How HIV is transmitted	78.5%	87.9%	98.6%
Playing sex	27.7%	31.8%	50.0%
AIDS	63.1%	78.8%	95.6%
Ways to abstain from playing sex	55.4%	27.3%	91.3%
Ways of showing you love someone without playing sex	64.6%	34.8%	88.1%
When to use a condom	35.4%	72.7%	47.8%
How to use a condom	33.8%	83.3%	33.3%
Where to get a condom	27.7%	40.9%	23.1%
Risk for HIV/AIDS	70.0%	80.0%	81.8%
I have actually spoken about...			
How HIV is transmitted	-	-	95.7%
Playing sex	-	-	53.6%
AIDS	-	-	94.2%
Ways to abstain from playing sex	-	-	95.7%
Ways of showing you love someone without playing sex	-	-	92.8%
When to use a condom	-	-	36.2%
How to use a condom	-	-	26.1%
Where to get a condom	-	-	23.2%

There was ample evidence from focus groups with pupils to support claims made by peer supporters of their activities in speaking about sex and HIV/AIDS. Communication about condoms was more problematic and tended to emphasize their fallibility.

Q: What do peer supporters do?

They talk to us about how to live and prevent it...avoiding Aids, having one partner, trust one another and visiting VCT...They come and we are taken to the hall, boys on their own and girls to, we are taught and we write notes (RBoys2: 97-109).

Sometimes when you go to sit with them they start telling what they were taught (RGirls2: 1018-1019).

Q: What did they tell you about HIV/AIDS?

That when somebody wants to make love to you, you pinch him here...

Q: At the nose?

Yes...[and] that you hit him between his legs (RGirls4: 1137-1146).

Reported peer supporter confidence in carrying out tasks fundamental to their role was relatively high both before training and remained so over time. There was indication of a sizeable increase in confidence when it came to getting information, presenting such information accurately and making presentations about HIV/AIDS, talking to other pupils about playing sex, and teaching others how to care for people living with HIV and AIDS.

Table 13: Peer supporter self-reported confidence in role

I am confident that I can...	Pre-training	Post-training	9-months post-training
Get information about HIV/AIDS	80.0%	83.3%	97.1%
Present accurate information about HIV/AIDS to pupils	67.7%	84.9%	94.2%
Talk to other pupils about playing sex	24.6%	36.4%	46.4%
Help other pupils develop skills to protect themselves	87.6%	81.8%	95.7%
Explain to pupils how a condom should be used	32.3%	15.2%	37.6%
Teach other pupils how to care for PLWHA's	81.5%	90.9%	97.1%
Help other pupils understand their risk for HIV/AIDS	84.6%	88.8%	95.6%
Make presentations about HIV/AIDS	61.5%	66.7%	88.4%

While barriers to being a peer supporter were reported this was for the most part by a select few. A majority of peer supporters did cite shy pupils as being a major barrier to them in their role as a peer supporter.

Table 14: Peer supporter self-identified barriers

Barriers to being a peer supporter	9-months post-training
Not enough time to set up activities for pupils	31.9%
Not enough training	27.9%
Pupils are too shy to talk about HIV or AIDS	42.6%
Pupils are too shy to talk about playing sex	51.5%
I am uncomfortable talking about HIV and AIDS	36.8%

Focus group discussions with peer supporters indicated that their roles were not without constraint or difficulty. Their main concern seemed to be the fact that some pupils teased and ostracized them. The majority however, saw and accepted this as embedded within their role.

The disadvantage is when you explain to your colleagues some of them might abuse you in disregard and call you stupid (MBPSI: 708-709).

Some of them say we do waste their time and whatever we teach them is not examinable during exams (MBPSI: 886-889).

When you are writing and you have turned your back, they hit you.

When you turn and ask who has done it, nobody talks to you instead they laugh (MBPSII: 355-357).

Overall, peer supporters do appear to be playing an active role within their schools. This is confirmed by reports from pupils and descriptions they provide of interactions with and observations of peer supporters. What emerges from the results is a sense that pupils identify both peer supporters and teachers as credible sources of HIV/AIDS information. Even more is that in many places, pupils assess and rank peer supporters similar to teachers.

KNOWLEDGE

Adequate knowledge is recognized as a necessary, though not sufficient, condition for taking action to prevent HIV transmission and respond appropriately to the presence of AIDS in the community. Knowledge was measured using several clusters of questions on:

- Knowledge about HIV testing
- How STIs relate to HIV vulnerability
- Condoms as a strategy for reducing the likelihood of HIV transmission
- How sexual activity relates to HIV transmission
- Summative knowledge scale including all of the above.

In Nyanza schools, the average pupil and teacher scores on knowledge tests did not change significantly across the three waves of data collection (mean teacher score at wave 1 was 70% and at wave 3, 77%; mean pupil score at wave 1, 50% and wave 3, 52%). Differences in pupil scores across the different variations were small at wave 3. Only those between Rift Peer Supporter and Rift Control reflected a statistically significant difference for knowledge about sex and HIV and the summative knowledge scale.

Table 15: Mean Percent Correct Responses of Pupils in Each Variation at Wave 3

Scales	Nyanza Control	Nyanza Basic Target	Church Leader	Additional Teacher	Health Worker	Rift Control	Rift Teacher Only	Rift Peer Supporter Target
Testing Knowledge	44%	44%	42%	46%	44%	39%	37%	37%
STI Knowledge	42%	44%	42%	46%	42%	40%	37%	38%
Condom Knowledge	45%	48%	46%	49%	46%	44%	45%	47%
Sex Knowledge	54%	54%	54%	54%	55%	51%	52%	57%**
Summative Knowledge	52%	55%	53%	56%	54%	48%	50%	54%**

** Significantly higher than scores in Rift Control at $p \leq .01$

When considering the individual questions that were used to tap knowledge, pupils in all schools were most likely to answer correctly that in order to prevent themselves from getting infected with HIV and AIDS they could do the following things:

- Avoid having sex (66-78% in different variations answered correctly)
- Don't share razor blades and knives (63-67% in different variations answered correctly)
- Make sure any injections are done with a clean needle (57-73% in different variations answered correctly)
- Avoid shaking hands with someone sick with AIDS (62-70% in different variations answered correctly).

Questions that were least likely to be answered correctly included:

- Being faithful to one uninfected partner was a way to stay safe from HIV (31-40% answered correctly in different variations);
- Using a condom correctly when playing sex prevents infection (31-40% answered correctly in different variations);
- Decreasing the number of sexual partners reduces your risk of infection (25-38% answered correctly in different variations).

For the remainder of the questions generally between 45% and 55% answered correctly. It should be noted that this pattern of responses did not differ in target as compared to control schools, nor did it differ over the three waves of data collection.

Factors Influencing Knowledge

Few aspects of programme uptake influenced pupil knowledge, with most influence coming from school and community characteristics such as ethnicity and school resourcing. In multivariate analyses:

- Learning about abstinence had the most consistent effect across all types of knowledge. It was associated with higher scores on all of the knowledge tests for all pupils in Nyanza and knowledge about sex and HIV in Rift.
- In Rift, Peer Supporter schools maintained higher scores on the summative knowledge scale compared to either the Rift Control or Teacher Only schools, even when other factors, including implementation and abstinence teaching, were taken into consideration.
- Ethnicity had a major impact on knowledge
 - Schools with primarily Luo pupils scored significantly higher in all areas of knowledge.
 - School with primarily Kikuyu pupils scored higher in knowledge about STIs and about condoms
- Nyanza schools with higher resourcing scored higher on STI knowledge
- Rift schools with higher resourcing scored higher on knowledge about condoms and sex as well as on the summative knowledge scale.

When teacher knowledge was assessed, there were no factors on which we collected information that significantly influenced levels of teacher knowledge.

Knowledge Displayed in Focus Group Discussions

The knowledge results on surveys seemed to contradict conclusions that would be drawn from reading focus group transcripts and comparing pupil discussions of knowledge-related issues in wave 1 to wave 3. In wave 3 youth demonstrated a clear ability to explain how HIV was transmitted and how this could be prevented. They were able to identify a variety of risks and, by wave 3, were not including erroneous sources of risk (e.g., mosquitoes, touching others) as they had been in wave 1. Among the sources of risk that were both identified and explained were: sexual activity, circumcision, use of needles, sharing razors, and ear piercing.

Everyone should use his/her own sharp things and your blood should be tested first before transfusion...

You may shake hands with someone infected, who has a wound and if you have a wound too, the blood may mix then you get infected...

Don't have sex with anyone (RGirls1: 456-488).

Pupils regularly recited a formula for remaining 'safe' from sexual transmission:

- (1) abstain until marriage,
- (2) before marriage get tested,
- (3) wait 6 months and get tested again,
- (4) stay faithful to your husband/wife.

This is illustrated in the following quotation from a boys' focus group discussion:

We were told to avoid sex till marriage, which is after school. After taking her you don't have sex until you are both tested. If you are both clean then you can get married (NBoys5: 524-526).

The list of strategies that youth provided for maintaining abstinence and dealing with situations and pressures related to playing sex also demonstrated an increase in awareness, knowledge, and self efficacy when compared to the ways youth discussed sexual activity in wave 1.

Teachers also spoke of teaching about the dangers of circumcision and ear piercing when the same implement is used for several boys or girls and about HIV transmission through sharing razors, toothbrushes, or other articles that could draw blood.

Q: What other ways have you told them to stay safe from HIV/AIDS?

You may use a razor blade that was used by someone who has AIDS and if it cuts you, you may get AIDS. Also when they go for treatment they should be sure the needle used is a new one and not one used by someone else (NST9: 317-322).

We tell them that if they are using one object to piece their ears, it is not wise because the other person might be infected with AIDS. The razor blades they use to cut their nails, if they share them the other person maybe infected if it cut through your skin. Each person should have his instead of sharing with the other person. Also sharing of toothbrush each person should have his. We also told them of ways in which they may not get AIDS (RST4: 176-182).

Even the boys when they are being circumcised they should go to the proper person and avoid the local circumcision because you never know the tools the person is using they may be infected (NST9: 333-335)

Youth reflected back this knowledge in focus groups and were able to provide reasons why such practices were dangerous and also to discuss alternatives.

We have learned that it is always good for everyone to have his/her own sharp things like razorblades and needles...

If someone has a wound and he is infected and the other person also has a wound, but it is not infected, the wounds will meet if they are fresh with blood, the other clean person will be infected (RGirls1: 150-176).

You know the person who circumcises people uses the same knife. If one has HIV and it has been used on him, then he uses it on you, you can also be infected with HIV/AIDS...The knife used to cut your friend shouldn't be used to cut you...Your parents should buy a new knife and give it to the person who will circumcise you, and then they throw it away (RBoys2: 427-440).

You should buy your own pins and don't be wanting other people's pins because you might find it was used by someone with HIV/AIDS during plucking out objects out of the body then you will end up getting HIV/AIDS (NGirls8: 614-617).

If you share [razors] with someone who has it [HIV/AIDS], you can be infected and sharing at the barbershop can also make you be infected (NBoys9: 87-88).

They even recognized the practical difficulties in following safe practices.

Sometimes the teacher is coming to check nails so you just use any razorblade so as not to be punished (NGirls7: 488-489).

The one area where focus group discussions paralleled results on knowledge questions was related to condoms. Youth spoke of getting conflicting information about condoms. The most common approach to condoms described by youth was being told that condoms were not for them because they had holes and would not protect them from HIV, but that condoms were for married couples for family planning. Several boys and girls in focus groups readily identified this as puzzling since condoms with holes would not be useful for family planning. This kind of independent thinking also demonstrates gains in the area of knowledge since this type of independent reasoning was not evident in wave 1.

The differences between focus group and survey results have several possible interpretations. The focus group portion of the research relies on a small sample of youth selected by teachers because of their willingness and ability to articulate their views. These may, therefore, represent the most knowledgeable and sophisticated youth. However, the same selection procedures were used at wave 1 and there are clear differences in how pupils in waves 1 and 3 spoke about HIV and AIDS suggesting that although these may be the most competent youth, it would still be reasonable to expect a shift in scores on survey questions. A second possibility is that the survey questions did not accurately reflect pupils' knowledge. Perhaps pupils did not understand the language of the questions, the meaning of certain words, or how to respond to the questions. At wave 1, difficulties with language and understanding were already identified. These difficulties may be greater than anticipated.

COMMUNICATION AND PURSUING INFORMATION

Communication with others about HIV and AIDS is recognized as an important step toward recognizing, learning about and changing risk behaviours. The importance of communication to pupils was evident in focus group discussions where they consistently spoke of their desire to talk about HIV and AIDS with parents, community leaders and teachers and to learn from others in their community how to respond to this threat.

Sources of Information

When asked how much they had learned from a variety of sources there were substantial changes from wave 1. At wave 1 pupils reported learning about HIV and AIDS primarily from radio, television and other news sources. Teachers and school texts were among the least common source of information. At wave 3, pupils in Nyanza target schools were more likely than those in controls to say they had learned a lot from a wide variety of sources of information. While the top ranked sources of information were still radio and television, school texts and teachers were also commonly reported.

The list of information sources was shorter for Rift Valley schools, but here school texts, story books and teachers were at the top of the list.

In both Nyanza and Rift Valley there were no differences across any of the variations in the proportion of pupils who said they had learned a lot from church leaders or pastors.

For both regions, pupils said the most useful information they had obtained was from teachers and in schools clubs, with this response significantly higher for pupils in target than in control schools. This was decidedly different than responses at wave 1 where pupils listed radio as the source of their most important information.

Communication with Others

In the wave 2 and 3 surveys, pupils were provided with a list of people and asked which of those they wanted to speak to and which on the list they had spoken to. These questions produced three scalar measures. The measures represented wanting and having spoken with female relatives, male relatives and other community members. Results at wave 3 paralleled those at wave 2.

In all schools and at all waves of data collection, pupils were most likely to report talking to female relatives about HIV and AIDS (wave 3 overall mean score 4.40 for both Nyanza and Rift Valley compared to overall means of 3.41 for male relatives and 4.00 for other community members).

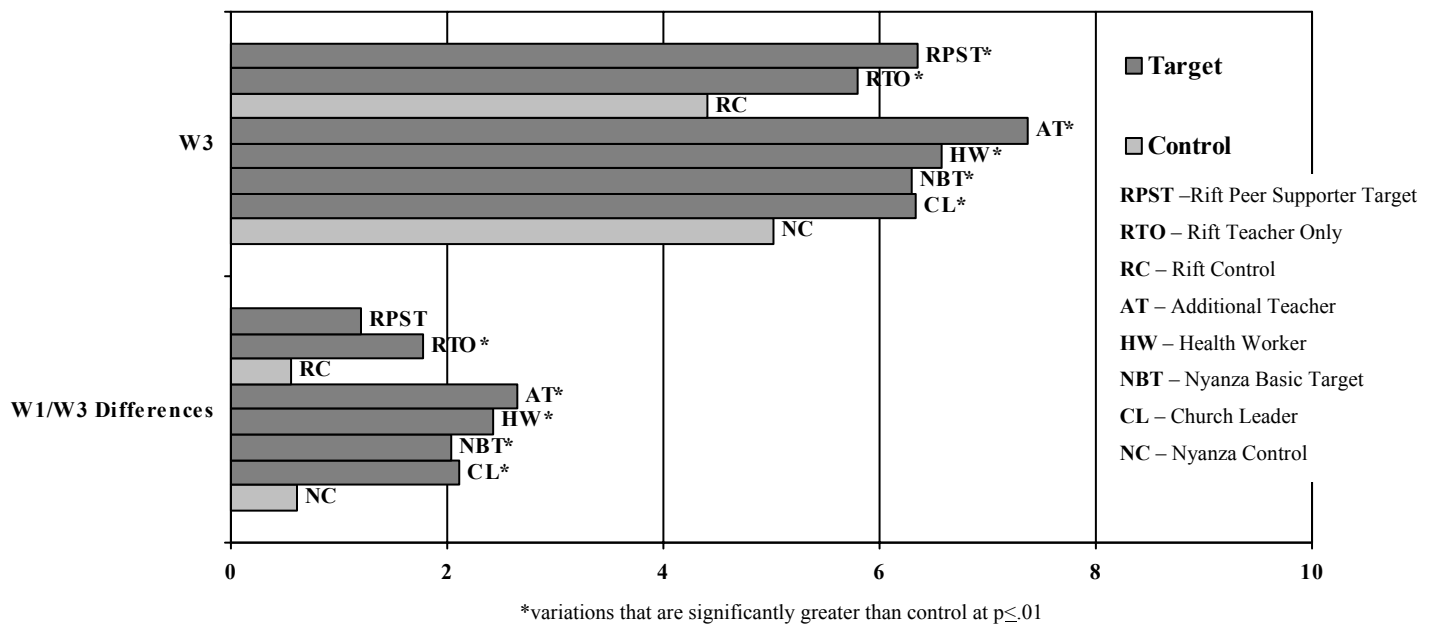
The only significant differences across variations were in the Additional Teacher and Basic Target schools in Nyanza where pupils at wave 3 were significantly more likely than pupils in control schools to indicate that they have talked to male relatives and other community members.

The factors influencing communication were similar to those influencing pursuing information (see below), suggesting that these were similar processes for pupils.

Pursuing Information

Survey results showed how pupils followed through with their desire for information. A scale was created using questions that indicated the degree to which pupils were pursuing information about HIV and AIDS. At wave 3, pupils in Nyanza and Rift Valley control schools had significantly lower scores than those in the target variations. Pupils in all Nyanza variations showed significantly greater increases than those in control schools from wave 1 to wave 3. In Rift Valley, only the pupils in teacher-only target schools showed significantly greater changes than those in control schools.

Figure L: Nyanza and Rift Valley - Level of Pursuing Information for Pupils:



In multivariate analysis, pupils in Nyanza schools had higher scores for pursuing information and communicating with others where:

- Teachers were PSABH trained, with strongest impact in Additional Teacher variation schools;
- There were higher levels of programme implementation;
- Pupils reported more learning about abstinence strategies;
- Pupils scored higher on the knowledge questions;
- Pupils were primarily Kisii.

These factors all influenced pursuing information among Nyanza pupils, but only the degree of implementation of the programme had an influence in Rift Valley.