## **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. Knowing this, it is important to note that the average pupil and teacher scores on knowledge tests did not change significantly between wave 1 and 2 and did not differ significantly between control and target schools. This was true for the summative score incorporating responses to all knowledge questions and also for each subset of questions (knowledge about: STDs and HIV; HIV testing; how to avoid infection; and, risk from PHAs). Teachers continued to respond to about 70-75% of questions correctly while mean pupil scores were below 40%. There was also no evident shift in which questions were responded to correctly or incorrectly. Clearly, something is interfering with improvement in knowledge in all communities and PSABH has not yet been able to counteract this effect.

Four factors influenced both the level of knowledge in each school at wave 2 and the change in the level of pupil knowledge. Knowledge was higher and there was more improvement in knowledge in schools with:

- Higher teacher/pupil ratios;
- Predominantly Kisii pupils;
- Higher scores on programme implementation:
- Pupils who rated the programme higher on practical usefulness; and,
- More churches holding meetings on HIV and AIDS (see Table T, column 8; Table U, column 6).

What these results suggest are that while HIV/AIDS knowledge is subject to the same influences as other areas of learning (i.e. teacher/pupil ratios and the ethnicity of pupils are both strongly correlated with KCPE scores), the degree of implementation of components of PSABH and positive pupil response also contribute to higher levels of knowledge, especially in communities where there is other HIV and AIDS programming such as that provided by churches.

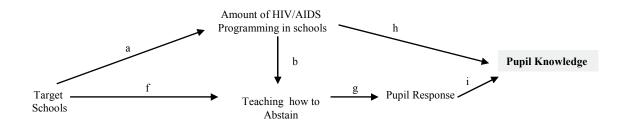
When teacher knowledge was assessed, there were no factors on which we collected information that significantly influenced levels of teacher knowledge.

## Paths of PSABH Influence on Pupil Knowledge

The ways in which the various components of HIV/AIDS programming that are present in the schools influenced pupil knowledge were examined using path analysis. The diagram below portrays the results of this analysis. Arrows represent where statistically significant influences were found when all factors were taken into consideration. Letters on the arrows correspond with the explanations below the diagram<sup>1</sup>.

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<sup>&</sup>lt;sup>1</sup> The analyses summarized in this diagram are described in Appendix A (p. ). For statistical results used to create this diagram see Table T, column 8.



## Effect of PSABH Training on HIV and AIDS Knowledge

What the above diagram shows is that being in a target or control school affects pupils' knowledge about HIV and AIDS indirectly through its effect on HIV/AIDS programming in the school and pupil response to that programming. Pupil knowledge about HIV and AIDS is higher in schools where there is

- C A greater amount of HIV/AIDS programming (see arrow 'h' above).
- C More positive pupil response to HIV/AIDS programming (see arrow 'i' above). As seen in the earlier analysis of the pathways of influence on HIV/AIDS programming, greater amounts of HIV/AIDS programming is found in
  - C Target compared to control schools (see arrow 'a' above).

More positive pupil response to the programming is found in schools where there is

C More teaching about how to abstain (see arrow 'g' above).

There is more teaching about how to abstain in

- C Schools with greater amounts of HIV/AIDS programming overall (see arrow 'b' above);
- C Target than control schools (see arrow 'f' above).

Finally, there is more HIV/AIDS programming

C In target than control.

## COMMUNICATION AND PURSUING INFORMATION

Communication with others about HIV and AIDS is recognized as an important step towards gathering information, taking responsibility for decreasing one's own risk, and normalizing the presence of AIDS in a community. 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.

### **Pursuing Information**

Survey results showed how pupils followed through with this desire for information. There was evidence at wave 2 that pupils in target schools were more actively involved in learning about HIV/AIDS. This included using the question box, talking to teachers and parents, taking part in school activities, and helping others.

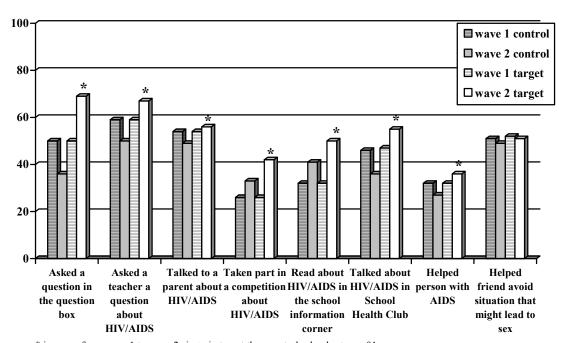


Figure G: Percentage of Pupils Who Have:

A scale was created using questions that indicated whether pupils were pursuing information about HIV and AIDS. While there was no change in the scores of pupils in control schools on this measure of pursuing information (4.3 at wave 1, 4.2 at wave 2), the scores of pupils in target schools increased substantially from wave 1 to 2 (4.4 at wave 1, 5.9 at wave 2 -- Refer to Table H, Appendix B). The increase in scores in target schools was greater for pupils who:

- Were in STD 7 rather than STD 6;
- Were boys rather than girls;
- Had never played sex rather than those who had played sex.

<sup>\*</sup> increase from wave 1 to wave 2 sig. > in target than control schools at  $p \leq .01$ 

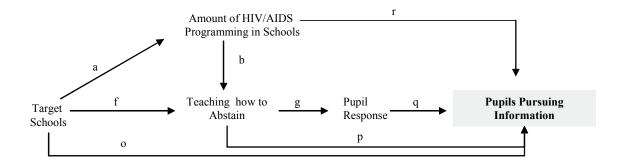
In the school-level analysis, the degree to which pupils in a school were pursuing information was strongly affected by:

- PSABH training;
- Degree of programme implementation in schools;
- Average level of KCPE scores;
- Degree to which teachers were teaching about how to resist pressure to play sex:
- Affective response of pupils to the programme;
- Pupils sense of sexual agency (see chapter on abstinence); and,
- Location of the school (see Table T, column 9; Table U, column 7).

Collectively, these results suggest that in schools where pupils are doing well academically, where teachers have been trained by PSABH, where there is stronger evidence of an HIV/AIDS programme, especially one that addresses one of the stated needs of pupils (teaching how to resist pressure to play sex), where pupils are responding positively to the programme and are gaining a sense of control over their sexual decision-making, pupils are more likely to actively pursue information on their own. Pursuing information is also more likely to occur in urban and peri-urban than in rural schools, a result which may relate to the availability of different sources of information in these locations.

#### Paths of PSABH Influence on Pursuing Information

The ways in which the various components of HIV/AIDS programming that are present in the schools influenced pupil pursuit of information were examined using path analysis. The diagram below portrays the results of this analysis. Arrows represent where statistically significant influences were found when all factors were taken into consideration. Letters on the arrows correspond with explanations below the diagram<sup>2</sup>.



**Effect of PSABH Training on Pursuing Information** 

What the above diagram shows is that being in a target or control school affects how much pupils are pursuing information about HIV and AIDS both directly, and also indirectly through the effect on various components of HIV/AIDS programming. More pupils pursue information about HIV and AIDS in:

<sup>&</sup>lt;sup>2</sup> The analyses summarized in this diagram are described in Appendix A. For statistical results used to create this diagram see Table T, columns 9.

- C Target rather than control schools (see arrow 'o' above);
- C Schools where there is more teaching about how to abstain (see arrow 'p' above);
- C Schools where the response of pupils to the programming is more positive (see arrow 'q' above); and
- C Schools with more HIV/AIDS programming overall (see arrow 'r' above). The indirect pathways of influence from being in a target compared to a control school to

pupils' pursuit of information have been explained in earlier sections and are repeated here.

A more positive pupil response to the programming is found in schools where there is

C More teaching about how to abstain (see arrow 'g' above).

There is more teaching about how to abstain in

- C Schools with greater amounts of HIV/AIDS programming overall (see arrow 'b' above);
- C Target than control schools (see arrow 'f' above).

Finally, there is more HIV/AIDS programming

C In target than control schools (see arrow 'a' above).

### **Communication with Others**

In order to look at who pupils were more likely to go to for information, in the wave 2 PSC pupils were provided with a list of people and asked which of these they wanted to speak to, which they had spoken to, and which they would never speak to about HIV and AIDS. These questions produced three scalar measures. The measures represented wanting and having spoken with female relatives, male relatives and other community members. Items on who would never be spoken to did not meet criteria necessary to create a scale.

Girls had higher scores for communicating with female relatives while boys had higher scores for communicating with male relatives and other community members. Despite these gender differences, the three measures were strongly correlated, i.e. when pupils communicated with one of these groups they were likely to communicate with all. The other factors that exerted the greatest influence on at least one measure of pupil communication included:

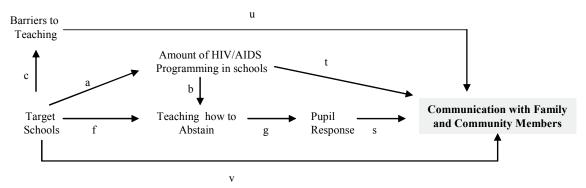
- PSABH training;
- Teacher rated barriers to teaching about HIV and AIDS;
- Degree of programme implementation in schools;
- Pupils' response to programming;
- Teacher/pupil ratio;
- KCPE scores; and,
- Dominant ethnic group (see Table T, columns 10, 11 and 12).

Of note is that the three most important influences on communication had to do with the presence of HIV/AIDS programming in schools. Schools where teachers had PSABH training (i.e. in target schools), where there was evidence of a high degree of programme implementation where teachers were less likely to see barriers to teaching about HIV and AIDS and where pupils saw the programme as useful, produced pupils who liked to and had communicated more about HIV and AIDS within their families and with others in

their communities. Besides programme effects, schools with predominantly Luo pupils had higher rates of communication with female relatives and lower with other community members while those with lower average KCPE scores had higher rates of communication with family and those with higher KCPE scores had higher rates of communication with other community members.

# <u>Paths of PSABH Influence on Pupil Communication with Family and Community Members</u>

The ways in which the various components of HIV/AIDS programming that are present in the schools influenced pupil communication with family and community members was examined using path analysis. The diagram below portrays the results of this analysis. Arrows represent where statistically significant influences were found when all factors were taken into consideration. Letters on the arrows correspond with explanations below the diagram<sup>3</sup>.



Effect of PSABH Training on Communication with Family and Community Members

What the above diagram shows is that being in a target or control school affects how much pupils communicate with family and community members about sexuality and HIV/AIDS both directly, and also indirectly through the effect on various components of HIV/AIDS programming. More pupils communicate with family and community members about sexuality, HIV, and AIDS in:

- C Target rather than control schools (see arrow 'v' above):
- C Schools where the response of pupils to the programming is more positive (see arrow 's' above);
- C Schools where teachers see fewer barriers to teaching about HIV and AIDS (see arrow 'u' above); and
- C Schools with more HIV/AIDS programming overall (see arrow 't' above). The indirect pathways of influence from being in a target compared to a control school to pupils' communication with family and community members have been explained in earlier sections and are repeated here.

A more positive pupil response to the programming is found in schools where there is

C More teaching about how to abstain (see arrow 'g' above).

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<sup>&</sup>lt;sup>3</sup> The analyses summarized in this diagram are described in Appendix A (p. ). For statistical results used to create this diagram see Table T, columns 10, 11 and 12.

There is more teaching about how to abstain in

- C Schools with greater amounts of HIV/AIDS programming overall (see arrow 'b' above); and
- C Target than control schools (see arrow 'f' above).

Teachers see fewer barriers to teaching about HIV and AIDS

C In target than control schools (see arrow 'c' above).

Finally, there is more HIV/AIDS programming

C In target than control schools (see arrow 'a' above).

### **Sources of Information**

When asked how much they had learned from a variety of sources, pupils in target schools were significantly more likely than those in control schools to say they had learned a lot from:

- School text books;
- Story books;
- Friends or peers; and,
- Teachers.

There were no differences between control and target schools with respect to the proportion who said they learned a lot from radio, TV, newspapers, magazines, pastors or church leaders, parents or community leaders.

When asked, in an open-ended question, about where they had learned the most important information about HIV/AIDS, the most common answer in wave 1 was radio; whereas, the most common answer in wave 2 was from teachers and/or school clubs. The responses in wave 2 represented a 2-3 fold increase over wave 1.

These results support the conclusion that there is more going on in target schools with respect to HIV/AIDS education than in control schools particularly since the implementation of PSABH. HIV/AIDS programming in schools is replacing external sources such as the radio in providing important lessons for pupils and is also developing in pupils a motivation to pursue information on their own and talk to family and community members about HIV/AIDS. The evidence suggests that PSABH is an important catalyst in learning about HIV/AIDS with pupils in target schools scoring higher than those in control schools on pursuing information and communicating with others.