CHAPTER 4: RESULTS

As stated in Chapter 1, this study aimed at identifying factors that impact on teachers' willingness to communicate about HIV/AIDS. Willingness to communicate about HIV/AIDS has been operationalized using multiple measures in terms of three distinct behaviors, namely: future intention to talk about HIV/AIDS, past behavior of talking about HIV/AIDS in schools, and past behavior of talking about HIV/AIDS in the community. This chapter starts with a summary of the characteristics of the respondents and of the data collected. This discussion is followed by a detailed presentation of results relating to each of the six hypotheses in turn. Each hypothesis focuses on the three types of behavior identified (future intentions, past school behavior, and past community behavior). A summary of the main findings follows each hypothesis. In addition and where relevant, selected findings from the personal interviews with teachers are used to inform and contrast the findings for some of the hypotheses. The final section of the chapter provides an overview of incidental findings relating to attitude functions.

Characteristics of the Respondents

A total of 606 current or future primary and secondary school teachers for Grades one through twelve¹⁷ in the province of Gaza in southern Mozambique participated in this study. Of this total 46.8% (corresponding to 271 teachers) were female. Teachers ranged in age from a very young 16 years to 57 years of age. Just over one third of the teachers (35.5%) came from urban areas, a quarter (24.9%) from semi-urban areas, and the remaining teachers were residing in rural areas.

The large majority of teachers (415 in total or 68.8%) who participated in the study were primary school teachers with the responsibility of lecturing Grades one through seven. An additional 109 teachers (a further 18%) were still in the process of completing their professional training as primary school teachers. The remaining teachers (13.2%) were secondary school teachers lecturing Grades 8 through 12.

Well over one third of the teachers (39.8%) had no professional qualifications, in other words, they were recruited straight out of school to become teachers without receiving a formal

¹⁷ The education system in Mozambique consists of grades 1-5 (known as Ensino Primário 1), 6 and 7 (Ensino Primário 2), grades 8-10 (Ensino Secundário Geral), grades 11-12 (Ensino Pré-Universitário), and university degrees (Bachelors and Masters Level).

teacher training degree or were still completing their degree at the time the study took place. Just over one quarter (25.9%) had completed seventh Grade and had done three years of teacher training at a teacher training college. 51 teachers (8.7%) held the equivalent of higher education degrees. The remaining teachers had academic qualifications ranging from Grade 7 to Grade 10 with between one to two years of professional training.

Teaching experience varied greatly among the teachers. Approximately one third of the teachers (33.8%) had very little professional experience, i.e. two years or less. A further one third had between 3 and 8 years of experience, and the remaining teachers had anywhere between 9 and 37 years of teaching experience.

In terms of HIV/AIDS training, less than one third (28.1%) reported receiving some form of HIV training in the past two years. The reported duration of these HIV/AIDS courses ranged from several hours to a week. Reported participation in HIV/AIDS courses was markedly lower among future and current primary school teachers (25.7% and 26.6% respectively) than for the group of secondary school teachers (38.9%).

At each school teachers were asked to volunteer for in-depth interviews. A total of 28 teachers from all five districts volunteered in this manner. Their profile did not differ appreciably from that the overall group of teachers, with the exception that a slightly higher percentage of female teachers volunteered (50%) as compared to the 46.7% female teachers who completed the questionnaire.

In addition to the work done with teachers, questionnaires were administered to 106 primary and secondary school students randomly selected in Grades 6 through 12 in two rural and two urban schools in three districts. Forty-six percent of the respondents were male and the respondents ranged in age from 11 to 21 years old (mean age: 16). Since the schools were selected on the basis of convenience, care should be taken in interpreting the results for this group.

Description of the Data

Tables 6 and 7 provide an overview of the predicted and predictor measures in this study, providing frequencies for the subcategories of each measure as well as the total number of valid responses for each measure. It should be noted that although 606 teachers participated in the study, 109 of these were excluded from the hypothesis testing since these they were still in training and therefore did not have experience of talking about HIV/AIDS.

Table 7: Predictor Measures in the Study

PRE	DICTOF	R ME	ASURES	
AGE (n=489)	In %		ATTITUDE ABOUT HIV/AIDS (n=477)	In %
Under 25	25.6		Relatively unsupportive	31.4
26 – 35	37.6		Moderately supportive	22.6
Over 35	36.8		Highly supportive	45.9
SEX (n=468)			PERCEPTION OF PERSONAL RISK (n=484)	
Male	44.9		Can do more to reduce personal risk	70.7
Female	55.1		Do not need to do more to reduce risk	28.3
PERSONAL EXPERIENCE WITH			SOCIAL NORMS (n=490)	
HIV/AIDS (n=478)				
No experience	43.4		Relatively unimportant	31.8
Knows 1 person who is sick/died	29.9		Moderately important	33.1
Knows 2 or more people sick/died	26.8		Highly important	35.1
KNOWLEDGE OF HIV/AIDS			PERCEIVED BEHAVIORAL	
(n=494)			CONTROL (n=494)	
Relatively low level of knowledge	32.2		Relatively low perceived behavioral control	40.3
Moderate knowledge level	43.9		Moderate perceived behavioral control	26.5
High level of knowledge	23.9		High perceived behavioral control	33.2
LEVEL TAUGHT (n=494)			VALUE EXPRESSIVE ATTITUDE FUNCTION (n=494)	
Lower primary	68.2		Values relatively unimportant	34.6
Upper primary	15.8		Values moderately important	32.2
Secondary level	16.0		Values highly important	33.8
CONDOM USE (n=494)				
Always use	26.5			
Sometimes/never use	73.5			

Table 8: Frequencies of Predicted measures in the study

F	PREDICT	ΓED	MEASURES	
FUTURE INTENTIONS TO DISCUSS HIV/AIDS – 2 LEVEL (n=474)	In %		FUTURE INTENTIONS TO DISCUSS HIV/AIDS – 3 LEVEL (n=474)	In %
Intends to talk about HIV/AIDS	65.3		High consistent intentions	37.8
Does not intend to talk about HIV/AIDS	34.7		Limited intentions	28.7
			No intentions	33.5
PAST BEHAVIOR IN SCHOOL – 2 LEVELS (n=494)			PAST BEHAVIOR IN SCHOOL - 3 LEVELS (n=494)	
Talked about HIV/AIDS	48.6		High consistent behaviors	24.1
Did not talk about HIV/AIDS	51.4		Limited behaviors	24.5
			No behaviors	51.4
PAST BEHAVIOR IN			PAST BEHAVIOR IN COMMUNITY – 3	
COMMUNITY – 2 LEVELS (n=494)			LEVELS (n=494)	
Talked about HIV/AIDS	43.7		High consistent behaviors	17.6
Did not talk about HIV/AIDS	56.3		Limited behaviors No behaviors	26.1 56.3

Results for all Study Hypotheses

The predicted variables for all six hypotheses fall under the overall designation of teachers' "willingness to openly communicate about HIV/AIDS in distinct times and settings". As was explained in Chapter 3, willingness to communicate about HIV/AIDS refers to: a) future behavior; b) past behavior in school; and c) past behavior in the community. For each of these three behaviors two levels of analysis are presented, a first one which contrasts no behavior against any behavior, and a second one which contrast no behavior with limited behavior and high consistent behavior.

The presentation of the results of this study will therefore consist of a set of six tables for each hypothesis¹⁸, as follows:

- Results for **future behavior (2 levels)**, contrasting those who have no intention to talk about HIV/AIDS with those who do intend to talk
- Results for future behavior (3 levels), contrasting those who have no intention to talk about HIV/AIDS with those who expressed a limited intention and those who have a high consistent intention
- Results for past school behavior (2 levels), contrasting those respondents who did not talk about HIV/AIDS in school with those who did
- Results for past school behavior (3 levels), contrasting those respondents who did not talk
 about HIV/AIDS in school with those who did so to a limited extent and with those who did so
 consistently
- Results for past community behavior (2 levels), contrasting those respondents who did not talk about HIV/AIDS in the community with those who did; and finally
- Results for past community behavior (3 levels), contrasting those respondents who did not
 talk about HIV/AIDS in the community with the same two categories namely, with those who
 did so to a limited extent and those who did so consistently.

For future behavior the reference category is "No, do not intend to talk about HIV/AIDS". For past community and school behavior the reference category is consistently "no, did not talk about HIV/AIDS".

_

¹⁸ Full tables will not be presented for non-significant results.

Preliminary analysis

Before proceeding to the tests of the hypotheses, the presence of a possible interaction between age and sex was tested to determine whether the level of either of these was being influenced by the other. However, no interaction was found. The hypothesis tests therefore only report on main effects, controlling for both sex and gender¹⁹.

Hypothesis 1: Using Sex and Age to Predict Willingness to Communicate about HIV/AIDS

The first hypothesis argued that younger teachers and female teachers would be more willing to address HIV/AIDS than their older and male counterparts, based on preliminary indications from the focus group discussions in the pilot phase of the study. Teachers were asked to indicate how many times they intended to talk about HIV/AIDS in the coming month, and how many times they had done so in the past month for various behaviors related to talking about HIV/AIDS in school and in the community. The results for the multinomial regression analyses are presented below for future intentions (Tables 9a and 9b), past school behavior (Tables 9c and 9d) and past community behavior (Tables 9e and 9f), contrasting first those teachers that intend to talk with those who have no intention (2 levels) and then those teachers that have high consistent intentions and those that have limited intentions with those that have no intentions (3 levels).

Future intentions to discuss HIV/AIDS

Tables 9a and 9b examine the relationship between age and sex and teachers' intentions to communicate about HIV/AIDS. Table 9a identifies whether relationships exist, and Table 9b focuses on the extent to which the variables predict consistent future intentions. The overall models in Tables 9a and 9b are statistically significant (log likelihood 28.125, $X^2 = 27.147$, df = 3, p \leq 0.001 and (log likelihood 54.740, $X^2 = 30.315$, df = 6, p \leq 0.001, respectively).

Controlling for sex (Table 9a), teachers who are in the youngest age group are 3.7 times (95% C. I., ORs = 2.2-6.4, p ≤ 0.001) more likely to talk about HIV/AIDS than their older (over 35) counterparts, whilst the second youngest group of teachers is 2.2 (95% C.I., OR = 1.4-3.4, p ≤ 0.001) times more likely to talk about HIV/AIDS. More specifically, when contrasting high behavioral intent with no behavior (Table 9b), teachers in the youngest age group are 4.5 times (95% C. I., ORs = 2.4 -8.2, p ≤ 0.001) more likely, and teachers in the second age group are 2.6

_

¹⁹ Controlling for demographic variables is a common procedure, especially in the medical literature.

times more likely (95% C. I., ORs = 1.6-4.3, p ≤ 0.001) to have high consistent intentions to talk about HIV/AIDS. Similarly, age is also a statistically significant predictor when comparing those with limited intentions with those that do not intend to talk about HIV/AIDS. These odds ratios, however, are consistently smaller.

Contrary to what was hypothesized, however, sex was not a statistically significant predictor of future intention to talk about HIV/AIDS.

Table 9a: MLR Analysis: Using Sex and Age to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	55.272			
Final	28.125	27.147	3	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 Levels) to Talk About HIV/AIDS			Sig.			ice Interval for o(B)
in the Coming Month		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk	Intercept	1				
about HIV/AIDS	Female	1		1.001	.668	1.499
	Male	0				
	Age 25 and under	1	***	3.740	2.177	6.424
	Age 26 - 35	1	***	2.153	1.377	3.365
	Age over 35	0				

 $^{^{}m a.}\,$ The reference category is: No, do not intend to talk about HIV/AIDS

Table 9b: MLR Analysis: Using Sex and Age to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	85.055			
Final	54.740	30.315	6	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 9b Continued

Intention (3 Levels) to Talk About HIV/AIDS in			Sig.		95% Confidence Interval fo Exp(B)		
the Coming Month		df	1-tail	Exp(B)	Lower Bound	Upper Bound	
High consistent intentions	Intercept	1					
	Female	1		.999	.638	1.566	
	Male	0					
	Age 25 and under	1	***	4.534	2.495	8.241	
	Age 26 - 35	1	***	2.589	1.555	4.311	
	Age over 35	0					
Limited intentions	Intercept	1					
	Female	1		1.035	.645	1.662	
	Male	0					
	Age 25 and under	1	***	2.924	1.562	5.473	
	Age 26 - 35	1	*	1.768	1.037	3.013	
	Age over 35	0					

a. The reference category is: No, do not intend to talk

Past behavior in school

The second type of behavior examined was past behavior in schools. Teachers were asked to indicate whether they had talked about HIV/AIDS in the classroom, before class with their students, and on other informal occasions in school in the past month.

Tables 9c and 9d provide an overview of the relationships between age and sex and teachers' past behavior of talking about HIV/AIDS in school. As in the previous analysis, Table 9c examines whether the relationship exists and Table 9d illustrates to what extent the variables predict high consistent past behavior.

The overall models using sex and age to predict past behavior in school are statistically significant (log likelihood 29.210, X^2 = 14.975, df = 3, p \leq 0.01 and log likelihood 53.789, X^2 = 17.935, df = 6, p \leq 0.01, respectively). Comparing teachers who declared having talked about HIV/AIDS in school in the past month with those who did not (and controlling for sex), teachers in the youngest age group are 2.4 times (95% C. I., ORs = 1.5 – 3.9, p \leq 0.01) more likely to have talked about HIV/AIDS in school than their colleagues in the over 35 age group.

Table 9c: MLR Analysis: Using Sex and Age to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	44.185			
Final	29.210	14.975	3	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in School in Past Month (2			Sig.			ice Interval for b(B)
Levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		1.119	.776	1.612
	Male	0				
	Age 25 and under	1	***	2.429	1.522	3.876
	Age 26 - 35	1		1.235	.813	1.877
	Age over 35	0				

 $^{^{\}mbox{a.}}\,$ The reference category is: No, did not talk about HIV/AIDS.

Table 9d: Multinomial Logistic Regression Analysis: Using Sex and Age to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	71.725			
Final	53.789	17.935	6	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in School in Past Month			Sig.		95% Confidence Interval for Exp(B)	
(3 Levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		.938	.592	1.485
	Male	0				
	Age 25 and under	1	***	2.673	1.517	4.710
	Age 26 - 35	1		1.148	.668	1.976
	Age over 35	0				
Limited behavior	Intercept	1				
	Female	1		1.311	.843	2.038
	Male	0				
	Age 25 and under	1	**	2.199	1.242	3.893
	Age 26 - 35	1		1.314	.787	2.193
	Age over 35	0				

a. The reference category is: No, did not talk about HIV/AIDS

More specifically (Table 9d) when contrasting teachers with high consistent past school behavior with those who declared they had not talked about HIV/AIDS in school , teachers 25 and under are 2.7 times (p \leq 0.001: 95% C. I., ORs = 1.6 – 4.7) more likely to have talked about HIV/AIDS. Age is also a statistically significant predictor when comparing those with limited past school behavior with those that did not talk about HIV/AIDS in school but the odds ratios are appreciably smaller.

Respondents' sex is not a statistically significant predictor of talking about HIV/AIDS in the school.

Past behavior in the community

Talking about HIV/AIDS in the community in the past month was the third predicted measure in this study. Teachers were asked to indicate how many times in the past month they had talked about HIV/AIDS informally in the community and at community awareness raising events. Similarly to the above analyses two comparisons were done, first between any behavior and no behavior and then between highly consistent behavior, limited behavior and no behavior.

The overall model is statistically significant in both cases (for the 2 level model: log likelihood 29.411, $X^2 = 10.806$, df = 3, p \leq 0.05, and for the 3 level model: log likelihood 58.421, $X^2 = 18.551$, df = 6, p \leq 0.01). The pattern in both models is similar to that found for the earlier predicted variables. Thus controlling for sex (Table 9e) when comparing those who declared having talked about HIV/AIDS in the community in the past month with those who reported not having talked about HIV/AIDS, teachers in the two youngest age groups are, respectively, 2.0 times (p \leq 0.01: 95% C. I., ORs = 1.3 – 3.2) and 1.44 times (p \leq 0.05: 95% C. I., ORs = 0.9 – 2.2) more likely to have talked about HIV/AIDS. More specifically (Table 9f), comparing teachers with high consistent behavior against those with no behavior in the community, teachers in the two youngest age groups are 2.6 (p \leq 0.01: 95% C. I., ORs = 1.4 – 5.0) and 2.1 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 3.9) more likely, respectively, to have talked about HIV/AIDS in the community.

Once again, respondents' sex is not a significant predictor of past community behavior about HIV/AIDS.

Table 9e: MLR Analysis: Using Sex and Age to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	40.217			
Final	29.411	10.806	3	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in Community in Past Month			Sig.		95% Confiden Exp	
(2 Levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		.790	.547	1.141
	Male	0				
	Age 25 and under	1	**	2.021	1.269	3.220
	Age 26 - 35	1	*	1.439	.941	2.203
	Age over 35	0				

a. The reference category is: No, did not talk about HIV/AIDS

Table 9f: MLR Analysis: Using Sex and Age to Predict Teachers' Talking (3 levels) About HIV/AIDS in Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	76.972			
Final	58.421	18.551	6	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in Community in Past			Sig.			ice Interval for o(B)
Month (3 Levels)		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1	*	.548	.329	.912
	Male	0				
	Age 25 and under	1	**	2.632	1.381	5.019
	Age 26 - 35	1	**	2.151	1.181	3.920
	Age over 35	0				
Limited behavior	Intercept	1				
	Female	1		1.014	.658	1.564
	Male	0				
	Age 25 and under	1	*	1.719	1.001	2.952
	Age 26 - 35	1		1.097	.661	1.820
	Age over 35	0				

a. The reference category is: No, did not talk about HIV/AIDS

Summary conclusions for hypothesis 1

The first hypothesis was partially supported. For this hypothesis, in which age and sex were used to predict willingness to communicate about HIV/AIDS, the results highlight the consistent importance of age (controlling for sex) as a predictor of willingness to talk about HIV/AIDS, with younger teachers being more willing to talk about HIV/AIDS across all three behaviors. Of particular interest is that overall the relationship tends to be stronger when contrasting high consistent behavior with no behavior (the 3 level analysis), than when simply considering variable behavior (the 2 level analysis).

Sex (controlling for age), on the other hand, was not a predictor of any of the three behaviors. This finding is contrary to the hypothesis that female teachers would be more willing than male teachers to communicate about HIV/AIDS.

Hypothesis 2: Using Personal Experience and Knowledge to Predict Willingness to Communicate about HIV/AIDS

Hypothesis 2 contended that teachers with a high level of knowledge of HIV/AIDS and teachers who had a close personal experience with the disease would be more willing to talk about HIV/AIDS. Teachers' knowledge levels were determined on the basis of their score on a HIV/AIDS knowledge scale. In addition, teachers' personal experience with HIV/AIDS was determined on the basis of the number of people (family, friends, and colleagues that they reported knowing who were either sick or had died of HIV/AIDS).

Multinomial Logistic Regression, controlling for age and sex, was used to test this hypothesis for future behavior (Tables 10a and 10b), past behavior in school (Tables 10c and 10d) and past behavior in the community (Tables 10e and 10f).

Future intentions to discuss HIV/AIDS

As can be seen from Tables 10a and 10b below, the models using personal experience and knowledge to predict teachers' future intentions to talk about HIV/AIDS (controlling for age and sex) are statistically significant (2 level comparison: log likelihood 145.352, $X^2 = 50.667$, df = 7, p \leq 0.001, and 3 level comparison: log likelihood 307.518, $X^2 = 67.580$, df = 14, p \leq 0.001). Table 10a below identifies whether relationships exist, and Table 10b indicates the extent to which the variables predict high consistent future intentions.

Within both models personal experience with HIV/AIDS emerged as a statistically significant predictor of intentions to talk about HIV/AIDS. Controlling for age, sex and knowledge

of HIV/AIDS, when contrasting those who intended to talk about HIV/AIDS with those who had no intention, teachers who declared knowing two or more people who were either sick or had died of HIV/AIDS (i.e. those with substantial personal experience) are 3.3 times ($p \le 0.001$: 95% C. I., ORs = 1.9 – 5.6) more likely than those with no personal experience to plan to talk about HIV/AIDS in the coming month. In a similar fashion teachers who know 1 person who was sick or had died of HIV/AIDS (i.e. those with moderate experience) are 2.5 times ($p \le 0.001$: 95% C. I., ORs = 1.5 – 4.0) more likely to intend to talk about HIV/AIDS than their colleagues without this experience.

Table 10a: MLR Analysis: Using Personal Experience and Knowledge to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	196.019			
Final	145.352	50.667	7	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 Levels) to Talk About HIV/AIDS			Sig.		95% Confidence Interval for Exp(B)	
in the Coming Month		df	1-tail ^b	Exp(B)	Lower Bound	Upper Bound
YES, intend to talk about HIV/AIDS	Intercept	1				
	Female	1		1.043	.680	1.601
	Male	0				
	Age 25 and under	1	***	4.058	2.290	7.191
	Age 26 - 35	1	**	2.015	1.259	3.225
	Age over 35	0				
	High knowledge of HIV/AIDS	1		1.187	.675	2.089
	Intermediate knowledge of HIV/AIDS	1		1.152	.707	1.879
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	***	3.264	1.895	5.621
	Knows 1 person sick/died of HIV/AIDS	1	***	2.450	1.491	4.024
	No personal experience with HIV/AIDS	0				

a. The reference category is: No, do not intend to talk about HIV/AIDS

More specifically (Table 10b), when comparing high consistent intentions with no intentions both teachers who have substantial experience with HIV/AIDS, and those that have moderate experience are more likely to intend to talk about HIV/AIDS - 4.6 times (p \leq 0.001: 95% C. I., ORs = 2.6 – 8.4) for teachers with substantial experience and 2.2 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 3.8) for those with moderate experience. Similarly personal experience is also a

b. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

statistically significant predictor when comparing teachers with limited intentions with those that do not intend to talk about HIV/AIDS. These odds ratios are however appreciably smaller.

Table 10b - MLR Analysis: Using Personal Experience and Knowledge to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	375.098			
Final	307.518	67.580	14	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 Levels) to Talk About HIV/AIDS in			Sig.		95% Confidence Interval for Exp(B)	
the Coming Month		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent intentions	Intercept	1				
	Female	1		1.040	.646	1.675
	Male	0				
	Age 25 and under	1	***	5.447	2.880	10.301
	Age 26 - 35	1	***	2.600	1.513	4.469
	Age over 35	0				
	HIgh knowledge of HIV/AIDS	1		1.306	.698	2.443
	Intermediate knowledge of HIV/AIDS	1		1.108	.641	1.914
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	***	4.638	2.567	8.380
	Knows 1 person sick/died of HIV/AIDS	1	**	2.180	1.241	3.829
	No personal experience with HIV/AIDS	0				
Limited intentions	Intercept	1				
	Female	1		1.027	.626	1.685
	Male	0				
	Age 25 and under	1	***	2.942	1.530	5.657
	Age 26 - 35	1		1.572	.903	2.736
	Age over 35	0				
	High knowledge of HIV/AIDS	1		.887	.452	1.741
	Intermediate knowledge of HIV/AIDS	1		1.164	.666	2.034
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	**	2.232	1.166	4.271
	Knows 1 person sick/died of HIV/AIDS	1	***	2.640	1.503	4.638
	No personal experience with HIV/AIDS	0				

 $^{^{\}mbox{a.}}$ The reference category is: No, do not intend to talk about HIV/AIDS

Contrary to what was hypothesized, knowledge of HIV/AIDS failed to emerge as a statistically significant predictor of intention to talk about HIV/AIDS in the coming month.

Past behavior in school

Past behavior in schools was the second predicted variable considered in this analysis of the impact of knowledge of HIV/AIDS and personal experience of HIV/AIDS on intention to talk about HIV/AIDS (controlling for sex and age). Table 10c identifies whether the relationship exists and Table 10d focuses on the extent to which the variables predict strong consistent intentions. The overall models in Tables 10c and 10d are statistically significant (log likelihood 171.950, $X^2 = 22.550$, df=7, p ≤ 0.01 , and log likelihood 294.567, $X^2 = 39.190$, df = 14, p ≤ 0.001 , respectively).

Controlling for the other variables in the model (Table 10c), when contrasting teachers who declared having talked about HIV/AIDS in school with those who had not, those teachers who know two or more people who are sick or have died from HIV/AIDS are 1.9 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 2.9) more likely to have talked about HIV/AIDS.

Table 10c: MLR Analysis - Using Personal Experience and Knowledge Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	194.500			
Final	171.950	22.550	7	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in School in Past Month			Sig.			nce Interval for o(B)
(2-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		1.077	.740	1.569
	Male	0				
	Age 25 and under	1	***	2.507	1.548	4.058
	Age 26 - 35	1		1.175	.763	1.810
	Age over 35	0				
	High knowledge of HIV/AIDS	1		1.110	.671	1.836
	Intermediate knowledge of HIV/AIDS	1		1.286	.834	1.982
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	**	1.872	1.186	2.956
	Knows 1 person sick/died of HIV/AIDS	1		1.268	.815	1.973
	No personal experience with HIV/AIDS	0				

a. The reference category is: No, did not talk about HIV/AIDS

More specifically, when comparing teachers with high consistent behavior in school with those who had not talked about HIV/AIDS, teachers with substantial personal experience are 2.2 times (p \leq 0.01: 95% C. I., ORs = 1.2 - 3.8) more likely to demonstrate high consistent behavior

than those with no personal experience. Similarly personal experience is also a statistically significant predictor when comparing those with limited behavior with those who did not talk about HIV/AIDS in schools. This odds ratio was, however, notably smaller.

Table 10d: MLR Analysis - Using Personal Experience and Knowledge Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	333.758			
Final	294.567	39.190	14	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in School in Past Month			Sig.			nce Interval for o(B)
(3-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		.958	.597	1.536
	Male	0				
	Age 25 and under	1	***	2.765	1.536	4.976
	Age 26 - 35	1		1.083	.621	1.886
	Age over 35	0				
	HIgh knowledge of HIV/AIDS	1	**	2.288	1.191	4.396
	Intermediate knowledge of HIV/AIDS	1	**	2.213	1.223	4.005
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	**	2.167	1.230	3.817
	Knows 1 person sick/died of HIV/AIDS	1		1.397	.800	2.440
	No personal experience with HIV/AIDS	0				
Limited behavior	Intercept	1				
	Female	1		1.194	.757	1.884
	Male	0				
	Age 25 and under	1	**	2.283	1.270	4.104
	Age 26 - 35	1		1.264	.742	2.155
	Age over 35	0				
	HIgh knowledge of HIV/AIDS	1		.587	.310	1.110
	Intermediate knowledge of HIV/AIDS	1		.877	.531	1.451
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	*	1.635	.941	2.841
	Knows 1 person sick/died of HIV/AIDS	1		1.144	.665	1.967
	No personal experience with HIV/AIDS	0				

a. The reference category is: No, did not talk about HIV/AIDS

HIV/AIDS knowledge is a statistically significant predictor only when comparing teachers with high consistent behavior with those who have not talked about HIV/AIDS in schools. Thus

teachers with a high level of knowledge of HIV/AIDS and those with an intermediate level of knowledge of HIV/AIDS are 2.3 (p \leq 0.01: 95% C. I., ORs = 1.2 – 4.3) and 2.2 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 4.0) more likely, respectively, to have talked about HIV/AIDS in school in the past month than teachers with a low knowledge level (controlling for age, sex and personal experience).

Past behavior in the community

The overall models using knowledge and personal experience to predict both 2 levels and 3 level comparison of community behavior, and controlling for age and sex, are statistically significant (2 level comparison: log likelihood 171.043, $X^2 = 17.-42$, df=7, p \leq 0.05, and 3 level comparison: log likelihood 294.663, $X^2 = 35.351$, df = 14, p \leq 0.001). Table 10e examines whether the relationship exists, and Table 10f determines to what extent the variables predict consistent future intentions.

Table 10e: MLR Analysis - Using Personal Experience and Knowledge Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig.
Intercept Only	188.085			
Final	171.043	17.042	7	*

Talked about HIV/AIDS in the Community in Past			Sig.		95% Confidence Interval for Exp(B)	
Month (2 levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		.768	.527	1.120
	Male	0				
	Age 25 and under	1	**	2.066	1.281	3.332
	Age 26 - 35	1		1.388	.897	2.148
	Age over 35	0				
	HIgh knowledge of HIV/AIDS	1		1.043	.629	1.728
	Intermediate knowledge of HIV/AIDS	1		1.306	.847	2.015
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	*	1.696	1.076	2.672
	Knows 1 person sick/died of HIV/AIDS	1		1.079	.692	1.681
	No personal experience with HIV/AIDS	0				

a. The reference category is: No, did not talk about HIV/AIDS

Table 10f: MLR Analysis - Using Personal Experience and Knowledge Predict Teachers' Talking (3 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	330.014			
Final	294.663	35.351	14	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in the Community in			Sig.		95% Confidence Interval for Exp(B)	
Past Month (3 levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1		• • •		• •
	Female	1	**	.515	.304	.874
	Male	0				
	Age 25 and under	1	***	2.911	1.497	5.660
	Age 26 - 35	1	**	2.130	1.147	3.953
	Age over 35	0				
	High knowledge of HIV/AIDS	1		1.216	.627	2.359
	Intermediate knowledge of HIV/AIDS	1		1.140	.628	2.069
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1	***	2.535	1.414	4.547
	Knows 1 person sick/died of HIV/AIDS	1		.874	.458	1.667
	No personal experience with HIV/AIDS	0				
Limited behavior	Intercept	1				
	Female	1		.993	.640	1.542
	Male	0				
	Age 25 and under	1	**	1.680	.968	2.916
	Age 26 - 35	1		1.051	.628	1.760
	Age over 35	0				
	High knowledge of HIV/AIDS	1		.924	.500	1.710
	Intermediate knowledge of HIV/AIDS	1		1.416	.855	2.345
	Low knowledge of HIV/AIDS	0				
	Knows 2 or more people sick/died of HIV/AIDS	1		1.220	.701	2.125
	Knows 1 person sick/died of HIV/AIDS	1		1.218	.734	2.022
	No personal experience with HIV/AIDS	0				

 $^{^{\}rm a.}\,$ The reference category is: No, did not talk about HIV/AIDS

Comparing teachers who talked about HIV/AIDS in the community in the past month with those who did not (Table 10e) and controlling for age, sex and knowledge, teachers who know two or more people who are sick/have died of HIV/AIDS are 1.7 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 2.7) more likely to have talked about HIV/AIDS than those who have no personal experience with the disease. More specifically, when comparing teachers with high consistent behavior with those who did not talk about HIV/AIDS in the community, teachers with substantial

personal experience are 2.5 times (p \leq 0.001: 95% C. I., ORs = 1.4-4.6,) more likely to talk about HIV/AIDS in the community than those without personal experience.

Contrary to what was hypothesized, knowledge of HIV/AIDS is not a predictor of community behavior.

Summary conclusions for hypothesis 2

Hypothesis 2, using personal experience with HIV/AIDS and knowledge of HIV/AIDS to predict willingness to communicate about HIV/AIDS was partially supported. Controlling for age, sex, and knowledge of HIV/AIDS, substantial personal experience of HIV/AIDS (defined as knowing two or more people who are sick/have died of HIV/AIDS) is shown to be a strong and consistent predictor across all three behaviors. Moderate personal experience with HIV/AIDS (defined as knowing one person who is sick/has died of HIV/AIDS) emerges as a predictor only of teachers' future intentions to discuss HIV/AIDS in the coming month.

Controlling for the other three variables in the model, knowledge of HIV/AIDS was statistically significant only in predicting a consistently high behavior of talking about HIV/AIDS in schools in the last month and is not a determining factor for future intentions to talk about HIV/AIDS or for community behavior.

Hypothesis 3: Using Condom Use and Perception of Personal Risk to Predict Willingness to Communicate about HIV/AIDS

The expectation in this study was that those teachers who regularly used condoms and those that with a high perception of personal risk of becoming infected with HIV/AIDS would be more willing to address HIV/AIDS in the broad educational context (school and community) across all three types of behavior. Teachers were asked to report how often they used condoms and only those teachers who always use condoms were categorized as "always users". In addition, teachers' perception of personal risk was measured by asking them whether they believed that they could do more to prevent themselves from becoming infected with HIV/AIDS.

Multinomial Logistic Regression, controlling for age and sex, was used to test this hypothesis for future behavior (Tables 11a and 11b), past behavior in school (Tables 11c and 11d) and past behavior in the community (Tables 11e and 11f).

Future intentions to discuss HIV/AIDS

Tables 11a and 11b examine the relationships between condoms use, personal risk and intentions to discuss HIV/AIDS. Table 11a identifies whether the relationships are present, and Table 11b establishes the extent to which the variables predict consistent future intentions. The overall models are statistically significant (2 level comparison: log likelihood 84.222, $X^2 = 30.645$, df=5, p \leq 0.001, and 3 level comparison: log likelihood 163.277, $X^2 = 36.943$, df = 10, p \leq 0.001).

Table 11a: MLR Analysis: Using Condom Use and Perception of Personal Risk to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	114.866			
Final	84.222	30.645	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 Levels) to Talk About HIV/AIDS			Sig		95% Confidence Interval for Exp(B)	
in the Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk	Intercept	1				
about HIV/AIDS	Female	1		1.079	.713	1.634
	Male	0				
	Age 25 and under	1	***	3.837	2.207	6.672
	Age 26 - 35	1	***	2.164	1.374	3.409
	Age over 35	0				
	Always use condom	1		1.259	.786	2.016
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1		1.282	.831	1.977
	Do not need to do more to reduce personal risk	0				

 $^{^{\}mbox{a.}}$ The reference category is: No, do not intend to talk about HIV/AIDS

However, as can be seen from Tables 11a and 11b below, in both the 2 level and 3 level comparison neither condoms use (controlling for age, sex, and personal risk) nor personal risk (controlling for the other three variables in the model) are statistically significant predictors of future intentions to talk about HIV/AIDS. In other words, the model's statistical significance was entirely the result of the influence of age on future intention, and not of the two variables under consideration in this hypothesis.

Table 11b: MLR Analysis: Using Condom Use and Perception of Personal Risk to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	200.220			
Final	163.277	36.943	10	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 levels) to Talk About HIV/AIDS in			Sig.	Sig.		ice Interval for o(B)
the Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		1.091	.688	1.733
	Male	0				
	Age 25 and under	1	***	4.776	2.582	8.836
	Age 26 - 35	1	***	2.738	1.622	4.620
	Age over 35	0				
	Always use condom	1		1.444	.864	2.412
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1		1.371	.840	2.236
	Do not need to do more to reduce personal risk	0				
Limited behavior	Intercept	1				
	Female	1		1.090	.673	1.765
	Male	0				
	Age 25 and under	1	***	2.895	1.533	5.469
	Age 26 - 35	1	*	1.684	.983	2.885
	Age over 35	0				
	Always use condom	1		1.190	.688	2.057
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1		1.041	.632	1.716
	Do not need to do more to reduce personal risk	0				

 $^{^{\}mbox{a.}}$ The reference category is: No, do not intend to talk about HIV/AIDS

Past behavior in school

The same analysis was done to examine the potential impact of condom use and personal risk (controlling for age and sex) on teachers' behavior in school over the past month. The results for this analysis are presented in Table 11c which establishes whether the relationship exists, and in Table 11d which identifies the extent to which the variables predict consistent past behavior in school. The overall models of past school behavior are statistically significant (2 level comparison: log likelihood 102.056, $X^2 = 18.891$, df=5, p \leq 0.01, and 3 level comparison: log likelihood 167.635, $X^2 = 22.574$, df = 10, p \leq 0.05).

Table 11c: MLR Analysis - Using Condom Use and Perception of Personal Risk to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	121.037			
Final	102.056	18.981	5	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in School in Past Month			Sig.		95% Confidence Interval for Exp(B)	
(2-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		1.163	.801	1.689
	Male	0				
	Age 25 and under	1	***	2.257	1.403	3.631
	Age 26 - 35	1		1.206	.787	1.848
	Age over 35	0				
	Always use condom	1		1.289	.856	1.940
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1	*	1.460	.979	2.178
	Do not need to do more to reduce personal risk	0				

a. The reference category is: No, did not talk about HIV/AIDS

Comparing teachers who declared talking about HIV/AIDS in school in the past month (Table 11c) with teachers who did not talk, and controlling for the other three variables in the model, teachers who believe that they can do more to reduce their personal risk of becoming infected with HIV/AIDS are 1.5 times ($p \le 0.05$: 95% C. I., ORs = 1.0-2.2) more likely to have talked about HIV/AIDS than teachers who believe they don't need to do more to reduce risk. More specifically (Table 11d), when comparing teachers with high consistent behavior with those who did not talk about HIV/AIDS in school, those who believe they can do more to reduce personal risk are 1.7 times ($p \le 0.05$: 95% C. I., ORs = 1.0 - 2.8) more likely to have talked about HIV/AIDS in school in the past month than those who do not believe they need to address their personal risk.

Contrary to what was hypothesized, however, condom use was not a statistically significant predictor of past school behavior of talking about HIV/AIDS.

Table 11d: MLR Analysis - Using Condom Use and Perception of Personal Risk to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	190.209			
Final	167.635	22.574	10	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in School in Past Month			Sig.			nce Interval for o(B)
(3-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
HIgh consistent behavior	Intercept	1				
	Female	1		.979	.612	1.565
	Male	0				
	Age 25 and under	1	***	2.460	1.380	4.385
	Age 26 - 35	1		1.136	.655	1.970
	Age over 35	0				
	Always use condom	1		1.219	.734	2.024
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1	*	1.687	1.003	2.83
	Do not need to do more to reduce personal risk	0				
Limited behavior	Intercept	1				
	Female	1		1.356	.865	2.12
	Male	0				
	Age 25 and under	1	**	2.066	1.158	3.68
	Age 26 - 35	1		1.268	.753	2.13
	Age over 35	0				
	Always use condom	1		1.358	.833	2.21
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1		1.291	.798	2.08
	Do not need to do more to reduce personal risk	0				

a. The reference category is: No, did not talk about HIV/AIDS

Past behavior in the community

The overall models using condoms use and risk perception (controlling for age and sex) to predict community behavior are statistically significant (2 level comparison: log likelihood 100.582, X^2 = 20.451, df=5, p \leq 0.001, and 3 level comparison: log likelihood 172.618, X^2 = 28.463, df = 10, p \leq 0.01).

Table 11e: MLR Analysis - Using Condom Use and Perception of Personal Risk to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	121.033			
Final	100.582	20.451	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in Community in Past Month			Sig.		95% Confidence Interval for Exp(B)	
(2-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		.842	.578	1.227
	Male	0				
	Age 25 and under	1	**	1.857	1.154	2.990
	Age 26 - 35	1		1.397	.905	2.158
	Age over 35	0				
	Always use condom	1	**	1.629	1.083	2.451
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1	*	1.537	1.023	2.308
	Do not need to do more to reduce personal risk	0				

a. The reference category is: No, did not talk about HIV/AIDS

Controlling for the other three variables in the model, when comparing teachers who talked about HIV/AIDS in the community in the past month with those who did not (Table 11e), teachers who declared always using a condom are 1.6 times (p \leq 0.01: 95% C. I., ORs = 1.1 – 2.5) more likely to have talked about HIV/AIDS than those who had sometimes/never used condoms. Furthermore, when contrasting teachers with high consistent community behavior with those who did not talk about HIV/AIDS in the community (Table 11f), teachers who consistently use a condom are 1.7 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 2.6) more likely to have talked about HIV/AIDS in the community in the past month than those who used condoms irregularly or never. Condom use was also a statistically significant predictor when comparing teachers with limited intentions with those that do not intend to talk about HIV/AIDS. These odds ratios are only slightly lower.

Table 11f: MLR Analysis - Using Condom Use and Perception of Personal Risk to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	201.081			
Final	172.618	28.463	10	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in Community in Past			Sig.			nce Interval for o(B)
Month (3-levels)		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1	*	.587	.350	.985
	Male	0				
	Age 25 and under	1	**	2.359	1.226	4.538
	Age 26 - 35	1	*	2.043	1.114	3.748
	Age over 35	0				
	Always use condom	1	*	1.698	1.000	2.884
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1	*	1.723	.976	3.042
	Do not need to do more to reduce personal risk	0				
Limited behavior	Intercept	1				
	Female	1		1.077	.693	1.674
	Male	0				
	Age 25 and under	1	*	1.604	.924	2.782
	Age 26 - 35	1		1.079	.645	1.806
	Age over 35	0				
	Always use condom	1	*	1.578	.977	2.546
	Sometimes/never use condom	0				
	Can do more to reduce personal risk	1		1.421	.881	2.293
	Do not need to do more to reduce personal risk	0				

 $^{^{\}mbox{a.}}$ The reference category is: No, did not talk about HIV/AIDS

As was hypothesized, assessment of personal risk is also a statistically significant predictor. Comparing teachers who talked about HIV/AIDS in the community with those who did not (Table 11e), teachers who believe they can do more to reduce their personal risk of becoming infected with HIV/AIDS (controlling for the other variables in the model) are 1.5 times ($p \le 0.01$: 95% C. I., ORs = 1.0 – 2.3,) more likely to have talked about HIV/AIDS in the community than those who do not believe they need can do more to address their personal risk. More specifically (Table 11f), when comparing teachers with high community behavior to those who did not talk about HIV/AIDS in the community, teachers who believe they can do more to reduce their risk are

1.7 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 3.0) more likely to have high consistent intentions than teachers who don't believe they need to address personal risk.

Summary conclusions for hypothesis 3

The hypothesis that condom use and perception of personal risk would influence willingness to communicate about HIV/AIDS in the broad educational setting (school and community) was partially supported. With respect to community behavior (and controlling for the other variables in the model) teachers who declared always using a condom, and teachers who believed they could do more to reduce their personal risk, are consistently more likely to have talked about HIV/AIDS in the community in the past month than those who sometimes/never use a condom and did not believe they were at risk. With respect to school behavior it is the perception of personal risk rather than condom use that is the determining factor for past school behavior. Controlling for age, sex and condom use, teachers who declared that they believe they can do more to reduce their personal risk of becoming infected with HIV/AIDS are more likely to have talked about HIV/AIDS in school than those who declared they do not need to do more.

No relationship was found between the two predictor variables (condom use and perception of risk) and future intentions to talk about HIV/AIDS.

Hypothesis 4: Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Willingness to Communicate about HIV/AIDS

Hypothesis 4 aimed at examining how traditional predictors of behavior/behavioral intent in the Theory of Planned Behavior (TPB) impact on future intentions of teachers to address HIV/AIDS, on past school behavior and on past community behavior. The expectation was that teachers with highly supportive attitudes of talking about HIV/AIDS, teachers who do not believe social norms are important, and teachers who have a high level of perceived behavioral control would be more willing to address HIV/AIDS across all three types of behavior.

Analysis procedures for this hypothesis were similar to those used in the earlier hypotheses. For each variable under consideration in the hypothesis, the analysis controlled for the other variables in the hypothesis as well as for age and sex. Results for future intentions (Tables 12a and 12b), for school behavior (Tables 12c and 12d) and for community behavior (Tables 12e and 12f) are presented below.

Future intentions to discuss HIV/AIDS

Tables 12a and 12b examine the relationship between attitudes, social norms and perceived behavioral control and teachers intentions to discuss HIV/AIDS in the future. Table 12a identifies whether the relationship exists, and Table 12b indicates the extent to which the variables predict consistent future intentions to talk about HIV/AIDS. The overall models for using attitudes, social norms and perceived behavioral control to predict future intentions to talk about HIV/AIDS are statistically significant (2 level comparison: log likelihood 282.758, $X^2 = 35.271$, df=9, p \leq 0.001, and 3 level comparison: log likelihood 510.798, $X^2 = 53.833$, df = 18, p \leq 0.001).

Table 12a: MLR Analysis: Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	318.029			
Final	282.758	35.271	9	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 levels) to talk about HIV/AIDS in	,		Sig.		95% Confidence Interval for Exp(B)	
the Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk	Intercept	1				
about HIV/AIDS	Female	1		1.113	.729	1.699
	Male	0				
	Age 25 and under	1	***	4.269	2.410	7.561
	Age 26 - 35	1	***	2.243	1.408	3.575
	Age over 35	0				
	Very supportive attiude	1		1.415	.852	2.351
	Moderately supportive attitude	1		1.080	.618	1.888
	Not supportive attitude	0				
	Social norm not important	1		1.105	.629	1.942
	Social norm moderately important	1		.815	.487	1.363
	Social norm highly important	0				
	High perceived behavioral control	1	*	1.561	.930	2.619
	Moderate perceived behavioral control	1		1.419	.826	2.437
	Low perceived behavioral control	0				

a. The reference category is: No, do not intend to talk

The results show that comparing teachers who intend to talk about HIV/AIDS in the coming month with those who do not intend to talk about HIV/AIDS (Table 12a), and controlling for all the other variables in the model, those teachers who have a high level of perceived behavioral control are 1.6 times (p \leq 0.05: 95% C. I., ORs = 0.9 – 2.6) more likely to intend to talk about HIV/AIDS than those who have a low level of perceived behavioral control.

Table 12b: MLR Analysis: Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	564.632			
Final	510.798	53.833	18	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 levels) to talk about HIV/AIDS in			Sig.		95% Confiden Exp	
the Coming Month		df	1-tail a	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		1.209	.754	1.940
	Male	0				
	Age 25 and under	1	***	5.524	2.932	10.408
	Age 26 - 35	1	***	2.776	1.623	4.749
	Age over 35	0				
	Very supportive attiude	1	*	1.926	1.079	3.439
	Moderately supportive attitude	1		1.417	.751	2.672
	Not supportive attitude	0				
	Social norm not important	1		1.238	.657	2.334
	Social norm moderately important	1		1.084	.609	1.930
	Social norm highly important	0				
	High perceived behavioral control	1		1.461	.816	2.615
	Moderate perceived behavioral control	1	*	1.656	.908	3.018
	Low perceived behavioral control	0				
Limited behavior	Intercept	1				
	Female	1		1.058	.645	1.736
	Male	0				
	Age 25 and under	1	***	3.023	1.567	5.833
	Age 26 - 35	1	*	1.796	1.034	3.120
	Age over 35	0				
	Very supportive attiude	1		1.000	.556	1.799
	Moderately supportive attitude	1		.771	.401	1.483
	Not supportive attitude	0				
	Social norm not important	1		.853	.444	1.640
	Social norm moderately important	1		.574	.313	1.052
	Social norm highly important	0				
	High perceived behavioral control	1		1.553	.855	2.824
	Moderate perceived behavioral control	1		1.024	.537	1.953
	Low perceived behavioral control	0				

 $^{^{\}mbox{a.}}\,$ The reference category is: No, do not intend to talk about HIV/AIDS

More specifically (Table 12b), when comparing teachers with high consistent intentions with those who do not intend to talk about HIV/AIDS in the coming month, it is teachers with a moderate level of perceived behavioral control who are 1.7 times ($p \le 0.05$: 95% C. I., ORs = 0.9

-3.0) more likely to demonstrate high consistent intentions to talk about HIV/AIDS in the coming month. One would expect that this would be the case for teachers with high perceived behavioral control. The result therefore indicates the possible presence of a non-ordinal phenomenon.

Attitudes emerge only as a statistically significant predictor when comparing teachers with high consistent future intentions with teachers who have no intention to talk about HIV/AIDS. Teachers with very strong supportive attitudes are 1.9 times (p \leq 0.05: 95% C. I., ORs = 1.1 – 3.4) more likely to intend to talk about HIV/AIDS.

Contrary to what was hypothesized, social norms are not a statistically significant predictor of future intentions to talk about HIV/AIDS.

Past behavior in school

Contrary to what was hypothesized, none of the three predictors are statistically significant predictors of past school behavior by teachers. Therefore only the portion of the table relating to the overall test of both models is reproduced below.

Table 12c: MLR Analysis - Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	332.243			
Final	317.239	15.004	9	NOT SIGNIFICANT

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 12d: MLR Analysis - Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	537.983	Crii-Square	ui	Sig.
Final	512.720	25.263	18	NOT SIGNIFICANT

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Past behavior in the community

Similar to the earlier analyses, the first table (Table 12e) demonstrates whether relationships exist, and the second table (Table 12f) focuses on the extent to which the variables predict high consistent past community behavior. The overall models using attitudes, social norms and perceived behavioral control (while controlling for age and sex) to predict past

community behavior are statistically significant (2 level comparison: log likelihood 308.592, X^2 = 18.544, df=9, p \leq 0.05, and 3 level comparison: log likelihood 481.702, X^2 = 34.660, df = 18, p \leq 0.01).

Table 12e: MLR Analysis - Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	327.135			
Final	308.592	18.544	9	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in the Community in Past			Sig.			nce Interval for o(B)
Month (2 levels)		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		.813	.554	1.193
	Male	0				
	Age 25 and under	1	***	2.124	1.304	3.460
	Age 26 - 35	1	*	1.469	.942	2.291
	Age over 35	0				
	Very supportive attiude	1	*	1.473	.923	2.352
	Moderately supportive attitude	1	*	1.655	.982	2.787
	Not supportive attitude	0				
	Social norm not important	1		1.168	.704	1.937
	Social norm moderately important	1		1.276	.795	2.049
	Social norm highly important	0				
	High perceived behavioral control	1		1.069	.669	1.707
	Moderate perceived behavioral control	1		1.367	.835	2.239
	Low perceived behavioral control	0				

a. The reference category is: No, did not talk about HIV/AIDS

Controlling for the other variables in the model (Table 12e), when comparing teachers who talked about HIV/AIDS in the community in the past month with those who did not, teachers with very supportive attitudes and teachers with moderately supportive attitudes are 1.5 times (p \leq 0.05: 95% C. I., ORs = 0.9 – 2.4) and 1.7 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 2.8), respectively, more likely to talk about HIV/AIDS than those holding an unsupportive attitude. More concretely (Table 12f) teachers with a very supportive attitude and teachers with a moderately supportive attitude are 2.7 (p \leq 0.01: 95% C. I., ORs = 1.3 – 5.2) and 2.6 times (p \leq 0.05: 95% C. I., ORs = 1.2 – 5.5) more likely to have high consistent intentions to talk about HIV/AIDS in the community.

Table 12f: MLR Analysis - Using Attitudes, Social Norms and Perceived Behavioral Control to Predict Teachers' Talking (3 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	516.362			
Final	481.702	34.660	18	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS						
in the Community in Past Month (3 levels)			Sig. 1-tai		95% Confiden Exp	
		df	I	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1	*	.532	.312	.909
	Male	0				
	Age 25 and under	1	**	2.805	1.422	5.532
	Age 26 - 35	1	*	2.193	1.162	4.137
	Age over 35	0				
	Very supportive attiude	1	**	2.656	1.343	5.256
	Moderately supportive attitude	1	*	2.602	1.234	5.488
	Not supportive attitude	0				
	Social norm not important	1		.753	.381	1.487
	Social norm moderately important	1		.898	.475	1.696
	Social norm highly important	0				
	High perceived behavioral control	1		1.076	.575	2.013
	Moderate perceived behavioral control	1		1.224	.630	2.377
	Low perceived behavioral control	0				
Limited behavior	Intercept	1				
	Female	1		1.065	.679	1.671
	Male	0				
	Age 25 and under	1	*	1.823	1.035	3.212
	Age 26 - 35	1		1.149	.679	1.942
	Age over 35	0				
	Very supportive attiude	1		1.031	.596	1.783
	Moderately supportive attitude	1		1.295	.708	2.366
	Not supportive attitude	0				
	Social norm not important	1		1.567	.855	2.872
	Social norm moderately important	1		1.604	.911	2.824
	Social norm highly important	0				
	High perceived behavioral control	1		1.091	.623	1.911
	Moderate perceived behavioral control	1		1.487	.832	2.656
	Low perceived behavioral control	0				

a. The reference category is: No, did not talk about HIV/AIDS

Contrary to what was predicted, social norms and perceived behavioral control were not significant predictors of past community behavior of talking about HIV/AIDS.

Summary conclusions for hypothesis 4

The hypothesis that attitudes, social norms, and perceived behavioral control would predict future intentions was partly supported. Attitudes and perceived behavioral control emerged as factors contributing to future intentions to talk about HIV/AIDS, with teachers who have highly supportive attitudes being more likely to have consistent intentions of addressing HIV/AIDS in the future and with teachers with both high and moderate levels of perceived behavioral control being more likely to intend to talk about HIV/AIDS in the coming month. The study failed to find support for a link between the three variables and past school behavior. In past community behavior only attitudes toward talking about HIV/AIDS emerges as a consistent predictor. In summary, of the three variables, strongest support was found for the importance of attitudes which are determining factors of two of the three behaviors (future intent and past community behavior) when contrasting high consistent behavior with no behavior.

Hypothesis 5: Using Level Taught to Predict Willingness to Communicate about HIV/AIDS

This study hypothesized that those teachers who are teaching Grades 6 through 12 (upper primary and secondary level) would be more willing to communicate about HIV/AIDS in their educational setting than lower primary school teachers. Multinomial logistic regression, controlling for age and sex in each analysis, was used to contrast teachers' responses about the level that they teach at with their future intention (Tables 13a and 13b), past school behavior (Tables 13c and 13d) and past community behavior (Tables 13e and 13f). Results for both levels of each of these behaviors are discussed below for each type of behavior.

Future intentions to discuss HIV/AIDS

Tables 13a and 13b examine the relationship between level taught and future intentions to discuss HIV/AIDS, with the first table identifying whether the relationship exists and the second table establishing to what extent the variables predict strong consistent behavior by teachers.

Table 13a: MLR Analysis: Using Level Taught to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	91.825			
Final	64.969	26.856	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 Levels to Talk About HIV/AIDS			Sig		95% Confidence Interval for Exp(B)	
in the Coming Month ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk	Intercept	1				
about HIV/AIDS	Female	1		.943	.604	1.472
	Male	0				
	Age 25 and under	1	***	3.242	1.856	5.664
	Age 26 - 35	1	***	2.112	1.321	3.377
	Age over 35	0				
	Secondary level teacher	1		.755	.424	1.343
	Upper primary teacher	1	*	1.824	.975	3.413
	Lower primary teacher	0				

a. The reference category is: No, do not intend to talk about HIV/AIDS

The overall models in these two tables are statistically significant (2 level comparison: log likelihood 64.969, $X^2 = 26.856$, df=5, p \leq 0.001, and 3 level comparison: log likelihood 128.592, $X^2 = 29.063$, df = 10, p \leq 0.001).

Controlling for sex and age (Table 13a), when comparing teachers who intend to talk about HIV/AIDS with those who have no intention, teachers who teach at upper primary are 1.8 times ($p \le 0.05$: 95% C. I., ORs = 1.0 – 3.4) more likely to talk about HIV/AIDS than their colleagues in the lower primary grades. More specifically, when comparing teachers with high consistent intentions with those that have no intention of talking about HIV/AIDS (controlling for age and sex) teachers working at upper primary level are 1.9 times ($p \le 0.05$: 95% C. I., ORs = 1.0 – 3.7) more likely to talk about HIV/AIDS than their colleagues in lower primary.

However, contrary to what was expected, no relationship was found between future intentions and teachers lecturing at secondary level. In other words at secondary level teachers are not more likely to intend to talk about HIV/AIDS than their colleagues in lower primary education.

Table 13b: MLR Analysis: Using Level Taught to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	157.655			
Final	128.592	29.063	10	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 Levels to Talk About HIV/AIDS in the			Sig.		95% Confidence Interval for Exp(B)	
Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent intentions	Intercept	1				
	Female	1		.933	.569	1.529
	Male	0				
	Age 25 and under	1	***	3.807	2.062	7.032
	Age 26 - 35	1	***	2.466	1.448	4.200
	Age over 35	0				
	Secondary level teacher	1		.717	.375	1.373
	Upper primary teacher	1	*	1.903	.970	3.733
	Lower primary teacher	0				
Limited intentions	Intercept	1				
	Female	1		.993	.589	1.674
	Male	0				
	Age 25 and under	1	**	2.630	1.378	5.019
	Age 26 - 35	1	*	1.802	1.031	3.148
	Age over 35	0				
	Secondary level teacher	1		.857	.436	1.683
	Upper primary teacher	1		1.501	.723	3.115
	Lower primary teacher	0				

a. The reference category is: No intention to talk about HIV/AIDS

Past behavior in school

The same comparison of two tables, where the first table (Table 13c) examines whether the relationship exists, and the second table (Table 13d) determines to what extent the variable predicts high consistent past school behavior, was used for this analysis.

The analysis found that the overall models for past behavior in school are both statistically significant (2 level comparison: log likelihood 67.305, X^2 = 19.490, df=5, p < 0.01, and 3 level comparison: log likelihood 120.068, X^2 = 28.034, df = 10, p < 0.01).

Table 13c: MLR Analysis - Using Level Taught to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	86.795			
Final	67.305	19.490	5	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in School in Past Month		Sig.			95% Confidence Interval for Exp(B)	
(2-levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		1.062	.710	1.587
	Male	0				
	Age 25 and under	1	***	2.364	1.455	3.843
	Age 26 - 35	1		1.213	.785	1.876
	Age over 35	0				
	Secondary level teacher	1		.675	.390	1.166
	Upper primary teacher	1		1.508	.885	2.569
	Lower primary teacher	0				

a. The reference category is: No, did not talk about HIV/AIDS

However, controlling age and sex, examining the difference between teachers who talked about HIV/AIDS and those who did not (Table 13c) fails to reveal a statistically significant difference between teachers at any of the educational levels. The relationship did emerge when comparing teachers with high consistent behavior with those who did not talk about HIV/AIDS (Table 13d) in school in the past month. In the analysis, teachers in upper primary are 2.1 times ($p \le 0.05$: 95% C. I., ORs = 1.1 – 3.8) more likely to have talked about HIV/AIDS during this time period than those in lower primary.

Table 13d: MLR Analysis - Using Level Taught to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	148.101			
Final	120.068	28.034	10	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 13d Continued

Talked About HIV/AIDS in School in Past Month			Sig.		95% Confidence Interval for Exp(B)	
(3-levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		1.003	.607	1.655
	Male	0				
	Age 25 and under	1	**	2.418	1.349	4.335
	Age 26 - 35	1		1.058	.605	1.849
	Age over 35	0				
	Secondary level teacher	1		1.008	.527	1.928
	Upper primary teacher	1	*	2.056	1.105	3.827
	Lower primary teacher	0				
Limited behavior	Intercept	1				
	Female	1		1.108	.684	1.796
	Male	0				
	Age 25 and under	1	**	2.294	1.267	4.150
	Age 26 - 35	1		1.370	.802	2.340
	Age over 35	0				
	Secondary level teacher	1		.424	.200	.895
	Upper primary teacher	1		1.096	.567	2.116
	Lower primary teacher	0				

a. The reference category is: No, did not talk about HIV/AIDS.

Past behavior in the community

The overall model using level taught to predict past community behavior is not statistically significant , when comparing teachers who talked about HIV/AIDS in the community with those who did not.(Table 13e). However, when comparing teachers with high consistent past community behavior with those who declared not having talked about HIV/AIDS in the community, the overall model is statistically significant (log likelihood 131.197, X2 = 21.198, df=10, $p \le 0.05$), with teachers in upper primary being 1.8 times (p < 0.05: 95% C. I., ORs = 1.0 – 3.5) more likely to declare having talked about HIV/AIDS in the community than teachers in lower primary.

Table 13e: MLR Analysis - Using Level Taught to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	79.659			
Final	69.425	10.234	5	NOT SIGNIFICANT

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 13f: MLR Analysis - Using Level Taught to Predict Teachers' Talking (3 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	152.396			
Final	131.197	21.198	10	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in the Community in			Sig.		95% Confidence Interval for Exp(B)	
Past Month (3 levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1	*	.574	.325	1.014
	Male	0				
	Age 25 and under	1	*	2.175	1.109	4.266
	Age 26 - 35	1	*	2.001	1.070	3.740
	Age over 35	0				
	Secondary level teacher	1		1.516	.768	2.992
	Upper primary teacher	1	*	1.791	.921	3.484
	Lower primary teacher	0				
Limited behavior	Intercept	1				
	Female	1		.967	.605	1.545
	Male	0				
	Age 25 and under	1	*	1.657	.952	2.886
	Age 26 - 35	1		1.139	.677	1.916
	Age over 35	0				
	Secondary level teacher	1		.940	.489	1.807
	Upper primary teacher	1		.954	.502	1.812
	Lower primary teacher	0				

 $^{^{\}mbox{a.}}$ The reference category is: No, did not talk about HIV/AIDS

Summary conclusions for hypothesis 5

The hypothesis that teachers in upper primary and secondary would be more willing to address HIV/AIDS was consistently supported across all three types of behaviors (future intentions, past school behavior and past community behavior) for teachers in upper primary, when comparing teachers with high consistent behavior with those teachers with no behavior. Controlling for age and sex, teachers in upper primary were more likely than those in lower primary to demonstrate high consistent intentions to address HIV/AIDS and high consistent past school and community behavior.

Support was not found for the part of the hypothesis that contended that secondary school teachers would also be more likely to exhibit all three behaviors.

Hypothesis 6: Using Attitude Functions to Predict Willingness to Communicate about HIV/AIDS

The final hypothesis in the study concerned attitude functions. Since the value expressive attitude function reflects perceptions of moral consequences of talking about HIV/AIDS, it was hypothesized that teachers who hold weak value expressive attitude functions (i.e. who were less concerned with these moral issues) would be more willing to address HIV/AIDS. Multinomial logistic regression was employed for this analysis, controlling for sex and age, and the results are presented below for future intentions (Tables 14a and 14b), for past school behavior (Tables 14c and 14d), and for past community behavior (Tables14e and 14f).

Future intentions to discuss HIV/AIDS

Tables 14a and 14b examine the relationship between the value expressive attitude function and teachers future intentions to discuss HIV/AIDS. Table 14a determines whether the relationship exists, and Table 14b establishes to what extent the variables predicts high consistent future intentions. The overall models are statistically significant (2 level comparison: log likelihood 75.801, $X^2 = 31.546$, df=5, p < 0.001, and 3 level comparison: log likelihood 139.575, $X^2 = 37.548$, df = 10, p < 0.001).

Table 14a: MLR Analysis: Using the Value-Expressive Attitude Function to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	107.346			
Final	75.801	31.546	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 14a Continued

Intention (2 Levels) to Talk About HIV/AIDS			Sig.		95% Confidence Interval for Exp(B)		
in the Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound	
Yes, intend to talk about HIV/AIDS	Intercept	1					
	Female	1		.970	.645	1.457	
	Male	0					
	Age 25 and under	1	***	3.761	2.183	6.481	
	Age 26 - 35	1	***	2.224	1.416	3.493	
	Age over 35	0					
	Values not important	1	*	1.694	1.030	2.786	
	Values moderately important	1		1.222	.759	1.965	
	Values very important	0					

 $^{^{\}mbox{a.}}$ The reference category is: No, do not intend to talk about HIV/AIDS

Controlling for sex and age, when comparing teachers who intend to talk about HIV/AIDS in the coming month with those who do not intend to do so (Table 14a), teachers who declared that values were not an important consideration are 1.7 times ($p \le 0.05$: 95% C. I., ORs = 1.0 – 1.8,) more likely to talk about HIV/AIDS, than teachers for whom values are very important. More specifically, when examining high consistent intentions (Table 14b), teachers who said values are not important are 2.1 times ($p \le 0.05$: 95% C. I., ORs = 1.2 – 3.6,) more likely to demonstrate high consistent behavior than teachers for whom values are very important.

Table 14b: MLR Analysis: Using the Value-Expressive Attitude Function to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	177.123			
Final	139.575	37.548	10	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 14b Continued

Intention (3 Levels) to Talk About HIV/AIDS in			Sig.		95% Confidence Interval for Exp(B)	
the Coming Month a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		.948	.602	1.492
	Male	0				
	Age 25 and under	1	***	4.572	2.503	8.352
	Age 26 - 35	1	***	2.705	1.614	4.534
	Age over 35	0				
	Values not important	1	**	2.086	1.195	3.643
	Values moderately important	1		1.430	.835	2.450
	Values very important	0				
Limited behavior	Intercept	1				
	Female	1		1.016	.631	1.636
	Male	0				
	Age 25 and under	1	***	2.948	1.573	5.525
	Age 26 - 35	1	*	1.806	1.057	3.085
	Age over 35	0				
	Values not important	1		1.310	.733	2.340
	Values moderately important	1		1.023	.586	1.785
	Values very important	0				

a. The reference category is: No, do not intend to talk about HIV/AIDS

Past behavior in school

Again two tables were produced examining the relationship between the variables, with Table 14c determining the presence of the relationship and Table 14d examining to what extent the value expressive attitude function predicts past school behavior.

Table 14c: MLR Analysis - Using the Value-Expressive Attitude Function to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	98.137			
Final	81.298	16.839	5	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 14c Continued

Talked About HIV/AIDS in School in Past Month (2			Sig.		95% Confidence Interval for Exp(B)		
levels)		df	1-tail	Exp(B)	Lower Bound	Upper Bound	
Yes, talked about HIV/AIDS	Intercept	1					
	Female	1		1.097	.759	1.583	
	Male	0					
	Age 25 and under	1	***	2.408	1.507	3.847	
	Age 26 - 35	1		1.242	.815	1.891	
	Age over 35	0					
	Values not important	1		1.305	.834	2.042	
	Values moderately important	1		1.305	.841	2.025	
	Values very important	0					

 $^{^{\}rm a.}\,$ The reference category is: No, did not talk about HIV/AIDS

Table 14d: MLR Analysis - Using the Value-Expressive Attitude Function to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	167.592			
Final	139.731	27.862	10	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in School in Past Month			Sig.			nce Interval for o(B)
(3 levels) ^a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		.886	.556	1.412
	Male	0				
	Age 25 and under	1	***	2.636	1.488	4.669
	Age 26 - 35	1		1.175	.679	2.034
	Age over 35	0				
	Values not important	1	**	2.163	1.206	3.880
	Values moderately important	1	**	1.913	1.068	3.427
	Values very important	0				
Limited behavior	Intercept	1				
	Female	1		1.326	.851	2.066
	Male	0				
	Age 25 and under	1	**	2.193	1.238	3.884
	Age 26 - 35	1		1.301	.778	2.175
	Age over 35	0				
	Values not important	1		.851	.494	1.468
	Values moderately important	1		.978	.581	1.646
	Values very important	0				

a. The reference category is: No, did not talk about HIV/AIDS

The overall models in those two tables are statistically significant (2 level comparison: log likelihood 81.298, $X^2 = 18.839$, df=5, p < 0.01, and 3 level comparison: log likelihood 139.731, $X^2 = 27.862$, df = 10, p < 0.01). However, the value expressive attitude function did not emerge as a statistically significant factor when comparing teachers with past school behavior with those who did not talk about HIV/AIDS in school in the past month (Table 14c). In other words the overall significance of the model was entirely due to the influence of age on past school behavior alone.

However, as expected, (controlling for the other variables in the model) when comparing teachers with high consistent behavior in school with those who had not talked about HIV/AIDS (Table 14d) teachers who considered values not important or only moderately important are 2.2 times (p \leq 0.01: 95% C. I., ORs = 1.2 - 3.9) and 1.9 times (p \leq 0.01: 95% C. I., ORs = 1.1 - 3.4), respectively, more likely to demonstrate high consistent behavior than teachers for whom values are very important.

Past behavior in the community

A final multinomial logistic regression was run to determine the impact of the valueexpressive attitude function on past community behavior.

Table 14e: MLR Analysis - Using the Value-Expressive Attitude Function to Predict Teachers' Talking (2 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	92.327			
Final	77.839	14.488	5	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in Community in Past Month		Sig.			95% Confidence Interval for Exp(B)	
(2 levels) a		df	1-tail	Exp(B)	Lower Bound	Upper Bound
Yes, talked about HIV/AIDS	Intercept	1				
	Female	1		.771	.532	1.117
	Male	0				
	Age 25 and under	1	**	1.992	1.248	3.180
	Age 26 - 35	1	*	1.441	.939	2.212
	Age over 35	0				
	Values not important	1		1.364	.867	2.146
	Values moderately important	1	*	1.519	.975	2.366
	Values very important	0				

a. The reference category is: No, did not talk about HIV/AIDS

The same comparison of two tables was used in these analyses and the models for both these analysis are statistically significant (2 level comparison: log likelihood 81.298, $X^2 = 18.839$, df=5, p < 0.01, and 3 level comparison: log likelihood 139.731, $X^2 = 27.862$, df = 10, p < 0.01).

Controlling for age and sex (Table 14e), when contrasting teachers who stated having talked about HIV/AIDS in the community in the past month, teachers who did not attach importance to values are 1.5 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 2.4) more likely to have talked about HIV/AIDS than those who say that values are very important. More specifically (Table 14f), teachers who said values were either not important or who said values were only moderately important are 1.7 (p \leq 0.05: 95% C. I., ORs = 0.9 – 3.2,) and 1.9 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 3.4) more likely, respectively, to have shown high consistent past behavior in taking about HIV/AIDS in the community.

Table 14f: MLR Analysis – Using the Value-Expressive Attitude Function to Predict Teachers' Talking (3 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	167.402			
Final	143.709	23.694	10	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked About HIV/AIDS in Community in Past			Sig. 1		95% Confidence Interval for Exp(B)	
Month (3 levels)		df	tail	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1	**	.522	.312	.876
	Male	0				
	Age 25 and under	1	**	2.577	1.346	4.932
	Age 26 - 35	1	**	2.184	1.193	4.000
	Age over 35	0				
	Values not important	1	*	1.735	.927	3.248
	Values moderately important	1	*	1.873	1.019	3.442
	Values very important	0				
Limited behavior	Intercept	1				
	Female	1		1.001	.647	1.547
	Male	0				
	Age 25 and under	1	*	1.703	.991	2.927
	Age 26 - 35	1		1.093	.657	1.818
	Age over 35	0				
	Values not important	1		1.163	.682	1.985
	Values moderately important	1		1.324	.786	2.228
	Values very important	0				-

a. The reference category is: No, did not talk about HIV/AIDS

Summary conclusions for hypothesis 6

The hypothesis that low value expressive attitudes would influence willingness to communicate about HIV/AIDS is supported across all three types of behavior (controlling for age and sex) when comparing teachers with high consistent past community behavior with those who did not talk about HIV/AIDS in the community. In addition, in the analysis of past school and past community behavior, it is both teachers who believed values were not important as well as those who believed values were moderately important that demonstrate consistently higher behavior when compared with their colleagues who declared not talking about HIV/AIDS at all in the past month.

The Full Model

As a final test, all variables were included in the 3 level model simultaneously (the 2 level model is not included to facilitate discussion and presentation of the results). The resulting models were all statistically significant (log likelihood 796.176, X^2 = 99.649, df=38, p < 0.001; log likelihood 810.273, X^2 = 68.446, df = 38, p < 0.001; log likelihood 776.458, X^2 = 62.241, df = 38, p < 0.001, for future intentions, past school behavior and past community behavior respectively) and can be found in Appendix K. A summary overview of the results is provided in the table below.

Table 15: Comparison of Model Results for Individual Analyses and Model Results for Full Model

	Future intentions (3 levels)		Past School Behavior (3 levels)		Past Community Behavior (3 levels)	
Predictor measures	Individual analyses	Full model	Individual analyses	Full model	Individual analyses	Full model
Sex						
Age	*	*	*	*	*	*
Knowledge			*	*		
Personal experience	*	*	*	*	*	*
Condom use		*			*	
Personal Risk			*		*	*
Attitude	*	*			*	*
Social norms						
Perc. Behavioral Control	*	*				
Level Taught	*		*	*	*	
Value Attitude Function	*	*	*	*	*	*

The results of the full model mirror the results of the individual analyses fairly well. With respect to future intentions the impact of level taught disappears in the full model, whereas condom use appears as a significant predictor. All other variables that were statistically significant continue to be significant in the full model. For past school behavior the impact of personal risk disappears in the full model, but all other variables remain the same. And, finally, for past

community behavior, the impact of condom use disappears in the full model but all other variables remain the same.

Summary for all Hypotheses

The table below summarizes, for both levels of the predicted variables, which of the predictor measures emerged as statistically significant in the analyses. Age, personal experience, level taught, and the value expressive attitude function emerge as predictors for the 2 or 3 level comparisons for each of the three types of behavior. However, there is also substantial variation across the different types of behavior. Thus, perceived behavioral control is an issue only in terms of future behavior, but not for past school or community behavior. Sex was not a predictor of any of the behaviors.

Furthermore, there is evidence that the comparison between teachers with highly consistent intentions and those who have no intention is particularly important in terms of school behavior. Whereas only age and personal experience impact on behavior in the two level comparison in school, in the 3 level comparison a number of other predictors take on importance, such as knowledge of HIV/AIDS, assessment of personal risk, attitudes toward talking about HIV/AIDS, and the value expressive attitude function. The comparison between 2 and 3 level behaviors does not add significantly to the interpretation in the case of future intentions and past community behavior.

Table 16: Comparison of Predictor and Predicted Variables Indicating Analyses for which Statistically Significant Results were Found

	Future intentions		Past School		Past Community	
			Beha	avior	Behavior	
Predictor measures	2 level	3 level	2 level	3 level	2 level	3 level
Sex						
Age	*	*	*	*	*	*
Knowledge				*		
Personal experience	*	*	*	*	*	*
Condom use					*	*
Personal Risk			*	*	*	*
Attitude		*			*	*
Social norms						
Perc. Behavioral Control	*	*				
Level Taught	*	*		*		*
Value Attitude Function	*	*		*	*	*

Incidental Findings

Further Analyses Concerning Attitude Functions

Only one formal hypothesis was included in this study related to attitude functions, namely concerning the relationship between the value expressive attitude function and willingness to communicate about HIV/AIDS and this hypothesis was supported across all three types of behavior (future intentions, past school behavior and past community behavior). In general it was found that teachers who hold weak value expressive attitudes are more willing to address HIV/AIDS across all three settings.

In order to determine whether the other five attitude functions (socio-adjustive, ego-defensive, utilitarian, knowledge and socio-defensive) influence willingness to communicate about HIV/AIDS, multinomial logistic regression analyses were run for the remaining five attitude functions. Of these analyses, only the models with the utilitarian attitude function and those with a socio-defensive attitude functions were significant and are reported on below, following the same procedures used for the testing of the formal hypotheses in this study.

Incidental Findings for the Utilitarian Attitude Function

Future intentions to discuss HIV/AIDS

The overall model using the utilitarian attitude function to predict intentions to talk about HIV/AIDS in the future (controlling for age and sex) is statistically significant (2 level comparison: log likelihood 62.887, X2 = 32.669, df=5, p < 0.001, and 3 level comparison: log likelihood 136.711, X2 = 42.884, df = 10, p < 0.001).

Table 17a: MLR Analysis: Using Utilitarian Attitude Functions to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. a
Intercept Only	105.556			
Final	72.887	32.669	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 17a Continued

Intention (2 Levels) to Talk About HIV/AIDS in					95% Confiden Exp	
the Coming Month		df	Sig.	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk about	Intercept	1				
HIV/AIDS	Female	1		1.076	.712	1.624
	Male	0				
	Age 25 and under	1	***	3.965	2.293	6.855
	Age 26 - 35	1	***	2.189	1.393	3.438
	Age over 35	0				
	Highly utilitarian attitude	1	*	1.681	1.015	2.784
	Moderate utilitarian attitude	1		1.013	.620	1.653
	Low utilitarian attitude	0				

a. The reference category is: No, do not intend to talk about HIV/AIDS

Table 17b: MLR Analysis: Using Utilitarian Attitude Functions to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	179.596			
Final	136.711	42.884	10	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 Levels) to Talk About HIV/AIDS in					95% Confidence Interval for Exp(B)	
the Coming Month		df	Sig.	Exp(B)	Lower Bound	Upper Bound
High consistent intentions	Intercept	1				
	Female	1		1.101	.696	1.741
	Male	0				
	Age 25 and under	1	***	4.928	2.683	9.053
	Age 26 - 35	1	***	2.636	1.572	4.419
	Age over 35	0				
	Highly utilitarian attitude	1	**	2.365	1.327	4.213
	Moderate utilitarian attitude	1		1.474	.841	2.583
	Low utilitarian attitude	0				
Limited intentions	Intercept	1				
	Female	1		1.068	.660	1.726
	Male	0				
	Age 25 and under	1	***	3.026	1.608	5.693
	Age 26 - 35	1	*	1.821	1.065	3.114
	Age over 35	0				
	Highly utilitarian attitude	1		1.132	.633	2.024
	Moderate utilitarian attitude	1		.747	.423	1.319
	Low utilitarian attitude	0				

 $^{^{\}rm a.}\,$ The reference category is: No, do not intend to talk about HIV/AID

The results for the 2 level comparison (Table 17a) show when comparing teachers who intend to talk about HIV/AIDS with those who do not, teachers with a highly utilitarian attitude are 1.7 times ($p \le 0.05$: 95% C. I., ORs = 1.0 – 2.7) more likely to talk about HIV/AIDS than those with a low utilitarian attitude. Similar, but more striking, results are found in the 3 level analysis (Table 17b). In this analysis, teachers who hold a highly utilitarian attitude toward talking about condoms/sexuality in schools are 2.4 times ($p \le 0.01$: 95% C. I., ORs = 1.6 – 4.2) more likely to intend to talk about HIV/AIDS in the coming month than those who hold a low utilitarian attitude.

Past behavior in school

The models using utilitarian attitude functions to predict past behavior in school are also both statistically significant (2 level comparison: log likelihood 75.954, X2 = 17.763, df=5, p < 0.01, and 3 level comparison: log likelihood 133.723, X2 = 27.144, df = 10, p < 0.01) and exhibit essentially the same pattern as for future behavior. In the 2 level analysis (and controlling for age and sex), teachers with a high utilitarian attitude are 1.5 times (p \leq 0.05: 95% C. I., ORs = 1.0 – 2.3) more likely to have talked about HIV/AIDS in the past month in school then teachers with a low utilitarian attitude.

Table 17c: MLR Analysis: Using Utilitarian Attitude Functions to Predict Teachers' Talking (2 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	93.717			
Final	75.954	17.763	5	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in	//AIDS in				95% Confiden Exp	
School in the Past Month (2		df	Sig.	Exp(B)	Lower Bound	Upper Bound
Yes, talked about	Intercept	1				
HIV/AIDS	Female	1		1.158	.801	1.675
	Male	0				
	Age 25 and under	1	***	2.524	1.574	4.047
	Age 26 - 35	1		1.245	.817	1.897
	Age over 35	0				
	Highly utilitarian attitude	1	*	1.457	.925	2.296
	Moderate utilitarian attitude	1		1.139	.724	1.792
	Low utilitarian attitude	0				

a. The reference category is: No, did not talk about HIV/AIDS

Table 17d: MLR Analysis: Using Utilitarian Attitude Functions to Predict Teachers' Talking (3 levels) About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	160.867			
Final	133.723	27.144	10	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in	HIV/AIDS in				95% Confider Exp	ice Interval for b(B)
School in Past Month (3 levels) a		df	Sig.	Exp(B)	Lower Bound	Upper Bound
High consistent	Intercept	1				
behavior	Female	1		.997	.626	1.589
	Male	0				
	Age 25 and under	1	***	2.926	1.643	5.211
	Age 26 - 35	1		1.170	.676	2.025
	Age over 35	0				
	Highly utilitarian attitude	1	**	2.214	1.237	3.961
	Moderate utilitarian attitude	1		1.303	.712	2.384
	Low utilitarian attitude	0				
Limited	Intercept	1				
behavior	Female	1		1.314	.843	2.050
	Male	0				
	Age 25 and under	1	**	2.197	1.237	3.901
	Age 26 - 35	1		1.308	.782	2.187
	Age over 35	0				
	Highly utilitarian attitude	1		.990	.569	1.723
	Moderate utilitarian attitude	1		1.037	.610	1.762
	Low utilitarian attitude	0				

 $^{^{\}mbox{a.}}\,$ The reference category is: No, did not talk about HIV/AIDS

And in the 3 levels analysis, comparing teachers with high consistent behavior with those who stated they had not talked about HIV/AIDS in school in the past month, teachers with a high utilitarian attitude are 2.2 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 4.0) more likely to have talked about HIV/AIDS than their colleagues with a low attitude).

Past behavior in the community

Only the 3 level model (see Table 17e) is statistically significant in using the utilitarian attitude function to predict past community behavior (log likelihood 75.954, X2 = 17.763, df=5, p < 0.01). However, analysis of the table reveals that the significance is based solely on the contribution of the age factor to the model, and that the utilitarian attitude function has no influence on the relationship.

Table 17e: MLR Analysis: Using Utilitarian Attitude Functions to Predict Teachers' Talking (3 levels) About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	164.221			
Final	145.175	19.046	10	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Incidental Findings for the Socio-defensive Attitude Function

A similar analysis was carried out for the socio-defensive attitude function, using this attitude function to predict the three behaviors (and controlling for age and sex). The pattern for this attitude function was almost identical to the utilitarian attitude function, with the high socio-defensive attitude function predicting both levels of future behavior (Tables 18a and 18b) and one of the levels of past school behavior Tables 18c) but not past community behavior.

Future intentions to discuss HIV/AIDS

The models for both levels of future are statistically significant. (2 level comparison: log

Table 18a: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers' Future Intentions (2 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	101.579			
Final	68.617	32.961	5	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (2 Levels) to Talk About HIV/AIDS in					95% Confidence Interval for Exp(B)	
the Coming Month		df	Sig.	Exp(B)	Lower Bound	Upper Bound
Yes, intend to talk about	Intercept	1				
HIV/AIDS	Female	1		1.058	.702	1.596
	Male	0				
	Age 25 and under	1	***	3.926	2.272	6.783
	Age 26 - 35	1	***	2.240	1.425	3.521
	Age over 35	0				
	High socio-defensive attitude	1	*	1.802	1.085	2.991
	Moderate socio-defensive attitude	1		1.149	.706	1.868
	Low socio-adjustive attitude	0				

a. The reference category is: No, do not intend to talk about HIV/AIDS

likelihood 68.617, X2 = 32.961, df=5, p < 0.001, and 3 level comparison: log likelihood 136.002, X2 = 38.127, df = 10, p < 0.001).

In the two level comparison, teachers with high socio-defensive attitudes were 1.8 times (p \leq 0.05: 95% C. I., ORs = 1.1 – 3.0) more likely to talk intend to talk about HIV/AIDS in the next month. In the three level comparison, comparing teachers with high consistent intention to those who do not intend to talk about HIV/AIDS, teachers with high socio-defensive attitudes are 2.1 times (p \leq 0.01: 95% C. I., ORs = 1.2 – 3.8) more likely to intend to talk about HIV/AIDS.

Table 18b: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers' Future Intentions (3 levels) to Talk About HIV/AIDS

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	174.129			
Final	136.002	38.127	10	***

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Intention (3 Levels) to Talk About HIV/AIDS in					95% Confidence Interval for Exp(B)	
the Coming Month		df	Sig.	Exp(B)	Lower Bound	Upper Bound
High consistent intentions	Intercept	1				
	Female	1		1.086	Lower Bound .687 2.643 1.628 1.187 .664 .663 1.599 1.054	1.716
	Male	0				
	Age 25 and under	1	***	4.845	2.643	8.879
	Age 26 - 35	1	***	2.732	1.628	4.583
	Age over 35	0				
	High socio-defensive attitude	1	**	2.087	1.187	3.670
	Moderate socio-defensive attitude	1		1.152	.664	1.999
	Low socio-adjustive attitude	0				
Limited intentions	Intercept	1				
	Female	1		1.072	2.643 1.628 1.187 .664 .663 1.599 1.054	1.733
	Male	0				
	Age 25 and under	1	***	3.002	1.599	5.637
	Age 26 - 35	1	*	1.802	1.054	3.082
	Age over 35	0				
	High socio-defensive attitude	1		1.390	.767	2.520
	Moderate socio-defensive attitude	1		1.098	.624	1.93
	Low socio-adjustive attitude	0				

 $^{^{}m a.}\,$ The reference category is: No, do not intend to talk about HIV/AIDS

Past behavior in school

In the 2 level model for past school behavior, although statistically significant, the sociodefensive attitude function is not statistically significant, therefore only the table referring to the overall test is presented here.

Table 18c: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers (2 level) Talking About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	90.536			
Final	75.107	15.429	5	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 18d: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers (3 level) Talking About HIV/AIDS in School in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	166.711			
Final	141.158	25.553	10	**

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Talked about HIV/AIDS in School in Past Month					95% Confidence Interval for Exp(B)	
(3 levels) a		df	Sig.	Exp(B)	Lower Bound	Upper Bound
High consistent behavior	Intercept	1				
	Female	1		.990	.622	1.577
	Male	0				
	Age 25 and under	1	***	2.754	1.556	4.874
	Age 26 - 35	1		1.176	.681	2.030
	Age over 35	0				
	High socio-defensive attitude	1	*	1.772	1.001	3.139
	Moderate socio-defensive attitude	1		1.161	.641	2.102
	Low socio-adjustive attitude	0				
Limited behavior	Intercept	1				
	Female	1		1.281	.820	2.001
	Male	0				
	Age 25 and under	1	**	2.170	1.224	3.845
	Age 26 - 35	1		1.295	.774	2.166
	Age over 35	0				
	High socio-defensive attitude	1		.771	.441	1.349
	Moderate socio-defensive attitude	1		.978	.580	1.649
	Low socio-adjustive attitude	0				

a. The reference category is: No, did not talk about HIV/AIDS

The 3 level model is, however, statistically significant. Comparing teachers with high consistent behavior to those who did not talk about HIV/AIDS in school in the past month, teachers who have high socio-defensive attitudes are 1.8 times ($p \le 0.05$: 95% C. I., ORs = 1.0 – 3.1,) more likely to talk about HIV/AIDS than teachers with low socio-defensive attitudes (controlling for age and sex).

Past behavior in the community

The 2 level model for past behavior in the community is not statistically significant, and in the 3 level model, although statistically significant, the socio-defensive attitude functions are not statistically significant. Therefore only tables for the overall model tests are presented here.

Table 18e: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers (2 level) Talking About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	87.659			
Final	76.666	10.992	5	NOT SIGNIFICANT

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Table 18f: MLR Analysis: Using Socio-Defensive Attitude Functions to Predict Teachers (3 level) Talking About HIV/AIDS in the Community in the Past Month

Model	-2 Log Likelihood	Chi-Square	df	Sig. ^a
Intercept Only	155.513			
Final	136.469	19.044	10	*

a. * p <= 0.05, ** p <= 0.01, *** p <= 0.001

Conclusions Concerning the Incidental Findings of the Remaining Attitude Functions

The above incidental findings show that high utilitarian and high socio-defensive attitudes predict future intentions to discuss HIV/AIDS (controlling for age and sex) and past school behavior when comparing high behavioral consistency with limited consistency and no behavior (the 3 level analysis). In the 2 level comparison this relationship only shows up for the utilitarian attitude functions. Neither attitude function predicts community behavior.

Qualitative Support for Selected Variables

In what follows the results of the semi-structured interviews with teachers are used to provide a qualitative background for some of the findings of the study. The conversations were

very informal so that teachers would feel uninhibited in responding to the questions. While this had the advantage of generating a substantial amount of information by way of personal accounts, it had the drawback of resulting in more information on some topics than on others. As a result, findings from the interviews are used to support/inform only a selection of the variables that were tested the six hypotheses of this study. The reader will notice that it is particularly in the domain of personal experience with HIV/AIDS that a substantial amount of information was collected.

A total of 28 teachers volunteered to participate in individual interviews. Of this total 50% were female. Volunteers were recruited in all five districts of the study, and the locations where they work cover both rural and urban areas. Sixty-seven percent of the teachers who were interviewed were teaching at primary level (grades 1 through 7), and just under half were younger than 25 years old.

Age

Age was a statistically significant and consistent predictor of all three types of behavior in the quantitative part of the study, and there was some evidence of this also in the interviews. Younger teachers talked more frankly and openly about HIV/AIDS, including about the sexual issues associated with the disease. As one of young teachers pointed out, the younger generation has grown up in the era of communication campaigns and has been much more exposed to the explicit messages from the media (both through formal campaigns and through entertainment programs). As this teacher noted: "Sex is becoming banal, we don't find it difficult to talk about this topic." Younger teachers were also more keen to explore ways in which they could learn more about the disease and to discuss ways in which they could play an active role. This was particularly the case for teachers who were still in training at the teacher training college in the capital city. Frequently the individual interviews were used by the younger respondents to ask how they could become more involved in the fight against HIV/AIDS. Older teachers, on the other hand, expressed more reservations in talking about HIV/AIDS, as the following quote of one of the older female teachers in the City of Xai-Xai illustrates: "Children nowadays are not as they used to be. I believe that if we talk about these things (referring to sex and condoms) there will no longer be any respect and discipline in our communities".

Personal Experience with HIV/AIDS

In the survey among teachers, personal experience emerged as a strong consistent predictor of teachers' future intentions and past school and community behavior with regard to communicating about HIV/AIDS. The qualitative data gathered during this study also consistently supports this finding. Teachers who had not been confronted with the impact of the disease expressed less conviction and confidence in their role as communicators about HIV/AIDS. On the other hand, teachers with close personal experience provided substantial anecdotal evidence of a greater engagement with the



Figure 4 - Patients at the Tuberculosis hospital in Chókwe

issue of HIV/AIDS, as well as evidence of a stronger commitment to making a difference to the impact of the disease.

For some teachers HIV/AIDS was not a pervasive presence in their lives. A number of teachers in the individual interviews said they were simply not sure whether the disease is really affecting the people around them. Because, in the words of a secondary school teacher in the capital city, "no-one talks about this disease, and when they do so they only whisper", and because they find it difficult to recognize the symptoms of the illness, they have a tendency to think of other explanations when they are confronted with colleagues, students and friends who are not well. As one of the older male teachers in a rural school put it: "It is difficult to see which of our colleagues are sick. Many people here have the vice of consuming alcohol. They don't look well at all, their body is not healthy, neither is their skin. But the doubt remains, is it because of what they drink or is this cursed disease going to take them, too". This type of statement was made by various teachers. Difficulties in identifying the symptoms of the disease appear to play a key role in teachers' perceptions of the reality of the disease.

The statement by this teacher stands in stark contrast to the way in which teachers with some form of experience with HIV/AIDS expressed themselves. It was evident from the interviews that personal experience can cover a wide range of issues such as living in an area with high HIV prevalence, hearing about the death of other teachers, close personal confrontation with the reality of the disease, and the experience of doing an HIV/AIDS test.

Differences in prevalence rates appear to affect teachers' perception of the proximity of the disease. A very particular case in this respect was the city of Chókwe and the surrounding area, where HIV/AIDS has become so prevalent that many teachers say it has become impossible to ignore. The presence of the hospital where tuberculosis patients are treated (the only hospital of its kind in the province) appears to have contributed substantially to the visibility of the disease. Tuberculosis is closely associated with HIV/AIDS and according to sources at the hospital 60% of the tuberculosis patients are HIV positive. Teachers interviewed at the secondary school in the city of Chókwe were much more open and frank in revealing what was happening in their school and in their community. Although many people are sick and dying in Chókwe and the surrounding areas, these teachers expressed the conviction that they are witnessing the beginning of a gradual attitude change. They cited examples of students offering condoms to the teachers, of couples who have an AIDS test before deciding to have children, and of people commenting openly about friends and family who are HIV positive or that have died of AIDS. These teachers voiced their belief that it is the pervasive impact of the disease that has contributed to this change. As one teacher put it: "Things started changing when the Tuberculosis Hospital here in Chókwe started taking in more and more sick people. Even colleagues come here from other districts to die. It was because of this reality that we realized that living next to the cemetery should not mean that we have to die. It is better that the hospital receives guests from elsewhere than that we should end up there". These teachers were also the only ones among those interviewed in the course of this study who were clear in advocating the message that being HIV positive does not mean an immediate death, but that there are various ways of living positively with the impact of HIV/AIDS. A quote from a female primary school teacher in this same area illustrates this: "We are close to a hospital where people who have HIV are treated. Here in Chókwe there are many mineworkers who return from South Africa contaminated with the disease. It is true that we used to say that this disease is nothing, but now we can feel it to the bone. Every day we are burying more people and seeing others come to the hospital. Because of this, there is no-one in this community who does not at least know one person who is affected." It therefore appears that having personal knowledge increases the sense of proximity to the disease as well as the likelihood of teachers recognizing symptoms and the impact of the disease, which in turn may influence teachers' perceptions of the importance of talking about HIV/AIDS with their students.

Experience also takes the form of being confronted with the sickness or death of colleagues. One teacher expressed this as follows: "It is sad how we teachers are disappearing. In years gone by, teachers did not die the way they do now. Lately, we have been gradually dying off, and it is very hard to see our colleagues like this, knowing just how hard it is to train a teacher in the first place, and then seeing that same person die when in this country there are still so many problems to solve!" In the context of these kinds of examples various teachers in the

interviews referred to the statistics that the Ministry of Education had just released that 17% (approximately one in every six teachers) is infected with HIV, and to how this statistic made them realize how prevalent the disease is.

Some teachers spoke very frankly about their experience of seeing how HIV/AIDS is affecting their family and related this experience to their own commitment to doing something about HIV/AIDS. A 52 year old secondary school teacher in Chókwe resorted to a drawing to explain what he had personally been through and how it had affected him: "Look, this is my family (starts drawing), here is my niece, she died first (crosses her out), then her husband (crosses him out) and so now their three children are living with my wife and me. Then came her brother, he got sick, his wife died (another cross) before him (crosses the brother out) and they have four children. Every family has a story like this, and the only way we can get away from this disease if we recognize what is happening and we talk about it to others. Now when I draw a picture of my family I have to place crosses where people used to be, if I don't talk, soon there will be someone else placing a cross where I used to be".



Figure 4 - Teachers discussing their experience of living with people affected with HIV/AIDS

Personal experience may also be brought on by the conditions that teachers live in. In rural areas teachers are frequently single (if they have families they leave them behind in the city) and therefore share accommodation with other teachers. The same happens in boarding schools, where some of the participants in the study were staying. The story of a female teacher in Mandlakazi is typical of this kind of living situation. In her case, her experience with HIV/AIDS was the direct result of living in the same room with a female colleague who was

HIV/AIDS causes: "I knew she was sick, and I knew that I could not catch the disease just from living with her. I wanted to help her because I could see her suffering was terrible, but she would ask me to help her bath because the itch from the disease was unbearable and I would find many excuses not to help her, I was too scared that her misfortune would pass on to me. I kept thinking that when she would die I would be happy. But then when she died, it was as if her suffering passed on to me. Now I worry every time I cough, every time I have a small problem with my skin, and I wait for my turn to die".

Confrontation with the disease can also be in the form of doing an HIV/AIDS test. "The most significant moment of my life", a 22 year old recent graduate from the teacher training college in Inhamissa explained, "was when I got the results of my AIDS test. I was petrified because I knew very well that I had not always been cautious in my behavior, but I was so relieved to find out that I am on the right side of things, that I am safe. It completely changed me to know that I am free, that I don't have to worry any longer. My HIV status is the most precious thing that I have. It is the passport to my future."

Personal experience can even take the form of being wrongly 'accused' of having fallen victim to the disease. In this context, a teacher in rural Bilene told the following story: "A few years ago I was in Chokwe I was having a very difficult time, I had no money at all, and very little to eat. I have always been thin since I was a child, but I became even thinner. Then my problems became worse, because people started avoiding me, they were not looking me in the eye anymore. At school my colleagues were polite but distant. My girlfriend left me and when I asked her why she would not say. It was only when a friend asked me whether I was sick that I realized that I myself had been placed between inverted commas, that people thought I had HIV".

Finally, it may also important to note that there were differences between the experience of men and women. In general it appeared that for the female teachers, the situation is more complex than for the male teachers. A number of younger female teachers spoke of their experience of trying to get their partners to use condoms and how this had resulted in scenes of anger, violence or rejection. "I have a friend, a teacher at school nearby where I teach, who asked her boyfriend to use a condom because she wanted to be sure that they would both be protected. But he refused, he accused her of sleeping with other men, and then he abandoned her. Now she is alone," said a 27 year old teacher from Xai-Xai, and she added her guestion: "Is it better to be alone and safe, than happy but maybe unsafe?" The difference between men and women was also mentioned as an issue when one person in a couple becomes infected with HIV. As one of the older teachers in Chokwe explained: "We women, we truly believe in 'until death us do part' and so we stay with our partners even when they get sick and in spite of their behavior. We will have sex with them even when we have doubts. But when it is a woman who gets sick, she will be abandoned, rejected by the community and left alone to die. No wonder that some prefer to commit suicide rather than to live with such disgrace." For women there is also the added complication of being expected to have children. Among a group of HIV/AIDS activists in Bilene district there were two women who had decided to abstain from sex rather than become infected, but one of them expressed her frustration in clear terms: "How to have children? We women need to have children. I don't know if this choice I have made is the best way to live."

Based on the anecdotal evidence it appears that teachers' experience may also, to some degree be a function of at least two other factors. In the first place large class sizes and multiple shifts in urban areas appear to make it more difficult for teachers to know their students well enough to realize whether they are affected. One teacher in Xai-Xai echoed the feelings of some of his colleagues in urban areas: "We don't have the capacity to know anything about our students, even in meetings we only deal with pedagogical issues, and we don't know anything about the health of their families, nor of the students themselves". In addition, urban communities are large and more disperse compared to rural environments, which makes it difficult to know people well and so HIV/AIDS cases may seem less obvious. In rural areas this is different because communities are so small. A teacher from a rural school in Bilene put things in the following terms: "In rural areas we know everyone and it becomes hard to hide what is going on. Even if people don't say that it is that thing (referring to HIV/AIDS) we still speculate, "Is she like that because the disgrace is affecting her too?'. And that makes us aware that something is happening".

Knowledge of HIV and AIDS

From the analysis of the survey data, HIV/AIDS knowledge emerged as a predictor of past school behavior. The survey data failed to demonstrate a consistent link between knowledge and the other two behaviors (future intentions and past community behavior).

During the interviews issues related to knowledge and understanding of the disease emerged quite consistently. However, from teachers' personal accounts it appears that possibly knowledge of the disease influences not so much whether they talk about HIV/AIDS, but what (i.e. the specific content) they talk about, and how accurate the information is that they provide. The following examples provided by teachers who participated in the interviews illustrate how varied teachers' approaches to talking about HIV/AIDS were:

"I emphasize that persons who carry the HIV virus should not be isolated from the society in which they live. I think that individuals with HIV/AIDS should appear in public, so that people in the community can know them, and become more aware of ways of preventing the spread of this disease to other people who are healthy."

"I inform my students that I do not want to see any of them walking about at odd hours of the night. And I tell them that if I find them doing these things then I will mention in class that this is prostitution, and point out that the person who is doing this is a thief because he/she wants to walk about late at night. And I will forbid asking for money. If anyone really wants money then they should just study so that when they grow up they can have a job and have a lot of money. Now is not the time to fool around."

"As a teacher I have tried to address these issues in an adequate manner, and have made it one of my day-to-day priorities to use examples whenever possible. One of the things that I have done is taken an object made of wood into the classroom to show students how to use a condom. It made them laugh but I think they learnt a lot from it."

"I tell my students that those who are affected by this disease have brought bad luck upon themselves, and that this will happen to them too if they don't behave. For me the problem is women, they don't have sex for love, but because they want money or goods."

"Teachers who have sex with their students are often being provoked. But by having sex with their students they are guaranteeing their future livelihood because there will be more children to teach."

"Even a drunk person can tell you not to drink and you will believe it, the same goes for teachers. I don't think it is necessary to set a good example by behaving in a particular way, the most important thing is to tell people what they need to know about HIV/AIDS".

A substantial number of teachers in the personal interviews mentioned that they urgently need more information. In general, teachers voiced many questions and doubts about various issues related to the disease. Quite often, the issues that they raised were related to condoms, and their own lack of confidence in condoms as a means of preventing the spread of the disease. Teachers asked questions such as: "Are condoms really safe?", "Have condoms been infected with disease", "Do condoms help spread HIV?"

A further issue that came up repeatedly in the discussions with teachers is that they are not able to find answers that satisfy their doubts and questions to the point that they can feel confident about what they are saying. In the words of one of the teachers: "We have questions but we never get answers, only that we will die and we will die not knowing the answers because we don't know where to ask. All we ever hear and see on the radio, in the press, is that AIDS means death. A person who has this disease ceases to exist, such a person has one foot in his grave and is no longer part of our community. We can tell our students to use condoms so they won't get the disease, but still this disease is all around us. How is it that since the Government started advocating condoms, the indices of HIV have only gone up? How can we trust condoms, when we know that some of them are infected with the disease? How can we talk positively about this disease when people die such a horrific death?" This same teacher explained, that "yes, I do

talk about HIV/AIDS" but that he avoids talking about issues that he is unsure about, such as the safety of using condoms.

Condom Use

The results of this study indicate that condom use is associated with past behavior in the community. The personal interviews did not provide very detailed information about condoms use, however, some teachers – especially the younger and male ones - talked frankly about their own use of condoms. One teacher clarified his decision to frequently use condoms as follows: "If I behave adequately then I can tell others to use a condom. This community here is small, people know too much about each other for me to fool around on this matter". Other teachers referred to the inconsistency between their own behavior and the message that they are supposed to convey

to their students. In the words of a male teacher in his early thirties: "Look, I have a condom here in my back pocket, but when the time comes I may use it or I may not. Maybe it will depend on the person whom I am with, on how much I trust them. Or sometimes I just don't feel like it. And then afterwards, I will wonder, why did I put that person at risk?" Other teachers expressed a strong mistrust of condoms. The observation of this teacher in the district of Mandhlakazi was fairly typical in this respect: "If I



Figure 4 - Poster at a district directorate for education advocating the use of condoms

were young, and had not yet started to have sex, I would wait, not do anything really. Not even in the condom can I trust, I don't know what it is made of, what is inside it, what medication it contains, or even if it won't just break and cause me problems".

Attitudes, Social Norms, Perceived Behavioral Control

"Kids will become promiscuous", "kids will become scared", "parents will not approve", "religious leaders are against it", "we will get disciplinary problems in our schools", "we will be accused of provoking disgrace". These are just a few of the reasons cited by some teachers why they find it difficult to communicate about HIV/AIDS. In some cases, teachers who felt this way

confessed that they preferred not to talk about HIV/AIDS. In other cases, teachers explained that they adapted their teaching content and strategies to their attitudes and beliefs, by selecting topics, avoiding details, and giving preference to the lecture form.

Social norms did not emerge as a particularly strong predictor of future intentions or of past behavior. However, in the interviews, teachers provided many examples of social pressure:

"For the people in my community things are very clear, it is not the teachers who should talk about this. They have not been recommended to do so. When I try to talk about this disease the people in my area don't take to it kindly, they even comment: 'Since when did this teacher learn these things, she should be teaching, when did she ever take a health course. Are the doctors going to sell us vegetables next, and will the bricklayer be teaching our children how to read and write?' So it is clear to me, when the teacher is alone, no one will take her seriously".

"Not all teachers can talk easily about these issues. A teacher in a rural area will have much more difficulty when trying to talk to children that are between 13-16 years old. People will say that that teacher is doing harm because he is introducing children to something they did not even know about and now they have become interested in it. Or they may even say that all he wants is to take advantage of his students" – female secondary school teacher in Xai-Xai.

"Teachers who talk about condoms are accused of trying to reduce the strengths of families and communities because they will have fewer children" – young teacher in Bilene.

The qualitative findings are therefore somewhat contradictory to the findings of the survey. This is an area that could benefit from further research.

With regard to perceived behavioral control training, materials, incentives and support from colleagues and school directors emerged as key issues for teachers in all the interviews and, by their own account, affect their ability and willingness to talk about HIV/AIDS. The findings on the quantitative part of the study only support this as far as future intentions are concerned but failed to find support for the hypothesized link between perceived behavioral control and past school and community behavior. However, the perception from the interviews, and the frequency with which teachers mention issues that affect their ability/willingness to talk about HIV/AIDS (both in the interviews and in the surveys), shows that concerns such as training, materials, etc. are crucial across the board. In other words, it appears that key factors that may influence perceived behavioral control (such as training, and materials) are an issue for everyone and therefore do not show up as being crucial only to teachers who decide to talk about HIV/AIDS.

An important issue mentioned by many teachers was the difficulty in finding good, convincing examples, examples that would make the issue "live for the students". Some of them said they would like to bring in someone from the community (sufficiently affected by the disease to show what was going on, but still healthy enough to walk) to show their students what happens to people who are not careful. This suggestion was offered not by one teacher but by various teachers in different locations. Many of the teachers themselves acknowledged the ethical drawbacks of this proposal, but it serves to illustrate how much of a limitation the lack of examples and explicit materials is to teachers.

Support by colleagues and management of schools was also key issue. Many teachers said that their personal efforts in talking about HIV/AIDS were hampered by lack of support from other teachers. In other words, they would still talk about the disease but would have to limit/restrict what they were talking about. As one of the female teachers in the rural areas remarked: "My male colleagues do not always set a good example. They have a lot of girlfriends, and some of those are even students from our school. For me it is difficult to tell students that they need to abstain from having sex, or at least have only one partner, when teachers here at the school are behaving this way".

Level Taught

One of the findings from the survey data was that teachers who teach at upper primary are more likely to talk about HIV/AIDS than those teaching at lower primary. There was also some indication that teachers at secondary level are even less likely to talk about HIV/AIDS than their counterparts in lower primary. The statements of teachers during the personal interviews help to shed some light on this issue. A selection of comments and observations by teachers at these different levels are reviewed below.

For teachers in EP1 (lower primary level grades 1-5) one of the key constraints to talking about HIV/AIDS is the difficulty in talking about sensitive issues to young people, as well as the reaction from parents if they were to do so. Teachers are aware that the main vector of transmission is sexual, but they don't know how to talk to children about these issues. As one teacher explained: "We have tried to talk of this terrible disease with our pupils. But the problem is that we don't have ways of communicating adequately with them, we don't have the right terminology. We cannot talk about sex with them, it is not our tradition. So we talk about things that can cut them, like razors. But there is a monotony to what we are able to talk about. We are not able to talk about everything". This teacher attempted to adapt the content that he was talking

about. Other teachers simply decide they will not talk at all. As one female teacher remarked: "My children are too young, I am not going to frighten them with things they will not understand".

For teachers in the higher grades (particularly at secondary level) the difficulty is related to the fact that the children are older, more experienced and often already sexually active. Especially in the urban areas, teachers noted that children and young adults know so much about sex and sexuality that they ask complex and provoking questions which embarrass the teacher or which he/she has difficulty in answering. Some of the secondary school teachers reported wanting to talk about HIV/AIDS, but finding it difficult to integrate the topic in their subject matter, lacking clear examples, and feeling frustrated with repeating the same message over and over again. As one of the teachers said: "Children nowadays are no longer children. They know about sex, they watch TV, and they know about condoms. Are we telling them something new? Are they using the condoms? Well, as long as I still see so many young girls drop out this school every year because they become pregnant, I am not sure I can be convinced." And, to a small but significant group of teachers at this level, students are actually in part to blame for the spread of the disease, they want to have money so they prostitute themselves and, in doing so, present a temptation to the teacher. As a secondary school teacher remarked when we were leaving one of the focus group discussions: "Really, I could not say it in there, but the girls, they want money so much they don't care about using condoms, they will just go with anyone to be able to buy a skirt or braid their hair."

An additional problem at secondary level appears to be that teachers lecture very specific subjects as opposed to Grades 1 through 5 where teachers are not specialized and Grades 6 and 7 where teachers are only moderately specialized along broad lines separating the sciences from the art. There was some evidence from the interviews that teachers struggle with the fact that it is not immediately apparent to them how to integrate HIV/AIDS into their teaching. As a secondary school teacher in Mandlakhazi remarked: "I am an art teacher. What can I realistically talk about? Art is not about talking, it is about doing."