

Correlates of teachers' attitudes towards and comfort about teaching school-based sexuality education in urban and rural Tanzania

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Abstract

This study assessed teachers' attitudes towards and comfort in teaching sexuality education within the school curriculum. Participants were drawn from one urban district and one rural district. The results show that a majority of teachers (more than 90%) in both districts overwhelmingly supported the provision of sexuality education in schools, as well the inclusion of a wide range of sexuality topics in the school curriculum. Nevertheless, though the results show that teachers may support the teaching of sexuality education and the inclusion of a number of topics in the school curriculum, they may not be comfortable and capable of teaching all the key sexuality education topics. This was particularly the case with regard to topics related to attitudes and values, such as homosexuality and other controversial topics. This implies that declaration of positive attitudes towards school-based sexuality education as well as change in policy alone may not be enough; these need to go hand in hand with providing teachers with the knowledge, skills and confidence to teach the various sexuality education topics.

Key words: sexuality education, teachers, schools, attitudes and comfort

Introduction

The effectiveness of school-based sexuality education depends on, among other factors, the effectiveness of teachers who implement it (Cohen, Sears, Byers & Weaver, 2004). Furthermore, it has been argued that the extent to which teachers implement the school-based sexuality education curriculum is largely dependent upon and influenced by their attitudes towards it (Paulussen, Kok & Schaalma, 1994). Indeed, one of the central characteristics of an effective sexuality education programme is the level at which teachers are willing and show positive attitudes towards teaching it (Kirby et al., 2005). It is in this context that several authors have recommended that teachers' attitudes and confidence about teaching sexuality

education be assessed prior to engaging them in its delivery (Paulussen et al., 1994; Oshi, Nakalema & Oshi, 2004; Mathews, Boon, Flisher & Schaalma, 2006).

Though there has been a plethora of studies that have examined the attitudes of teachers towards teaching sexuality education in schools in developed countries, there has been a paucity of such studies in sub-Saharan Africa. This paper reports on the results of a survey that assessed teachers' attitudes and comfort about teaching sexuality in schools in Tanzania.

Methods

Participants

Forty eight teachers in 12 primary schools in the urban district (Kinondoni) and 38 teachers in eight schools in the rural district (Sengerema) were requested to complete a questionnaire. However, only 38 teachers in the urban district and 32 teachers in the rural district actually volunteered to complete the questionnaire, giving a response rate of 79.2 percent and 84.2 percent for the urban and rural districts respectively. The overall response rate for both districts was 81.4 percent.

Table 1 summarises the demographic characteristics of responding teachers. The majority of teachers in the urban district were aged 25-35 (57.9 %), while the majority of teachers in the rural district were aged 46-55 (36.7 %) and 25-35 (30 %). In both districts, the majority of respondents were female; 63.9 percent and 55.2 percent of the respondents in the urban and rural districts were female respectively.

A majority of the responding teachers (42.1%) in the urban district identified as Catholics, while the majority of those in the rural district (50%) identified as Protestants. In both districts, more than 90 percent of the responding teachers reported attending religious services either *every day* or *at least once a week* and that religion was *very important* in their life.

The majority of teachers in the urban district (92.1%) and rural district (73.3 %) held a certificate in education (Grade A) as their teaching qualification. The majority of teachers in the urban district (42.1%) had teaching experience of less than 5 years,

while the majority of teachers in the rural district (53.3%) had teaching experience of more than 15 years. About 57 percent of teachers in the rural district indicated having attended some training programmes in teaching sexuality education, compared to 42 percent of teachers in the urban district.

Table 1

Demographic Characteristics of Responding Teachers by District

<i>Demographic variables</i>	<i>% of Respondents</i>			
	<i>Urban (Kinondoni) N= 38</i>	<i>District</i>	<i>Rural (Sengerema) N= 32</i>	<i>District</i>
<i>Age</i>				
25-35	57.9		30.0	
36-45	21.1		23.3	
46-55	21.1		36.7	
Over 55 years	-		10.0	
<i>Sex</i>				
Male	36.1		44.8	
Female	63.9		55.2	
<i>Religion</i>				
Catholics	39.5		50.0	
Protestant	42.1		40.0	
Islam	18.4		3.3	
Other	-		3.3	
None	-		3.3	
<i>How many times do you attend religious services</i>				
Everyday	23.7		16.7	
At least once a week	73.7		76.7	
At least once a month	2.6		3.3	
At least once a year	-		3.3	
Never attend	-		-	
<i>How important is religion in your life</i>				
Very important	94.7		89.3	
Important	5.3		10.7	
Somehow important	-		-	
Not important	-		-	
Not important at all	-		-	
<i>Teaching qualification</i>				
Certificate in education (Grade A)	92.1		73.3	
Certificate in education (Grade B)	-		20.0	
Diploma in education	2.6		3.3	
University degree	-		3.3	
No formal teaching qualification	5.3		-	
<i>Teaching experience</i>				
Less than 5 years	42.1		23.3	
5-10 years	10.5		6.7	
10-15 years	23.7		16.7	
More than 15 years	23.7		53.3	
<i>Have you attended any training course on SE?</i>				
Yes	41.7		56.7	
No	58.3		43.3	

The instrument and procedure

Teachers completed a questionnaire entitled *Teachers' views and attitudes towards school-based sexuality education in Tanzania*, which comprised five major parts. In the first part, respondents were asked to indicate the extent to which they agreed or disagreed with the view that *Sexuality education should be provided in schools* and that *the school and parents should share the responsibility to provide this education*. In the second part of the questionnaire, respondents were provided with a list of several basic sexuality education topics and were asked to rate the importance of each topic on five response options, ranging from *not at all important (1)* to *very important (5)*. In the third part, respondents were asked to indicate the school level they thought each of the topics could be introduced in the school curriculum. The fourth part of the questionnaire comprised demographics, including age, sex, religion and residential location (Dar es Salaam as urban or Mwanza as rural). The last part of the questionnaire contained questions on teachers' comfort regarding teaching sexuality education; teachers were provided with a list of 12 basic sexuality education topics and, for each topic, they were asked to indicate the level of comfort they would find in teaching each topic on the basis of a five-response scale ranging from *Very difficult (1)* to *Very easy (5)*.

The questionnaire was initially prepared in Kiswahili, then translated into English. To ensure that consistency in the content and meaning, it was back-translated into English.

Data were entered and analysed using SPSS statistical package Version 15. The percentages of respondents in favour of various aspects of school-based sexuality education were computed and were used to assess the extent to which teachers supported the provision of sexuality education in schools. Independent samples t-test was performed to explore the variation in the views and attitudes towards school-based sexuality education between teachers in the urban (Kinondoni) and rural (Sengerema) districts. Logistic regression analysis was performed to examine the effects of teachers' demographic characteristics on their views and attitudes about school-based sexuality education. Multivariate statistical analysis (MANOVA) was

conducted to explore the association between teachers' demographics and their perceived importance of sexuality education topics.

Results

Teachers' attitudes towards basic issues related to school-based sexuality education

As can be seen in Figure 1, in both districts, an overwhelming majority of teachers supported the provision of sexuality education in school as well as the idea that the school and parents should share the responsibility to provide sexuality education to children. For example, 92.2 percent of teachers in the urban district (Kinondoni) agreed (42.1%) or strongly agreed (50.1%) with the statement that *sexuality education should be provided in schools*. In the rural district (Sengerema), 90 percent of teachers either agreed (30%) or strongly agreed (60%) with the statement. Again, in both districts, 90 percent of the teachers either strongly agreed or agreed with the statement that *the school and parents should share the responsibility of providing sexuality education (SE) to young people*.

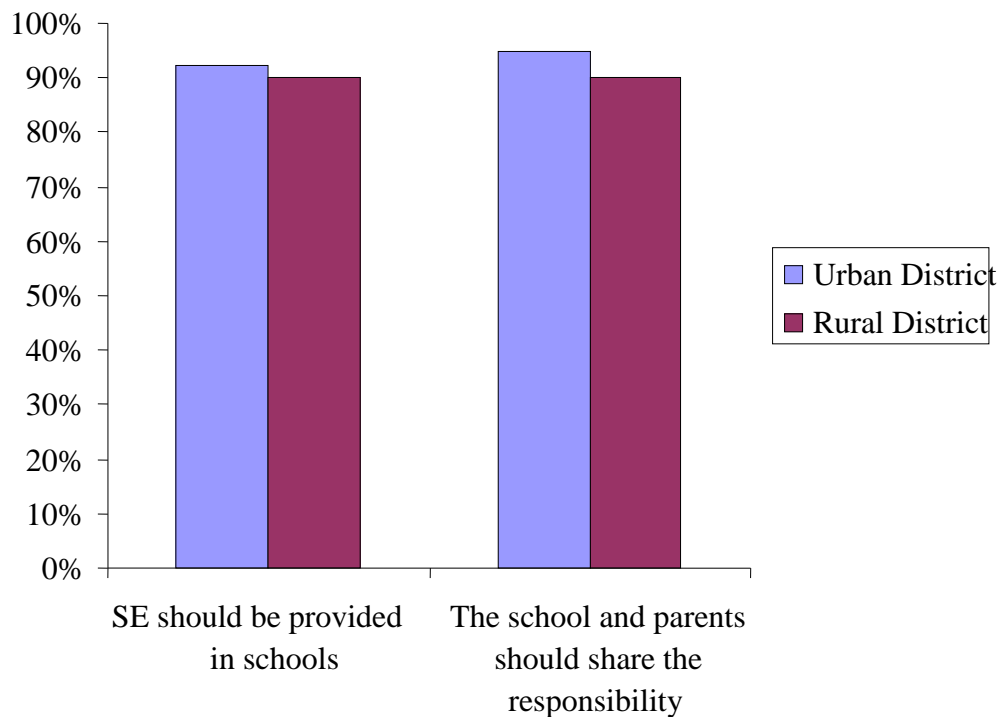


Figure 1. Percentage of teachers in the urban and rural districts agreeing with statements: Sexuality education should be provided in schools and the school and parents should share the responsibility

When asked to indicate the class level during which sexuality education should be introduced in schools, 71 percent of the teachers in the urban district and 94 percent of the teachers in the rural district indicated that sexuality education should begin at primary school level between Class 4 and 7 (see Figure 2). The paired- samples t- test revealed a statistically significant difference in teachers' preference of the school level to introduce sexuality education between the primary school level ($M= 4.14$, $SD=1.12$) and the secondary school level ($M= 2.39$, $SD= 1.46$): $t(58) = 6.224$, $p < .0005$. The eta squared statistic (.40) indicated a large effect size. However, a one-way between groups MANOVA revealed no statistically significant difference in the preference of the school level to introduce sexuality education in schools between teachers in the urban and rural districts: $F(2, 56) = 2.053$, $p = .138$; Wilks' Lambda = .932.

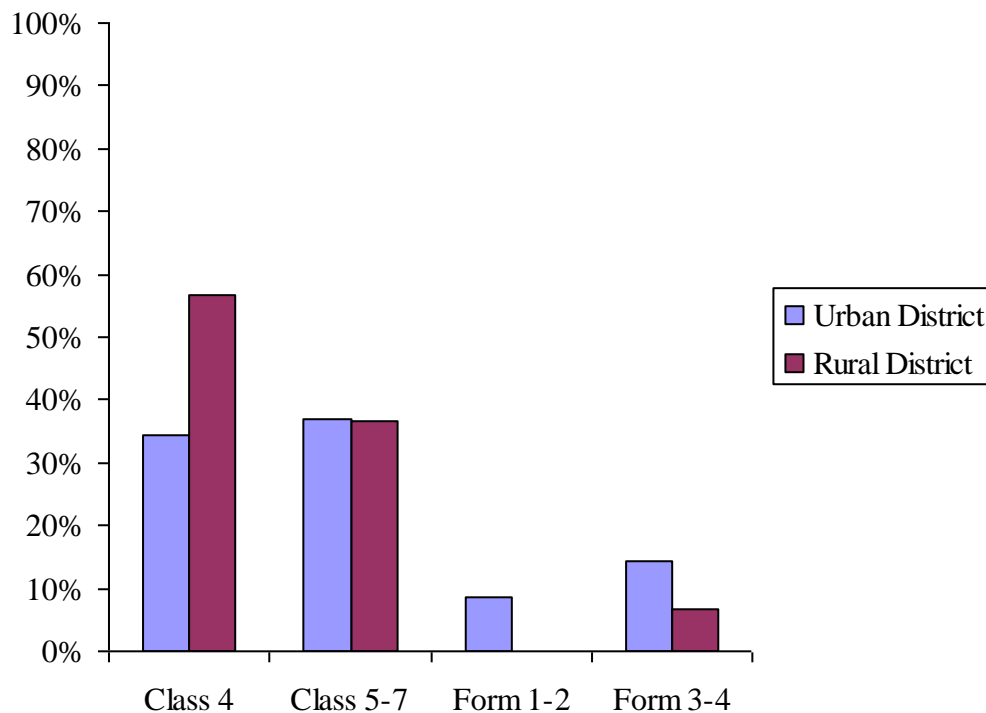


Figure 2. Percentage of teachers in the urban and rural districts indicating the level at which sexuality education should be introduced in schools.

Note that, according to the Tanzanian education system, Class 4 to 7 are primary school levels corresponding to ages 10 to 14 and Form 1 to 4 are ordinary secondary school levels corresponding to ages 15 to 17.

Effects of teachers' demographic characteristics on their attitudes towards school-based sexuality education

A logistic regression analysis was performed with *sexuality education should be provided in schools* as Dependent Variable (DV) and *sex, teaching subject, experience of training in sexuality education, location* and *religion* as Independent Variables (IVs). A total of 68 cases were analysed, with the model accounting for between 28.3 % (Cox & Snell R Square=.096) and 21.7 % (Nagelkerke R Square=.217) of the variance. The Hosmer and Lemeshow test showed that the model was accurate in predicting the teachers' attitudes towards the provision of sexuality education in schools (Hosmer and Lemeshow test Chi-square=7.884, df=8, $p=.445$).

Table 2 presents coefficients and the Wald statistic and associated degrees of freedom and probability values for each of the predictor variables. The table shows that none of the teachers' demographic characteristics reliably predicted the teachers' attitudes towards school-based sexuality education. However, these results need to be interpreted with care given the small size of the sample ($N=68$) under investigation. According to Tabachnick and Fidel (2001), sometimes the failure of the logistic regression model is caused by too a small sample size relative to the number of predictors as was the case in this study. Pallant (2005) proposes this formula to determine the number of predictors to be entered into the logistic regression equation: $N > 50 + 8m$, where m is the number of predictors. Thus, for a sample of 68 cases as was the case in this study, logistic regression model would work well for a maximum of only two predictor variables. However, in this case, even when only two predictors were considered at a time, none of them statistically significantly predicted teachers' attitudes towards school-based sexuality education.

Table 2

Variables Entered in the Logistic Regression Equation with the Resultant Coefficients

Predictor variables	B	S.E.		Wald	df	Sig.	95.0% C.I. for		
		Lower	Upper				Exp(B)	EXP(B)	
Step 1(a)									
sex(1)	1.675	1.330		1.584	1	.208	5.336	.393	72.403
Teaching subject(1)	1.160	1.175		.975	1	.323	3.191	.319	31.919
Training in SE(1)	-2.504	1.428		3.075	1	.079	.082	.005	1.343
Location (1)	-.024	1.091		.000	1	.982	.976	.115	8.281
Age(1)	-1.054	1.130		.870	1	.351	.349	.038	3.191
Religion (1)	-1.093	1.431		.584	1	.445	.335	.020	5.537
Constant	3.779	1.574		5.767	1	.016	43.780		

a Variable(s) entered on step 1: sex, Teaching subject, Training in SE, Location, Age, Religion.

Teachers' views on the importance of topics to be included in the school-based sexuality education

Teachers were provided with a list of 44 sexuality education (SE) topics and were asked to rate the importance of each topic on a five-point scale ranging from *Not important at all* (1) to *Very important* (5). Table 3 summarises the mean and median response scores of the teachers' views about the importance of each of the 44 topics.

As can be seen from Table 3, teachers rated the majority of topics as *very important* or *important* (median score of 5 and 4 respectively). For example, teachers in the urban district rated 32 topics (72.7 percent of all topics) as *very important* (18 topics) or *important* (14 topics). Teachers in the rural district rated 33 topics (75 percent of all topics) as *very important* (19 topics) or *important* (14 topics).

Teachers in the urban district rated nine topics as *somehow important* (median score =3), whereas teachers in the rural district rated six topics as such. Only two topics were rated by teachers in both districts as *not important at all*, these were *homosexuality* and *pornography*. *Sex as part of a loving relationship* was rated by teachers in both districts as *not important* (median score= 2). Additionally, teachers in the rural district rated five other topics as *not important* (median score=2); namely, *masturbation*, *appropriate/inappropriate touching*, *sexuality as a positive aspect of self*, *common myths about sexuality* and *sexual feelings and expression*.

When the topics were classified into the three dimensions of sexuality education - cognitive, affective and behavioural dimensions- using factor analysis, it emerged that the affective dimension (encompassing topics on attitudes and values) was the least preferred by the majority of teachers in both districts. Whereas more than 90 percent of teachers in both districts rated cognitive (encompassing topics on facts and information) and behavioural (encompassing topics on skills and interpersonal relationships) dimensions as *very important* or *important*; less than 30 percent of teachers rated the affective dimension as such (see Figure 4).

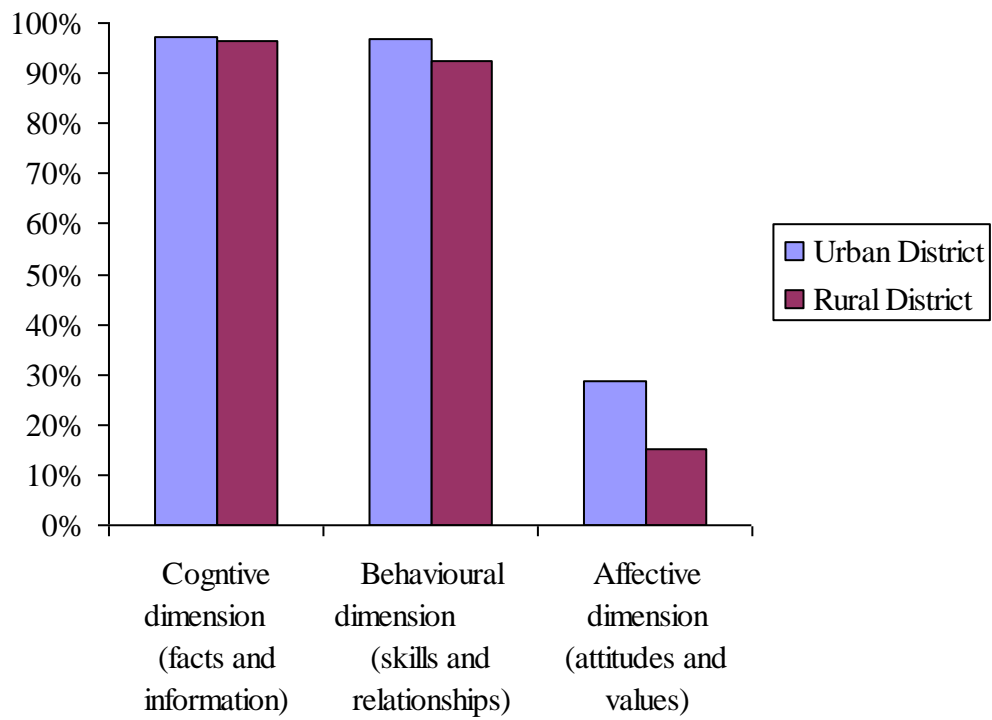


Figure 4. Percentage of teachers in the urban and rural districts indicating the importance of SE dimensions

Table 3

education *Curriculum by District*

	<i>Urban District (Kinondoni)</i>			<i>Rural District (Sengerema)</i>		
	<i>Mean</i>	<i>Median</i>	<i>Std Deviation</i>	<i>Mean</i>	<i>Median</i>	<i>Std Deviation</i>
1. Correct names of genitalia	3.5	4	1.2	3.8	4	1.4
2. Body image	4.1	4	0.8	4.0	4	0.7
3. Puberty	4.5	5	0.8	4.5	5	0.6
4. Birth control	3.6	4	1.3	4.1	4	1.2
5. Menstruation	4.4	5	0.6	4.4	5	0.7
6. Pregnancy	3.9	4	1.0	4.5	5	0.8
7. Wet dreams	3.4	3	1.0	3.8	4	1.1
8. Personal safety	4.6	5	0.6	4.7	5	0.5
9. Health and wellness	4.6	5	0.7	4.6	5	0.6
10. The effects of drugs, alcohol and tobacco use	4.9	5	0.4	4.9	5	0.4
11. Sexually transmitted diseases (STDs) including HIV/AIDS	4.9	5	0.3	4.9	5	0.3
12. Body and diseases	4.6	5	0.7	4.6	5	0.6
13. Sexual problems and concerns	4.6	5	0.8	4.6	5	0.7
14. Masturbation	3.4	3	1.4	2.9	2	1.6
15. Friendships/social skills	4.3	5	0.9	3.9	4	1.1
16. Family types and roles	4.4	5	0.9	4.2	4	1.0
17. Dating and marriage	3.2	4	1.4	4.0	4	1.2
18. Parenting	4.3	5	0.9	4.5	5	0.6
19. Sexual behaviours	3.5	4	1.2	3.4	4	1.3
20. Attraction, love and intimacy	3.1	3	1.1	2.8	3	1.5
21. Sex as part of a loving relationship	2.1	2	1.2	2.4	2	1.5
22. Sexual orientation including homosexuality	2.2	1	1.5	1.8	1	1.2
23. Being comfortable with the other sex	3.6	4	1.2	3.8	4	1.2
24. Dealing with peer pressure to be sexually active	4.5	5	0.6	4.3	5	0.9
25. Sexual coercion and sexual assault	4.7	5	0.8	4.6	5	0.6
26. Sex in exchange of gifts and money	4.7	5	0.6	4.6	5	1.0
27. Sex in exchange of better examination grades at school	4.7	5	0.6	4.3	5	1.4
28. Communicating about sex	3.0	3	1.3	3.0	3	1.5
29. Pornography	1.9	1	1.4	1.8	1	1.2
30. Personal rights	4.3	4	0.9	4.6	5	0.5

	<i>Urban District (Kinondoni)</i>			<i>Rural District (Sengerema)</i>		
	<i>Mean</i>	<i>Median</i>	<i>Std Deviation</i>	<i>Mean</i>	<i>Median</i>	<i>Std Deviation</i>
31. Abstinence as an alternative to sexual intercourse	3.7	4	1.3	3.7	4	1.4
32. Masturbation as an alternative to sexual intercourse	2.7	3	1.5	2.2	2	1.3
33. Sexual behaviours other than intercourse	3.0	3	1.5	2.7	3	1.6
34. Appropriate/inappropriate touching	3.2	4	1.4	2.4	2	1.5
35. The effectiveness of different birth control methods	3.8	4	1.2	4.1	5	1.2
36. Decision making	4.4	5	0.8	4.5	5	1.1
37. Demonstrate use of condoms	2.9	3	1.3	3.4	4	1.5
38. Sexuality as a positive aspect of self	2.9	3	1.3	2.9	2	1.6
39. Common myths concerning sexuality	3.7	4	1.1	3.6	4	1.5
40. Sexual feelings and expression	3.0	3	1.4	2.7	2	1.6
41. Being responsible for your own behaviour	3.7	4	1.1	4.1	4	1.1
42. Reduction of fears and myths about sexuality matters	3.8	4	1.0	4.1	4	1.1
43. Saying 'no' to non-consensual sex	4.5	5	0.8	4.5	5	1.0
44. Saying 'no' to alcohol	4.9	5	0.4	4.8	5	0.6

Note: Response options: 1=Not at all important, 2=Not important, 3=Somehow important, 4=Important and 5= Very important.

Variation in the attitudes towards sexuality education (SE) between rural and urban teachers

An independent samples t-test was performed to investigate the variation in attitudes towards school- based sexuality education between rural and urban teachers, with *location* as independent variable and *SE should be provided in schools* as dependent variable. There was no statistically significant difference in scores measuring the attitudes towards school- based sexuality education between rural teachers ($M=4.43$, $SD= .86$) and urban teachers ($M= 4.32$, $SD= .93$); $t(66) = -.534$, $p=.59$, with a very small magnitude of the difference in the means (eta squared = .004).

A one-way between groups MANOVA was performed to investigate variation in the perceived importance of the three mostly commonly identified controversial topics in school-based sexuality education: *homosexuality*, *masturbation* and *condom use*. These are the topics that received the lowest rating, with clear percentage variation between urban and rural parents. Preliminary assumption testing using homogeneity of variance-covariance matrices revealed no serious violation of this assumption. There was no statistically significant difference between urban and rural based responding teachers on the combined dependent variables: $F(3, 57) = 0.90, p = .442$; Wilks' Lambda = .95; partial eta squared = .05. Thus, despite the actual percentage variation, there was no statistically significant difference in attitudes towards these topics between urban and rural based teachers.

Teachers' preferred class levels to introduce sexuality education topics

Teachers were asked to indicate the class levels to introduce each of the 44 topics in the school-based sexuality education curriculum. There were five response options: Class 4 (age 10), Class 5-7 (age 11-13), Form 1-2 (age 14-15), Form 3-4 (age 16-17) and Form 5-6 (age 18-20). In accordance with the education system in Tanzania, primary and secondary education levels roughly correspond to ages 7-13 and 14-17 respectively. In practice, however, a significant proportion of children complete primary education much later than age 13.

Table 4 summarises the teachers' preference of school levels for introducing 12 sexuality education topics that have been considered as constituting the minimum package for a school-based sexuality education programme (Byers et al., 2003; Lenderyou, 1993). The table shows that the majority of teachers wanted most of the topics to be introduced at some point during the children's primary education (ages 10-13). For example, in both districts, the overwhelming majority of the teachers wanted all but one topic (*homosexuality*) to be introduced during primary school between Classes 4 and 7 (ages 10 and 13). In both districts, the majority of teachers wanted *STDs/HIV/AIDS* to be introduced at a much earlier level than other topics; 55.3 percent of the teachers in the urban district and 43.3 percent of the teachers in the rural district indicated that this topic should be introduced at Class 4 (age 10).

Table 4

Percentage of Teachers Indicating the Class Levels for Introducing SE Topics by District

Topics	Percentage of teachers indicating each class level									
	Urban District (Kinondoni) N=25-38					Rural District (Sengerema) N=23-30				
	Class 4	Class 5-7	Form 1-2	Form 3-4	Form 5-6	Class 4	Class 5-7	Form 1-2	Form 3-4	Form 5-6
1. Names of genitalia	20.6	50.0	14.7	8.8	5.9	10.7	71.4	14.3	0.0	3.6
2. Personal safety	43.2	43.2	2.7	5.4	5.4	26.7	66.7	6.7	0.0	0.0
3. Puberty	10.8	75.7	2.7	5.4	5.4	16.7	73.3	3.3	0.0	6.7
4. Reproduction and birth	8.8	58.8	14.7	11.8	5.9	17.2	62.1	17.2	3.4	0.0
5. Abstinence	7.7	50.0	26.9	11.5	3.8	0.0	43.5	34.8	21.7	0.0
6. Sexual pleasure	0.0	73.3	10.0	10.0	6.7	7.7	61.5	15.4	15.4	0.0
7. Decision making	0.0	56.0	16.0	24.0	4.0	3.8	69.2	19.2	7.7	0.0
8. Condom use	3.6	46.4	14.3	28.6	7.1	7.7	53.8	3.8	34.6	0.0
9. STDs and HIV/AIDS	55.3	28.9	7.9	0.0	0.0	43.3	40.0	10.0	6.7	0.0
10. Sexual coercion	29.7	56.8	2.7	2.7	8.1	30.0	70.0	0.0	0.0	0.0
11. Masturbation	10.3	51.7	10.3	20.7	6.9	0.0	54.2	25.0	20.8	0.0
12. Homosexuality	15.6	21.9	18.8	18.8	9.4	25.9	14.8	11.1	29.6	0.0

Teachers' views about the comfort of teaching various sexuality education topics

Teachers were asked to indicate the extent to which they would find it easy or difficulty to teach sexuality education topics in schools on a five response scale ranging from “*very difficult (1) to very easy (5)*”. Table 5 summarises the teachers' responses regarding their views about the comfort in teaching each of the 12 basic sexuality education topics. As shown in the table, teachers were divided regarding their level of comfort in teaching sexuality education topics; in both districts, teachers expressed easiness in teaching some topics and difficulty in many others.

Only four topics were seen by teachers in the urban district (Kinondoni) as easy to teach, with more than 80 percent of the teachers indicating that these topics were either *very easy* or *easy* to teach. The topics and the percentage (in brackets) of teachers indicating that they would find them very easy and easy to teach are *personal safety* (88.9%), *puberty* (83.3%), *sexual decision making* (83.3%) and *sexual coercion and assault* (83.3%). Teachers in the rural district (Sengerema) indicated five topics as *very easy* or *easy* to teach; namely, *puberty* (96.6%), *reproduction and birth* (90.0%), *sexual decision making* (89.75), *STDs and HIV/AIDS* (96.6%) and *sexual coercion and assault* (82.1%).

Teachers in the urban district expressed difficulty in teaching *correct names of genitalia*, *sexual pleasure and enjoyment*, *condom use*, *masturbation* and *homosexuality*, with less than 40% of them indicating that they would find it *very easy* or *easy* teaching these topics. Interestingly, teachers in the rural district indicated only two topics (*masturbation* and *homosexuality*) as being very difficult or difficult in teaching, with less than 40 percent of them indicating that they would find it very difficult or difficult in teaching these topics.

As would be expected, *homosexuality* was seen by teachers in both districts as the most difficult topic to teach, with 50 percent of the teachers in the urban district (Kinondoni) indicating that they would find it very difficult (36.1%) or difficult (13.9%) teaching this topic. In the rural district (Sengerema), 48.1 percent of the teachers indicated that they would find it very difficult (25.9%) or difficult (22.2%) teaching *homosexuality*.

Again, the one-way between groups MANOVA revealed no statistically significant difference between urban and rural based responding teachers in their comfort about teaching the most three controversial sexuality education topics (*homosexuality, masturbation and condom use*): $F(3, 55) = 1.473, p = .232$; Wilks' Lambda = .926.

Table 5

Percentage of Teachers Indicating the Extent to Which They Would Find it Easy or Difficult to Teach Various SE Topics

	% Teachers Urban District (Kinondoni) N=					% Teachers Rural District (Sengerema) N=				
	Very difficult	Difficult	Neutral	Easy	Very easy	Very difficult	Difficult	Neutral	Easy	Very easy
1. Correct names of genitalia	25.0	11.1	30.6	22.2	11.1	13.8	17.2	10.3	41.4	17.2
2. Personal safety	0.0	2.8	8.3	38.9	50.0	0.0	3.4		58.6	37.9
3. Puberty	2.8	5.6	8.3	69.4	13.9	0.0	3.6	21.4	39.3	35.7
4. Reproduction and birth	11.8	11.8	26.5	26.5	23.5	0.0	10.0	0.0	40.0	50.0
5. Abstinence	13.9	11.1	16.7	33.3	25.0	19.2	7.7	26.9	26.9	19.2
6. Sexual pleasure and enjoyment	22.9	5.7	28.6	25.7	17.1	21.4	7.1	17.9	17.9	35.7
7. Sexual decision making	2.8	0.0	13.9	41.7	41.7	3.4	6.9	0.0	34.5	55.2
8. Condom use	36.1	16.7	19.4	19.4	8.3	24.1	13.8	10.3	20.7	31.0
9. STDs/HIV/AIDS	2.8	2.8	19.4	27.8	47.2	3.4	0.0	0.0	34.5	62.1
10. Sexual coercion and assault	0.0	0.0	16.7	38.9	44.4	3.6	7.1	7.1	32.1	50.0
11. Masturbation	25.7	17.1	25.7	22.9	8.6	32.1	7.1	25.0	21.4	14.3
12. Homosexuality	36.1	13.9	30.6	13.9	5.6	25.9	22.2	22.2	18.5	11.1

Discussion

The results of this study show that an overwhelming majority of the responding teachers in both rural and urban districts supported the provision of comprehensive school-based sexuality education. The results also show that the majority of teachers think that both parents and the school should share the responsibility to provide sexuality education to children. Furthermore, the results show that the majority of the teachers who took part in the study wanted sexuality education to begin early during primary education (ages 10-13) rather than during secondary education (ages 14 and above).

Again, teachers supported a wide range of sexuality education topics to be included in the school curriculum. This implies that teachers view school-based sexuality education not only as an important strategy for protecting young people from HIV/AIDS and other sexual health problems (diseases prevention model), but also as an important strategy for promoting healthy adolescent sexual development. These results are consistent with findings of previous studies in both developed and developing countries, which also revealed that teachers' support for school-based sexuality education was not associated with their comfort and willingness to teach it (Byers et al., 2003; Cohen et al.,; Carrera & Ingham, 1997; Milton, 2003; Orji & Esimai, 2003).

Previous studies have shown that though teachers may be committed to teaching sexuality education in schools, they are currently incapacitated to do so by the low status of sexuality education in the school curriculum. For example, a recent study in Tanzania revealed that only a few aspects of sexuality are covered in the Tanzania school curriculum, mainly in the area of HIV/AIDS (Mkumbo, 2009). Nevertheless, this may not be the only factor behind the poor teaching of sexuality education in schools as teachers also showed considerable anxieties in teaching several topics. For example, when the teachers were presented with the same topics they had rated as important and asked to indicate their comfort about teaching them, a majority of the teachers expressed uneasiness in teaching many of the topics. The majority of teachers in the urban district, for example, expressed comfort in teaching only four topics; namely, *personal safety*, *puberty*, *decision making* and *sexual coercion and assault*. Teachers in the rural district expressed comfort in teaching only five topics: *puberty*, *reproduction and birth*, *decision making*, *STDs and HIV/AIDS* and *sexual coercion and assault*.

The fact that none of the assessed demographic characteristics had a statistically significant effect on the teachers' attitudes towards school-based sexuality education shows that social and cultural influences may not be the most important determining factors for teachers' willingness to teach sexuality education in schools. This implies that there is need to focus on training that focuses on building teachers' competence and confidence to handle sexuality education in classroom context.

Conclusively, the results of this study show that though teachers may support the teaching of sexuality education and the inclusion of a number of topics in the school curriculum, they may not be comfortable and capable of teaching all the key sexuality education topics. This was particularly the case with regard to *homosexuality* and other controversial topics. This implies that adequate preparation in a way of training is required for teachers if they are to handle sexuality education in the classroom situation effectively. Therefore declaration of positive attitudes towards school-based sexuality education as well as change in policy alone may not be enough; these need to go hand in hand with providing teachers with the knowledge, skills and confidence to teach the various sexuality education topics.

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