Exposure to and desire for sexual health education among urban youth: Associations with religion and other factors

Natalie Causarano[1], Jason D. Pole[2], Sarah Flicker[3], and the Toronto Teen Survey Team

[1] Department of Community Health and Epidemiology, Queen's University, Kingston, ON
[2] Pediatric Oncology Group of Ontario (POGO), Assistant Professor at the Dalla Lana School of Public Health, University of Toronto & Adjunct Scientist, Hospital for Sick Children Research Institute, Toronto. ON
[3] Faculty of Environmental Studies, York University, Toronto, ON

Abstract: This study utilized data from the *Toronto Teen Survey* to examine the sexual health topics that respondents had received information about and the topics they did or did not want to learn more about. Given the diverse sample of youth participating in the study, we placed particular emphasis in the current analysis on associations between religious affiliation and having received information on eight different sexual health topics, and the desire to learn more about the same topics. Overall, there were few associations of religious affiliation with either topics youth had received information about or with topics they wanted to learn more. Protestant youth were more likely than those with no religious affiliation to have received information about sexually transmitted infections. Muslim youth were less likely to express a desire to learn more about sexual health than those identifying no religion. Gender and age differences in sexual health topics that youth had received information about and topics they wanted to learn more about were also examined.

Acknowledgements: This study was supported by grants from the Ontario HIV Treatment Network, the Canadian Institutes of Health Research, the Centre for Urban Health Initiatives, and the Wellesley Institute. It was hosted by Planned Parenthood Toronto. We want to thank the entire Toronto Teen Survey Research Team for all their help in gathering, managing and analyzing the data: Susan Flynn, Crystal Layne, Dr. June Larkin, Dr. Robb Travers, Hazelle Palmer, Adinne Schwartz, Kristin McIlroy, Adrian Guta, Roxana Salehi, our amazing students and research assistants and our youth advisory committee. Finally, we want to express gratitude to the community partner agencies that hosted workshops, and the youth and service providers who participated in our research.

Introduction

The *Canadian Guidelines for Sexual Health Education* (Public Health Agency of Canada, 2008) present three key components of behaviourally effective sexual health education: exposure to relevant information, motivation to use the information, and acquisition of skills to put this information into practice. It is understood that information, although not sufficient on its own, is vital for adolescents to make safer sexual health choices. Schools are often the formal source for such information and a number of Canadian studies have therefore investigated students' perceptions of the importance of different sexual health topics, the grades at which they would like to learn about them, and the extent to which their classes covered those topics (e.g., Byers, Sears, Voyer et al., 2003a; 2003b). Such studies have generally been done with relatively homogenous student populations and it is therefore of interest to know what a large sample of ethno-culturally diverse urban youth would say in response to similar questions. The present study used data from the Toronto Teen Survey (TTS) (Flicker et al., 2010) to determine what sexual health topics the TTS's diverse sample had learned about, what they wanted to learn more about, and how their religious affiliation was associated with these factors.

Correspondence concerning this article should be addressed to Jason D. Pole, Scientist, Pediatric Oncology Group of Ontario (POGO), 480 University Avenue, Suite 1014, Toronto, ON, M5G 1V2. E-mail: jpole@pogo.ca

The literature reviewed below identifies the school and community sources of sexual health education available to youth in Ontario and examines background research studies on the associations between religion, sexual health education, and adolescent sexual behaviour.

Sources of sexual health education

Students in Ontario may attend the public school system or the Catholic school system, both of which are publicly funded, or they may attend private schools that have religious affiliation or private schools that have no religious affiliation. All secondary schools that grant the Ontario Secondary School Diploma (OSSD) must teach the Ontario curriculum; private schools can choose to offer credits (which must also follow the curriculum) towards the OSSD, but they may also teach other credits not required by the government (Ontario Ministry of Education, 2010a). To achieve their OSSD, all students must complete one credit in health and physical education. The Grade Nine Health and Physical Education course is the prerequisite for all other health and physical education courses (Ontario Ministry of Education, 2010b), and sexual health information is included as a relatively small component of this course. Schools with religious affiliation, such as those under the Catholic school board and private schools, can supplement the existing sexual health education with information in courses of their own design. The ability of school systems to teach their own additional sexual health curriculum allows for variation in the sexual health information that students in Ontario are exposed to. Apart from the "formal" school system, youth may also receive faith-based sexual health education from youth groups or religious groups and/or non faith-based education from community youth organizations.

Sexual health curriculum in publicly-funded schools in Ontario

At the time of the present study, the Ontario curricula being used in which sexual health education was incorporated were the 1999 Ontario Physical and Health Education curricula for Grades 1-8, Grades 9 and 10, and Grades 11 and 12. Our study asked youth to indicate the sexual health topics they had learned about using a list of ten such topics drawn from prior studies and from expectations based on curricular guidelines. For example, topic expectations for the Ontario grade 9 and 10 curriculum (Ontario Ministry of Education, 1999) included pregnancy/birth control options, STIs, HIV/AIDS and healthy relationships but did not explicitly outline curriculum related to communicating or talking about sex, sexual pleasure, sexual orientation or sexual abuse. Furthermore, while expectations for material to be taught are explicit in the curriculum, educators are not required to teach the supplemental examples that help guide the expectation. For example, one expectation reads, "students will describe the relative effectiveness of methods of preventing pregnancies and sexually transmitted diseases (e.g., abstinence, condoms, oral contraceptives)" (Ontario Ministry of Education, 1999). The nature of the curriculum allows for variation in breadth and depth of coverage of such topics across schools boards and between individual schools and educators. The actual implementation of topic expectations has not been well studied.

Sexual health curriculum in Ontario Catholic schools

In addition to the topics mandated for students seeking OSSD certification, Catholic students also receive the mandatory Grade Nine Religious Education course which includes sexual health topics addressed in the Catholic context. For example, this course expects that students will be able to "describe symptoms, treatments and prevention of major sexually transmitted infections including HIV/AIDS, and their effect on human fertility and life" (Institute for Catholic Education, 2006). Methods of STI prevention could involve abstinence until marriage and faithfulness within marriage. Condoms are mentioned when students must "explain the moral implications and the unadvertised risk involved in the use of condoms to fight HIV infection" (Institute for Catholic Education, 2006). Since religious education is offered in grades 9-12, and family life is a component for each of those years, Catholic students may receive considerable exposure to sexual health topics within a religious context.

Religion, sexual health information, and sexual behaviour

There are a number of reasons why youth in Ontario may differ in their exposure to sexual health education. Religion could have an impact through

its association with type of schooling, official or family disapproval of specific topics, or through family or cultural traditions linked to religious beliefs. However, we found few studies that directly investigated such associations between religion and sexual health information. We will therefore consider here the literature on religion and youth sexual behaviour to determine whether it can provide a basis for drawing inferences about the association of religion and exposure to sexual health education.

Religion and sexual risk behaviours

Studies have found both positive and negative effects of religious beliefs and practices on sexual risk behaviours. In their study of adolescent girls, Miller and Gur (2002) examined the association of sexual behaviour with four aspects of "religiousness." Those aspects were:

> personal devotion ("How often do you pray?" and "How important is religion to you?"); personal conservatism ("Do you agree or disagree that the sacred scriptures of your religion are the word of God and are completely without mistakes?" and "Do you think of yourself as a born again Christian?"); frequency of attendance ("In the past 12 months, how often did you attend religious services?" or related activities such as "youth groups, Bible classes, and choir" (Miller & Gur, p.402).

The fourth aspect of religiousness was institutional conservatism, based on a measure of the relative fundamentalism of the religion the youth identified. They found that greater personal devotion was positively associated with having fewer sexual partners outside a romantic relationship and that more frequent attendance was associated with greater perception of the risk that unprotected intercourse posed for HIV infection or pregnancy, greater foresight concerning the suffering arising from HIV or unintended pregnancy, and a more responsible, planned use of birth control. In contrast, greater personal conservatism was associated with a greater likelihood of engaging in unprotected intercourse.

Other studies have found that youth who are religious are less sexually active (Davidson, Moore, & Ullstrup, 2004), and those who make promises to retain their virginity until marriage based on religious beliefs will delay sexual activity later than their peers (Bruckner & Bearman, 2005). However, when those adolescents who made faith-based promises do engage in sexual activity before they intended to, they have a greater likelihood of having unprotected sex than those who did not make promises (Bruckner & Bearman, 2005). In addition, Hauser (2004) also reported that abstinence-only education programs did not have a significant long term effect on delaying sexual intercourse.

Religion and condom use

In their study on the association of family religiosity (not adolescent religiosity) and adolescent sexual behaviour and contraceptive use, Manlove, Logan, Moore, and Ikramullah (2008) drew on data from the 1997 cohort of the U.S. Longitudinal Survey of Youth gathered in ongoing face-to-face interviews. The sub-sample of interest consisted of 1,465 teens who had not had intercourse at baseline (12-14 years of age) but had experienced first intercourse by age 17. These teens provided information on their sexual behaviour and contraceptive use in the past year. The associations of their behaviour with measures of family religiosity (provided by interviews with mothers) were examined as were the associations with measures mediating family relationship characteristics (identified by teens and mothers). Among males, a negative association was reported between family religiosity and consistency of contraceptive use (reflecting lower condom use consistency). This association was not noted in females. Some reported associations of early exposure to family religiosity (delayed first intercourse, fewer partners) were mediated indirectly through family cohesion, family monitoring, parent-adolescent relationship quality, family routines, and also through positive or negative peer associations.

In a study that focused on individual rather than family religiosity, Crosby and Yarber (2001) found that adolescents who identified themselves as religious were 20% more likely to have misconceptions about proper condom use (OR of 1.19, with a 95% CI of 1.07-1.32). Hauser (2004) concluded that abstinence-only education discouraged adolescents' use of condoms. Other reports have found that abstinence-only programmes have limited (if any)

impact on incidence of unprotected vaginal sex, number of partners, condom use, or sexual initiation (Underhill, Operario, & Montgomery, 2008), whereas more comprehensive educational approaches seem to have more of a protective impact on sexual behaviour (Kirby, Laris, & Rolleri, 2007).

Religion and sexual health information

A study in London, England, investigated the amount of sexual health knowledge young people had, stratified by religion (Coleman & Testa, 2008). A test including questions regarding pregnancy, HIV and other STIs was administered, and students had the potential to score up to 25 points. Comparing between religious and non-religious adolescents, a difference in knowledge was detected. Male students had mean scores (SD) of: non-religious, 18.7 (4.6), Hindu, 16.6 (4.1), Christian 15.8 (4.9), and Muslim 14.6 (5.1). Female students had mean scores (SD) of: non-religious 20.3 (3.6), Christian 19.9 (3.9), Hindu 17.1 (4.5), and Muslim 16.4 (4.9).

The present study

The research reviewed above demonstrates that family religiousness and individual religious affiliation can have both positive and negative associations with adolescent sexual behaviour. Less is known about the association of religion with the likelihood of an adolescent's exposure to sexual health education. The present study addressed this association using the large, ethno-culturally and religiously diverse sample of youth provided by the Toronto Teen Survey. The survey asked youth to check a list of all places where they had experienced sexual health classes or workshops, to indicate which among ten topics they had learned about, and thereafter to indicate which of those topics they wanted to learn more about. These responses made it possible to test the association of students' prior topic exposure and of their wanting more in relation to their self-identified religion. Given the limited research in this area, our study should be considered exploratory although we hypothesized that youth who identified with a religion would be less likely to report exposure to the sexual health topics cited than those who reported no religion.

Methods

Survey design

The Toronto Teen Survey (TTS) was administered to youth aged 13-18+ through a community-based collaboration between TTS and Planned Parenthood Toronto in partnership with an established Youth Advisory Committee (YAC). The goal was to draw a large and ethno-culturally diverse sample of urban youth and particularly "hard-to-reach" and marginalized youth who are often under-represented in such research. The self-administered surveys were completed and collected in 90 community workshops conducted in settings where sexually diverse and marginalized youth gather and administered by youth using a peer-to-peer model. For further details regarding survey development and implementation see Flicker and Guta (2008) and Flicker et al. (2010).

Key survey measures for the present study

Religion

To determine the religion youth identified with, they were asked "Are you…? (Check all that apply)". For the purposes of the present analyses, the 17 religion response options were categorized as follows: no religion (atheist, agnostic, and no religion); Catholic; Muslim; Protestant (Anglican, Baptist, Lutheran, Protestant Christian, and United); Other (Aboriginal/ First Nations Spirituality, B'hai, Buddhist, Hindu, Jewish, Sikh, and Religion/Spirituality not listed here).

Places where sexual health education was received

Youth were asked (Q.25) to "Please check all of the places you have had sexual health classes or workshops." Response options were: elementary school (e.g. Kindergarten to grade 8), high school, youth group (please specify), religious group (i.e., church, temple, mosque), other, and "I have never received sexual health classes or workshops."

Sexual health topics learned about

The next question (Q.26) was "What kind of things have you learned about? (check all that apply)". Response options were eight sexual health topics plus "other information (please specify)" and "I have not received any sexual health information." The eight topics were "Information on..": HIV/AIDS, sexually transmitted infections, communicating/talking about

sex, pregnancy and birth control options, healthy relationships, sexuality or sexual orientation, sexual abuse/assault or sexual violence, and sexual pleasure.

Topics youth wanted to learn more about

The subsequent follow-up question (Q.27) asked "What would you like to learn more about? (check all that apply)". Response options were the eight topics above, presented in a different order, plus "other information (please specify)" and "I don't want to learn more about sexual health."

Categorization of possible responses for each topic

The two topic-related questions above permit four possible and separate characterizations of responses to each of the eight topics. These characterizations, with simplified identifiers, are:

Satisfied: Had learned about the topic, but did not want to learn more;
Unconcerned: Had not learned about the topic but did not want to learn more;
Desired more: Had learned about the topic and wanted to learn more;
Unmet needs: Had not learned about the topic, and wanted to learn more.

Respondents identified as wanting more information were those who had learned and wanted to learn more about a topic ("desired more") and those who had not learned about a topic but wanted to learn more ("unmet needs"). Those who did not want to learn more included those who previously learned about a topic (satisfied) and those who had not (unconcerned). A respondent could have indicated as few as zero topics they wanted to learn more about (i.e., "satisfied" or "unconcerned" for all eight topics) to eight they wanted to learn more about (i.e., "desired more" or "unmet needs" for all eight sexual health topics).

Analysis

The categories arising from responses to having learned about a topic, or not, and wanting to learn more about it, or not (i.e., satisfied, desired more, unconcerned, and unmet needs) were stratified by religion and reported descriptively for each topic. The statistical analysis dealt first with responses related to those wanting more information. For this analysis, three models were created, so that information wants ("desired more" or "unmet needs") on each of the eight sexual health topics were formulated as both a two-level (Model 1) and four-level (Model 2) categorical variable. Covariates were determined by running a fully saturated model, and then removing one covariate at a time and re-running the models. If there was a difference of more than 10% in the effect estimates between the fully saturated and the adjusted model, the covariate was considered to have a significant effect and was included in the final model.

For the purpose of analysis, some covariates were modified from the way the question was posed in the survey. Categories for gender included female, male, transgender and two-spirited. Transgender and two-spirited were collapsed into one category named "other". For sexual orientation, respondents were offered eight choices for sexual identification. These were collapsed into three categories: straight; lesbian/bisexual/gay/2 spirited/pansexual/queer (LBG2PQ); and questioning (which included the responses "questioning" and "I don't know"). Respondents were also able to give up to 14 responses to indicate their racial background. For the analysis, race was categorized into five variables: Aboriginal; Asian; Black; White; and Other/Multi Racial.

Model 1

As a two-level variable, wanting more information about topics was categorized as not wanting more information about any topics or as a second category indicating youth who wanted more information about one or more topics. A logistic regression model was performed to determine the odds of wanting more information about one or more topics compared to wanting no more information about any topics. Covariates included religion, age, gender, living situation and race.

Model 2

As a four-level categorical variable, the categories in relation to wanting to learn more about topics were determined to be high (wanting more about 7-8 topics), medium (4-6 topics), low (1-3 topics) and none. A cumulative logit model was used to determine the odds of being in a higher category compared to

a lower category. Covariates included religion, age, gender, living situation, location of sexual education, immigration status and level of education.

Model 3

For each of the eight sexual health topics, having learned about the topic was also treated as a two-level variable (had learned or had not learned) based on the question "What kinds of things have you learned about?" Eight logistic regression models, one for each of the sexual health topics, were performed and are presented together. Covariates differed slightly for each model, but included wanting information on that topic, age, gender, religion, living situation, level of education, race, location of sexual education, immigration status, birthplace of mother, birthplace of father and sexual orientation. As religion is the main covariate of interest, it is the only covariate shown in the model (for the sake of clarity the other covariates are not shown).

Results

Demographic characteristics of Toronto Teen Survey sample

The sample was very diverse with about 80% of youth being members of racial or ethno-cultural groups other than Caucasian (Table 1). Over half of the sample was either Catholic or Protestant (in about equal proportions) with 17.9% no religion, 9.4% Muslim, and 13% other (Aboriginal/First Nations Spirituality, B'hai, Buddhist, Hindu, Jewish, and Sikh). A sizeable percentage of youth (33%) were not born in Canada, 7% of the total sample was sexual minority youth, and youth aged 13 through 18+ were about equally represented across this age range. Parental education was high with 36.5% university; 22.3% college and 4.9% less than high school; 15% of youth did not know. Over 80% were living with parents or relatives with 7.7% living independently and 5.9% in foster homes or group homes.

Religion in relation to demographic characteristics

Table 2 presents demographic statistics for the 1,151 youth in the total sample who identified their religion (65 did not). It also shows these seven demographic parameters for each of the five religion groupings. Since these parameters may be associated with youth having learned about different sexual health topics or wanting to learn more, the similarities and differences in these parameters among the religion groups are of interest.

Although the percentage of youth aged 13-18+ was fairly evenly distributed across this age range for the total sample, some differences are notable. Youth aged 18+ represented 28% of the no religion category, about double that for the other four religious groups. As would be expected, the no religion group had the lowest percentage aged 13-15 (40.3%) compared to the percentage of 13- to 15-year-olds among Catholics (57.6%) and Protestants (58.9%). In terms of gender, females (54%) were more common in the total sample whereas 43% of Muslims and 58.9% of Catholics were female. The religion groups also differed in relation to racial group identification. For example, 61% of the Protestant group was Black and 60.8% of the "Other" religion group (which included B'hai, Buddhist, Hindu and Sikh) was Asian. No other racial group predominated to that extent in any of the other religion groups. A majority in each of the religion groupings indicated that they lived with parents or relatives (77.2%-84.5%) and that they had received sexual health education in multiple locations (52.9%-61.3%). Most were born in Canada (60.1%-72.7%) except for Muslims (34.2%). University or college level education of parents was generally high (62.7%-68.5%) with 55.1% for no religion youth and 43.7% for "Other" religion youth; the latter group was the most likely to not know their parent's education level (23.4%) compared to the four other religion groups (12.6%-15.8%).

Places where youth received sexual health classes and workshops

In response to the survey's first question about sexual health education, youth checked all of the places where they had received "sexual health classes and workshops". Overall 62% reported having had such classes or workshops in elementary school, 61% in secondary school, 37% in youth groups, 7% in religious groups and 8% reported that they had never received any sexual health classes or workshops (data not shown).

Topics learned about in sexual health classes and workshops

Based on a list of eight sexual health topics (Table 3), youth were asked what things they had learned about

Table 1 Summary table of participant characteristics

	N	%		N	%
Total	1,216	100.0			
Age			**Immigration**		
13	218	17.9	Born in Canada	794	65.3
14	185	15.2	Born Elsewhere/In Can 4+yrs	267	22.0
15	241	19.8	Born Elsewhere/In Can 0-3 yrs	138	11.3
16	185	15.2	Missing	17	1.4
17	169	13.9	**Disability**		
18+	207	17.0	None	978	80.4
Missing	11	0.9	Drugs / Alcohol	55	4.5
Gender			Mobility/Hearing/Speech or Visual	53	4.4
Female	652	53.6	Other	89	7.3
Male	543	44.7	Missing	41	3.4
Other	10	0.8	**Sexual Orientation**		
Missing	11	0.9	Straight	1,094	90.0
Parent/Caregiver Education			LBG2PQ	47	3.9
Less than high school	60	4.9	Questioning	39	3.2
High school	253	20.8	Missing	36	3.0
College	271	22.3	**Living Situation**		
University	444	36.5	Parent / Relatives	999	82.2
Don't know	182	15.0	Foster / Group Home	72	5.9
Missing	6	0.5	Independent Living	94	7.7
Race			Shelter / Hostel	8	0.7
Aboriginal	20	1.6	Missing	43	3.5
South Asian	116	9.5	**Pregnancy (been or gotten)**		
East / South East Asian	176	14.5	Yes	86	7.1
Black	463	38.1	No	1,048	86.2
White	175	14.4	Not Sure	54	4.4
Other	71	5.8	Missing	28	2.3
Multi-Racial	157	12.9			
Missing	38	3.1			
Religion					
No religion	218	17.9			
Catholic	333	27.4			
Muslim	114	9.4			
Protestant	328	27.0			
Other	158	13.0			
Missing	65	5.3			

and to check all that applied. Since this question followed the previous one on places where such information was received, it is likely that youth interpreted this question to apply to any or all of those formal settings. Overall, the rank ordering for the total sample in Table 3 shows a range of topic exposure from 78% for HIV/AIDS to 42% for sexual pleasure.

For all but one of the topics, females were more likely to have learned about the topic (e.g., 74.5% of females versus 54.5% of males said they had learned about pregnancy and birth control options). The exception was the topic of sexual pleasure which was checked by 40% of females and 44.6% of males.

Topics youth wanted to learn more about

Since the question "What would you like to learn more about?" followed the previous question about topics they had learned about, it is likely that youth answered this question in relation to their prior responses. The rank-ordered responses for the total sample (Table 4) show lower levels of interest to learn more about each of the topics (15.5%-30.4%) as well as some changes in priority. For example, the topic healthy relationships now placed first rather than fifth and sexual pleasure was third rather than eighth. In both cases, based on the total sample, topics less learned about were more likely to be cited as ones that youth wanted to learn more about. However, the

Table 2 Descriptive statistics stratified by religion*

	Total		Religion									
			No religion		Catholic		Muslim		Protestant		Other	
	N	%	N	%	N	%	N	%	N	%	N	%
Total	1,151	100.0	218	18.9	333	28.9	114	9.9	328	28.5	158	13.7
Age												
13	209	18.1	29	13.3	76	22.8	16	14.0	62	18.9	26	16.5
14	175	15.2	21	9.6	52	15.6	21	18.4	57	17.4	24	15.2
15	227	19.7	38	17.4	64	19.2	21	18.4	74	22.6	30	19.0
16	175	15.2	31	14.2	50	15.0	23	20.2	43	13.1	28	17.7
17	165	14.3	37	17.0	46	13.8	16	14.0	45	13.7	21	13.3
18 or older	193	16.8	61	28.0	42	12.6	17	14.9	46	14.0	27	17.1
Gender												
Female	621	54.0	113	51.8	180	54.1	49	43.0	194	59.1	85	53.8
Male	513	44.6	102	46.8	150	45.0	65	57.0	129	39.3	67	42.4
Other	10	0.9	3	1.4	1	0.3	0	0.0	4	1.2	2	1.3
Race												
Aboriginal	20	1.7	1	0.5	1	0.3	0	0.0	1	0.3	17	10.8
Asian	287	24.9	62	28.4	58	17.4	43	37.7	28	8.5	96	60.8
Black	419	36.4	51	23.4	113	33.9	44	38.6	200	61.0	11	7.0
White	171	14.9	52	23.9	74	22.2	1	0.9	36	11.0	8	5.1
Other	69	6.0	7	3.2	36	10.8	13	11.4	6	1.8	7	4.4
Multi racial	154	13.4	38	17.4	37	11.1	12	10.5	51	15.5	16	10.1
Living												
Parent(s) or relatives	949	82.5	182	83.5	273	82.0	95	83.3	277	84.5	122	77.2
Foster or group home	70	6.1	13	6.0	21	6.3	7	6.1	18	5.5	11	7.0
Independent living	89	7.7	18	8.3	22	6.6	6	5.3	22	6.7	21	13.3
Shelter/hostel	8	0.7	1	0.5	3	0.9	1	0.9	1	0.3	2	1.3
Location of sexual education												
Only elementary school	163	14.2	34	15.6	58	17.4	8	7.0	41	12.5	22	13.9
Only high school	146	12.7	32	14.7	32	9.6	20	17.5	37	11.3	25	15.8
Only youth group/ organization	39	3.4	7	3.2	14	4.2	2	1.8	11	3.4	5	3.2
Multiple locations	652	56.6	117	53.7	176	52.9	67	58.8	201	61.3	91	57.6
Never received any	74	6.4	16	7.3	24	7.2	9	7.9	12	3.7	13	8.2
Immigration												
Born Can.; here 10+ years	753	65.4	145	66.5	242	72.7	39	34.2	232	70.7	95	60.1
Not born Can.; here 4+ years	256	22.2	37	17.0	50	15.0	55	48.2	69	21.0	45	28.5
Not born Can.; here 3 yr or less	130	11.3	32	14.7	35	10.5	19	16.7	26	7.9	18	11.4
Parental education												
High school	154	13.4	57	26.1	60	18.0	16	14.0	64	19.5	40	25.3
College	258	22.4	39	17.9	80	24.0	24	21.1	88	26.8	27	17.1
University	435	37.8	81	37.2	129	38.7	54	47.4	121	36.9	42	26.6
Do not know	170	14.8	28	12.8	42	12.6	18	15.8	45	13.7	37	23.4
Less than high school	58	5.0	13	6.0	22	6.6	2	1.8	9	2.7	12	7.6

*** missing values were low for all categories except parental education (data not shown)**

Table 3 Topics that youth said they learned about in sexual health classes or workshops

Topics	What kind of things have you learned about? N	Total %	Female N	Female %	Male N	Male %
HIV/AIDS	943	78	534	81.9	395	72.7
STI	864	71	507	77.8	343	63.2
Pregnancy and birth control options	794	65	486	74.5	296	54.5
Communicating/talking about sex	741	61	430	66.0	299	55.1
Healthy relationship	746	61	440	67.5	294	54.1
Sexual abuse/assault or sexual violence	700	58	434	66.6	255	47.0
Sexuality or sexual orientation	621	51	359	55.1	252	46.4
Sexual pleasure	512	42	261	40.0	242	44.6

Those who identified gender as "Other" and those who are "Missing" (did not identify a gender) composed a very small percent of the total N for each topic and are therefore not shown in the table.
Total sample N = 1,216; female N = 652; male N = 543.

absolute and relative measure differed for males and females. Visual inspection of the findings indicates that females were more likely than males to want to learn more about all topics despite their greater likelihood of having already learned about all but one of the topics compared to males. In terms of the ranking of topics they wanted to learn more about, the top three choices for females were healthy relationships (37.1%), HIV/AIDS (29.9%), and sexual pleasure (29.4%) compared to males' choices of HIV/AIDS (26%) and healthy relationships (22.7%) and with communicating about sex and sexual pleasure about equal (21.5% and 21%). Both sexes included in the top four topics they wanted to learn more about one sexual risk topic (HIV) which is usually covered in sexual health education and is hence one they would most likely have learned about. In contrast, the other three were relationship and pleasure topics that they were less likely to have learned about because these topics were less likely to have been covered.

Sexual health topic exposure and desire to learn more according to religion

Table 5 presents the four categorizations of exposure to and desire for more for each of the eight sexual health topics as a basis for comparing youth by religion. The categorizations reflect youth: (1) who did not want to learn more, whether they had learned about a topic (satisfied) or not (unconcerned); and (2) who wanted to learn more whether they had learned about a topic (desired more) or not (unmet needs).

Topics youth of different religions had learned about

The topics in Table 5 are listed in decreasing order of

Table 4 Sexual health topics that youth said they would like to learn more about

Topics	What would you like to learn more about? N	Total %	Female N	Female %	Male N	Male %
Healthy relationship	369	30.4	242	37.1	123	22.7
HIV/AIDS	340	28.0	195	29.9	141	26.0
Sexual pleasure	312	25.7	192	29.4	114	21.0
Communicating/talking about sex	296	24.3	173	26.5	117	21.5
STI	281	23.1	174	26.7	103	19.0
Pregnancy and birth control options	261	21.5	174	26.7	83	15.3
Sexual abuse/assault or sexual violence	251	20.6	163	25.0	84	15.5
Sexuality or sexual orientation	188	15.5	114	17.5	69	12.7

Those who gender identified as "Other" and those who are "Missing" (did not identify a gender) composed a very small percent of the total N for each topic and are therefore not shown in the table.
Total sample N = 1,216; female N = 652; male N = 543.

all students having learned about them (i.e., combined "satisfied" plus "desired more"). Topics that a higher percentage of all students had learned about, e.g., HIV/AIDS, STI, pregnancy/birth control, showed less pronounced differences across religions than did topics that fewer said they had learned about. For example, 51.8% of Muslim youth had learned about healthy relationships compared to 69.7% of the Other religion group and 36% of Muslim youth had learned about pleasure compared to 47.8% of Protestant youth.

Topics youth of different religions wanted to learn more about

In the total sample, youth who wanted to learn more (i.e., combined "desired more" plus "unmet needs") showed the highest priority for more about healthy relationships (30.9%), HIV/AIDS (27.8%), sexual pleasure (25.7%), and communicating about sex (24.9%) with generally similar patterns across religious groups. The least subscribed topic for wanting more was sexuality and sexual orientation (15.8% of the total sample) which was again similar across religions (14.1% - 17.7%). The unmet needs category is of particular interest because these youth had not previously learned about the topic and wanted to learn about it. However, in the total group unmet needs were low across almost all topics (4.0% - 9.6%) with only healthy relationships (11.4%) and sexual pleasure (12.7%) exceeding this range. On a topic by topic basis, there did not appear be striking differences across religions in relation to unmet needs.

The "desired more" group

In contrast to the unmet needs group, youth who desired more did have prior learning about a topic, and still wanted to learn more. We do not know whether these youth considered their prior learning to be inadequate, or whether it stimulated interest, or whether age-related changes gave some topics more relevance. Whatever the reason, within the total sample the desired more group was larger than the unmet needs group across topics ranging from 9.5% for sexuality/orientation to 23% for HIV/AIDS, with 19.1% for STI and 19.5% for healthy relationships. Differences across religions were modest in this respect although the trend was for Muslim youth to be less likely to desire further information compared to other religion groups.

The "unconcerned" group

Youth in the unconcerned category are of interest not only because they had not learned about a particular topic but because they did not want to learn more. This unconcerned group, by topic, represented a sizeable percentage of the total sample ranging from 17.1% (HIV/AIDS) to 44.7% (sexual pleasure). In the mid-range, about a quarter of youth were unconcerned about STI, healthy relationships, communicating about sex and pregnancy and birth control. Across the five religion groupings, Muslim youth had higher percentages unconcerned for these same topics ranging from 23.7% (HIV/AIDS) to 50% (sexuality/orientation; sexual pleasure). Although youth classified as unconcerned about particular topics did not acknowledge a need to learn more, it is difficult to exclude the possibility of an unmet need in some of these responses.

Estimating desire for more information about one or more topics

In reporting their desire for more information, each youth could have cited none of the eight topics to all topics. Table 6 presents the odds ratios (OR) and corresponding 95% confidence intervals (95% CI) from the logistic regression model (Model 1) that generated the odds of youth desiring more information about one or more topics compared to not desiring information about any topics. Muslim youth were significantly less likely to desire more information on one or more topics compared to those with no religion (OR=0.57 95% CI: 0.33-0.97), males were significantly less likely to desire more information on one or more topics compared to females (OR=0.48 95% CI: 0.36-0.64), as were 14-year-olds in comparison to 13-year-olds (OR=0.52 95% CI=0.33-0.84). Youth 18 years of age or older were 1.86 times more likely to want more information about one or more topics compared to 13-year-olds (OR=1.86 95% CI=1.10-3.16).

Estimating greater desire for more information across topics

The cumulative logit model (Model 2) was used to calculate the odds of youth desiring more information about a higher compared to a lower number of topics. The categories were 7-8 topics (high), 4-6 topics (medium), and 1-3 topics (low). Table 7 presents the odds ratios and corresponding 95% confidence intervals from the cumulative logit model computing

Table 5 Categorization of sexual health topics learned about and more wanted by religion

			No religion		Catholic		Muslim		Protestant		Other	
	N	%	N	%	N	%	N	%	N	%	N	%
HIV/AIDS												
Satisfied	634	55.1	120	55.0	171	51.4	64	56.1	185	56.4	94	59.5
Unconcerned	197	17.1	34	15.6	63	18.9	27	23.7	46	14.0	27	17.1
Desired more	265	23.0	50	22.9	82	24.6	20	17.5	81	24.7	32	20.3
Unmet needs	55	4.8	14	6.4	17	5.1	3	2.6	16	4.9	5	3.2
STI												
Satisfied	607	52.7	109	50.0	170	51.1	59	51.8	182	55.5	87	55.1
Unconcerned	278	24.2	52	23.9	87	26.1	33	28.9	72	22.0	34	21.5
Desired more	220	19.1	43	19.7	61	18.3	20	17.5	66	20.1	30	19.0
Unmet needs	46	4.0	14	6.4	15	4.5	2	1.8	8	2.4	7	4.4
Pregnancy/birth												
Satisfied	578	50.2	105	48.2	158	47.4	58	50.9	178	54.3	79	50.0
Unconcerned	324	28.1	53	24.3	103	30.9	38	33.3	86	26.2	44	27.8
Desired more	183	15.9	43	19.7	50	15.0	13	11.4	54	16.5	23	14.6
Unmet needs	66	5.7	17	7.8	22	6.6	5	4.4	10	3.0	12	7.6
Communicating												
Satisfied	533	46.3	101	46.3	149	44.7	44	38.6	165	50.3	74	46.8
Unconcerned	332	28.8	61	28.0	98	29.4	44	38.6	84	25.6	45	28.5
Desired more	176	15.3	29	13.3	55	16.5	14	12.3	53	16.2	25	15.8
Unmet needs	110	9.6	27	12.4	31	9.3	12	10.5	26	7.9	14	8.9
Healthy relationships												
Satisfied	490	42.6	97	44.5	133	39.9	41	36.0	144	43.9	75	47.5
Unconcerned	305	26.5	55	25.2	89	26.7	38	33.3	86	26.2	37	23.4
Desired more	225	19.5	38	17.4	70	21.0	18	15.8	64	19.5	35	22.2
Unmet needs	131	11.4	28	12.8	41	12.3	17	14.9	34	10.4	11	7.0
Sexual abuse/assault												
Satisfied	511	44.4	93	42.7	143	42.9	43	37.7	156	47.6	76	48.1
Unconcerned	399	34.7	72	33.0	109	32.7	50	43.9	115	35.1	53	33.5
Desired more	158	13.7	29	13.3	55	16.5	12	10.5	44	13.4	18	11.4
Unmet needs	83	7.2	24	11.0	26	7.8	9	7.9	13	4.0	11	7.0
Sexuality/Orientation												
Satisfied	487	42.3	90	41.3	133	39.9	41	36.0	152	46.3	71	44.9
Unconcerned	482	41.9	92	42.2	146	43.8	57	50.0	128	39.0	59	37.3
Desired more	109	9.5	20	9.2	32	9.6	10	8.8	31	9.5	16	10.1
Unmet needs	73	6.3	16	7.3	22	6.6	6	5.3	17	5.2	12	7.6
Sexual pleasure												
Satisfied	340	29.5	63	28.9	90	27.0	32	28.1	111	33.8	44	27.8
Unconcerned	515	44.7	97	44.5	158	47.4	57	50.0	134	40.9	69	43.7
Desired more	150	13.0	24	11.0	43	12.9	9	7.9	46	14.0	28	17.7
Unmet needs	146	12.7	34	15.6	42	12.6	16	14.0	37	11.3	17	10.8

Satisfied **Has learned about the topic, does not want to learn more**
Unconcerned **Has not learned about the topic, does not want to learn more**
Desired more **Has learned about the topic, does want to learn more**
Unmet needs **Has not learned about the topic, does want to learn more**

Table 6 Estimating desire for more information on one or more topics

	OR	95% CI
Age		
13	1.00	
14	0.52*	0.33 - 0.84
15	0.74	0.48 - 1.16
16	0.86	0.53 - 1.39
17	1.47	0.88 - 2.44
18	1.86*	1.10 - 3.16
Gender		
Female	1.00	
Male	0.48*	0.36 - 0.64
Other	3.16	0.27 - 36.95
Race		
Aboriginal	0.43	0.14 - 1.29
Asian	1.13	0.70 - 1.83
Black	0.84	0.54 - 1.31
White	0.73	0.43 - 1.23
Other	0.77	0.39 - 1.53
Other Multi Racial	1.00	
Living Situation		
Parent(s)/Relatives	3.32	0.67 - 16.52
Foster/Group Home	1.98	0.37 - 10.62
Independent Living	2.10	0.40 - 11.00
Shelter/Hostel	1.00	
Religion		
No Religion	1.00	
Catholic	1.34	0.86 - 2.07
Muslim	0.57*	0.33 - 0.97
Protestant	0.88	0.57 - 1.35
Other	0.74	0.44 - 1.25

*** significant at p < .05**

the odds of being in a higher category compared to a lower category. These results are reported based on a number of demographic characteristics. Males were significantly less likely than females to be in a higher category (OR=0.58 95% CI: 0.46-0.75), 14-year-olds were less likely than 13-year-olds to be in a higher category in terms of the number of topics for which more information was desired (OR=0.59 95% CI=0.38-0.93) and those 18 years of age or older were 1.88 times more likely to be in a higher category compared to 13 years-olds (OR=1.88 95% CI=1.15-3.05). The only other significant effect was that youth who reported receiving sexual health education at multiple locations were 1.77 times more likely to be in a higher category compared to youth who reported receiving no such education (OR=1.77 95% CI 1.06-2.96).

Table 7 Estimating desire for more information about a greater number of topics

	OR	95% CI
Age		
13	1.00	
14	0.59*	0.38 - 0.93
15	0.83	0.53 - 1.30
16	0.99	0.61 - 1.58
17	1.37	0.85 - 2.21
18	1.88*	1.15 - 3.05
Gender		
Female	1.00	
Male	0.58*	0.46 - 0.75
Other	3.53	0.85 - 14.65
Race		
Aboriginal	0.67	0.24 - 1.86
Asian	0.99	0.64 - 1.52
Black	0.79	0.54 - 1.17
White	0.86	0.55 - 1.34
Other	0.83	0.46 - 1.52
Multi racial	1.00	
Living Situation		
Parent(s)/ relatives	4.13	0.90 - 18.99
Foster/group home	2.15	0.44 - 10.49
Independent living	2.75	0.58 - 13.11
Shelter/hostel	1.00	
Religion		
No religion	1.00	
Catholic	1.30	0.90 - 1.87
Muslim	0.70	0.43 - 1.14
Protestant	0.98	0.68 - 1.43
Other	0.90	0.57 - 1.41
Location of Sexual Education		
Elementary school	1.47	0.81 - 2.66
High school	1.07	0.59 - 1.93
Youth group/organization	1.92	0.86 - 4.28
Religious group	4.52	0.10 - 196.68
Other	1.96	0.14 - 27.95
Multiple locations	1.77*	1.06 - 2.96
Never received sexual education	1.00	
Immigration		
Born in Canada	1.00	
Born elsewhere/ Lived 4+ years in Canada	0.89	0.65 - 1.23
Born elsewhere/ Lived 0-3 years in Canada	1.25	0.81 - 1.94
Education		
High school	1.39	0.77 - 2.50
College	1.20	0.67 - 2.15
University	1.59	0.91 - 2.78
Do not know	0.87	0.47 - 1.64
Less than high school	1.00	

*** significant at p < .05**

Estimating exposure to each of the eight sexual health topics by religion

Table 8 presents eight logistic regression models for each sexual health topic, generating odds ratios and 95% confidence intervals to estimate the likelihood of youth having had sexual health classes or workshops on the topic. Each topic was treated as a two level variable, i.e., had learned or had not learned. All comparisons were done against the no religion group (atheist, agnostic, no religion). The only significant influence of religion on having learned about a topic was that Protestant youth were 1.82 times more likely to have received information about STIs than those who had no religion (OR=1.82 95%CI=1.03-3.23).

Discussion

The present study drew on findings from the Toronto Teen Survey to identify sexual health topics that an ethno-culturally and religiously diverse sample of urban youth had learned about and wanted to learn more about and to determine the association of religion with those findings.

Given the relatively homogeneous samples in prior Canadian studies on adolescents' perceptions of school-based sexual health education and the fact that these studies did not address the influence of religion, it was anticipated that this exploratory investigation would be pertinent to the delivery of sexual health education to the diverse populations of youth in urban centers.

Topic exposure and importance

Youth in the present study were most likely to have learned about STI/HIV and pregnancy and birth control and least likely to have learned about sexual pleasure. Our sample was not asked to rate the importance to them of the eight topics, but it is of interest that grade 9-12 high school students in New Brunswick who were asked that question (Byers et al., 2003a) gave STIs and birth control their top

Table 8 Estimating having learned about each of eight sexual health topics

	HIV/AIDS		STI		Talking	
	OR	95% CI	OR	95% CI	OR	95% CI
Religion						
No religion	1.00		1.00		1.00	
Catholic	1.03	0.55 - 1.92	1.05	0.61 - 1.80	1.12	0.71 - 1.78
Muslim	0.66	0.31 - 1.41	1.31	0.65 - 2.66	0.70	0.39 - 1.25
Protestant	1.37	0.71 - 2.66	1.82*	1.03 - 3.23	1.48	0.92 - 2.36
Other	0.88	0.42 - 1.83	1.24	0.65 - 2.39	1.01	0.58 - 1.75
	Pregnancy/birth control		**Relationships**		**Sexuality**	
	OR	**95% CI**	**OR**	**95% CI**	**OR**	**95% Cl**
Religion						
No religion	1.00		1.00		1.00	
Catholic	0.94	0.56 - 1.55	0.99	0.62 - 1.58	1.07	0.70 - 1.64
Muslim	0.99	0.52 - 1.90	0.63	0.35 - 1.13	0.81	0.46 - 1.41
Protestant	1.42	0.84 - 2.41	1.07	0.66 - 1.72	1.35	0.88 - 2.08
Other	0.72	0.39 - 1.32	1.45	0.81 - 2.61	1.20	0.71 - 2.01
	Sexual violence		**Sexual pleasure**			
	OR	**95% CI**	**OR**	**95% CI**		
Religion						
No religion	1.00		1.00			
Catholic	1.38	0.88 - 2.16	1.18	0.77 - 1.80		
Muslim	0.67	0.37 - 1.20	1.10	0.63 - 1.91		
Protestant	1.14	0.72 - 1.80	1.54	1.00 - 2.37		
Other	1.13	0.66 - 1.95	1.40	0.83 - 2.34		

*** significant at p < .05**

ratings (very to extremely important) and sexual pleasure their lowest (important) among 10 topics judged on a five point scale. When asked to assess the coverage of these topics in their sexual health education classes, the New Brunswick students reported that STIs and birth control were covered but that pleasure was not (42% of our sample said they had learned about sexual pleasure but we did not ask our participants to rate topic coverage in their sexual health classes).

The percentage of youth in our study that wanted to learn more about a topic (15.5%-30.4%) was decidedly lower than the percentage that had reported in a prior question that they learned about a topic (42%-78%). It is noteworthy that both the topics most often learned about (e.g., STI, HIV, birth control) and those less learned about (sexual pleasure, healthy relationships, communicating about sex) were reflected in youths' identification of topics that they wanted to learn more about. These topics are presumably important to them and the factors associated with topics that youth wanted to learn more about are thus of interest.

Age, gender and desire for more sexual health information

Although the association of religion and sexual health education was the primary focus of this study, we did note a number of cases in which the influence of age and gender was apparent. Age was found to be associated with desire for more information about one or more topics in the logistic regression analysis (Model 1) and for information on a higher numbers of topics in the cumulative logit analysis (Model 2). In both cases, younger age was associated with lower desire for more information and older age with greater desire for more information. To the extent that older adolescents are more likely to be sexually active, some of the topics we offered might have had more immediate pertinence to the higher age groups. Males were significantly less likely than females in Model 1 to want any more information and in Model 2 were also less likely to want more information on a greater number of topics. These findings may reflect the greater perceived need for sexual health information among adolescent females or a lesser inclination on the part of males to communicate about sexuality and hence to seek out information.

Religious affiliation and desire for more sexual health information

Coleman and Testa (2008) reported that students who identified a religious affiliation scored lower on a test of sexual health knowledge in relation to students who identified no religious affiliation. Although we did not assess religiosity or religiousness in the present study, our findings did show that Muslim youth were significantly less likely than youth with no religion to want more information on any topics. Across all eight topics, Muslim youth were more likely to be unconcerned (had not learned and did not want to learn more) and be less likely to desire more information than other religion groupings, although the differences did not appear to be great and no statistical comparisons were done on these specific findings. The possibility that Muslim youth may have more conservative attitudes toward sexual topics (Coleman and Testa, 2008) is one factor relevant to our findings but social and cultural factors, access, and self-perceived need may also be involved here. The only other statistically significant finding based on religion was the finding that Protestant youth were more likely than those with no religion to have learned about STIs. Given the singular nature of this finding, it is interesting but difficult to explain.

Limitations of the present study

The Toronto Teen Survey used three questions to assess the location and extent of participant's exposure to sexual health topics and their desire for more. Each question had limitations. The question that asked about places where youth had sexual health classes or workshops listed both school and non-school (i.e., youth group, religious group, other) sources but did not make it possible to allocate topic coverage to source except by speculation. The question that asked about topics youth had learned about did yield a hierarchy of topic exposure (42% of all youth had learned about sexual pleasure compared to 78% for HIV/AIDS) but since the source could not be tied to particular topics, we could only infer the nature and depth of topic coverage (e.g., by referencing school curricular guidelines). In addition, the question that asked youth about topics they would like to learn more about followed the previous question on topics already learned about and was thus open to several interpretations. For example, youth who did not want to learn more about a topic could have been

satisfied with what they had already learned, or did not feel the topic was pertinent to them, or were uncomfortable with sexual education for personal or religious reasons, especially in a classroom setting, and wanted to minimize exposure. With respect to youth who wanted to learn more, there are again multiple possible explanations although educators should take note of these topics (and the youth who chose them) regardless of the reasons.

As noted earlier, our analysis of religion and exposure to and desire for more sexual health education was limited by the fact that our response option asked participants to indicate their religion and did not measure religiousness or religiosity. For the purposes of analysis, it was also necessary to combine six denominations under Protestant and seven religious groupings under Other.

Concluding observations

Although a number of studies have explored adolescents' exposure to and desire for information about specific sexual health topics (Byers, Sears, Voyer et al., 2003a; 2003b), our findings offer important insights into these issues in an ethno-culturally and religiously diverse sample of urban youth. Similarly, although a number of studies have examined the association of religiosity/spirituality with adolescent sexual health-related attitudes and behaviours (e.g., Rew & Wong, 2006), few have investigated religious affiliation and exposure to and desire for sexual health education. We hope this exploratory study will stimulate further research on religion and sexual health education in order to identify the educational needs of under-served populations of urban youth and to foster access to age-appropriate information.

References

Bruckner, H., & Bearman, P. (2005). After the promise: The STD consequences of adolescent virginity pledges. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 36*, 271-278. doi:10.1016/j.jadohealth.2005.01.005

Byers, E.S., Sears, H.A., Voyer, S.D., et al. (2003a). An adolescent perspective on sexual health education at school and at home: I. High school students. *The Canadian Journal of Human Sexuality, 12*, 1-17.

Byers, E.S., Sears, H.A., Voyer, S.D., et al. (2003b). An adolescent perspective on sexual health education at school and at home: I. Middle school students. *The Canadian Journal of Human Sexuality, 12*, 19-33.

Coleman, L.M., & Testa, A. (2008). Sexual health information, attitudes and behaviours: Variations among a religiously diverse sample of young people in London, UK. *Ethnicity & Health, 13*, 55-72. doi:10.1080/13557850701803163

Crosby, R.A., & Yarber, W.L. (2001). Perceived versus actual knowledge about correct condom use among U.S. adolescents: Results from a national study. *Journal of Adolescent Health, 28*, 415-420.

Davidson, J.K., Moore, N. B., & Ullstrup, K. M. (2004). Religiosity and sexual responsibility: Relationships of choice. *American Journal of Health Behavior, 28*(4), 335-346.

Flicker, S., & Guta, A. (2008). Ethical approaches to adolescent participation in sexual health research. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 42*(1), 3-10. doi:10.1016/j.jadohealth.2007.07.017

Flicker, S., Guta, A., Larkin, J., Flynn, S., Fridkin, A., Travers, R., Pole, J.D., & Layne, C. (2010). Survey design from the ground up: Collaboratively creating the Toronto Teen Survey. *Health Promotion Practice, 11*, 112-122. doi: 10.1177/1524839907309868

Hauser, D. (2004). *Five years of abstinence-only-until-marriage education*. Washington, DC: Advocates for Youth, 2004.

Kirby, D.B., Laris, B.A., & Rolleri, L.A. (2007). Sex and HIV education programs: Their impact on sexual behaviors of young people throughout the world. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 40*, 206-217. doi:10.1016/j.jadohealth.2006.11.143

Manlove, J., Logan, C., Moore, K.A., & Ikramullah, E. (2008). Pathways from family religiosity to adolescent sexual activity and contraceptive use. *Perspective on Sexual and Reproductive Health, 40*, 105-117.

Miller, L., & Gur, M. (2002). Religiousness and sexual responsibility in adolescent girls. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 31*, 401-406.

Institute for Catholic Education. (2006). *Ontario Catholic secondary curriculum policy document for religious education, revised.* Ontario Conference of Catholic Bishops. Toronto, ON.

Ontario Ministry of Education. (1999). *The Ontario curriculum, grades nine and ten, health and physical education*. Canada: Queen's Printer for Ontario.

Ontario Ministry of Education. (2010a). *Private elementary and secondary schools*. Retrieved from http://www.edu.gov.on.ca/eng/general/elemsec/privsch/index.html

Ontario Ministry of Education. (2010b). *What do you need to graduate?* Retrieved from http://www.edu.gov.on.ca/extra/eng/ppm/graduate.html

Public Health Agency of Canada. (2008). *Canadian guidelines for sexual health education* (3rd Ed.). Ottawa, ON: Public Health Agency of Canada.

Rew, L., & Wong, Y.J. (2006). A systematic review of associations among religiosity/spirituality and adolescent health attitudes and behaviors. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 38*, 433-442. doi:10.1016/j.jadohealth.2005.02.004

Underhill, K., Operario, D., & Montgomery, P. (2008). Abstinence-plus programs for HIV infection prevention in high-income countries. *PLoS Medicine, 4*, 1471-1485.