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Connecticut Teen Pregnancy Prevention: Parental Attitudes about Reproductive Health Education Based on Racial Ethnic Backgrounds

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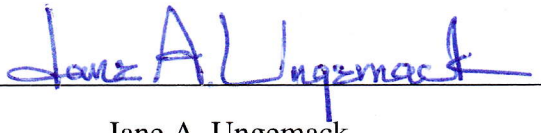
Major Advisor 

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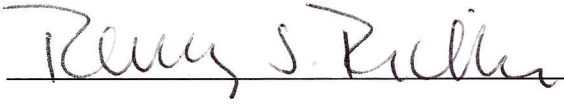
Associate Advisor 

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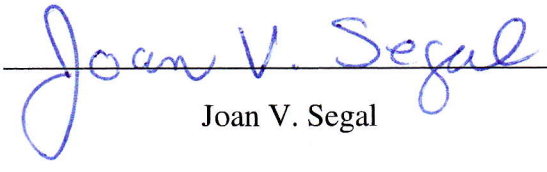
Associate Advisor 

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Introduction

Although rates have been declining in recent years, teen pregnancy continues to be a large public health issue, both nationally and in Connecticut. The birth rates among females aged 15-19 in the United States was 29.4 per 1,000 in 2012, compared to 31.3 in 2011.[1] In Connecticut, the rate was 15.1 per 1,000 in 2012 compared to 16.4 in 2011.[1] From 2007 to 2012, the United States birth rate for females aged 15–19 years went from 41.5 to 29.4 births per 1,000 females, an overall 29% decline.[1] Although teen birth rates have decreased over the past few years, geographic, socioeconomic, and racial and ethnic disparities still exist. In 2011, Non-Hispanic Black and Hispanic teen birth rates were more than two times higher than the rate for Non-Hispanic White teens, a disparity which has not changed since 2007.[2] The literature has shown the importance of parental involvement in preventing teen pregnancy, so this study focuses on the beliefs of the parents of teenagers at risk for teen pregnancy. The aim of this paper is to examine differences in parental views and attitudes towards varying aspects of sex education for their children, and to examine if these differences are associated with the parents' racial and ethnic backgrounds. By better understanding parental views, one may be able to implement teen pregnancy prevention programs that can more effectively serve their teen participants.

Background

Teenage pregnancy rates continue to be a major public health issue both in the United States and in Connecticut. Nationwide, there were more than 365,000 teens aged 15-19 years who gave birth in 2010, and 329,797 babies were born to teens aged 15-19

years in 2011.[3] Responsible sexual behavior has been identified by the United States Public Health Service as one of the ten leading public health issues facing the nation.[4] In Connecticut, teenage pregnancy cost state taxpayers at least $137 million in 2008 for health care, child welfare, incarceration and lost tax revenue due to decreased earnings and spending.[5]

Giving birth to a child as an adolescent is associated with adverse outcomes for both the parents and the children. After having a first child, one in four adolescent mothers have a second child within two years.[6] Pregnant adolescents are not as likely to seek early prenatal care, are at increased risk for low birth weight and premature babies, and having babies who die in infancy. Adolescent mothers are less likely to graduate high school, more likely to live in poverty, be unemployed and depend on public assistance compared to adolescents without children.[4, 6] Adolescent fathers tend to have lower incomes, have less schooling and are less likely to work compared to older fathers. The children of adolescent mothers are more likely to have health problems and developmental disorders, in addition to being at higher risk of abuse and neglect. Daughters of adolescent mothers are also more likely to become pregnant during their adolescence, while sons are more likely to go to jail.[6]

Contributing factors to teenage pregnancy include poverty, cultural and religious beliefs, education gaps, and health disparities.[7] Research has shown that cultural beliefs, in particular, put Hispanic teens at greater risk of becoming parents. Hispanic girls often grow up in an environment where pregnant teens are the norm and many are themselves daughters of teenage moms.[7] A study by East showed that Hispanic girls desire children at a younger age than African Americans, Southeast Asians, and Whites.[8] According to

Ford and Norris, Hispanics also become sexually active at an earlier age than Whites or African Americans.[9] Sangi-Haghpeykar et. al. surveyed 443 sexually active, nonpregnant, low-income women including Non-Hispanic Whites, U.S.-born Hispanics and Non-U.S.-born Hispanics at two publicly funded clinics.[10] As compared to Non-Hispanic Whites, U.S. born Hispanic women had lower levels of social support for and self-efficacy in contraceptive use, desired larger families, had more religious objections to using birth control and were more likely to believe that birth control use is a woman's responsibility. Compared to Whites, both U.S. and Non-U.S.-born Hispanic women had significantly lower rates of ever-use of contraceptives and higher rates of unintended pregnancies.[10]

Many Hispanic teenagers in the United States are faced with the challenge of living in two cultures, one bound by more traditional religious beliefs and the other by greater diversity of beliefs.[11] Overall, their strong religious beliefs do not support contraception or abortion.[7, 11] According to a survey of the entire U.S. population conducted in July 2006 by the PEW Research Center, the PEW 2006 U.S. Religion Survey, 68% of Hispanics identify themselves as Catholic while most other Latinos are spread amongst various Protestant or other Christian denominations.[12] Less than 1% of adult Latinos belong to non-Christian faiths. Fewer than one in ten Latinos (8%) say they are atheist or that they have no specific religious affiliation. When looking among different Hispanic countries of origin, Catholicism is still the predominant faith amongst Latino adults despite their country of origin.[12] A more recent Gallup Daily survey conducted from January 2012 to January 2013, with 28,607 Hispanics, found that 54% of U.S. Hispanics identified with the Catholic religion, 28% with Protestant, 3% with another religion and 15% didn't know, refused, or weren't religious.[13] When looking at

religious affiliation among Hispanics based on age, it appears that the percentage of Catholics is decreasing and that younger Hispanics are becoming proportionally more Protestant.[13]

Ellison, Echevarria, and Smith examined the relationship between religious involvement, based on affiliation and frequency of attendance at services, and abortion attitudes among three major Hispanic subgroups: Mexican Americans, Puerto Ricans and Cuban Americans.[14] The results from the Latino National Political Survey completed in 1990 by over 2,700 U.S. Hispanics showed that 77.4% of Hispanics identified themselves as Catholic, 16.2% as Protestant and only 6.4% as having no religious affiliation. Among Catholics, 23.5% described themselves as committed or regularly attending and 39.4% were occasional or sporadically attending Catholics. In contrast, almost 9% of the 16.2% of Protestants said they were committed while 7.4 % were occasional or sporadically attending. Overall, most Hispanics identified as having a religious affiliation and a little over 32%, whether they were Catholic or Protestant, were considered committed. Results of this study showed that religious factors are important predictors of Hispanics' views regarding abortion policies. Committed, regularly attending Hispanic Protestants were more in favor of pro-life and total abortion bans than other Hispanic religious groups. While committed Catholics were also pro-life, they were more likely to support exceptions to the abortion ban for rape, incest, and threats to the mother's life. Less devoted Catholics and Protestants were similar to religiously unaffiliated Hispanics in their abortion views.[14]

In Connecticut, where Hispanics make up only 13% of the state's population, teen birth rates are 8.5 times higher for Hispanics than for whites and almost double that of

African American girls 15 to 19 years old. Of the 2,626 teen births in Connecticut in 2009, 1,277 were to Hispanics, 48.6% of all teen births. Of the 22 births to teen moms ages 13 to 14, more than half (12) were to Hispanics.[7]

The literature has shown the significance of parental involvement in preventing teen pregnancy. A study by Hacker et al. found that teenagers preferred to get information about teen pregnancy prevention from their parents, yet only 37% of students said they talked to their parents frequently about sex.[15] One obstacle to contraception use by teenagers is poor communication with parents. Communication about sex between children and their parents can be difficult as teens are often embarrassed to discuss sex, and parents may be both embarrassed and lacking in accurate information to convey during such conversations.[15]

Parental involvement in sex education has been associated with teens making responsible decisions regarding sex. Meneses found that African American and Hispanic girls who communicated frequently with their mothers about sexual risks were less likely to report episodes of unprotected sexual intercourse.[16] Miller et al. showed that if mothers discussed condom use before a teen's first sexual intercourse, their teens were three times more likely to use condoms than teens whose mothers never discussed condoms or talked about it only after they had become sexually active.[17]

An evaluation of Focus on Kids, a sex education program in Baltimore, compared outcomes for youth who participated in the program with a parent versus those without a parent. Those adolescents who participated in the program with the parent component reported significantly lower rates of sexual intercourse and unprotected sex compared to those who were in the program without parental involvement.[18] These findings suggest

that teen pregnancy prevention programs should include a parental component to ensure that parents are part of the learning process in their children's sexual health.

Despite the potential benefit of parent involvement in sex education, helping teens make more responsible decisions about sex, parent-based approaches in teen pregnancy prevention are rare.[19] The National Campaign to Prevent Teen Pregnancy states that one of the many factors that contributes to the success of teen pregnancy prevention groups is involving parents and providing them with practical support.[20] Enhancing communication between parents and their children and providing parents with education on the topic would be one approach. Informed parents can continue the teaching and reinforce the messages at home so that adolescents receive guidance and support from their own parents or guardians.

In Connecticut, there are two types of evidence-based teen pregnancy prevention models, long-term and short-term, funded primarily through the Connecticut Department of Social Services (DSS). The programs are located in the cities with consistently higher-than-state-average teen pregnancy rates.[20,21] In the long-term programs, which are seven years long on average, students usually begin at the end of fifth grade and end when they graduate from high school. Students attend the program both during the school year and the summer. The long-term programs, located in New Britain, Waterbury, and Torrington, are based on the Carrera model. The Carrera model of teen pregnancy prevention offers academic assistance and tutoring; career and job club experiences; family life and sexuality education; self-expression and arts activities; referrals for mental, physical and dental health care; and sports and recreation activities.[22] In a study by Philliber et. al., youth were randomly assigned to either the Carrera Program or a

control youth program. Participants were followed for three years and the outcome measure was whether or not kids got pregnant or caused a pregnancy**.** The results from the study showed the Carrerra Model was effective in preventing teen pregnancy.[22]

The DSS-funded short-term programs in Connecticut are based on the Wyman Teen Outreach Program (TOP) model and are one academic year in length. Three essential TOP program goals include the development of healthy behaviors, real life skills and a sense of purpose for all young people participating in the program.[23] Allen et. al. demonstrated that the TOP program had lower rates of pregnancy, school failure, and academic suspension compared to a control group.[24, 25] A limitation to the study, however, was that the participants were only followed during the time they were in the program which was less than a full calendar year.

There are currently 13 TOP sites located throughout the state: Hartford and New Haven, which have two TOP programs each, Meriden, West Haven, Norwich, New London, Killingly, East Hartford, New Britain, Bridgeport and Windham. Most young people enrolled in the TOP sites around the state are referred to the program by local school social workers or guidance counselors, although facilitators at individual TOP sites can at times have some influence over program participation.[26]

To ensure effective and proper implementation of these DSS-funded evidence-based models in Connecticut, there is active program monitoring and oversight. In addition to regular program monitoring by DSS, experts in the Carrera and TOP models help with training and technical assistance for program facilitators.[20] In order to ensure that there is fidelity to the model, the program must comply with 11 standards for Wyman TOP certification.[27] Standard 1 requires the TOP clubs to meet weekly over nine months

with a minimum of 25 meetings within that period. Standard 2 is that either the TOP Changing Scenes Curriculum or Wyman's TOP community service learning activities or both are used weekly. Standard 3 states that clubs within the Certified Replication Partner's network must organize and implement a minimum of 20 hours of service for the teens per year. This standard stems from TOP research which demonstrated that teens who perform a minimum of 20 hours of community service learning during the program year are most likely to achieve the desired outcomes. TOP providers may offer a variety of service learning opportunities using either group or individual experiences. Standard 4 requires that only staff who have completed the TOP training can deliver the model, and Standard 5 specifies that there should be one trained facilitator for every 25 teens. Standard 6 requires that the TOP clubs administer Wyman's pre- and post-surveys to the teen participants to monitor program outcomes. Pre-surveys should be administered within the first 4-8 weeks of the program and the post-survey should be administered during the last month of the program. Standard 7 is that facilitators for Wyman's TOP club have to complete mid-year and end-of-year surveys. Standard 8 requires one or more visits from the TOP Partner annually. Standard 9 requires club facilitators to have parent/guardian consents permitting their child to participate in all teen surveys. For Standard 10, the youth participants should feel safe within the TOP club, and Standard 11 requires a corrective action plan to maintain standards for each club, if necessary.[27]

Further, both models, the long-term Carrera model and the shorter term TOP model, are tracked annually by an outside evaluator to compare program outcomes from the beginning of the school year to the end of the year to determine if there are changes in participants' sexuality knowledge, self-efficacy, preventing pregnancy and academic

indicators. Program outcome data is tracked by DSS as an additional program monitoring tool.[20, 26]

This project studied the attitudes of parents of children participating in the TOP teen pregnancy prevention program toward talking to their child about sex. It examined whether parents want more information about talking to their children about sex and whether they support sex education in school. This exploratory study was designed to determine whether parents do want to actively be involved in the prevention programming. The study also analyzed whether parental attitudes vary based on race and ethnicity. It was hypothesized that religion would play more of a role in how Hispanic parents make decisions for their children compared to Non-Hispanics. It was expected that both Hispanics and Non-Hispanics would want advice and information about talking to their child about sex.

Methods

Study design:

This study is based on a secondary analysis of data collected by the Teen Outreach Program (TOP) for an evaluation conducted by Rosemary Richter, the Coordinator of Teen Pregnancy Prevention at the University of Connecticut Health Center's Family Planning Program. This study uses data from a TOP parent survey that was conducted in 2013.

The participants in the study were the parents/primary caregivers of TOP participants during the 2013-2014 school year at TOP programs across Connecticut. Parents of TOP participants in 12 of the 13 TOP sites in Connecticut were asked to complete and return

the TOP Parent Survey (one site was not officially operating at the time the surveys were distributed). The TOP facilitators distributed the survey to all parents who had a child enrolled in the TOP program.

The information was collected through a brief, anonymous, self-administered questionnaire, the TOP Parent Survey. The surveys were distributed to the parents at the beginning of the school year in August and September 2013 in a packet sent home with the TOP Club student participants by the program facilitators at each TOP site. The completed surveys for each site were returned to the University of Connecticut Health Center for data entry and analysis.

Measurement:

The survey includes questions regarding the parents' expectations for their children, their comfort with talking about sex with their children, their attitudes about teenagers having unprotected sex and learning about sex at school, and the role of religious beliefs in their parenting. They were also asked about their interest in receiving help and information in talking to their children about sex, and if and in what ways the parents might like to be involved in the TOP program. Additionally, parent and child demographic information was obtained, including the responding parent's gender, race and ethnicity, and age and gender of the child. (See Appendix A: The TOP Parent Survey.)

The key independent variables in this analysis were the parents' race and ethnicity. The survey asks if the parent is Hispanic or Non-Hispanic for ethnicity and then asks with which race the parent self-identified. The response options for race included: American Indian or Alaska Native, Asian, Black/African American, White, Native

Hawaiian/other Pacific Islander, or Other. Based on the responses to these two questions, the respondents were recoded into the following categories for race and ethnicity: Hispanic, Non-Hispanic White, Non-Hispanic Black, and Non-Hispanic Other. A parent who selected Hispanic for ethnicity was classified as Hispanic regardless of race. A parent who selected Non-Hispanic for ethnicity and Black for race, was categorized as Non-Hispanic Black. A parent who selected Non-Hispanic for ethnicity and White for race was classified as Non-Hispanic White. A parent who selected Non-Hispanic for ethnicity and any other race (American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, or Other) besides White or Black, was categorized as Non-Hispanic Other.

The dependent variables included the parents' attitudes and beliefs about sex education and the degree to which they wanted to be involved in the TOP program. The parents' attitudes and beliefs about sex education were based on the following items: if the parents had ever talked to their children about sex; how comfortable the parents felt talking to their children about sex; if the parents thought it was okay for teenagers to have unprotected sex sometimes; if the parents supported their children learning about sex in school; if the parents' religious beliefs played a role in how they made decisions for their children; if the parents would like advice about talking to their children about sex; and if the parents thought it would be helpful to receive written information about talking to their son or daughter about sex.

Most of the responses to the dependent variables were dichotomous. The exceptions to the questions with dichotomous responses included: if the parents were comfortable talking to their children about sex, if the parents supported children learning

about sex at school, and if religion played a role in how the parents made decisions for their children. Responses to these variables were on an ordinal scale to measure the degree of comfort, for example, parents had about talking to their children about sex, the degree to which they supported sex education in school, and to what extent religion played a role in parental decision making. Other questions, such as if the parents ever talked to their children about sex, were better suited for a dichotomous, yes or no answer. After initial analysis of response frequencies, the responses to the question regarding whether the parents supported their children learning about sex at school was recoded into a dichotomous variable. The original responses were too skewed so the responses were categorized as 'strongly support' and 'do not strongly support,' with the latter category collapsing the 'somewhat support,' 'somewhat against,' and 'strongly against' responses together. Comfort with talking to child about sex was on a 1 to 4 scale with 1 being 'very uncomfortable,' 2 being 'a little uncomfortable,' 3 being 'fairly comfortable,' and 4 being 'very comfortable.' Responses to the question asking how much of a role religion played in the parents' decisions for their children was on a 1 to 3 point scale with 1 indicating 'not at all,' 2 indicating 'sometimes,' and 3 indicating 'very much so.'

The degree to which parents wanted to be involved in the TOP program, if at all, was also assessed. They were given four choices for type of involvement including: not being involved at all, talking to the TOP facilitators on the phone, helping out at TOP events, or helping out at community service events. For this last question, parents were instructed to check off as many options as applied to them. If a parent did not check off any of the four options, the question was considered a missed question. If the parent checked off at least one option then the question was considered answered. In this case,

any checked boxes next to an option meant that the option applied to the parent, and conversely, if the box was not checked next to an option, then it meant that option did not apply to the parent.

Data analysis:

Descriptive statistics, including frequency distributions and cross-tabulations, were used to describe the parents' characteristics and attitudes towards talking to their children about sex and their interest in wanting information and help with talking to their children about sex. Chi-square tests and F-tests were used to examine the associations between the independent and dependent variables. The purpose of the analysis was to see if parental views varied by race and ethnicity and which ways, if at all, the parents wanted to be involved in the TOP program.

Results

In total, 287 parents of TOP participants filled out and turned in the TOP parent survey (Table 1). Three sites (Windham, West Haven and New Britain) out of the 12 total sites did not return any surveys, leaving the data from the remaining nine sites to be used for the purpose of this study. The total number of participants enrolled across all sites was unable to be obtained from each site, but the available data shows a range of 24.5% to 87.5% response rate among the nine responding sites.

Table 1. Number and Percent of Respondents from Each TOP Location

TOP Site	Number of Respondents	Total Number of Participants	% of Respondents
Hartford- Burr School	34	Unable to obtain	**NA**
Hartford-Clark School	21	Unable to obtain	**NA**
Windham	0	Unable to obtain	**0**
New London	45	Unable to obtain	**NA**
East Hartford	38	46	**82.6**
Killingly	48	55	**87.2**
West Haven	0	Unable to obtain	**0**
New Britain	0	Unable to obtain	**0**
Meriden	12	49	**24.5**
New Haven	16	44	**36.4**
Norwich	56	64	**87.5**
Bridgeport	17	Unable to obtain	**NA**
TOTAL	**287**		

The children of the responding parents ranged in age from 11-18 years old and were in grades 7-11. Seventy percent of the children were ages 12 and 13, and 83.2% were in grades 7 and 8 (Table 2). The children of the respondents included 186 (64.8%) girls, 100 (34.8%) boys and one (0.3%) transgender youth.

Table 2. Child Demographic Characteristics

Characteristic	N	Valid Percent
Age		
11	17	**6.0**
12	80	**28.1**
13	120	**42.1**
14	41	**14.4**
15	20	**7.0**
16	6	**2.1**
18	1	**.4**
Total	**285**	**100**
Grade		
7	98	**34.1**
8	141	**49.1**
9	24	**8.4**
10	21	**7.3**
11	3	**1.0**
Total	**287**	**100**
Gender		
Boy	100	**34.8**
Girl	186	**64.8**
Transgender	1	**.3**
Total	287	**100**

Of the parents responding to the survey, there were 220 (76.7%) females and 67 (23.3%) males (Table 3). Slightly more than half (52.2%) of the respondents had less than a high school education and about one-third (34%) had been teen parents. The racial/ethnic breakdown of the parents included: 41.3% Hispanics, 19.3% Non-Hispanic Blacks, 28.3% Non-Hispanic Whites, and 11.2% Non-Hispanic Other (American Indian/Alaska Native, Asian, Native Hawaiian/Other Pacific Islander, or Other).

Table 3. Parent Demographic Characteristics

Characteristic	N	Valid Percent
Parent Gender		
Male	67	**23.3**
Female	220	**76.7**
Total	287	**100.0**
Education		
Less than High School	47	**16.9**
High School Graduate	98	**35.3**
More than High School	133	**47.8**
Total	278	**100.0**
Age when had first child		
Less than 20 years old	95	**34.4**
20-25 years old	121	**43.8**
Older than 25 years old	60	**21.7**
Total	276	**100.0**
Ethnicity/Race		
Hispanic	111	**41.3**
Non-Hispanic Black	52	**19.3**
Non-Hispanic White	76	**28.3**
Non-Hispanic Other	30	**11.2**
Total	269	**100.0**
Ethnicity		
Hispanic	111	**41.1**
Non-Hispanic	159	**58.9**
Total	270	**100**

Almost all (95.2%) parents expected their children to be going to college the year after they graduated from high school, whether it was going to college only, going to college and working at a job, or going to college, working and being part of the military (Table 4).

Table 4. Parents' Expectation for Their Children after High School

Expectation for Child after High School	N	Valid Percent
Be in the Military	2	**.7**
Working at a Job	8	**2.8**
Going to college	119	**41.9**
Working at a job and going to college	145	**51.1**
Doing something else	4	**1.4**
Military and going to college	3	**1.1**
Military, job and college	3	**1.1**
Total	284	**100.0**

Table 5 shows parents' attitudes and beliefs about various aspects of sex education. Although most parents (75.9%) reported that they had talked to their children about sex, only 34.7% felt very comfortable doing so. About two-thirds of parents said they strongly supported sex education in school, while very few parents (6.3%) were against it. Eight out of ten parents thought it would be helpful to receive written information about talking to their children about sex, but only one in four wanted advice on talking to their child about sex.

Table 5. Parents' Attitudes and Beliefs Regarding Sex Education

Parental Attitudes/Beliefs	N	Valid Percent
Have talked to child about sex		
Yes	205	**75.9**
No	65	**24.1**
Total	**270**	**100**
Comfort with talking to child about sex		
Very Uncomfortable	55	**20.5**
A little uncomfortable	44	**16.4**
Fairly comfortable	76	**28.4**
Very comfortable	93	**34.7**
Total	**268**	**100**
Think it is okay for teenagers to have unprotected sex sometimes		
Yes	3	**1.1**
No	267	**98.9**
Total	270	**100**
Support children learning about sex at school		
Strongly Support	174	**64.4**
Somewhat Support	79	**29.3**
Somewhat Against	10	**3.7**
Strongly Against	7	**2.6**
Total	**270**	**100**
Would like advice on talking to child about sex		
Yes	67	**25.3**
No	198	**74.7**
Total	**265**	**100**
Think it is helpful for parents to receive written information about talking to child about sex		
Yes	215	**79.9**
No	54	**20.1**
Total	**269**	**100**

Table 6 shows that slightly less than 60% of parents reported that their religious beliefs play a role in their decision-making for their child; 36% said it sometimes influenced their decisions and 23.1% said it did very much so.

Table 6. How Much Religious Beliefs Played a Role in Parents' Decision-making for Their Children

Religious beliefs play a role	N	Valid Percent
Not at all	109	**40.7**
Sometimes	97	**36.2**
Very Much So	62	**23.1**
Total	**268**	**100**

The data in Table 7 compares parents' attitudes and beliefs regarding various aspects of sex education according to their race and ethnicity. Regardless of race/ethnicity, most parents have talked to their children about sex, disapprove of unprotected sex by their children, and thought it would be helpful to receive written information about talking to their children about sex. Few, however, wanted advice on talking to their children about sex. There was a statistically significant difference ($p = 0.006$) among groups regarding sex education in school. While the majority of Hispanic, Non-Hispanic Black and Non-Hispanic White parents strongly supported sex education in school, the majority of Non-Hispanic Other parents (67.9%) did not.

Table 7. Parents' Attitudes and Beliefs Regarding Sex Education as a Function of Race and Ethnicity.

Parental Attitudes/ Beliefs	Hispanic (n=111)	Non-Hispanic Black (n=52)	Non-Hispanic White (n=76)	Non-Hispanic Other (n=30)	Asymp. Sig 2-sided
	%	%	%	%	
Have talked to child about sex					
Yes	75.2	67.4	83.8	71.4	
No	24.8	32.6	16.2	28.6	
Total	**100**	**100**	**100**	**100**	**.198**
Think it is okay for teenagers to have unprotected sex sometimes					
Yes	1.9	0	0	3.6	
No	98.1	100	100	96.4	
Total	**100**	**100**	**100**	**100**	**.347**
Support children learning about sex at school					
Strongly Support	67	71.7	69.3	35.7	
Do not Strongly Support	33	28.3	30.7	64.3	
Total	**100**	**100**	**100**	**100**	**.006**
Would like advice on talking to child about sex					
Yes	30.7	26.1	15.1	32.1	
No	69.3	73.9	84.9	67.9	
Total	**100**	**100**	**100**	**100**	**.098**
Think it is helpful for parents to receive written information about talking to child about sex					
Yes	83.8	80	78.4	77.8	
No	16.2	20	21.6	22.2	
Total	**100**	**100**	**100**	**100**	**.784**

The number of respondents for each question varied slightly due to missing data.

When Hispanics were compared to all Non-Hispanics (Table 8), Hispanics trended toward being slightly more likely to want advice ($p = 0.081$), but the difference

did not reach statistical significance at the 0.05 level (Table 8). Otherwise, there were no differences between Hispanics and Non-Hispanics with regard to talking to their children about sex, their attitudes toward unprotected sex, support for sex education at school, and interest in written information.

Table 8. Parents' Attitudes and Beliefs Regarding Sex Education as a Function of Ethnicity

Parental Attitudes/Beliefs	Hispanic	Non-Hispanic	Sig. chi-square 2-sided
	%	%	
Have talked to child about sex			
Yes	75.2	77.2	
No	24.8	22.8	
Total	**100**	**100**	**.720**
Think it is okay for teenagers to have unprotected sex sometimes			
Yes	1.9	.7	
No	98.1	99.3	
Total	**100**	**100**	**.357**
Support children learning about sex at school			
Strongly Support	67	63.3	
Not Strongly Support	33	36.6	
Total	**100**	**100**	**.550**
Would like advice on talking to child about sex			
Yes	30.7	20.9	
No	69.3	79.1	
Total	**100**	**100**	**.081**
Think it is helpful for parents to receive written information about talking to child about sex			
Yes	83.8	78.2	
No	16.2	21.8	
Total	**100**	**100**	**.270**

When looking at parents' comfort with talking to their children about sex as a function of the parents' race and ethnicity, there was only a slight difference (p = 0.11) among the racial ethnic groups (Table 9). It appears that Non-Hispanic Black parents were slightly more comfortable than other racial/ethnic groups in talking to their child about sex, while those in the Non-Hispanic Other group were least comfortable.

Table 9. Parents' Comfort with Talking to Their Children about Sex as a Function of Race and Ethnicity

	Hispanic		Non-Hispanic Black		Non-Hispanic White		Non-Hispanic Other		Sig. (F-test)
	Mean	N	Mean	N	Mean	N	Mean	N	
Comfort with talking to child about sex*	2.79	104	3.09	45	2.69	74	2.46	28	.11

***Responses range from 1 (very uncomfortable) to 4 (very comfortable).**

However, as the data in Table 10 shows, there was a significant difference in the role of their religious beliefs in making decisions for their children by race and ethnic categories (p = 0.001). Non-Hispanic Other parents and Non-Hispanic Black parents had the highest mean values to this question (2.22 and 2.04, respectively) compared to Non-Hispanic White parents (1.74) and Hispanic parents (1.66). The higher mean values indicate that the parents' religious beliefs are more likely to play in a role in how they make decisions for their children.

Table 10. How Much Religious Beliefs Play a Role in Parents Decision-making for Their Children as a Function of Race and Ethnicity

	Hispanic		Non-Hispanic Black		Non-Hispanic White		Non-Hispanic Other		Sig. (F-test)
	Mean	**N**	**Mean**	**N**	**Mean**	**N**	**Mean**	**N**	
Religious beliefs play a role in making decisions for child*	**1.66**	102	**2.04**	45	**1.74**	73	**2.22**	27	**.001**

***Responses range from 1 (not at all) to 3 (very much so).**

Tables 11 and 12, respectively, look at potential differences between Hispanics and Non-Hispanics in the comfort of the parents in talking to their children about sex and the extent to which parents use religion in their decision-making for their children. There was not a difference between Hispanics and Non-Hispanics when it came to feeling comfortable talking to their children about sex. There was, on the other hand, a statistically significant difference ($p=0.008$) between Hispanics and Non-Hispanics with regard to the role religious beliefs played in making decisions for their children. Contrary to expectation, Non-Hispanic parents reported that religion played more of a role in parental decision-making than did Hispanic parents.

Table 11. Parents' Comfort with Talking to Their Children about Sex as a Function of Ethnicity

	Hispanic		Non-Hispanic		Sig. (F-test)
	N	**Mean**	**N**	**Mean**	
Comfort with talking to child about sex*	104	**2.79**	148	**2.78**	**.974**

***Responses range from 1 (very uncomfortable) to 4 (very comfortable).**

Table 12. How Much Religious Beliefs Play a Role in Parents Making Decisions for Their Children as a Function of Ethnicity

	Hispanic		Non-Hispanic		Sig. (F-test)
	N	**Mean**	**N**	**Mean**	
Religious beliefs play a role in making decisions for child*	103	**1.65**	148	**1.91**	**.008**

***Responses range from 1 (not at all) to 3 (very much so).**

Table 13 shows that two-thirds of parents wanted to be involved in the TOP program in some form or another. More than a third (35.5%) wanted to talk to the facilitator on the phone, and 34.4% were willing to help out at TOP events. Slightly less, 27.8%, indicated that they were interested in helping out with community service learning activities.

Table 13. Parent Interest in Being Involved with the TOP Program

Type of Involvement	Valid Percent
Do not want to be involved in the TOP program	34.3
Talk to TOP Facilitators on the Phone	35.5
Help out at TOP Club Events	34.3
Help out at community service learning activities	27.8

Discussion

The purpose of this study was to investigate parents' attitudes and beliefs towards sex education and determine if race and ethnicity made a difference.

More than three-quarters of parents had talked to their children about sex, but only about one in five felt very comfortable doing so. When taking race and ethnicity into account, Non-Hispanic Black parents were the least likely to say they have discussed sex with their children, while Non-Hispanic White parents were the most likely to do so. In contrast, Non-Hispanic Blacks were more likely to report feeling very comfortable about talking to their children about sex. It seems inconsistent that Non-Hispanic Black parents would feel the most comfortable talking to their children about sex, but least likely to have talked to their children about sex. Perhaps if they had more information about reproductive health, they would be more inclined to talk to their children about sex.

On the other end of the spectrum, Non-Hispanic Other parents appeared to be the least comfortable talking to their children about sex. Non-Hispanic Other parents were also the racial/ethnic group that was least supportive of sex education in school compared

to all other groups of parents. One may have expected that parents would be more, instead of less, supportive of sex education in school if they did not feel comfortable talking to their child about sex at home. It may be that Non-Hispanic Other parents do not feel comfortable with the topic in general and do not want their children to learn about sex at school or at home.

It was hypothesized that Hispanic and Non-Hispanic parents alike would want both advice and information about talking to their children about sex. The results show that regardless of both race and ethnicity, most parents felt that it would be helpful to receive written information about talking to their child about sex. In contrast, again regardless of race or ethnicity, fewer parents (ranging from 15.1 % of Non-Hispanic Whites to 32.1% of parents identified as Non-Hispanic Other) wanted advice on talking to their child about sex. This is surprising, as one would think there would be a comparable pattern between parents who would want advice on talking to their children about sex as parents who thought written information about talking to their children about sex would be helpful.

It was originally hypothesized that religion would play more of a role in how Hispanic parents make decisions for their children as compared to Non-Hispanics. The results, however, show that religion plays more of a role in decision-making for Non-Hispanic parents than for Hispanic parents ($p=0.008$). When analyzing this question, it is important to take into consideration that it was a general question to the parents regarding religion and decision-making for their children. The question did not specifically focus on how religion affected decision-making regarding reproductive health. For example, would parents support their children's use of contraception or would they support or be

completely opposed to the idea of abortion should their child become pregnant? Given the sensitivity of such questions and potential response biases by respondents, these direct questions were not asked in this initial survey as it was intended to collect general feedback. In addition, the length of the survey was taken into consideration. It may be helpful in the future to administer another survey geared towards those more specific and controversial questions.

Limitations

There were several limitations to this study. Three of the 12 programs that received the surveys failed to return them so those sites are not represented in the results. Since the information about the number of surveys sent to parents is incomplete, it is unclear how representative the respondents to this survey are of all parents of the TOP participants. Although it was not possible to determine all of the response rates, five sites did have information about the number of parents targeted by the survey. Three of the five had response rates of 83% or higher. This suggests that if a systematic protocol is put in place to distribute and collect the parent surveys across all sites, such surveys can be a successful way to solicit parental input and feedback relevant to the TOP program. There would also be more confidence with higher response rates in the generalizability of the findings.

This analysis used broad categorizations of racial/ethnic groups which did not allow sensitivity to smaller cultural groups. For example, the Hispanic subgroup could be further subdivided (e.g. Puerto Rican, Mexican, Cuban, Dominican, etc.). Also, the Non-Hispanic Other subgroup is a very broad grouping of many diverse ethnic groups

including Asians, American Indians or Alaska Natives, Native Hawaiians or other Pacific Islanders and other races not specified.

Furthermore, as discussed above, the question about religious beliefs is also broadly worded and does not lend itself to specific areas in which parents' religious beliefs may play a role in decision-making for their children. Similarly, the question about whether parents had ever talked to their children about sex does not convey the frequency or specific content of such conversations.

Conclusions

The results of this study have implications for the TOP program, and the findings will be shared with the TOP facilitators and DSS for their review and discussion. It is clear that most parents support sex education for their children and are interested in receiving more information about talking to their children about sex. It is recommended that the TOP program provide written information to the participants' parents about reproductive health education and let them know what is taught in school. This may help parents feel more comfortable with the topic and talking to their children about sex.

Moreover, TOP facilitators should consider holding an open discussion with parents to answer any questions or misconceptions they may have about sex education rather than a lecture style meeting to advise parents on how to talk to their child about sex. The ways TOP parents want to be involved in the program may vary by TOP location. Each site might be able to tailor the best ways to have parents be involved according to local preferences or interests. Since there were some differences in parental

attitudes and beliefs based on race and ethnicity, each site may also want to tailor offerings to be culturally appropriate to the populations they serve.

In addition to assessing parents' attitudes and beliefs regarding sex education, the TOP surveys asked about the type of involvement, if any, parents would want to have with the TOP program. The results show that the majority of parents were interested in being involved in the TOP Club in some form. The ways parents wanted to be involved varied: 35.5% were interested in talking to TOP facilitators on the phone, 34.3% were interested in helping out at TOP Club events, and 27.8% were interested in helping out at community service events. Based on these results, it is recommended that in the upcoming years TOP facilitators should reach out to parents and seek to get them involved. They should offer a variety of ways for parents to be involved to maximize parental involvement in the program overall.

Although this study explored parental attitudes and beliefs regarding sex education based on race and ethnicity, the survey provided much more demographic information which could be used in the future to examine other factors and determinants that may affect parents' attitudes and beliefs about sex education. Possible future studies, using the data collected from the TOP Parent Survey, could look at whether the parents' gender, level of education, status as a teen parent, their child's gender and age, or even the location of the TOP site affects parental views on different aspects of sex education.

Appendix A.

TOP Club Parent Survey

Please check or fill in the answer that is right for you.

1. **How old is your child?_____years old**

2. **What grade is your child in? _____grade**

3. **Is your child a boy or a girl?**
   [ ] Boy [ ] Girl

4. **What is your gender?**
   [ ] Male [ ] Female

5. **How would you describe your ethnicity?**
   [ ] Hispanic/Latino [ ] Not Hispanic/Latino

6. **What is your race? (Please check off all that apply.)**
   [ ] American Indian or Alaska Native [ ] White
   [ ] Asian [ ] Native Hawaiian/Other Pacific Islander
   [ ] Black/African American [ ] Other

7. **What is your highest level of education?**
   [ ] Less than high school [ ] High school graduate [ ] More than high school

8. **How old were you when your first child was born?**

   [ ] Younger than 20 years old [ ] 20-25 years old [ ] Older than 25 years old

9. **What do you expect your child to be doing in the year after he/she leaves high school?**
   [ ] Be in the military (the army, navy, marines, etc.)
   [ ] Working at a job
   [ ] Going to college
   [ ] Working at a job and going to college
   [ ] Doing something else. (What?_____)

10. Have you ever talked to your child about sex?
[ ] Yes [ ] No

11. How comfortable would you say you are talking to your child about sex?

[ ] Very uncomfortable [ ] A little uncomfortable
[ ] Fairly comfortable [ ] Very comfortable

12. Do you think it is okay for teenagers to have unprotected sex sometimes?
[ ] Yes [ ] No

13. How much do you support children learning about sex at school?

[ ] Strongly support. [ ] Somewhat against
[ ] Somewhat support. [ ] Strongly against

14. Do your religious beliefs play a role in how you make decisions for your child?
[ ] Not at all [ ] Sometimes [ ] Very much so

15. Would you like advice on talking to your child about sex?
[ ] Yes [ ] No

16. Do you think it would be helpful for parents to receive written information about talking to their child about sex?

[ ] Yes [ ] No

17. If possible, in what ways would you like to be involved in the TOP program this school year? Please check off ALL the ways that you would like to be involved.

[ ] I do NOT want to be involved in the TOP program this school year
[ ] I would like to talk to the TOP facilitators on the phone
[ ] I would like to help out at TOP club events
[ ] I would like to help out at community service learning activities

Thank you

References

1. Martin JA, Hamilton BE, Osterman JK, et al. Births: Final Data for 2012. Natl Vital Stat Rep 2013; 62:9. Available at http://www.cdc.gov/nchs/data/nvsr/nvsr62/nvsr62_09. Accessed April 13, 2014.
2. CDC. Teen Birth Rates Drop, But Disparities Persist. 2013. Available at *http://www.cdc.gov/features/dsTeenPregnancy/*. Accessed February 15, 2014.
3. CDC. Teen Pregnancy: The Importance of Prevention. 2014. Available at http://www.cdc.gov/TeenPregnancy/index.htm. Accessed February 15, 2014.
4. Garofalo R and Forcier M. Adolescent Sexuality. Literature review. 2012. Available at www.uptodate.com. Accessed June 5, 2012.
5. The National Campaign to Prevent Teen and Unplanned Pregnancy: Key Information about Connecticut. Available at www.TheNationalCampaign.org. Accessed March 2, 2013.
6. Chacko MR. Pregnancy in Adolescents. Literature review. 2012. Available at www.uptodate.com. Accessed June 5, 2012.
7. Olivero, Magaly. CT Health I Team. Connecticut Teen Births: Nearly One-Half Hispanics, January 25, 2012. Available at ctwatchdog.com. Accessed March 2, 2013.

8. East PL. Racial and Ethnic Differences in Girls' Sexual, Marital, and Birth Expectations. *J. Marriage Fam.*1998;60:150-162.
9. Ford K and Norris AE. Urban Hispanic Adolescents and Young Adults: Relationship of Acculturation to Sexual Behavior. *J. Sex Res.*1993;30:316-323.
10. Sangi-Haghpeykar H, Ali N, Posner S, and Poindexter AN. Disparities in Contraceptive Knowledge, Attitude, and Use Between Hispanic and Non-Hispanic Whites. *Contraception.*2006;74:125-132.
11. Driscoll AK et al. In Their Own Words: Pregnancy Prevention Needs of Latino Teen Mothers. *Californian J. Health Promot.*2003;1:118-129.
12. Pew Hispanic Center and Pew Forum on Religion and Public Life. Changing Faiths: Latinos and the Transformation of American Religion. Chapter 1. Religion and Demography. Pew Research Center. 2007. 7-16.
13. Newport F. U.S. Catholic Hispanic Population Less Religious, Shrinking: Protestant Hispanics Much More Religious than Those who are Catholic, February 25, 2013. Available at http://www.gallup.com. Accessed April 29, 2014.
14. Ellison CG, Echevarria S and Smith B. Religion and Abortion Attitudes Among U.S. Hispanics: Findings from the 1999 Latino National Political Survey. *Social Science Quarterly*. 2005;86:192-208.
15. Hacker KA, Amare Y, Strunk N, Horst L. Listening to Youth: Teen Perspectives On Pregnancy Prevention. *J Adolescent Heath.* 2000;26:279-288.

16. Meneses L. Racial/Ethnic Differences in Mother-Daughter Communication about Sex. *J Adolescent Health*. 2006;29:128-131.

17. Miller KS et al. Patterns of Condom Use Among Adolescents: The Impact of Mother Adolescent Communication. *Am J Public Health*. 1998;88:1542-44.

18. Kitchen E and Huberman B. Advocates for Youth. Parent-Child Communication Programs: Helping Parents Become Knowledgeable and Comfortable as Sex Educators. 2011. Available at www.advocatesforyouth.org/publications. Accessed June 5, 2012.

19. Davis KC, Blitstein JL, Evans WD, Kamyab K. Impact of a Parent-child Sexual Communication Campaign: Results from Controlled Efficacy Trial of Parents. *Reproductive Health*. 2010;7:1-12.

20. Connecticut General Assembly. Staff Findings and Recommendations: Part II. Adolescent Health in Connecticut: RBA Project 2011. February 22, 2012. Legislative Program Review and Investigations Committee.

21. Richter RS. Facts and Figures: 2008 Analysis of the Need for Teen Pregnancy and Adolescent Childbearing Prevention in Connecticut Communities. University of Connecticut Health Center. Available at http://teenpregnancy-ct.org/facts.htm. Accessed December 3, 2011.

22. Philliber S, Kaye JW, Herrling S and West E. Preventing Pregnancy and Improving Health Care Access Among Teenagers: An Evaluation of the Children's Aid Society-Carrera Program. *Perspect Sex Repro H.* 2002;34:244-251.

23. Philliber Research Associates. Connecticut Department of Social Services Teen Outreach Programs. Progress Report, 2010-2011.

24. Allen JP, Philliber S, Herrling S, and Kuperminc GP. Preventing Teen Pregnancy and Academic Failure: Experimental Evaluation of a Developmentally Based Approach. *Child Dev.*1997;64: 729-742.

25. Allen JP and Philliber S. Who Benefits Most from a Broadly Targeted Prevention Program? Differential Efficacy across Populations in the Teen Outreach Program. *J. Community Psychol.*2001; 29:637-655.

26. Richter R. Personal communication. May 5, 2014.

27. Richter R and Young LW. Wyman's Standards for TOP Certification (PowerPoint). TOP Facilitator meeting. June 7, 2012.