

The sexual activity of Canadian girls and boys aged 12 and 13, 1996-97

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Abstract

Intimate sexual activity is only just beginning at ages 12 and 13. The object of this study is to determine how far it has advanced in Canada, and to review some of the key factors that may underlie the development of intimate sexual activity, defined as either petting or sexual intercourse.

Canada's first survey of sexual activity of 12- and 13-year-olds indicates that, of the children answering questions on sexual intimacy, one in five girls has engaged in petting above the waist (one in four boys), 15% in petting below the waist (20% of boys) and 4.4% of the boys has engaged in sexual intercourse. Among girls, 16% report intimate sex at age 12 and 25% report intimate sex at age 13, compared with 21% and 33%, respectively, of boys.

The incidence of intimate sexual activity increases with decreasing frequency of church attendance (especially for girls), and is higher for French Catholic girls and boys (compared with non-French Catholic, liberal Protestant, conservative Christian and children with no religious affiliation). Incidence is also higher among both girls and boys who do not like school, whose body hair is growing, who think other children find them good looking, who never stay out later at night than they should, and whose mother smokes daily.

Estimates for a model confirm the importance of several of these relationships, after we control for the effect of the other factors. In addition, the analytical results detect greater frequency of intimacy of boys who comfort others, of girls engaged in volunteer activities, and of girls with mothers who do not have a university degree. No association with intimacy is found if the girl or boy has older siblings, or is happy with life.

The study concludes with some implications of the research for parents, educators, and analysts.

Introduction

Most parents and educators would agree that intimate sexual activity should be avoided in the early teen years. Sexual activity can lead to pregnancy, sexually transmitted diseases, even birth of a child or abortion, and may be related to low marks in school. Lives can be permanently scarred. Yet the fight to discourage sex seems an uphill battle in the face of mass media, peer pressure, a culture of moral relativism and the views of some experts who assume sex acts are spontaneous and beyond rationality, not to mention the development of non-cooperative hormones in children. For many parents and educators it seems best to ignore the potential problem or to assume that it is unimportant, at least in the case of children under their responsibility. Others will go farther and say things like "don't, but if you do, protect yourself" and hope and pray that the protections chosen are 100% effective.

This study has four purposes. First, it reviews some studies on the causes of sexual activity and notes some Canadian data from those studies. Second, it presents Canada's first data on the incidence of intimate sex in relation to a number of factors thought to be

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related to the incidence. Third, it presents results of some preliminary analyses of sexual activity among girls and boys. And finally, some suggestions based on the research for parents and educators are offered.

Related studies

No Canadian studies were found specifically on the questions of the causes and incidence of sexual activity among pre-teens or very young teens. The American literature on teen sexual activity and intercourse, births, and use of contraceptives is of related interest, however, because similar causal factors may underlie intimate sexual activity in Canada. Since Canada and the United States have a similar culture and environment, some of the theory may be profitably imported.

Gerald Oettinger studies the sexual activity of teens and the effect of sex education programs.² He concludes

Overall, the evidence suggests that sex education in the 1970s probably had some causal influence on teen sexual behaviour and the provision of information that enabled teens to alter their risks of sexual activity was probably an important source of this causal influence. Finally, simulations suggest that universal sex education in the mid-teen years probably would have had little effect on teen sexual behaviour but that universal sex education in the preteen years might have led to significant increases in female sexual activity and pregnancy in early and middle teenage years.³

These conclusions are based on an analysis of the decision to engage in sexual activity, and on estimates for a model based on the analysis of this decision. Though not commented on, the church attendance variables are statistically significant and the coefficients indicate reduced probabilities to engage in sex with increasing frequency of attendance.⁴ Other important variables in the model that increase the chance of sexual activity are the following: having an older sibling, being black or Hispanic, having parents with less than high school, and living in a non-intact family. Catholic, non-Christian and no religion variables were also included in the model, though the estimated coefficients for these variables are not reported.

Phillip Levine analyses costs and benefits associated with teen sexual activity and birth control use, and provides useful summaries of trends as well.⁵ In 1975 the teen birth rate in the United States was 55 per 1,000 teenage females, compared with 35 in Canada. By 1997 it was 52 in the United States compared with 25 in Canada. It is suggested that these differences are observed because of different costs and benefits associated with the decision of whether or not to engage in sex, use birth control (different probabilities of becoming pregnant but both greater than zero), and abort. Though some argue that sexual activity, especially the first experience, is spontaneous, Levine argues that costs and benefits are still influential for every decision. He analyses the behaviour of girls and boys in grades 7 to 12.⁶ Girls are more likely to engage in sexual activity if they are older, in a higher grade, perform worse in school, are a religion other than Catholic, and do not attend services on a weekly basis. The following endogenous variables (attitudes possibly influenced by sexual activity) are found to decrease the chance of engaging in

² Gerald S. Oettinger, "The effect of sex education on teen sexual activity and teen pregnancy", *Journal of Political Economy*, vol. 107, no. 3, 1999, pp. 605-644.

³ *Ibid.*, p. 608.

⁴ Oettinger, *op. cit.*, pp. 630-633.

⁵ Phillip B. Levine, *The sexual activity and birth control use of American teenagers*, NBER Working Paper 7601, Cambridge, MA, March 2000.

⁶ *Ibid.*, pp. 23-27.

sexual activity: girls rating pregnancy as one of the worst things that could happen to them, and two measures of parental disapproval. Those who see little or no risk to sexual activity are more likely to engage in sexual activity. Limited job opportunities, higher incidence of AIDS, increasing access to abortion and more generous welfare are viewed as the main factors that lower the cost of sexual activity.

Data on abortions for young teens is unavailable in Canada, though Millar et al. analyzes some data for teens aged 15 -19.⁷ The percentage in this age group with at least one abortion was 3.0 in 1975, 3.4 in 1979, 1984, 1989 and 1991, and 3.6 in 1993. The repeat abortion rate for this group was 21.8% in 1975, 65.6% in 1989, 79.9% in 1991 and 80.9% in 1993, much higher than the repeat abortion rate for all women in every year except in 1975.

The risk management model assumes that each individual aims to balance the perceived rewards of risk-taking against the hazards.⁸ When safety is perceived to increase as a result of a promotional campaign for a new safety measure or device, risk-taking increases in order to achieve a new balance between rewards and hazards, a process called risk compensation. Seat belt use and condom use may increase as a result of promotional campaigns, for example, but the beneficial effects may be offset by increased driving speed or sexual activity. Promotional campaigns encouraging condom use, for example, will result in increased use, and therefore in increased incidence of condom failure. In addition, some individuals will abandon safer strategies such as careful selection of partners or having fewer partners. The authors cite a study in which AIDS messages from the Ontario Ministry of Health inclined respondents to the use of condoms and to less commitment to avoidance of casual sexual partners. They also cite a US study that showed that the incidence of sexually transmitted disease increased when women were taught to negotiate condom use with their partners. They suggest the best way to change behaviour is by rewarding safe strategies and penalizing risk-taking, but offer no specific policies or programs for sexual behaviour.

The idea that people engage in sexual activity as a result of rational choice is not a modern invention of economists but has long been viewed as such by the guardians of morality. In a very popular book published in 1650 Jeremy Taylor offered nine “remedies against uncleanness”, including the following.⁹

1. When a temptation of lusts assaults thee, do not resist it by heaping up arguments against it and disputing with it, considering its offers and its dangers, but *fly from it*; that is, think not at all of it ... by any severe or laudable thought.
2. *Avoid idleness*, and fill up all spaces of thy time with severe and useful employment; for lust usually creeps in at those emptinesses where the soul is unemployed and the body is at ease.
3. *Give no entertainment to the beginnings*, the first motions and secret whispers of the spirit of impurity.
4. *Fly from all occasions*, temptations, loosenesses of company, balls and revelings, indecent mixtures of wanton dancings, idle talk, private society with strange women, staring upon a beauteous face, the company of women that are singers, amorous gestures, garish and wanton dresses, feasts and liberty, banquets and perfumes, wine and strong drinks,
5. He that will secure his chastity, must first cure his pride and his rage.
6. If thou beest assaulted with an unclean spirit, trust not thyself alone, but run forth into company whose reverence and modesty may suppress or whose society may divert thy thoughts ...
7. Hither bring in succour from *consideration of the Divine presence* and of His holy angels, meditation of death, and the passion of Christ upon the cross, imitation of His purities and of the Virgin Mary ...

⁷ Wayne J. Millar, Surinder Wadhwa and Stanley K Henshaw, “Repeat abortions in Canada, 1975-1993” *Family Planning Perspectives*, vol. 29, no. 1, Jan.-Feb., 1997, pp. 20-24.

⁸ This model is well explained by John Richens, John Imrie and Andrew Copas, “Condoms and seat belts: the parallels and the lessons”, *The Lancet*, Jan. 29, v.355, pp. 400-403.

⁹ Jeremy Taylor, *The rule and exercises of holy living*, Longmans, Green and Co., 1902 (1650), pp. 72-75. The emphasis in the above quotes are in the original.

Taylor's basic assumption is that the decision to entertain or indulge in sexual activity is a rational one that might be countered with other rational decisions such as changing dangerous thinking to productive thinking, avoidance of some company and cultivation of worthy friendships, and avoidance of idleness. Before launching into the discussion of this subject Taylor gives a warning that points to the potential danger of sex education:

Reader, stay, and read not the advices of the following section, unless thou desirest to be chaste, or at least art apt to consider whether you ought or no. For there are some spirits so atheistical, and some wholly possessed with a spirit of uncleanness, that they turn the most prudent and chaste discourses into dirty and filthy apprehensions; ... and in a literal sense, turning the grace of God into lasciviousness. ... I have used all the care I could, in the following periods, that I might neither be wanting to assist those that need it, nor yet minister any occasion of fancy or vainer thoughts to those that need them not.¹⁰

Argument

The above literature appears to support the importance of the following factors in the decision to engage in sexual activity: sex education including perception of risks, church attendance, religion, performance in school, limited job opportunities, and policies which increase access to abortion, or provide more generous welfare assistance. In addition, several factors that cannot be influenced by policy or educators have been identified, including age, an older sibling, risk propensity, and parent's level of education. In contrast to other scholarly traditions, economic theory assumes that the decision to engage in sexual activity is within the realm of rationality and is not purely spontaneous or impulsive.

Sex education may either encourage or discourage sexual activity. If it emphasizes the importance of safe sex and the use of condoms, it may implicitly legitimize sex, give students a sense of security, and lower the perceived risk of pregnancy, thus encouraging sex. However, sex education will discourage sexual activity if it emphasizes the risk of condom failure (5%-10% each use) and thus of pregnancy or disease, the moral unacceptability of petting and intercourse outside of marriage, the rationality of the decision, the unreliability of some sources (such as peers and much mass media), and the way to clearly define limits. Sex education comes from many sources -- parents, school (family studies, health courses, and literature courses for example), religious tradition, older brothers or sisters, peers, and the media.

Religious tradition, services, worship and schooling can provide moral guidance concerning right and wrong. Religious training can teach young people how to confront temptation using self-control, and how to avoid "slippery slopes" of no return. Religion can raise the cost of sexual activity by emphasizing authentic male-female relationships, the God-human relationship, and eternal life. It can heighten awareness of and respect for the "all seeing judge"¹¹ Religion can reinforce the message of parents and school regarding the risks of condom failure and pregnancy. If the religious tradition church ignores the issue of sexual activity, it may be perceived as considering sex to be outside its realm and therefore legitimate.

Parents can reinforce or counter the message of both school and church. In addition, they can add penalties or withdraw privileges if sexual activity is detected, thus raising the costs of such activity. They can restrict and enforce the time and place of dating and meeting with the opposite sex. They can strongly support their child's performance in school, sports, church,

¹⁰ *Ibid.*, p. 61.

¹¹ Discussed in Adam Smith's *Theory of Moral Sentiments*, 1759.

neighbourly and volunteer work, or other healthy alternatives to sexual activity, and insist that such activities are well supervised. They can give their children a sense of self-worth. They can coach older siblings to be role models and to responsibly educate the younger children, thus turning potential encouragement of sexual activity into discouragement. Parents teach by example when they demonstrate their love for each other and for their children, exercise self-control and avoid activities damaging to their health¹².

Three factors noted in the literature above — limited job opportunities, increased access to abortion, and more generous welfare — are affected by government policies. They are of greater relevance to the sexual decisions of older teens than of younger teens. One other lever of government has not been noted in the literature reviewed above — the classification and restriction of access to sexually explicit material. Such material may encourage sexual activity by increasing interest in sex and the perceived pleasure and benefit, while ignoring the costs to either or both parties. Government restrictions send the message that this material is undesirable and unacceptable for young teens. Parents can screen only a small fraction of explicit material with a v-chip. All such messages, whether from parents, school, church, government, media or peers, may be assumed to have some influence on the rational decision of children regarding involvement in sexual activity.

The extent of sexual activity

Statistics Canada's National Longitudinal Survey of Children and Youth for 1996-97 surveyed children aged 12 and 13 on their dating practices and a wide number of other issues. The sexual activities reported are, in decreasing order of frequency, hugging, kissing, petting above the waist, petting below the waist, and sexual intercourse. From 11% to 13% of girls and 20% to 23% of boys did not respond to these questions. The non-respondents tend to have some qualities that would incline them to sex, such as not liking school, and other qualities that would disincline them to sex, such as not having body hair.

Table 1 shows the basic patterns of lifetime sexual activity for girls and boys, whether or not they had ever engaged in petting or intercourse, and if so, the frequency. Of those responding, called "stated" in the table, a majority of girls and boys have never experienced intimate sexual activity (petting or sexual intercourse). Of those reporting intimate activity, more report "a few times" rather than "once" or "often". Of those girls and boys reporting hugging or kissing, however, more report the frequency as "often" than "once" or "a few times". More boys (82,000 or 26%) than girls (69,000 or 20%) report petting above the waist. Petting below the waist is less common, though again more common among boys (20%) than girls (13%). Fewer than 30 girls in the sample reported sexual intercourse so we cannot give a reliable estimate for them. The sexual intercourse rate for boys is 4.4%, or 13,930 boys. Some 16% of the 12-year-old girls report intimate sexual activity (21% of 12-year old boys) and 25% of the 13-year old girls (33% of the 13-year old boys).

¹² One reviewer wrote : In addition, maybe parents should discuss these issues directly with their children – not just a one-shot "speech", but a series of interactive "chats" over time to discover your child's perspective on the topic of sex, his reasons for thinking the way he does, etc. If he is misinformed or has an unbiblical viewpoint, you can begin to counter (gently and tactfully) with Biblical truth, so that it makes sense to him and is not just "because the Bible/I said so!". Perhaps, this conversation should start on a limited level before the child enters his teens.

Factors associated with sexual activity

Several of the above-noted factors are measurable and may be related to the degree of sexual activity of children. The variables proposed are derived from the National Longitudinal Survey of Children and Youth, 1996-97, though in many cases the variables are poor reflections of factors. For example, there is virtually no information on a key factor, sex education – the family studies variable discussed at the end of this section is poorly reported by teachers. In some respects though, the information available goes beyond that available in other studies of this nature.

Four relationships are estimated, two for girls and two for boys. The first set of relationships predicts an index of “harmless sex”: kissing and hugging, without intimate sex. The second set of relationships predicts what is called intimate sexual activity, an index of the degree of petting above and below the waist, and sexual intercourse. The way these indices are calculated is explained in the footnote to Table 4.

For each of the four indices of sexual activity, two for girls and two for boys, the relationship estimated has the following linear form:

$$Y = \alpha + \sum_i \beta_i X_i,$$

where Y is the index of sexual activity, and α and β_i are the estimated coefficients defining the relationship with the independent variables, X_i , defined in the footnote to Table 4. The relationships between sexual activity and each variable are now described. The emphasis is placed on the intimate sexual relationships since these are of greatest concern to parents and educators. The univariate and multivariate relationships are all measured for the sample of boys and girls stating their sexual activity.

The predictors of sexual activity comprise religion factors, age-related factors, behavioural factors, perceptual factors and family situation factors. These associations are discussed in turn.

Some would downplay the importance of religion factors, arguing that few young people today practice religion, but in fact 43% of the girls and boys aged 10 and 11 in 1994-95 attended religious services at least monthly (or regularly – Table 6 gives the details). These are the girls and boys surveyed in 1996-97, when religious attendance was not asked again in the survey. It is likely that most would still be attending religious services because the fall in attendance with age is gradual: in fact the 11-year-old girls were slightly more inclined to attend services regularly than the 10-year-old girls. The likelihood of intimate sexual activity tends to decrease as the frequency of attendance increases, and the relationship is much stronger for girls than boys (Table 2 and Chart 1). After controlling for the influence of other factors, we can see that the relationship for girls and boys is insignificant¹³ (though the direction of the relationship is as expected, indicated by the negative sign). Surprisingly, the association of intimate activity with the major faith affiliations reveals that French Catholic girls and boys have a higher likelihood of intimate activity than either English Catholics, liberal Protestants, conservative Christians, or children with no religious affiliation (Chart 2). This result holds after we control for other factors

¹³ To reduce the chance of discussing seemingly statistically significant results, which are not really significant, this study uses a strict level of estimated significance, 0.01, as a guide to statistically significant results. Actual levels of significance are given in Table 5 for those interested in applying other significance thresholds.

for girls; French Catholic boys have significantly more intimate sexual activity than all other faith groups except conservative Christians and non-Christians (Table 5).

For both girls and boys, age and the growth of underarm and public hair are strongly related to intimate sexual activity. Intimate activity is much more likely among 13-year-olds than 12-year-olds (Table 3 and Chart 3). The increase in activity with age is higher for boys (21% to 33%) than girls (16% to 25%). For both girls and boys the increase is statistically significant after we control for the other factors related to sexual activity (Table 5). Concerning body hair, 70% of the girls and 51% of the boys reported hair definitely growing. The boys with growing body hair are much more likely to have engaged in intimate activity (36%) than those without body hair growth (14%). After we control for the effect the other variables, the body hair factor remains highly significant in a statistical sense for both girls and boys.

Behaviour-related factors are involvement in volunteer activities, showing support for the work of those less able, not being easily distracted, and obeying parents regarding how late to stay out at night. All of these other-regarding behaviours are expected to be negatively associated with intimate sex. Volunteer activity is an example of a diversionary activity but in fact the association is strong only for girls, and the direction of association is opposite from that expected. It is possible that the volunteer experience helps children to relate to each other and this can promote either sexual or non-sexual associations with other children. Showing support for the work of others also seems an unselfish other-regarding activity that might be assumed to be negatively associated with sexual activity. But again, the association is opposite to that expected, at least in the case of boys. Perhaps this positive trait is an example of one that might be used to further one's own interests, by gaining the trust and confidence of girls who are supported. Regarding obedience to parents, if a child listens to his or her parents on the question of how late to stay out at night, and parents define and enforce limits, the child may be assumed to have less opportunity for sexual activity, and will tend to listen to their parents on the question of sexual activity. The statistical results for both girls and boys confirm the expected association.

Two of the three perceptual factors are found to be strongly associated with intimate sexual activity. Girls and boys who like school are less likely to engage in sex. A satisfying school life would seem to be an important diversionary activity indicative of success in school and good friendships, and those who enjoy school probably are more inclined to listen to their teachers, whether parents, religious leaders or school teachers, than to their peers or to the media. Only 16% of the girls who like school engage in sex, compared with 28% of the other girls (Table 3 and Chart 4). For boys the respective numbers are 23% and 31%. Girls are more inclined to say they like school than boys (58% versus 45%). For boys but not girls, enjoying school remains a statistically important factor after we control for the other factors (Table 5).

Feeling happy with life may reflect an aspect of self-esteem. About 85% of girls and boys express such feelings. Neither girls nor boys who feel happy with life, however, are significantly less likely to engage in intimate sex. This indicator of self-esteem seems to have little effect on the decision.

The third perceptual factor is negatively associated with intimate sexual behaviour: girls and boys who say that others find them good looking. This variable may be measuring an excess of pride, which might be assumed to encourage sexual activity, though it is also possible that the sexual partner is the one providing positive feedback on personal appearance. Some 24% of the girls and 22% of the boys think others find them attractive. The attractive girls are far more likely to engage in sex (35%) than the other girls (16%), and the same is true for attractive boys (44%

versus 22% -- Table 3 and Chart 5). These relationships are statistically significant, after we control for the effect of the other factors.

With one exception, family situation factors are relatively weak. The presence of older brothers or sisters has an insignificant influence on intimate sexual activity, and the associations are negative for both girls and boys, in contrast to the results of the American study cited above. Girls whose mother has a university degree are less likely to engage in intimate sex, but having a mother with a degree has an insignificant effect on the boys' decision. But there appears to be an important association between engaging in intimate sexual activity and having a mother who smokes daily: 26% of the girls and 20% of the boys have a mother who smokes daily (Chart 6). Both girls and boys with mothers who smoke are more likely to engage in intimate sexual activity – 28% versus 18% for girls, and 36% versus 25% for boys. Having a mother who smokes may reflect permissiveness or suggest to the child that it is not too important to try to avoid harmful activities. After we control for the effect of other factors on sexual activity, however, only the influence of smoking on the sexual behaviour of boys is statistically significant.

Though there were no direct indicators of sex education, teachers did report on the hours per week of family studies taken by students. The results suggest that the girls and boys who take family studies are somewhat less likely to engage in petting than those who do not take family studies. A significant percentage of teachers, however, did not answer this question (over 30%), so the results for this variable may be misleading. When included in the above-noted model, this variable was not statistically significant, and 30% of the observations, children, were dropped from the analysis because of teacher non-response.

Conclusion

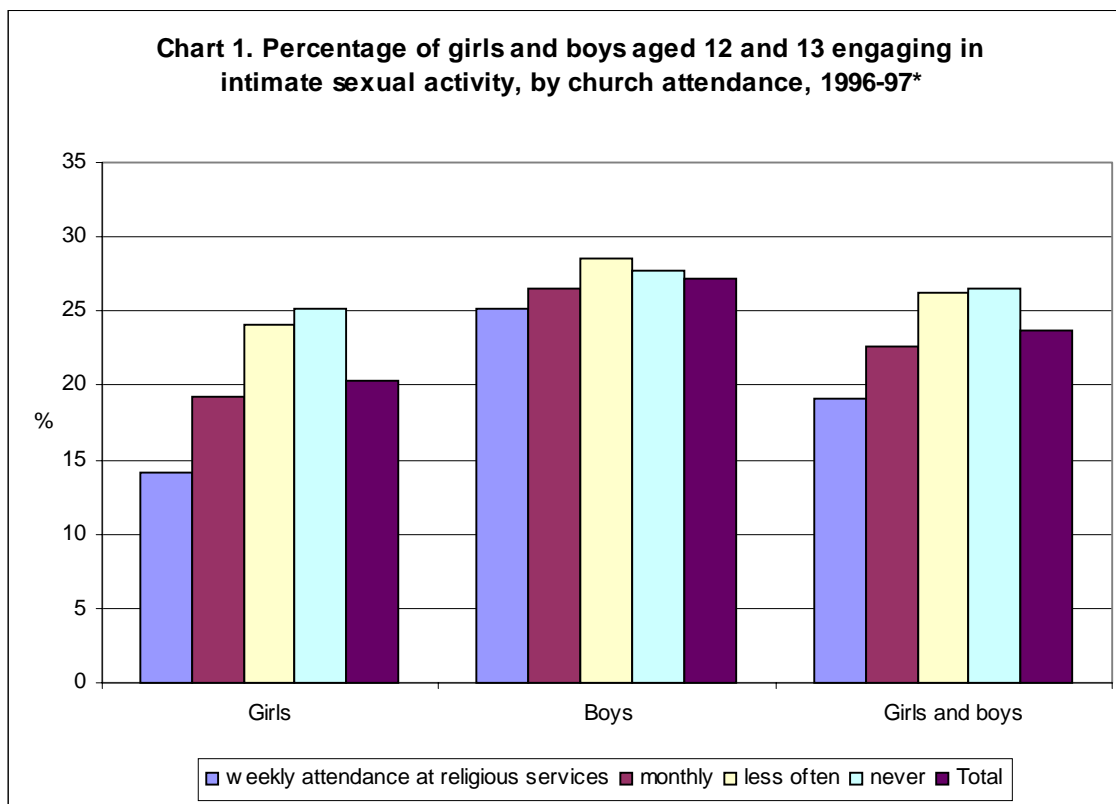
Intimate sexual activity among children aged 12 and 13 is much more common than many parents or educators would expect. Of the children answering questions on sexual intimacy, one in five girls has engaged in petting above the waist (one in four boys), 15% in petting below the waist (20% of boys), and 4.4% of the boys has engaged in sexual intercourse.

In this study we have regarded engagement in sexual activity as a rational decision, one for which the decision-making child is responsible. It is the kind of decision that may be influenced by the perception of facts about sexual activity, and the informed counsel of caring parents, older siblings, and other teachers in school, church and other settings. Though the data needed for a full test of this thesis is lacking, there is still some empirical support, both in this study and others reviewed above. Also, some of our argument should be modified in light of the results.

The decision and perceptual variables associated with intimate sexual activity merit special attention because they may be influenced to some extent by parents and educators. The decision variables that are associated with involvement in intimate sex are churchgoing (negatively related, especially for girls), volunteer activities (positively related, especially for girls), comforting others (positively related for boys), never being distractible (negatively related for girls), and never staying out too late (negatively related for both girls and boys). In addition, boys and girls whose mothers smoke daily are more likely to indulge in sex. Attending church and never staying out too late are behaviours that are influenced by both parent and child. The important perceptual variables are "liking school" (negatively related to sexual activity for boys especially), and thinking others find you good looking (positively related for girls and boys).

Following a review of literature, an argument is developed highlighting several factors that influence the incidence of intimate sexual activity. The argument for rationality concerning sexual activity is based not only on theory and evidence. There is also support for the thesis from moralists and from anecdotal evidence. In three recent letters to Dear Abby, all of the writers made it clear that they had made a choice or decision regarding sexual activity for which the consequences were important.¹⁴

Some aspects of the decision to engage in sexual activity have been ignored in this study, some because of lack of data. Data is lacking on the kind of sex education given at school, if any, on the type of media consumed, the type of moral education received at church or school, and on whether or not the child has experienced sexual abuse. The possible influence of family type, dynamics and instability has also been ignored in this study.

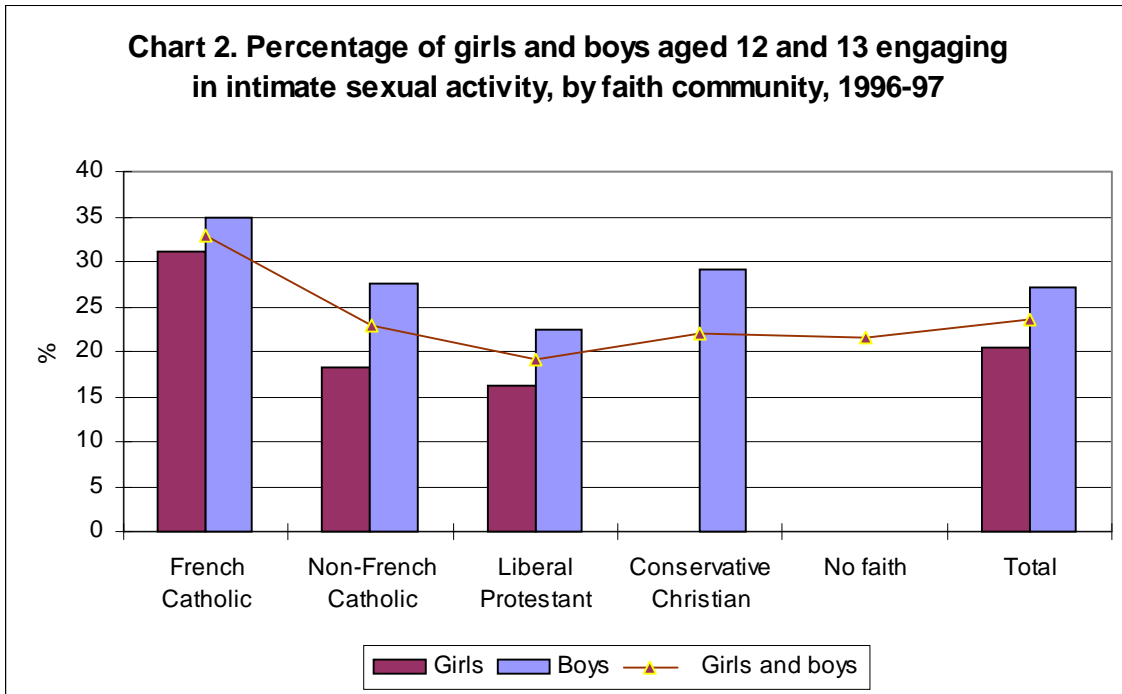


¹⁴ "Out in the Cold Up North," 14, thinks she should have sex because her friends do. I felt the same way when I was 14. ... I am now 18 and have a sexually transmitted disease I can't get rid of. When you're young you don't think an STD can happen to you, but it *can*. I live in pain every day – emotionally and physically – and I wish I could take back my decision. Annomy-miss in Helena, Montana.

... When I was 14, I had sex with someone I thought I loved. ... I regret the decision to this day. The guy told all his friends, and they all tried to have sex with me too. I have had 10 partners since then, and I am 18. ... I wish I had waited until I met my husband. I wouldn't have all the heartbreak and pain that I do now. Been There, Done That

... When I chose not to have sex until I was married, I channelled my energies into studying, working and earning an advanced degree. I cultivated many rewarding relationships with family and friends. Many nice young men were looking for nice young women – and there still are. That girl (Up North) needs new friends. There is a growing movement of teens who are committing themselves to purity before marriage. It may seem hard now – but if she will just enjoy her current status, she'll have a far happier life. Marietta, Georgia, Reader

Chart 2. Percentage of girls and boys aged 12 and 13 engaging in intimate sexual activity, by faith community, 1996-97



Notes: Intimate sexual activity is defined as either petting or sexual intercourse.
 Missing bars mean the sample is less than 30, or no data are available.
 Source: National Longitudinal Survey of Children and Youth, 1996-97

Chart 3. Percentage of girls and boys engaging in intimate sexual activity, by age*



Chart 4. Percentage of girls and boys engaging in intimate sexual activity, by whether or not they like school*

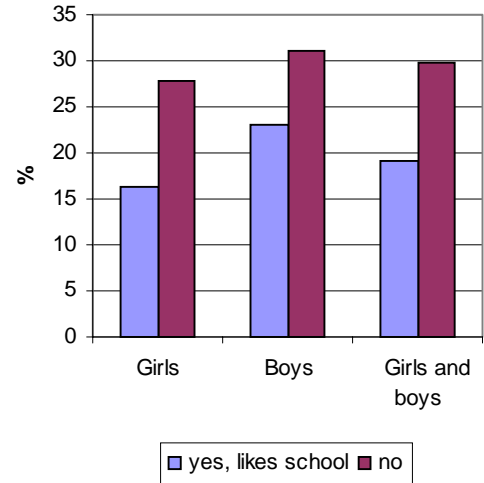


Chart 5. Percentage of girls and boys engaging in intimate sexual activity, by whether or not others think they are good looking**

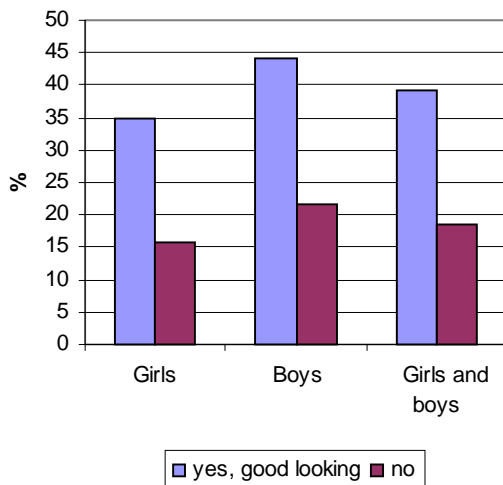
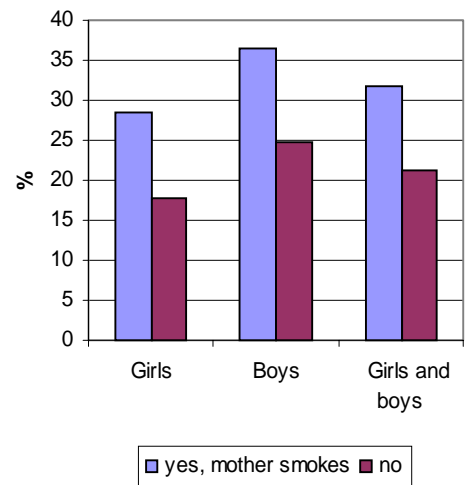


Chart 6. Percentage of girls and boys engaging in intimate sexual activity, by whether or not their mother smokes daily*



* Intimate sexual activity is defined as either petting or sexual intercourse.

** Good looking: Strongly agrees -- Other kids think I am good looking.

Table 1. Frequency of five types of sexual activity, girls and boys aged 12 and 13, 1996-97

a. Number of children	Frequency of sexual activity				Subtotal:		Total
	Never	Once	A few times	Often	At least once	Not stated	
Girls							
Hug	164,242	37,785	55,687	88,192	181,664	42,034	387,940
Kiss	192,756	28,363	56,268	62,822	147,453	47,732	387,941
Petting above the waist	268,519	21,757	25,564	21,670	68,991	50,429	387,939
Petting below the waist	293,065	13,602	17,319	12,244	43,165	51,710	387,940
Sexual intercourse	332,060	--	--	--	--	48,533	387,941
Boys							
Hug	154,856	29,720	75,921	63,466	169,107	81,220	405,183
Kiss	175,821	25,165	63,644	56,331	145,140	84,222	405,183
Petting above the waist	232,317	28,500	37,249	16,101	81,850	91,016	405,183
Petting below the waist	251,504	23,968	28,916	10,089	62,973	90,708	405,185
Sexual intercourse	304,612	--	--	--	13,930	86,642	405,184
b. Percentage of total							
Girls	Never	Once	A few times	Often	At least once	Not stated	Total
Hug	42.3	9.7	14.4	22.7	46.8	10.8	100.0
Kiss	49.7	7.3	14.5	16.2	38.0	12.3	100.0
Petting above the waist	69.2	5.6	6.6	5.6	17.8	13.0	100.0
Petting below the waist	75.5	3.5	4.5	3.2	11.1	13.3	100.0
Sexual intercourse	85.6	--	--	--	--	12.5	100.0
Boys							
Hug	38.2	7.3	18.7	15.7	41.7	20.0	100.0
Kiss	43.4	6.2	15.7	13.9	35.8	20.8	100.0
Petting above the waist	57.3	7.0	9.2	4.0	20.2	22.5	100.0
Petting below the waist	62.1	5.9	7.1	2.5	15.5	22.4	100.0
Sexual intercourse	75.2	--	--	--	3.4	21.4	100.0
c. Percentage of stated							
Girls	Never	Once	A few times	Often	At least once		Total stated
Hug	47.5	10.9	16.1	25.5	52.5		100.0
Kiss	56.7	8.3	16.5	18.5	43.3		100.0
Petting above the waist	79.6	6.4	7.6	6.4	20.4		100.0
Petting below the waist	87.2	4.0	5.2	3.6	12.8		100.0
Sexual intercourse	97.8	--	--	--	--		100.0
Boys							
Hug	47.8	9.2	23.4	19.6	52.2		100.0
Kiss	54.8	7.8	19.8	17.6	45.2		100.0
Petting above the waist	73.9	9.1	11.9	5.1	26.1		100.0
Petting below the waist	80.0	7.6	9.2	3.2	20.0		100.0
Sexual intercourse	95.6	--	--	--	4.4		100.0

-- = not available, sample less than 30 children reporting sexual intercourse

Source: National Longitudinal Survey of Children and Youth, 1996-97

Table 2. Percentage of children aged 12 and 13 engaging in intimate sexual activity, by attendance at religious services and faith community, Canada, 1995-96

	Girls	Boys	Girls and boys
Attendance			
weekly	14	25	19
monthly	19	27	23
less often	24	29	26
never	25	28	27
Faith community*			
French Catholic	31	35	33
Non-French Catholic	18	27	23
Liberal Protestant	16	23	19
Conservative Christian	--	29	22
No faith	--	--	22
Total	20	27	24

*Sample for non-Christians too small.

Note: Intimate sexual activity is defined as either petting or sexual intercourse.

-- = not available, sample less than 30 children reporting sexual intimacy

Source: *National Longitudinal Survey of Children and Youth, 1996-97*

Table 3. Percentage of children aged 12 and 13 engaging in intimate sexual activity, by selected characteristics of children and mothers, Canada, 1995-96*

	Girls	Boys	Girls and boys
Age 12	16	21	18
Age 13	25	33	29
Likes school			
yes	16	23	19
no	28	31	30
Body hair growing			
yes	24	36	29
no	--	14	13
Good looking to others			
yes	35	44	39
no	16	22	19
Volunteer			
yes	22	29	25
no	--	19	16
Parent a university graduate			
yes	--	29	20
no	23	27	25
Parent smokes daily			
yes	28	36	32
no	18	25	21
Often comforts others			
yes	21	34	25
no	21	24	23
Never distractible			
yes	17	27	22
no	25	27	26
Never stayed out late			
yes	9	14	11
no	32	34	33
Total	21	27	24

Note: Intimate sexual activity is defined as either petting or sexual intercourse.

*Refer to table 4 for definition of variables.

Source: National Longitudinal Survey of Children and Youth, 1996-97

Table 4. Mean value of variables entering intimate sexual activity regressions, girls and boys aged 12 and 13, 1995-96

	Girls	Boys
Mean: petting, intercourse index	0.92	1.10
Attends church monthly	0.46	0.39
No faith affiliation	0.15	0.16
Catholic, French	0.20	0.19
Catholic, non-French	0.23	0.25
Liberal Protestant	0.23	0.21
Non-Christian	0.15	0.14
Conservative Christian	0.03	0.03
Age 12	0.50	0.50
Body hair growing	0.70	0.51
Volunteer activities	0.81	0.73
Often comforts others	0.65	0.35
Never distractible	0.51	0.44
Never stayed out late	0.44	0.30
Likes school	0.58	0.45
Happy with life	0.85	0.84
Good looking: others	0.24	0.22
Has older siblings	0.48	0.51
University degree: parent	0.15	0.19
Parent smokes daily	0.26	0.20

Variables: kissing-hugging index = kissing + hugging indices -- each index =2 (once), 3 (a few times), 4 (often).

Petting, intercourse index: once =2, a few times=3, often=4 -- sum for petting (above; below waist), and intercourse.

Attends church monthly = 1 if child attends religious services at least monthly; 0 otherwise.

French Catholic is the reference group for the religions. Liberal Protestant includes United Church, Anglican, Presbyterian, and Lutheran. Conservative Christian includes Baptist, Pentecostal and smaller Christian faiths.

Volunteer activities = 1 if a volunteer, 0 otherwise.

Often comforts others = 1 if often true: "I comfort friend, brother, sister who is upset"; otherwise = 0.

Never distractible =1 if child never has trouble sticking to any activity; 0 otherwise.

Never stayed out late = 1 if child never stayed out longer than parent said he/she should; 0 otherwise.

Likes school = 1 if child likes school a bit, quite a bit or very much; 0 otherwise.

Happy with life: Agrees or strongly agrees -- In general I am happy with how things are in my life now.

Good looking: Strongly agrees -- "Other kids think I am good looking".

Body hair growing: Growth of body hair (underarm and public) definitely underway.

Has older siblings = 1 if child has older brothers or sisters; 0 otherwise.

University degree: parent = 1 if the person most knowledgeable of the child, usually the mother, has a university degree.

Parent smokes daily = 1 if the person most knowledgeable of the child smokes daily, 0 otherwise.

Source: National Longitudinal Survey of Children and Youth, 1996-97

Table 5. Regressions predicting the frequency of sexual activities, boys and girls aged 12 and 13, Canada, 1996-97*

<i>Kissing/hugging index</i>	Boys (n=793, r squared adjusted=0.272)			Girls (n=857, r squared adjusted=0.225)		
	B	"t" statistic	significance	B	"t" statistic	significance
Constant	3.875	9.1	0.000	5.443	12.5	0.000
Attends church monthly	-0.345	-2.0	0.041	-0.038	-0.2	0.833
No faith affiliation	-0.962	-3.9	0.000	-0.574	-2.1	0.034
Catholic, non-French	-0.511	-2.3	0.022	0.301	1.3	0.188
Liberal Protestant	-0.301	-1.3	0.186	0.187	0.8	0.415
Conservative Christian	-0.401	-1.6	0.104	-0.535	-1.9	0.052
Non-Christian	-0.301	-0.6	0.552	-0.453	-1.0	0.296
Age 12	-0.748	-4.9	0.000	-0.406	-2.6	0.011
Body hair growing	0.976	6.2	0.000	0.824	4.2	0.000
Volunteer activities	0.166	0.8	0.420	-0.586	-2.5	0.013
Often comforts others	0.661	4.3	0.000	0.091	0.5	0.591
Never distractible	0.252	1.7	0.092	-0.085	-0.5	0.592
Never stayed out late	-1.056	-6.9	0.000	-1.362	-8.5	0.000
Likes school	-0.170	-1.1	0.270	-0.597	-3.5	0.001
Happy with life	-0.016	-0.1	0.959	-0.328	-1.2	0.227
Good looking: others	1.176	6.7	0.000	0.937	5.2	0.000
Has older siblings	0.210	1.4	0.166	-0.133	-0.9	0.387
University degree: parent	0.000	0.0	0.999	-0.951	-4.5	0.000
Parent smokes daily	0.725	3.8	0.000	0.781	4.3	0.000

<i>Petting, intercourse index</i>	Boys (n=1140, r squared adjusted=0.207)			Girls (n=1116, r squared adjusted=0.183)		
	B	"t" statistic	significance	B	"t" statistic	significance
Constant	1.000	4.0	0.000	1.836	7.3	0.000
Attends church monthly	-0.251	-1.7	0.089	-0.295	-2.0	0.044
No faith affiliation	-0.650	-2.9	0.004	-1.081	-5.0	0.000
Catholic, non-French	-0.649	-3.3	0.001	-0.812	-4.3	0.000
Liberal Protestant	-0.939	-4.7	0.000	-0.936	-5.0	0.000
Conservative Christian	-0.226	-1.0	0.317	-0.545	-2.4	0.015
Non-Christian	-0.031	-0.1	0.937	-1.022	-2.8	0.006
Age 12	-0.471	-3.5	0.000	-0.363	-2.8	0.005
Body hair growing	0.887	6.2	0.000	0.795	5.3	0.000
Volunteer activities	0.358	2.0	0.044	0.485	2.7	0.007
Often comforts others	0.483	3.4	0.001	0.106	0.8	0.447
Never distractible	0.225	1.6	0.102	-0.418	-3.2	0.001
Never stayed out late	-0.760	-5.3	0.000	-0.725	-5.4	0.000
Likes school	-0.709	-5.0	0.000	-0.268	-1.9	0.059
Happy with life	0.129	0.6	0.545	-0.339	-1.7	0.082
Good looking: others	1.290	8.0	0.000	1.052	7.2	0.000
Has older siblings	-0.026	-0.2	0.842	-0.368	-3.0	0.003
University degree: parent	0.031	0.2	0.856	-0.506	-2.9	0.004
Parent smokes daily	0.615	3.7	0.000	0.113	0.8	0.437

*Refer to table 4 for definition of variables.

Table 6. Regular attendance at religious services (at least weekly or monthly) in 1994-95 by girls and boys aged 12 and 13 in 1996-1997, Canada

	Girls		total	Boys		total	Girls and boys		
	age 12	age 13		age 12	age 13		age 12	age 13	total
Regular attendees									
French Catholic	14,667	16,418	31,085	15,726	14,703	30,429	30,393	31,121	61,514
Other Catholic	26,432	19,233	45,666	31,543	23,636	55,179	57,975	42,870	100,845
Liberal Protestant	21,009	23,782	44,790	16,274	14,146	30,419	37,282	37,928	75,210
Conservative Christian	21,754	29,703	51,457	19,945	15,368	35,313	41,699	45,071	86,770
Total*	86,586	90,083	176,668	89,448	68,575	158,022	176,033	158,657	392,196
% of children									
French Catholic	37	43	40	48	33	39	42	37	40
Other Catholic	56	46	51	55	53	54	55	50	53
Liberal Protestant	48	52	50	44	29	35	46	40	43
Conservative Christian	91	91	91	67	56	62	77	75	76
Total*	45	47	46	44	34	39	45	40	43
% of total attendees									
French Catholic	17	18	18	18	21	19	17	20	16
Other Catholic	31	21	26	35	34	35	33	27	26
Liberal Protestant	24	26	25	18	21	19	21	24	19
Conservative Christian	25	33	29	22	22	22	24	28	22
Total*	100	100	100	100	100	100	100	100	100

*Total includes non-Christians and children with no religious affiliation.

Source: National Longitudinal Survey of Children and Youth, 1996-97