

Gender Differences in Factors Influencing First Intercourse Among Urban Students in Chile

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Context: While many surveys have documented trends in adolescent sexuality and fertility in Latin America, relatively few data are available that describe factors associated with the onset of sexual activity in a Latin American context.

Methods: Variables hypothesized to be associated with early sexual debut, such as family structure, parental education, academic performance, peer-group influences, use of drugs and alcohol, and attitudes toward sexuality and early parenthood, were examined through multivariate logistic regression techniques among a sample of 4,248 urban Chilean students aged 11–19.

Results: Overall, 21% of the young women and 36% of the young men had ever had sex, with the median ages of first intercourse being 15 years and 14 years, respectively. In the bivariate analyses, the father's absence from the home was significantly associated with early sexual initiation among female students but not among males; however, regardless of gender, students with more liberal attitudes toward sex, those who thought most of their peers were sexually experienced, those who rarely attended religious services, those who had ever used alcohol, tobacco or marijuana, and those with lower grade-point averages were all more likely to have ever had sex. In the final reduced model, there were few differences by gender in the attitudinal, behavioral and social relations factors that were significantly related to sexual debut, although father's presence in the home and academic achievement were still significant in the final model for young women only.

Conclusions: Enough young people initiate sexual activity in the early teenage years to warrant offering sex education sooner than is now the case. Courses might thus include specific information on contraception, as well as take into account the ways in which adolescent attitudes, risk behaviors and familial and academic environments shape choices related to sexual behavior.

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Latin American policymakers and health practitioners have become increasingly concerned about the demographic and social impact of adolescent sexuality and fertility, since increasing proportions of adolescents have engaged in premarital sex, often resulting in out-of-wedlock pregnancy.¹ In the 1980s, about half of all children born to adolescents in selected Latin American and Caribbean countries for which data are available either were born out-of-wedlock, were premaritally conceived or were born within one year of their mothers' having entered a union; in addition, since fertility has fallen among older women while age at marriage has risen, out-of-wedlock fertility among adolescents represents a growing proportion of total fertility.² The current age structure of Latin America further compounds the problem, since nearly 20%

of the population is aged 10–19.³

While few studies have been conducted on the attitudes and behaviors that influence sexual initiation among Latin American adolescents,⁴ considerable research is available on different socioeconomic and racial groups in the United States. Differences in sexual initiation by age and gender are consistent and well documented in both populations: The likelihood of first intercourse rises with age, and males have their first sexual experience substantially earlier than females.⁵

Studies have shown that socioeconomic factors are significant determinants of sexual initiation; for example, research conducted in the United States has shown that youths living in a single-parent household (usually with the father absent) are at increased risk of early initiation of sexual intercourse.⁶ Furthermore, a study conducted in Peru showed that adolescent women who did not reside with their biological mother were at greater risk than those who did of early sexual onset and early parenthood.⁷ Other structural, environmental and individual characteristics, such as religiousness, have been shown to delay first premarital intercourse in Chile, even when household structure and other

background factors are controlled for.⁸

The Young Adult Reproductive Health Surveys, sponsored by the U.S. Centers for Disease Control and Prevention and conducted in several Latin American countries, have documented trends in sexual initiation and contraceptive use.⁹ While the median age at first intercourse among 15–19-year-old women, for example, has actually increased in some Latin American countries, the age at first coitus is lower among Chilean women than among those from many other countries in the region.¹⁰

In this article, we examine Chilean data from a detailed evaluation of a sex education program in public schools in the capital, Santiago de Chile.¹¹ We analyze factors significantly associated with early sexual initiation, as documented in the U.S. and Latin American literature, among a sample of middle school and high school students from neighborhoods of low socioeconomic status in Santiago.

Data and Methods

The data come from a baseline survey used to evaluate a sex education and reproductive health services intervention program.* The intervention and the evaluation instruments were modeled on a program called the Self-Center Project, which was originally implemented in Baltimore, MD, USA, in 1981–1984.[†]

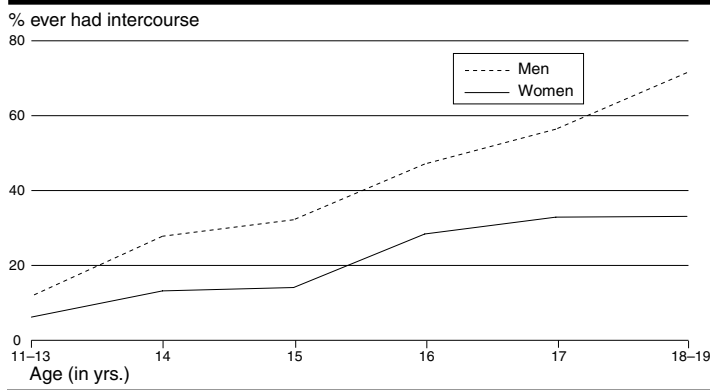
A total of 4,248 students aged 11–19 from grades seven through 12 (2,223 males and 2,025 females) completed self-administered baseline surveys in March 1994, before the project began. The response rate among students who were present on the day of the survey was 98%. All students, irrespective of their age, sex or grade, responded to identical questionnaires. The baseline surveys collected data on a variety of variables hypothesized to be associated with early intercourse—family structure, religiousness (measured by a scale denoting the num-

*The project was implemented by the Medical Center for Adolescent Reproductive Health Services (CEMERA) of the University of Chile, in coordination with the municipal board of education, and received financial support from the University of Chile and the Ford Foundation.

†For a more detailed description of the Baltimore, USA, Self-Center Project and its evaluation, see Zabin LS et al., Adolescent pregnancy-prevention program: a model for research and evaluation, *Journal of Adolescent Health Care*, 1986, 7(2):77–87.

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Figure 1. Percentage of middle school and high school students who had ever had intercourse, by age at time of interview, according to sex, Santiago, Chile, 1994



ber of times a respondent attended services monthly), academic performance (numerical grade-point average*), and participation in risk behaviors (ever having smoked tobacco, drunk beer or wine, or used marijuana).

Students also responded to items on their attitudes toward sexuality and child-bearing, including the ideal age to first have intercourse, the ideal age for having children and perceived obstacles posed by early parenthood. (The responses to this item, which were not mutually exclusive, were that early parenthood is expensive and that it creates difficulties for finishing school, for going to college, for marrying and for finding a job.)

The adolescents answered an item on the ideal circumstances under which one should first have intercourse (i.e., that a couple should be married, be engaged, be dating steadily, be dating often, be dating occasionally or have just recently met). For this item, we created a scale by coding responses from one to six, according to the relationship at which coitus was deemed acceptable, with one being the most traditional (sex is appropriate only within marriage) and six being the most liberal (sex is appro-

*The academic grading scale in Chile ranges from 1.0 to 7.0. A mark below 4.0 represents a failing grade, and students are retained in the same grade the following year if they receive a grade of 4.0 or below.

†These data for 11–19-year-olds in 1994 are fairly similar to those for 15–19-year-olds from the Santiago Young Adult Reproductive Health Survey, conducted in Santiago in 1988. For example, that survey showed that 19% of 15–19-year-old women and 48% of 15–19-year-old men had ever had sex (see: Herold JM et al., 1992, reference 10). As the school-based sample included 11–14-year-olds as well as those aged 15–19, we would expect these proportions to be somewhat lower.

‡A much lower proportion (10% of all students, male and female) said their mother was absent from the home. The mother's absence from the home was not significantly associated with age at first intercourse.

priate even when a couple has just met).

Finally, the students provided information on their current relationship, on their perception of peers' sexual experience and on how they would react if they (or their partner) were to become pregnant in the next six months. We analyzed all of these data sepa-

rately for males and females.

We first conducted bivariate analyses of the proportions who had ever had sex, by each of the characteristics. We then constructed five separate multivariate logistic regression models, each controlling for age, using the variables found to be significant in the bivariate analysis or deemed theoretically important in explaining when adolescents begin sexual activity. Then, as an intermediary step, we assembled a full multivariate model using only those variables significantly associated with first intercourse (plus the constant control for age) in the five individual models. Finally, to obtain the most parsimonious fit, we constructed a final reduced model, which included only those variables significantly associated with sexual initiation from the intermediary full model, as well as the controls for age.

Dummy variables were created to ensure that at least 95% of the sample was included in all multivariate analyses, and to test for differences between respondents who provided data and those who were "missing" on certain variables. For each variable for which more than 5% of the sample did not provide data, the missing were recoded to one, and those who answered the question were coded zero. Thus, if a dummy variable proved to be significant, respondents who were missing data on that variable differed significantly in sexual initiation from those who supplied data. By including the dummy, the main effects of the variable (e.g., among those who provided data) are given, controlling for the effects of missing data.

Findings

Fairly low proportions of the Santiago students reported ever having had sexual intercourse—21% of the young women and 36% of the young men.[†] The young

women first had sex at a median of 15.0 years, while young men first did so approximately one year earlier (median of 14.0). Figure 1 shows that, as would be expected, the proportion of male and female respondents who had ever had sex rises with time—from about 10% of males and about 5% of females aged 13 or younger, to around 70% and 35% of 18–19-year-old males and females, respectively. Interestingly, while a higher percentage of males than females in every age-group had ever had sex, the curves diverged more widely by gender from age 16 through ages 18–19, due to a leveling off in the percentage sexually experienced among females but not among males.

Bivariate Analyses

Approximately 26% of the young men and 30% of the young women reported that their father was absent from their home (Table 1); males whose father was absent were slightly more likely than those whose father was present to have started sexual activity (40% vs. 35%), but this difference was not statistically significant. Among young women, the percentage who had ever had sex was significantly higher ($p < .05$) for those whose father was absent than for those who lived with their father (28% vs. 18%).[‡]

Nearly 62% of the young women's mothers and 51% of the young men's mothers had less than a high school education (not shown); the mother's educational level was not related to adolescent sexual initiation.

For both sexes, frequency of church attendance was significantly ($p < .05$) associated with sexual initiation in the bivariate analysis: Santiago students who never went to services or did so infrequently were much more likely to have ever had sex than were those who attended services more frequently. Academic achievement was also associated with sexual initiation among both sexes, as students with a lower grade-point average were significantly ($p < .001$) more likely to have initiated sex than were those with a higher grade-point average.

Females gave a higher ideal age than males for first intercourse to occur (which is reflected in the higher actual median ages at first intercourse among the women in the sample). For example, 74% of the young women, but only 53% of the young men, thought a woman should be at least 19 years old before she has sex. For both genders, students who considered younger ages to be ideal were significantly ($p < .001$) more likely to have ever had sex.

Table 1. Percentage distribution of middle school and high school students and percentage who had ever had intercourse, all by categories of background characteristics, according to sex, Santiago, Chile, 1994

Category and characteristic	Male		Female		Category and characteristic	Male		Female		
	% dist.	% ever had sex	% dist.	% ever had sex		% dist.	% ever had sex	% dist.	% ever had sex	
STRUCTURAL/CONTEXTUAL					ATTITUDES TOWARD EARLY PARENTHOOD					
Father present	(N=2,160)		(N=1,983)		Is expensive	(N=1,996)		(N=1,943)		
Yes	74.2	35.1	70.3	17.5*	Yes	49.4	38.5	30.4	21.8	
No	25.8	39.6	29.7	27.9	No	50.6	35.8	69.6	20.0	
Attendance at religious services	(N=2,129)		(N=1,969)		Makes finishing school hard	(N=1,997)		(N=1,943)		
<monthly	51.0	41.1*	38.7	27.4*	Yes	85.5	35.6**	87.6	19.8*	
Monthly	31.4	33.7	35.2	18.4	No	14.5	46.1	12.4	25.9	
Twice monthly	2.6	26.4	4.0	16.4	Makes going to college hard	(N=1,996)		(N=1,941)		
3-4 times per month	9.1	31.1	14.5	13.6	Yes	60.0	35.8	57.4	18.0**	
≥5 times per month	6.0	19.7	7.6	11.7	No	40.0	39.1	42.6	24.0	
Grade-point average	(N=2,079)		(N=1,911)		Makes marriage hard	(N=1,996)		(N=1,942)		
1.0-3.9	23.0	42.1***	20.6	25.9***	Yes	34.6	36.4	31.7	15.9**	
4.0-5.3	27.8	40.9	29.6	23.5	No	65.4	37.5	68.3	22.6	
5.4-5.9	31.6	30.9	32.2	17.7	Makes getting a job hard	(N=1,996)		(N=1,943)		
6.0-7.0	17.6	23.0	17.6	6.0	Yes	36.3	29.2***	47.4	18.5*	
					No	63.7	41.6	52.6	22.4	
ATTITUDES TOWARD SEX					Ideal age for a woman to have a child	(N=1,437)		(N=1,703)		
Ideal age at first intercourse for a woman	(N=1,437)		(N=1,703)		≤18	4.2	43.0*	1.7	21.5	
≤16	18.6	61.2***	4.9	58.2***	19-20	20.8	28.4	14.0	24.0	
17-18	28.5	43.4	20.8	35.3	21-22	16.2	27.2	11.4	16.1	
19-20	26.9	23.6	34.1	17.4	23-24	16.5	36.6	20.4	19.3	
21-22	10.1	15.2	15.4	9.5	≥25	42.4	41.5	52.4	20.0	
≥23	15.9	20.5	24.7	7.6	Ideal age for a man to father a child	(N=1,879)		(N=1,465)		
Ideal age at first intercourse for a man	(N=1,879)		(N=1,465)		≤18	2.6	41.9*	0.7	7.1	
≤16	20.6	67.3***	6.0	52.1***	19-20	14.9	31.6	12.4	23.2	
17-18	26.8	43.8	24.5	32.3	21-22	12.7	25.8	7.7	17.3	
19-20	26.6	22.2	35.0	14.1	23-24	11.3	33.1	14.6	17.7	
21-22	8.4	15.9	11.3	13.1	≥25	58.5	40.8	64.7	21.4	
≥23	17.6	17.3	23.1	7.6	PARTICIPATION IN RISK BEHAVIORS					
Relationship in which sex is okay	(N=1,911)		(N=1,854)		Ever smoked	(N=2,084)		(N=1,941)		
Marriage only	29.5	19.2***	47.4	8.9***	Yes	63.9	47.3*	74.3	25.0*	
Engagement only	17.8	18.9	21.4	15.6	No	36.1	18.6	25.7	9.2	
Dating steadily	29.7	52.1	26.7	42.2	Ever drank	(N=2,079)		(N=1,932)		
Dating often	6.9	47.3	2.3	62.9	Yes	62.8	48.2*	58.2	28.1*	
Dating occasionally	5.6	51.5	1.0	14.5	No	37.2	17.9	41.8	11.2	
Just met	10.6	54.3	1.2	21.0	Ever used marijuana	(N=2,080)		(N=1,928)		
SOCIAL RELATIONS	(N=2,160)		(N=1,983)		Yes	19.6	74.2*	16.0	48.3*	
Currently going steady	(N=2,160)		(N=1,983)		No	80.4	27.8	84.0	15.8	
Yes	31.1	58.2*	42.1	34.2*	Total	100.0	na	100.0	na	
No	68.9	26.3	57.9	10.7						
Perception of peers' sexual experience	(N=1,416)		(N=1,552)							
All/most have had sex	28.5	76.1*	20.8	51.4*						
Some/none have had sex	71.5	31.2	79.2	15.3						
Total	100.0	na	100.0	na						

*p<.05. **p<.01. ***p<.001. Notes: na=not applicable. Ns vary because different numbers of students responded to each question. Asterisks denote statistically significant differences in the proportions who had ever had sex, by attribute.

Young women were more traditional than young men in their responses on the circumstances under which first intercourse is appropriate: Fewer women than men considered sex appropriate when partners are going steady, are dating or have just met (53% vs. 31%). Despite these overall differences by gender, both men and women were significantly ($p<.001$) more likely to have ever had sex if their responses were more liberal.

Although females were more likely than males to be going steady at the time of the

survey, the current relationship was significantly ($p<.05$) associated with the likelihood of sexual initiation among both sexes. For example, only 26% of male students who were not dating steadily had ever had sex, compared with 58% of those who were; the comparable proportions among females were 11% and 34%, respectively.

Approximately 29% of the men and 21% of the women believed that all or most of their friends had ever had sex. The perception of peers' sexual experience was significantly associated with the students'

own sexual history: Just 31% of the young men who said that few or none of their friends were sexually experienced had ever had sex, compared with 76% of those who believed that most or all of their friends had had sex. The same trend was apparent among women (i.e., 15% of those who said that none or some of their peers had had sex were sexually experienced, compared with 51% of those who said that most or all of their friends had ever had sex).

Even though 93% of the young women and 81% of the men said they would be

Table 2. Odds ratios from multivariate analyses showing likelihood of sexual initiation among middle school and high school students, by sex and whether model included individual category only or all categories, according to characteristic

Category and characteristic	Individual-category models		All categories (final reduced model)	
	Male	Female	Male	Female
Structural and contextual factors				
Age	1.63***	1.45***	1.36***	1.27***
Father present	0.87	0.60***	na	0.68**
Mother's education	1.16	1.15	na	na
Religiousness	0.89**	0.81***	na	na
Grade-point average	0.98*	0.94***	na	0.96**
Attitudes toward sex				
Age	1.58***	1.52***	na	na
Scale of appropriateness	1.26***	1.63***	1.18***	1.51***
Ideal age for first sex (woman)	1.06	0.80***	na	0.86***
Ideal age for first sex (man)	0.82***	0.98	0.90***	na
Social relations				
Age	1.53***	1.34***	na	na
Currently going steady	3.63***	3.44***	3.32***	3.24***
Believes most or all of peers have ever had sex	5.31***	4.38***	3.73***	2.42***
Attitudes toward early parenthood				
Age	1.63***	1.52***	na	na
Is expensive	1.08	1.36*	na	na
Makes finishing school hard	0.83	1.00	na	na
Makes going to college hard	0.99	0.78	na	na
Makes marriage hard	1.10	0.75*	na	na
Makes employment hard	0.65***	0.82	0.65***	na
Ideal age to have a baby (woman)	1.00	0.96	na	na
Ideal age to father a baby (man)	1.03	1.17	na	na
Happy with a pregnancy in next 6 mos.	1.13	1.72**	na	na
Participation in risk behaviors				
Age	1.41***	1.37***	na	na
Ever smoked	1.91***	1.83**	1.95***	na
Ever drank	1.52**	1.75***	na	1.48*
Ever used marijuana	3.58***	3.22***	2.40***	1.97***

* $p < .05$. ** $p < .01$. *** $p < .001$. Note: na=not applicable, because the variable lost significance in the intermediary full model and thus was never entered into the final model.

upset about a pregnancy (not shown), there were significant differences in the proportions who had ever had sex by their attitudes toward pregnancy. Among female students, 19% who said they would be upset by a pregnancy in the next six months had ever had sex, compared with 34% of those who said they would not be unhappy; although the difference was smaller among males (35% who said they would be upset by a partner's pregnancy had ever had sex, compared with 42% who said a pregnancy would be fine with them), it was still statistically significant.

No clear pattern emerged among the young women regarding the association between the ideal age (for women and men) to have children and sexual experience. Among men, however, there was a significant association between these variables, although the trend seemed to be bimodal rather than linear, since the highest proportions that were sexually active were among the respondents who gave

high school or entering college were significantly less likely than those who did not to have ever had sex. Young women who believed that early parenthood made it difficult to marry and to get a job were also significantly less likely than the others to have ever had intercourse. Among young men, the only significant differences in the proportions who had ever had intercourse were by the belief that early parenthood makes it hard to finish school and by the belief that it would make getting a job difficult.

Responses to questions on whether students had ever smoked cigarettes, drank beer or wine, or used marijuana indicated that sexual activity was significantly more likely to have occurred if respondents had ever used any of these three substances. Furthermore, among both men and women, the association between sexual behavior and substance use was more significant for alcohol use than for cigarette smoking, and even more so for drug use.

the lowest and the highest ideal ages.

In response to items on the perceived obstacles that early parenthood might present, high proportions of all respondents felt it would make it difficult for them to finish school. Only about one-third overall felt that becoming a parent while they were in high school would make it difficult to marry. Women were more likely than men to feel that parenthood would make employment harder to obtain.

The proportions of women who were sexually active differed significantly by beliefs about the effect of early parenthood on education: Women who considered parenthood an important obstacle to finishing

Individual Multivariate Models

Table 2 presents the results of the five individual multivariate logistic regressions (left-hand columns). (Each of the individual models included a control for the effects of age.) In the analysis for the effect of structural and contextual factors only, each additional year of age increased the odds of having ever had sex by relatively similar magnitudes for both males (odds ratio of 1.6) and females (1.5). More religious males and females were less likely to have ever had sex, as were those with a higher grade-point average. However, while the father's presence in the home lessened the probability of sexual initiation for women, it had no effect among young men, once other contextual variables were included in the model. Moreover, the respondent's mother's education was not significantly associated with the likelihood of first sex for either gender.

In the analysis that pooled the variables on attitudes toward sex, respondents with more liberal attitudes (i.e., higher scores on the appropriateness of sexual activity) had a significantly elevated likelihood of sexual initiation. Young women who believed that females should begin sexual activity at older ages were significantly less likely to have initiated sex themselves, but there was no association between sexual initiation and young women's perception of the ideal age for men to begin having sex. A comparable result was seen among young men (with their perception of men's ideal age to begin sexual activity having a protective effect, but their perception of the ideal age for women to begin having no significant effect). The dummy variable for missing data on ideal age at first sex for women was significant among women, meaning that women who did not supply data on this variable were significantly different from those who did.

The analysis that looked at the effects of social relations indicated that age, the type of relationship students were in at the time of the interview and whether they thought their peers were sexually active all had significant effects on the likelihood of sexual initiation: Those who were older, who were going steady or who believed that all or most of their friends were sexually active had greatly increased odds of ever having had sex. However, the dummy variables for missing data on the respondents' perception of their peers' sexual activity were statistically significant for female respondents, and nearly one-quarter of female respondents did not answer this question.

In the analysis of the combined effects

of attitudes toward pregnancy and early parenthood, the respondents' proposed ideal ages for men and women to have a child were not significantly associated with sexual initiation. Surprisingly, women who believed that early parenthood would be expensive were significantly more likely to have ever had intercourse, an association that did not appear in the bivariate analyses. Among women, the belief that becoming a parent in high school would make marriage difficult was the only attitude significant in the bivariate analysis that remained so in the individual multivariate model assessing the effect of attitudes toward early parenthood. Among men, only the perception that becoming a parent now would make obtaining a job difficult remained significantly associated with sexual initiation. Moreover, the variable denoting happiness with a pregnancy within six months significantly increased the likelihood of sexual experience only among women.

Finally, in the individual multivariate analysis that examined the effects of risk behaviors, the results were nearly identical to those from the bivariate analyses: For both males and females, ever use of tobacco, alcohol or marijuana significantly increased the odds of sexual initiation.

Intermediary and Final Models

In an intermediary full model (not shown), we combined all of the significant variables from the individual models. In this analysis, in which age was included only once, religiousness lost its significance as a predictor of early sexual initiation for both males and females in the presence of the significant variables from the other individual models. Moreover, grade-point average and drinking alcohol lost significance in determining the likelihood of first intercourse among males, while smoking was no longer a significant determinant among females. Only one attitudinal variable toward early parenthood remained significant among males (difficulty getting a job), but none of the attitudinal variables retained significance in the intermediary model among females.

As mentioned earlier, those variables that lost significance in the intermediary model were omitted from the final, reduced model. Thus, the right-hand columns in Table 2 present only the odds ratios and significance levels for this final, reduced set of variables.

•*Men.* The variables that were significant in the final reduced multivariate model among men were age, attitudes about the type of relationship in which sex is okay, the perception of the ideal age for men to initiate intercourse, their current relation-

ship, their perception of peers' sexual experience, their belief that early parenthood makes employment hard to obtain, and the risk behaviors of ever having smoked and ever having used marijuana. All of these significant variables increased the odds of having had intercourse, except for ideal age at first sex and perceiving that parenthood affects employment. Moreover, the dummy variables for missing data were significant for the ideal age for initiating sex, for the perception that early parenthood makes it difficult to get a job and for friends' sexual experience.

•*Women.* The results for women from the final reduced model indicate that two of the three significant contextual variables retained their importance in the presence of all other variables: High academic achievement and the father's presence in the home both significantly decreased the likelihood of sexual initiation among females. However, the effect of religiousness did not remain significant in the final model.

While all of the sexual attitudes and relationship variables that significantly predicted sexual initiation among women in the individual models remained significant in the final model, none of the three attitudes toward parenthood or early pregnancy continued to be significant. In addition, while ever having smoked no longer significantly predicted sexual initiation among women in the final model, the alcohol and marijuana use variables remained significant. The dummy variable for missing data was significant for the variable on the ideal age for initiating sex.

Discussion and Conclusions

Our data on Chilean students confirm many of the same factors associated with initiation of sexual intercourse in the U.S. The final reduced multidimensional model, which included a wide range of contextual, social, attitudinal and behavioral factors, captured many important elements associated with sexual initiation among young men and women.

Among the young men, however, the initial importance of the contextual variables of academic performance and religiousness was no longer significant when the four other dimensions were added. Among the young women, academic performance and the presence of the father in the home still independently affected the likelihood of sexual initiation, once the other dimensions were added.

Although the women in the sample held more conservative sexual attitudes than the men, participated less in risky behaviors and were less likely to be sexually ac-

tive, the associations between all of these factors and initiation of sexual intercourse was strikingly similar among both sexes. This held true in a social setting in which men are widely believed to hold "macho" attitudes.¹² Our findings of similar associations for men and women echo the qualitative work of Sharim and colleagues,¹³ who described a lessening of the traditionally wide breach between male and female sexuality in Latin America, with the "sentimentalization of male sexuality" and the "erotization" of female sexuality.

While our analysis did not rely on a random sample, the findings are consistent with those of representative studies of national and urban Latin American adolescents; as in those surveys, we found that lower proportions of young women than young men have ever had sex, and that women initiate sex at an older median age than do men.

Surveying young people in a school setting permitted a much more detailed analysis of factors related to sexual initiation than is usually possible in census or demographic and health surveys. Although the receipt of a full secondary education is less than universal in Latin America, substantial proportions of adolescents do attend secondary school in Chile, particularly in urban areas.* Future research with household-based adolescent samples in Latin America should explore why family environment seems to affect sexual initiation more for female adolescents than for male adolescents.

The effects of peer relationships also need to be characterized further. The survey instrument only assessed respondents' perceptions of peers' sexual experience. Thus, because the data are cross-sectional, we could not determine causality—that is, whether once students initiate sexual activity, they tend to associate with others whom they perceive to be sexually active also, or whether peers who are sexually active pressure friends to start having sex, or both. Likewise, it is impossible to assess the direction of significant associations between ideal age and first sex, and appropriate relationship circumstances and first sex (that is, whether sexual experience shapes attitudes, or whether attitudes shape sexual experience).

Shifts in adolescent sexuality reflect changes in culturally prescribed norms of

*Levels of secondary-school enrollment in Chile are the second-highest in South America, surpassed only by those in Argentina: Among Chileans of high school age, 70% of males and 75% of females, respectively, are enrolled in school. These proportions are far higher than the average for the nations of Central America (51–52%). (See: Noble J, Cover J and Yanagishita M, *La Juventud del Mundo: 1996*, wallchart, Washington, DC: Population Reference Bureau, 1996.)

family formation and pathways to adulthood, and social institutions must respond accordingly to such changes. In many Latin American countries, changes in the roles and opportunities available to women, and changes in social norms regarding the transition to adulthood—including the increasing incidence of premarital sex and of early family formation—imply that large cohorts of adolescents will exhibit new educational and health needs.

The ways in which individuals accomplish their transitions to adulthood have long-term consequences. Early initiation of sexual intercourse increases exposure to pregnancy, either prompting adolescents to marry early (with the attendant higher probabilities of separation and marital dissolution) or to become single parents, which often leads to truncated education and to economic vulnerability. Moreover, the effects of single parenthood continue in the next generation: Our data show that living with one's mother only—as defined by the variable father's absence from the home—was significantly associated with early sexual initiation among female adolescents, although not among male adolescents. Gaining an understanding of patterns in and determinants of the transition to first intercourse can help policymakers develop means of lessening the potential negative outcomes of adolescent sexual activity or of channeling behavior in more productive ways.

The fairly young age at sexual initiation among the 11–19-year-olds in our sample who had ever had intercourse presents a compelling argument for providing explicit, comprehensive sex education before the secondary-school level, especially because the most vulnerable segments of the population leave school at early ages in many countries in Latin America. Sex education and access to contraception need to be facilitated through institutions to reach those young people who are no longer in school. Sex education curricula should take into account the importance of attitudes toward sexuality (which we found to be associated with sexual initiation) and help students examine the implications of their own attitudes and behaviors.

Our finding that males' and females' sexual attitudes are significantly associated with their sexual behavior could facilitate instruction in the school setting. While school systems can hardly be expected to target students with the characteristics or attitudes shown to predict sexual initiation in our analysis, sex educators who develop curricula and professionals who work with adolescents in the

community need to recognize the potential importance of these factors.

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Resumen

Contexto: Si bien muchas encuestas han documentado las tendencias de la sexualidad y fecundidad entre adolescentes latinoamericana-

nos, se dispone de un limitado número de datos que describan los factores relacionados con el inicio de la actividad sexual en el ámbito de América Latina.

Métodos: Mediante técnicas de regresión logística de multivariantes, se examinaron algunas variables hipotéticas relacionadas con el inicio de la actividad sexual, tales como la estructura familiar, la educación de los padres, el rendimiento académico, la influencia de los pares, el uso de drogas y alcohol, y la actitud hacia la sexualidad y la paternidad o maternidad a temprana edad. Este estudio fue realizado en base a datos recogidos en una muestra de 4.248 estudiantes chilenos de zonas urbanas, de entre 11 y 19 años.

Resultados: En general, el 21% de las jóvenes y el 36% de los varones habían tenido relaciones sexuales alguna vez, y en el momento de su inicio sexual presentaban una mediana de edad de 15 y 14 años, respectivamente. Al realizarse el análisis de dos variables, la ausencia del padre del hogar estuvo significativamente relacionada con la iniciación sexual temprana de las jóvenes, pero no ocurrió lo mismo con los varones; sin embargo, se observó que tanto hombres como mujeres, eran más proclives a haber tenido relaciones sexuales aquellos que tenían actitudes más liberales con respecto al sexo, los que pensaban que la mayoría de sus pares ya tenían experiencia sexual, quienes raramente asistían a servicios religiosos, los que alguna vez habían consumido alcohol, tabaco o marihuana y quienes tenían calificaciones bajas. En el modelo final reducido, se identificaron pocas diferencias entre un género y otro con respecto a los actitudes, comportamientos y relaciones sociales que estuvieron significativamente asociados con la iniciación sexual, aunque la presencia del padre en el hogar y los logros académicos continuaron siendo factores significativos en el modelo final únicamente entre las jóvenes.

Conclusiones: Es suficiente el número de jóvenes que inician su actividad sexual en forma precoz como para que se justifique la realización de cursos de educación sexual en forma más temprana. En consecuencia, los cursos pueden incluir información específica sobre la anticoncepción y tomar en cuenta que influyen en la conducta sexual adolescente las actitudes, los comportamientos de riesgo y el entorno familiar y escolar.

Résumé

Contexte: Face à l'abondance des études documentant les tendances de la sexualité et de la fécondité adolescente en Amérique latine, il existe relativement peu de données décrivant les facteurs associés à l'éveil de l'activité sexuelle dans un contexte latino-américain.

Méthodes: Des variables supposées liées à

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Gender Differences...

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une activité sexuelle précoce (structure familiale, éducation parentale, résultats scolaires, influences exercées par l'entourage, drogues et alcool, et attitudes vis-à-vis de la sexualité et la parenté à un jeune âge) ont été examinées par l'intermédiaire de techniques de régression logistique à variables multiples sur un échantillon composé de 4.248 élèves et étudiants chiliens âgés de 11 à 19 ans.

Résultats: Dans l'ensemble, 21% des jeunes femmes et 36% des jeunes hommes avaient déjà eu des rapports sexuels, les premiers étant survenus à l'âge médian de 15 et 14 ans, respectivement. Dans les analyses à deux vari-

ables, l'absence du père au foyer a révélé une nette association avec l'activité sexuelle précoce des écolières mais pas de leurs homologues de sexe masculin. Indépendamment du sexe, toutefois, les élèves et étudiants dont les attitudes à l'égard des questions sexuelles étaient plus libérales, qui pensaient que la plupart de leurs camarades de classe possédaient une expérience sexuelle, qui assistaient rarement à des services religieux, qui avaient jamais consommé d'alcool, de tabac ou de marijuana et dont les résultats scolaires étaient les moins bons, étaient tous plus susceptibles d'avoir déjà eu des relations sexuelles. Dans le modèle final réduit, peu de différences se sont révélées entre les deux sexes dans les facteurs de perception, de comportement et de relations sociales sig-

nificativement liés aux premiers rapports sexuels, bien que la présence du père au foyer et la réussite scolaire aient conservés leur importance significative dans le modèle final des jeunes femmes seulement.

Conclusions: Un nombre suffisant de jeunes gens deviennent sexuellement actifs dès les premières années de l'adolescence pour justifier l'organisation d'une éducation sexuelle plus tôt qu'elle ne l'est actuellement. Les programmes proposés pourraient inclure une information spécifique sur la contraception et tenir compte des influences des perceptions que se font les adolescents, de leurs comportements à l'égard du risque et de leur cadre familial et scolaire sur leurs choix en matière de comportement sexuel.