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Premarital Sexual Behavior Among Chinese College Students in the United States

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Little is known about sexuality among Chinese in the U.S. There are reasons to believe that their sexual attitudes and behaviors would differ from those of Chinese in Asia as well as other groups in the U.S. This survey of ethnic Chinese college students in the U.S. examined the permissiveness of their attitudes toward premarital sex and their premarital sexual behavior with an eye toward their levels of acculturation. Over 60% approved of premarital sexual intercourse when the partners were in love or engaged. There was no significant gender difference in sexual permissiveness. Most of the men and women had engaged in kissing, necking, and petting, but most had not engaged in sexual intercourse. Gender differences were found in sexual experience: Chinese men were less experienced than Chinese women. Sexual permissiveness and experience were related to level of acculturation. Those who dated only Caucasians were more sexually experienced than those who dated only Chinese. Results are discussed in terms of differences in sexual attitudes and behaviors between Caucasian Americans and Chinese Americans and in terms of acculturation.

KEY WORDS: Chinese American; sexual attitudes; behaviors; acculturation.

INTRODUCTION

Many observers have indicated that American society now holds accepting attitudes towards adolescent premarital sexual activity (DeLamater and MacCorquodale, 1979; Zelnick and Kantner, 1980.) An estimated 85%

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of U.S. college students engage in premarital sex (De Buono *et al.*, 1990). However, youth in Asia are not nearly as sexually permissive or sexually active as youth in the U.S. For example, a study by the Family Planning Association of Hong Kong (1987) found that, in a community sample of 18- to 27-year-olds, only 27% of men and 19% of women had engaged in premarital sex. In a more recent study, Chan (1990) found that only 6% of Chinese men and 4% of Chinese women in a sample of undergraduate medical students in Hong Kong had ever had premarital sex. In that same study, Chinese students reported relatively more conservative attitudes towards premarital sex compared to Caucasian Americans. Very little is known about the sexual attitudes and behaviors of ethnic Chinese in the U.S. They have been subject to both Chinese and American mores.

Findings based on Chinese in Asia may not be generalizable to ethnic Chinese living in the U.S. While many Chinese living in the U.S. have been taught Chinese cultural values, they are also influenced by forces pushing them to acculturate to mainstream American ways. With acculturation comes the adoption of beliefs and social affiliations reflecting the group to which one is becoming acculturated. Those beliefs and affiliations would include attitudes toward sex and sexual behaviors. This suggests that the sexual attitudes and behaviors of Chinese in the U.S. would not simply reflect the sexual attitudes and behaviors of Chinese in Asia because the two groups are acculturating to different standards. That Chinese culture sends divergent signals concerning sexuality (Ng and Lau, 1990) may make the Chinese in America particularly open to American attitudes toward sexuality.

One might expect the Chinese in the U.S. to have sexual attitudes and behaviors that reflect their level of acculturation to American life. Yet, there is little empirical evidence supporting or refuting this expectation. There has been only one empirical study of sexuality which included Chinese in America, but Sue's (1982) small sample, taken from members of a sexuality class, did not differentiate Chinese from other Asian-American respondents.

Documentation of prevailing premarital sexual attitudes and behaviors from a variety of ethnic groups is needed for normative comparisons and for educational programming. Insofar as ethnic cultural values affect premarital sexual attitudes and behaviors, members of ethnic subcultures should demonstrate unique patterns of sexual attitudes and behaviors. Without examining group differences, views of sexual attitudes and behaviors in the U.S. are oversimplified. Yet, with the exception of comparisons between blacks and Caucasians, scant attention has been paid to ethnic differences in premarital sexual attitudes and behaviors.

This study was designed to (i) provide baseline data on attitudes toward premarital sex and premarital sexual experiences among ethnic Chi-

nese college students in America, (ii) examine the relationship between acculturation to American life and both sexual permissiveness and sexual experience, and (iii) look at the relationship between sexual experience and experiences in interracial dating.

METHOD

Subjects

Survey questionnaires were mailed to 500 students of Chinese ancestry, 332 men and 168 women, attending the University of California, Berkeley. The data, obtained in 1982 before the acquired immune deficiency syndrome (AIDS) crisis, are not considered obsolete. In spite of widespread education inveighing college students to be cautious with regard to premarital sex, findings based on a 14-year study over 700 college women have found no change in sexual behavior between 1975 and 1989 (De Buono *et al.*, 1990). After excluding questionnaires completed by homosexuals and married people, there were 114 respondents (63 women and 51 men).

The response rate of 30%, which is somewhat lower than the usual 40-50% reported for mail surveys (Kerlinger, 1986), probably resulted from a combination of factors. In particular, cost limitations which restricted the study to a single mailing of questionnaires with no postcard reminders and with no return-mail stamps appear to have reduced the response rate. However, there is evidence that the sample was valid: This sample appears to reflect the Chinese population nationally in the U.S. in terms of income (U.S. Department of Commerce, 1989), widely disparate amounts of time spent in the U.S., and gender distribution (U.S. Department of Commerce, 1988). Nonetheless, the limited response rate does limit the degree of generalization of the findings.

Respondents ranged in age from 18 to 31 (85% were between 18 and 21) with a mean age of 20 for both men and women. More than half (58.7%) of the female respondents compared to a third (33.3%) of the men were involved in "relationships" when they responded to the questionnaires.

Data Collection Procedure

The sample was randomly selected (every third name) from a list of all self-identified Chinese students who had approved public access to their names and addresses while attending the University of California at Ber-

key. Questionnaires and explanatory cover letters were sent to the resulting 500 students of Chinese ancestry.

Measures

The questionnaire included (i) questions seeking demographic information, (ii) Marmot's Acculturation Index (1975), (iii) Reiss' Premarital Sexual Permissiveness Scale (1964), and (iv) Verner and Stewart's (1974) Levels of Sexuality items.

Acculturation Index

Acculturation was measured using Marmot's Acculturation Index (1975). Marmot's original questionnaire was designed to test levels of acculturation among Japanese Americans but was adapted for Chinese in America by rewording questions to refer to Chinese rather than Japanese where necessary. The index assumes that acculturation is a nonlinear, multidimensional process and included five subindices to measure five a priori conceptual components of acculturation: (i) culture of upbringing, (ii) social-structural assimilation, (iii) cultural assimilation, (iv) social attitudes, and (v) cultural attitudes. Marmot reported validation with empirical clusters corresponding with the a priori indices and findings demonstrating construct validity.

Culture of Upbringing Index. This index, consisting of six items, was intended to measure the extent of the respondent's exposure to Chinese culture. It included questions regarding the number of years spent in Hong Kong, China, or Taiwan, where the respondent was educated, religion, whether the respondent had ever resided in a Chinatown, and ethnicity of friends while growing up.

Social-Structural Assimilation Index. This index was not included because it was deemed inapplicable for the student sample. In addition, Marmot (1975) reported that a cluster analysis found that the a priori variables were not well clustered empirically on this index only.

Cultural Assimilation Index. This measure, consisting of four items, was designed to be an index of behavioral, cultural assimilation. It included questions such as the respondent's ability to speak and read Chinese and whether the respondent spoke primarily Chinese with family and friends.

Social Attitudes Index. This indicator, consisting of eight items, was used to measure the degree to which respondents held normative Chinese beliefs concerning social relations. Respondents noted on a 4-point scale the degree to which they agreed or disagreed with statements such as the

following: "Socially, I feel less at ease with Caucasians than with Chinese Americans," "It is better for Chinese Americans to date only Chinese Americans," and "Chinese Americans should not disagree among themselves if there are Caucasians present."

Cultural Attitudes Index. This index, consisting of 12 items, was used to measure the degree to which respondents ascribed to Chinese cultural norms. Again, respondents noted on a 4-point scale the degree to which they agreed or disagreed with each statement presented. This measure included statements concerning such issues as whether they have strong feelings of attachment toward China, Taiwan, and Hong Kong, whether it is all right for Chinese Americans to become Americanized as long as they retain part of their culture, whether Chinese American parents need to promote the preservation of Chinese cultural heritage to their children, and whether they identify themselves first as Americans and secondarily as Chinese.

An overall acculturation score was obtained by following three steps: (i) each item was given a score of 1 or 3, based on whether the answer was, according to well-established criteria, nontraditional or traditional, (ii) items were summed to obtain subindex values (missing data were adjusted for by weighting the sum and averaging across items), and (iii) z scores for each subindex were summed to obtain the overall acculturation score.

Premarital Sexual Permissiveness Scale

Attitudes toward sex were measured using Reiss' (1964) Premarital Sexual Permissiveness Scale, a measure widely used in other studies of premarital sex. This Guttman scaled index measured attitudes toward broad categories of premarital sexual behaviors. Although it does not include a refined measurement of some approaches to sexual engagement (e.g., pursuit of orgasm), its broad categories were appropriate for the purposes of this study. The measure consisted of 12 statements regarding three premarital sexual behaviors (i.e., kissing, petting, and intercourse) in the context of varying degrees of emotional involvement (i.e., no particular affection, strong affection, in love, and engaged to be married). Respondents indicated whether they approved or disapproved of these sexual behaviors by men and by women in the different socioemotional contexts. Reiss (1964) reported over a .90 coefficient of reproducibility for this widely used scale with established reliability and validity (Hampe and Ruppel, 1974).

	1	2	3
	.709 ^a	—	—
	.360 ^a	.250 ^a	—
	.362 ^a	.416 ^a	.510 ^a

The amount of presexual and coital experience was measured using Verner and Stewart's (1974) Levels of Sexuality items. On a 5-point scale ranging from *never* to *very frequently*, respondents indicated the frequency with which they had ever engaged with a member of the opposite sex in what the index assumes to be a hierarchy of intimacy: Level I, holding hands; Level II, holding an arm around a partner or having a partner hold an arm around the respondent; Level III, kissing; Level IV, necking (i.e., deep kissing from shoulders and above); Level V, light petting (i.e., feeling the partner above the waist); Level VI, heavy petting (i.e., touching the partner below the waist); and Level VII, coitus. Scores were later reduced to either "had experienced" or "had not experienced" and a score for level of experience was derived. Respondents were also asked their age at first coital experience. Finally, they were asked the ethnicity of the majority of their dates and the amount of sexual experience they had with people of different ethnic groups.

RESULTS

Acculturation

Most respondents (78.7% of the men and 87.3% of the women) grew up in predominantly non-Chinese neighborhoods and had mostly non-Chinese friends while growing up. More than half (59.1%) were born in the U.S., 19.9% were born in Hong Kong, and 15.3% were born in Taiwan.

The four subindices of Marmot's (1975) Acculturation Index were highly intercorrelated, with the exception of cultural assimilation and social attitudes (see Table 1). There were positive interrelationships among cultural attitudes, social attitudes, cultural activities, and culture of upbringing. This supports the construct validity of the measures.

Table II. Approval of Petting and Full Sexual Relations for Women and Males by Stage of Relationship

Behavior	% approving of sexual behavior for women		% approving of sexual behavior for men	
	Women (n = 63)	Men (n = 47)	Women (n = 62)	Men (n = 48)
Petting				
When engaged	90	82	95	84
In love	90	80	90	84
Strong affection	84	75	87	80
No affection	30	39	33	33
Sexual Intercourse				
When engaged	63	63	68	66
In love	62	63	62	66
Strong affection	55	59	55	63
No affection	19	20	21	28

Gender Differences in Acculturation

There were no significant gender differences on the Acculturation Index.

Premarital Sexual Permissiveness

Permissiveness toward different sexual activities seemed to depend on the degree of emotional intimacy between the partners. Over 80% of the respondents approved of petting when in love or engaged to be married while closer to only one third approved of petting when there was no affection between partners. Over 60% approved of sexual intercourse when the partners were in love or engaged to be married while fewer than 30% approved of it when the partners felt no affection for each other. One third of the sample did not approve of premarital sex under any condition (see Table II). Kissing was uniformly approved of across all situations and therefore not included in Table II.

Gender Differences in Sexual Permissiveness

Men and women did not differ significantly in their levels of sexual permissiveness.

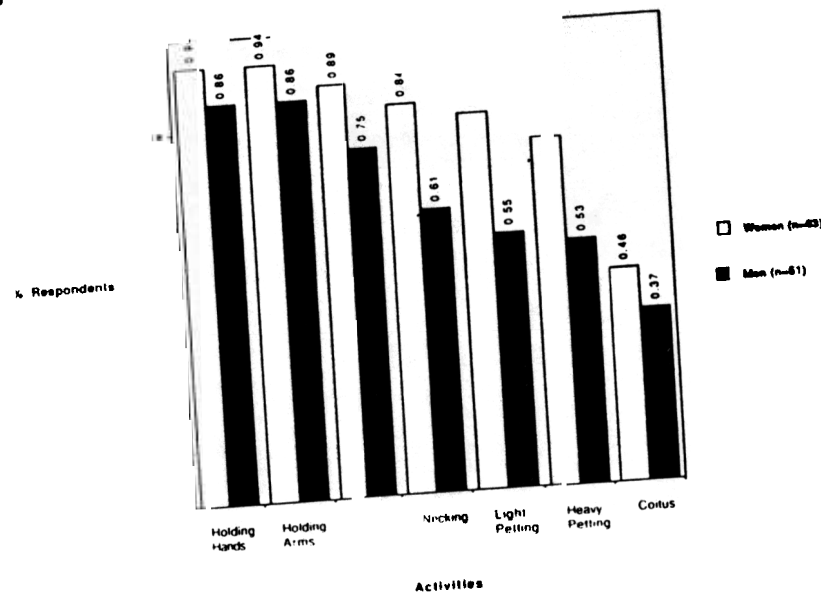


Fig. 1. Presexual and sexual behaviors by gender.

Acculturation and Sexual Permissiveness

Acculturation was positively related to level of sexual permissiveness ($r = .20, p < 0.01, n = 114$). However, the number of years residing in the U.S. was not significantly related to permissiveness.

Presexual and Sexual Behaviors

Most of the respondents had engaged in presexual behaviors ranging from holding hands to heavy petting (see Fig. 1). About 40% had experienced coitus. By age 19, 33.3% of the women had coitus. By age 18, only 19.6% of the men had experienced coitus.

Sexual Permissiveness and Sexual Behavior

There was a positive relationship between sexually permissive attitudes and level of sexual experience ($r = .48, p < .001, n = 114$). However, more respondents approved of premarital intercourse (see Table II) than had actually experienced it. Moreover, a chi-square analysis found that

among those respondents who had experienced intercourse, sexual permissiveness did not appear to differentiate the age at which the respondent had his/her first sexual intercourse or the number of partners that respondents reportedly had.

Gender Differences in Sexual Experience

Women differed from men in their experience in kissing, $\chi^2(4) = 16.77, p = 0.002$, necking, $\chi^2(4) = 9.62, p = 0.04$, and light petting, $\chi^2(4) = 10.30, p = 0.04$. In all instances, women reported more experience than men. The gender difference in heavy petting approached but did not reach significance, $\chi^2(4) = 9.21, p = 0.06$, and the difference in coitus did not reach significance, $\chi^2(4) = 7.48, p = 0.11$ (see Fig. 1).

By the age of 21, 43% of the female respondents and 33% of the men had experienced coitus. There was no significant gender difference in mean age at the first coital experience. The mean age for first coitus was 18.5 years for men and 18.8 years for women.

Acculturation and Sexual Behavior

There was a positive Pearson correlation between having experienced premarital sexual intercourse and level of acculturation ($r = .24, p < 0.004, n = 48$). There was a negative relationship between acculturation and age at first coital experience [$r(1, 48) = -.49, p < 0.0001; n = 48$], but no significant association between acculturation and sexual experience.

To examine further the relationship between sexual experience and social assimilation, consideration was given to whether the amount of sexual experience was related to the ethnicity of dating partners. Indeed, there were differences in sexual activity related to the ethnicity of the people the respondent usually dated (see Table III).

Table III shows that those dating only Caucasians consistently had more sexual experience than those who dated only Chinese. Those who had dated primarily Caucasians were more likely to have experienced kissing, necking, petting, and coitus than were either other group of respondents. Among those who dated only Caucasians, it appeared that many drew the line at coitus: Whereas 87.5% had engaged in heavy petting, there was a drop to 62.5% experiencing coitus. Among those who had dated only Chinese, it appeared that the line was drawn at heavy petting: Whereas 69.0% had experienced light petting, there was a drop to only 34.5% experiencing heavy petting. As another indication of the relative sexual conservativeness of those who dated only Chinese, the percentage of those

who dated only Chinese and had held hands was almost the same as the percentage of those who dated only Caucasians and who had been involved in heavy petting.

DISCUSSION

Sexual Permissiveness

The respondents generally felt positively toward premarital sex: Over 60% approved of premarital sexual intercourse when the partners are in love or engaged to be married. The more acculturated the respondent, the more permissive the respondent tended to be. That permissiveness was not correlated with the number of years of residence in the U.S. suggests that mere exposure to a relatively sexually permissive environment (i.e., being in the U.S. and in particular being at the University of California at Berkeley, which is known for its socially liberal attitudes and actions) does not appear to be sufficient to lead to sexual attitudes congruent with that sexually permissive environment. The shaping of sexual attitudes appears to depend on more than simply living within a permissive culture.

Although Chan (1990) found no link between sexual permissiveness and sexual experience among Hong Kong Chinese, in this study of Chinese in the U.S., permissiveness was positively correlated with level of sexual experience. As with studies of Caucasians (Christensen and Gregg, 1970; Robinson and Jedlicka, 1982), more Chinese respondents approved of premarital sex than had experienced it. None of the incongruence between sexual activity and disapproval of premarital sex that was reported by Sue (1982) and Abramson and Imai-Marquez (1982) appeared in this sample.

Sexual Experience

Whereas some authors (e.g., Chun-Hoon, 1971; Hsu, 1970; Sidel, 1973) have maintained that sexuality is part of the Chinese way of life, the data here indicate that this is not true of Chinese in America. Most of the respondents had held hands with, held an arm around someone of the opposite sex, kissed, necked, and petted.

The levels of sexual experience reported by this sample differ greatly from those reported by studies of non-Chinese-Americans. The number (40%) of Chinese college students who have engaged in premarital intercourse is much lower than the number (73-83%) of Caucasian students who have done so (Bauman and Wilson, 1974; Murstein and Holden, 1979.) In

Chinese-American Sex

Table III. Sexual Experience and Ethnicity of Dates

Sexual experience	Chinese only (n = 29)	Asians and Asian- Americans (n = 31)	Caucasian only (n = 32)
Holding hands	89.7	100	93.8
Holding arm around	82.8	96.8	96.9
Kissing	72.4	93.2	93.8
Necking	72.4	67.7	93.8
Light petting	69.0	61.2	87.5
Heavy petting	34.5	51.6	87.5
Coitus	34.5	35.5	62.5

addition, Chinese women and men were older when they first engaged in sexual intercourse, compared to Caucasian and African-American college students: The mean age for first experiencing coitus was 18.45 and 18.84 years for Chinese women and men, respectively, whereas the mean age has been reported to be 17.69 and 16.93 years for Caucasian women and men, respectively (Murstein and Holden, 1979), and 16.2 years for African-American women (Wyatt, 1989.) By age 19, only 33.3% of Chinese women in this study had experienced coitus compared to between 63.2% and 66.7% of Caucasian women (U.S. Department of Commerce, 1987; Zelnick *et al.*, 1979). Similarly, whereas only 19.6% of the Chinese men had experienced coitus by age 18, more than half of the men in a primarily Caucasian sample had experienced coitus by that age (Murstein and Holden, 1979).

The affirmative attitudes toward premarital sex in this sample of Chinese college students indicate that they do not avoid premarital sex because they find it not permissible. Instead, we speculate that other factors account for this apparent difference between Chinese and non-Chinese American college students' sexual experiences. First, Chinese students may put off physical intimacy longer than their Caucasian counterparts because they want to feel more certain that there is adequate emotional commitment. (The evidence suggests that Chinese students heavily weigh the amount of emotional commitment in deciding what sexual activity is permissible.)

Second, body image may influence a student's willingness to engage in physical intimacy. For example, Young (1980) found that there is a correlation between positive body image and premarital intercourse. Other research (Arkoff and Weaver, 1966) has found that some Asian Americans, particularly women, have less positive body images than do their Caucasian counterparts. It may be that the less positive body images of some Asian Americans cause them to be more sexually modest than their Caucasian counterparts.

Third, the higher mean age at first coitus among Chinese may be the result of fewer opportunities to have sexual relations due to a lack of social

acculturation. Those who dated Caucasians were more sexually experienced than those who dated Chinese. Since Caucasians are more likely to be sexually active, it may be that those Chinese who date Caucasians are under more pressure to have sexual intercourse than those who date other Chinese. (Alternatively, it may be that those who are more acculturated are more likely to have mainstream American attitudes toward sex and are also more likely to date Caucasians.)

The Chinese men were less experienced than the women in presexual behaviors ranging from kissing to petting. This pattern differs from that in most other populations in which men have more or equal amounts of sexual experience compared to women (e.g., Barrett, 1980; Stimson *et al.*, 1980). Weiss (1970) suggested that Chinese women are more sexually experienced than Chinese men because the men are preoccupied with heavy schoolwork loads, engaged in after-school employment, and under paternal pressure to achieve in the family's name. As a result, Weiss reasoned, Chinese men are too busy to date or to develop intimate sexual relationships. Indeed, in this study more women than men were involved in relationships, and therefore presumably had more opportunities and/or reasons for sexual intimacy.

Studies of Chinese in Asia reveal the same gender difference found in mainstream American populations: Men were more experienced than women (Chan, 1990; Family Planning Association of Hong Kong, 1987.) Since there is no reason to expect that Chinese men in Asia are any less hard-working than their counterparts in America, these writers suspect that the American social context, not the nature of Chinese men, has influenced the sexual experiences of Chinese men in the U.S. Other researchers (e.g., Sue and Morishima, 1982) have taken a similar societal view of the atypical disparity in sexual experience between Chinese men and women. It appears plausible that the American stereotypes of Chinese men as "nerdy" and socially inept have made them seem undesirable as dating partners whereas the "positive" stereotypes of Chinese women as man-pleasing, sexy "Suzie Wongs" have made them comparatively attractive as dating partners. As a result, Chinese women in the U.S. would have more dates and more opportunities for sexual experience than would Chinese men. Since these stereotypes do not prevail in Asia, the sociocultural context does not impede Chinese men's experiences in the same manner.

Implications

The differences between the Chinese in this sample and Caucasians in other studies illustrate the necessity of including ethnic populations in future research of adolescent sexuality. To base normative standards for

Americans without separate attention to ethnic subgroups would produce inaccurate generalizations. The development of theories of premarital sexual behavior will not be complete without the inclusion of a wide variety of populations. In particular, the unique pattern of Chinese men being less sexually experienced than Chinese women invites inquiry.

Much of the evidence presented here supports the notion that sexual attitudes and behaviors vary with the amount of acculturation. This suggests a need for further research to study not simply ethnic differences in sexual attitudes and behaviors but also the role of cultural differences.

As with any study of sexual attitudes and behaviors, certain cautions must be noted. First, the generalizability of results may be limited because the subject of sexuality is so personal. Respondents may not have been completely forthcoming. Less acculturated respondents may be more modest or uncomfortable about answering such personal questions than the more acculturated and this might affect their responses (Marmot, 1975). Second, there may be differences in what are perceived to be socially desirable responses and in the amount of pressure felt to provide socially desirable responses. Third, the measurement of sexual permissiveness asked about the respondent's attitudes toward sexual behavior of men and women in general. These abstract attitudes may differ from the respondent's attitudes toward his/her own sexual behavior.

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Secular Trends and Sociodemographic Regularities of Coital Debut Age in Norway

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Gender and birth cohort differences and the influence of social background variables on the coital debut age were investigated in the general population of Norway. The data derive from a 1987 questionnaire on sexual behavior mailed to a random sample of 10,000 Norwegians of both sexes, ages 18 through 60; 63% responded to the questionnaire. 94.5% reported that they had experienced intercourse. The median coital debut age was 18.2 years. There were both cohort and gender differences. Younger cohorts have lower coital debut ages, and women younger than 35 years experienced their first intercourse at an earlier age than men in the same age group. When each independent variable was analyzed separately, there were substantial differences between educational levels and social classes with respect to age of coital debut. Multivariate analysis of six separate cohorts revealed independent effects of gender in the two youngest cohorts, whereas educational level had significant independent effects in all but the oldest cohort. Social class did not reveal any independent effect on coital debut age. Population density of the place of residence of the respondents was not substantially related to age of coital debut. Seen together, the independent variables explain about 13% of the variance in coital debut age (by multiple regression).

KEY WORDS: coital debut; cohort differences; gender differences; sociodemographic variables.

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