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# Attitude Towards Premarital Sex among Rural College Youth in Maharashtra, India

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**Abstract** Little is known about the risky sexual behaviour, misconceptions and attitudes regarding sexuality and sexual health among rural youth in India. In order to understand these aspects, quantitative data were collected among 1,500 rural college students (800 male and 700 female) in the age group 15-24 years in the Thane district of Maharashtra, India, during 2004. Analysis of variance and regression analysis were performed using the total mean score of attitude towards sexuality as the dependent variable to determine the association and relationship, respectively, with background and familial characteristics. The results clearly showed that the majority of the students in the study expressed conservative attitudes towards premarital sexuality. Many students not only disagreed with casual sex but also considered it immoral. Gender bias i.e. permitting premarital sex for males and not for females, was reflected in their attitudes to some extent. Mean score indicated that male students had higher mean scores compared with their female counterparts and senior students compared with junior students, indicating more liberal attitudes towards sexuality. Bivariate analysis showed positive association between age; peer interaction; erotic exposure; habits of gutaka, tobacco, smoking and alcohol consumption; and knowledge about reproductive health issues with attitudes towards various sexuality issues. Multivariate analysis showed that female students studying in the commerce and science faculties were more liberal in attitude towards sexuality when compared with female students from the arts faculty. Male students with high erotic exposure (odds ratio 2.3); habits of gutaka, tobacco, smoking and alcohol consumption (odds ratio 2.7); and high peer interaction (odds ratio 2.3) had higher attitudinal scores indicated more liberal attitudes. Overall, the majority of the students expressed conservative attitudes towards premarital sex. The programme on sexuality education and responsibility for in-school

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adolescents should be launched early in secondary schools/college at an early stage of the perception process and formulation of attitudes towards sexuality. This would provide students with more scientific information and deter them from gathering incomplete information through sources such as pornography and peers.

Keywords Rural India · College youth · Sexuality attitude

#### Introduction

Attitudes play an important role in determining a person's behaviour. The relationship between sexual attitudes and behaviour is a vital linkage for young people to decide whether to engage in premarital sex. Strong evidence shows that adolescents with more liberal attitudes toward sexuality are more likely to experience premarital sex (Rakesh 1992). Among the various definitions of attitude, Shaw and Wright (1967) opined that attitude entails an existing predisposition to respond to social objects, which in interactions with situational and other dispositional variables, guides and directs the overt behaviour of the individual.

Males have been found to be more likely to engage in premarital sex and to have more positive attitudes towards premarital sex than do females (Carrol et al. 1985; Hendrick et al. 1985; Cernada et al. 1986; Alexander et al. 1989; Rangaiyan 1996; Abraham 2001). Also, it is widely argued that young people living in urban areas have a more liberal attitude towards sexuality and are more likely to engage in sexual premarital intercourse than are their counterparts living in rural areas (Promote et al. 1987; Orubuloye et al. 1991). This may be because the former have more life advantages and greater opportunity to be exposed to mass media related to sexuality issues.

However, due to the influence of socioeconomic development, the sexual attitude of adolescents has become more open and independent from the ties of traditional, cultural and sexual behaviour norms. In Indian society, sexual relations are regulated through the institution of marriage, and hence premarital sex is disapproved of and discouraged, whereas the virtue of virginity is upheld. Social and religious sanctions against premarital sex have traditionally been strong deterrents to its practice. Yet, exposure to Western ways of life and sexual conduct could have an influence on one's attitudes and behaviour. The Family Planning Association of India has conducted two multicentric surveys among males and females aged 15-29 years (in 1990 and 1993) in 13 and 16 cities, respectively (FPAI 1990; Watsa 1993). While not entirely comparable, the results of these surveys suggest that attitudes towards sexuality have changed to some extent over time. In 1990, for example two thirds of all males and 87% of all females surveyed disapproved of sexual relations. In contrast, the 1993 survey suggested that this proportion has declined, especially among males. There was little change in attitude about the importance of virginity. In both surveys, about half the males and females considered it imperative that a female should remain a virgin before marriage (cited in Rangaiyan 1996). The Operations Research Group (1989) reported that about half the male students approved of kissing and necking with girls. About 30% felt that

there is nothing wrong with visiting a prostitute or having a casual fling outside of marriage. More than half of the male students were ready to marry a girl who had had earlier sexual experience, and an equal number approved of the concept of living together. The majority of students agreed with the statement that an "unmarried couple should not have sexual intercourse", but what is quite unexpected that one quarter of these students agreed with the statement that "I believe in getting sexual pleasure where and when I get it". It is obvious from the responses to all the statements that males were more liberal than the females.

Reddy et al. (1993) stated that the views of the students who responded to the questionnaire regarding sexuality education and open discussion of sex were quite liberal. For example, 76% of male students and 60% of female students were in favour of introduction of sexuality education in schools and colleges. However, Rakesh (1992) found that more than 80% of college females in Delhi were against premarital sexual activity. About half of them did not involve in any sexual fantasy. More than two thirds of them admitted to having sexual desire but thought that it must be kept under control. Only one third expressed a desire for sex sometimes.

A similar study of 17,185 unmarried adolescents aged 14–17 from 251 schools in Uttar Pradesh, Rajasthan, Haryana and Delhi, India, (Family Planning Foundation 1992) reported that three in four respondents disapproved of premarital sex, i.e. 87% of females and 72% of males. College students reported liberal attitudes to premarital sex; even a majority of those who had not become sexually active approved of premarital sex (Goparaju 1993). The more permissive the attitudes, the more likely that premarital sexual activity will occur earlier.

Overall, these studies suggest a large extent of conservatism continues. There is a wide gap between the attitudes of males and females towards premarital sex and related issues. However, some change in the attitude towards relationships with the opposite sex has been noted, particularly among females in recent years.

#### Objectives

The study was undertaken primarily to understand the nature and extent of sexuality attitudes among unmarried rural college youth and to examine the relationship between background characteristics and knowledge towards various reproductive health issues.

#### **Background of the Study Area**

Maharashtra encompasses an area of  $308,000 \text{ km}^2$  (119,000 miles<sup>2</sup>) and is the third largest state in India after Rajasthan and Madhya Pradesh. As per the 2001 census, Maharashtra has a population of 96,752,247 inhabitants, making it the second most populous and urbanised state in India. Maharashtra is India's leading industrial state, contributing 13% of national industrial output. Around 64% of the people are employed in agriculture and allied activities. Maharashtra's urban population stands at 42.4%. Its sex ratio is 922 females to 1,000 males. About 77.2% of its population is literate, of which 86.2% are males and 67.5% females.

Thane is located to the north of Mumbai (Bombay, Maharashtra, India). The total population of the Thane district is 8,131,849, which includes a rural population of 2,229,376. The study area is located around 80 km from the Thane district headquarters. Around 70% of the population is literate. There are different landforms, which include mountainous region, river basins and the coastal region. From the point of view of industries, Thane is an important district headquarters. There are few small-scale industries in the study area. The modes of transport in the Thane district are roads, railways and waterways. The study area consists of a hilly region consisting of Jawhar, Wada, Shahapur and Murbad talukas; in the north and northeast are taluka headquarters of the Thane district, and they are developing gradually. People mainly work as wage earners, labourers in small-scale industries or farmers. Fishing is carried out along the coast. There are many salt pans. Adivasis (tribals) live in this hilly region, and the total tribal population is 1,199,290.

Role of Family, Marriage and Gender Relations

In India, sexuality is influenced by the interaction of biological, psychological, social, economical, political, cultural, ethical, legal, historical and religious and spiritual factors. Much of India remains relatively traditional when it comes to sex, especially with regard to premarital sex. In many parts of the country, even talking about sex is still considered taboo (International Herald Tribune, Nov. 2006). Indian youth are torn between crosscurrents of reality, fantasy and dream. Young people are poorly informed about their own bodies and matters related to sexuality and health. The information they have is often incomplete, and they remain confused. A strict moral code at home and the selection of a life partner are in contrast to the visuals a youth is exposed to in day-to-day activities. Moral standards set by societal norms through socialisation processes and prevailing situations in which they live place young people at the crossroad. Because of tremendous societal pressure, trying to define their own sexual identity is a problem for both sexes and severely limits their ability to speak about their need for more information or about their doubts and fear. Such taboos and restrictions are accepted with no questions asked. Some examples are "The girl must be virgin"; "Women are unclean during menstruation"; "Men must be controlling partner in sex"; "Sex with more than one partner is wrong". All these are just variations of a familiar theme.

The socialisation process plays an important role here, where girls are made to think of, and interact with, only the husbands, apart from other male members of her family. Women are not expected to express sex within the "desire" and "pleasure" perspective. Also, there are many restrictions imposed on their movement and socialising. Only in coeducational schools have girls found an opportunity to talk to boys, as in most other environments it is prohibited. The common notion among elders is when a boy and girl are mature enough to reproduce, then they should be married off as soon as possible. Religious beliefs have a significant impact on attitudes towards sexuality. The extent to which religion influences individual attitudes, however, depends on the specific doctrines of each religion. The negative influence of self-religiosity on attitudes towards sex clearly shows that individuals who perceive themselves as more religious display conservative attitudes towards sex (Rangaiyan 1996). An early marriage is also a strong component in which sex is discussed and practiced within the expected social norms. Today, age of marriage is increasing, as are strong external influences such as mass media etc., which are slowly and steadily bringing about changes in sexual attitude, behaviour and practices.

#### **Materials and Methods**

Selection of the district and colleges was done using purposive sampling. In all these selected taluaks (blocks), there is only one college for higher education. The students were recruited by faculty divisions by random sampling. The sample consisted of 1,500 students (800 male and 700 female) in the age group 15-24 years-junior-college youth (11th-12th standard) and senior (13th-15th standard) from eight colleges in Shahapur, Wada and Murbad in the Thane district. With the help of a professor, students were asked to sit in a classroom with enough space between them in order to avoid any discussion/copying. The purpose of the study was explained, and the students were told clearly that reliable information on sexuality issues is very much lacking, and the importance of giving honest replies was stressed. Students were also told that the questionnaire did not contain name and address, thereby assuring them complete anonymity and strict confidentiality. They were also told that their participation was voluntary and they could discontinue the interview if they wished to do so. On average, the respondents took almost 45 min-1 h to complete the questionnaire. Students who were younger than 18 years and willing to participate in the study were asked to produce written consent of their parents, and remaining students (18 years and older) were informed orally in regional language (either in English, Hindi or Marathi). Unmarried youth in the age group 15-24 years who did not wish to participate (give interview) or would only partially provide information were not included in the study. Around 5% (49 male and 34 female) students either refused to give information or did not complete the questionnaire. They were not included in the study.

The study employed a self-administered questionnaire after pretesting on 50 rural college students. The questionnaire contained questions on sexuality attitudes, such as attitudes towards premarital and extramarital sex, sexual thoughts, sex inhibition, sexual freedom, sex education, role of institutions in influencing sexual behaviour, HIV/AIDS and contraception. The study explored attitudes and views towards premarital sex through personal opinions of college youth and also through the attitudes of friends, as perceived by respondents. Questionnaires were provided in Marathi (local state language) and English. The survey was conducted from January through March 2004. Distributions of students are given according to the three major attitudinal response categories, i.e. agree, neutral and disagree. For every permissive attitude, a score of 3 was given; for every neutral/don't know answer, a score of 1 was given; for every conservative answer, a score of 0 was given. Bivariate and multivariate analysis was carried out to study significant association/ relationship between individual and family characteristics and sexuality attitude.

#### **Results and Discussion**

#### **Background Characteristics**

The mean age of the study population was around 18 years. Of the total students, around 74% belonged to the arts stream and the remaining 36% belonged to the science and commerce disciplines. A vast majority (91.5%) of students were Hindus, and 8.5% had other religious affiliations such as Muslim, Christian, Buddhist and Jain. Around three fifths (59%) belonged to Scheduled Caste (SC), Scheduled Tribe (ST) and Nomadic Tribe (NT), and others (SCs and STs are communities that were considered "outcastes" and were excluded from the Chaturvarna system that was the descriptive social superstructure of Hindu society in the Indian subcontinent for thousands of years. These communities had traditionally been relegated to the most menial labour, with no possibility of upwards mobility, and were subject to extensive social disadvantage and exclusion in comparison with the wider community. SCs/STs together comprise over 24% of India's population, with SC at more than 16% and ST more than 8% as per 2001 census. Source: Wikipedia, the free encyclopedia). Today, most of these castes enjoy the benefits of reservations and increased opportunities in education, employment and other sectors from the time of independence. Nearly 20% of boys and 6.6% girls are working for an income. The total personal income per month varied from Rs. 50 to Rs. 5,000. About 11% of male students reported that they were habitual to gutaka, tobacco chewing, smoking and alcohol consumption. About 60% of students (53% boys and 69% girls) reported to have cable connection and watch television daily up to 2 h. Overall, there was a higher proportion of students' fathers (32.9%) with educational level up to higher secondary and above compared with students' mothers (6.8%). Mother's occupational status was lower than fathers', and about 91% of students reported that their mothers were housewives. About 67.5% of students belonged to families with an income up to Rs. 5,000 per month.

#### Attitude Towards Sexuality

A total of 23 statements related to attitude towards sexuality were included. Table 1 presents distributions of male and female students according to three major attitudinal response categories, i.e. agree, neutral and disagree. More than three fifths of male and female students agreed with the statement that virginity is a girl's most valuable possession. Half of the male students and over four fifths of female students disagreed with taking pleasures when they find them. Around three fourths of both male and female students disagreed that if they love a girl/boy, they would have sexual relations with her/him.

Students consistently reported disagreement over premarital and extramarital sexual relations. For example, about 85% of male and 90% of female students disagreed with the statement that premarital sexual relations often equip persons for more stable and happier marriage. Around two thirds of male and female students disagreed with the statement that extramarital sexual relations is not bad. Though

Table 1	Percent distribution	of students who agi	ee or disagree to t	the attitudinal	l statements on sexuality
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Attitudinal statements on sexuality	Male $(n =$	= 800)		Female $(n = 700)$		
	Disagree	Neutral	Agree	Disagree	Neutral	Agree
Virginity is a female students' most valuable possession	21.4	17.3	61.2	17.7	12.7	69.5
If I love a girl/boy, I would do anything with her/him	70.1	17.7	12.2	77.3	19.5	3.3
I believe in taking my pleasures when I find them	50.5	21.2	28.3	82.0	14.7	3.3
I think it is right for a boy to masturbate	62.5	23.1	14.5	40.8	31.5	27.8
While it is natural for men to have multiple sexual relations, it is morally incorrect for women to do so	64.1	18.2	17.7	75.1	18.2	6.7
Premarital sexual relations often equip persons for more stable and happier marriages	85.0	8.6	6.4	90.1	7.7	2.1
Extramarital sexual relations is not bad	65.5	12.5	22.1	66.7	17.3	16.0
Pornographic writing should be allowed to be published	52.0	26.2	21.8	52.9	34.9	12.2
I think about sex almost everyday	55.1	20.8	24.1	68.8	25.0	6.2
I like to look at sexy pictures of naked persons	58.0	18.3	23.7	84.7	12.3	3.0
Sometimes sexual feelings empower me	43.6	18.8	37.5	66.8	22.6	10.6
I am embarrassed to talk about sex with friends	45.8	17.2	37.0	35.5	21.2	43.3
Religious groups shouldn't attempt to impose their standards on sexual behaviour	41.8	24.2	34.0	46.1	34.3	19.6
My religious beliefs are against sex	39.0	28.2	32.8	30.5	35.5	34.0
My parents influence has inhibited me sexually	28.8	22.4	48.8	28.6	30.3	41.1
Children should be given sex education	18.0	10.1	71.9	22.7	20.5	56.8
Sex education in elementary and high schools is likely to encourage premarital sexual activities	25.4	14.8	59.7	28.9	22.3	48.8
Easy access to birth control information and devices increases premarital sexual activities	43.4	23.6	33.0	39.6	39.2	21.2
I will use condoms only when my sexual partner requests	42.3	22.8	34.9	38.3	39.9	21.7
My friends mostly have sex for recreation/ fun	55.5	26.3	18.2	73.7	24.0	2.3
My friends don't think safe sex important	64.3	22.3	13.3	61.2	27.5	11.3
My friends believe that a single steady sexual partner relationship is no fun	50.9	24.9	24.2	71.1	26.3	2.6
My friends believe that love is not necessary for sex	48.4	23.9	27.7	55.8	33.5	10.7

there is no denying that youth today is moving towards more liberal sexual attitude and behaviour, it is apparent that the Indian youth still look at sex in the broader framework of relationship (Rangaiyan 1996).

The transitory nature of attitude is evident by the fact that easy accessibility to birth control information and devices was believed to increase the risk of premarital sexual activities (40% of males and 42% of females) (Rangaiyan 1996). However, in this study, only around one third of male and one fifth female students felt so. Around two fifths of male and female students disagreed with the statement "I will use condoms only when my sexual partner requests". Sexual thoughts are natural phenomena in the process of maturing. It is reasonable to expect that the nature and frequency of these thoughts will have an important bearing upon sexual attitudes as well as behaviour of youth. In this study, 55% of male and 69% of female students also disagreed that they think about sex almost every day. About 58% of male students and 85% of female students disagreed with the statement that they like to look at sexy pictures of naked persons. About 44% of male and 67% of female students disagreed with the statement that sometimes "sexual feelings empower them". About 37% male and 43% female students agreed with the statement that they feel embarrassed to talk about sex with their friends. More than 64% of male and 75% of female students did not consider it natural for men to have multiple sexual relations but it is morally incorrect for women to do so. In continuation with the above findings, it was observed that more than 52% of both male and female students did not approve of pornographic literature being published. Overall, these statements show an example of conscious control over one's sexuality.

There is evidence of conservatism in students' attitudes, as one third of male students and one fifth of female students agreed that religious groups should not attempt to impose their standards on sexual behaviour. Around one third of both male and female students agreed that their religious beliefs are against sex. Around half of the male students and two fifths of female students agreed that their parents' influence had inhibited them from becoming sexually involved. Approximately two thirds of male students and three fifths of female students favoured sex education in schools, and around one fourth of the male and female students disagreed that sex education in elementary and high school is likely to encourage premarital sexual activities.

One of the striking features during adolescence is the sudden increase in peer interaction and exploration and experiencing of adult behaviour within the subculture of peer groups. These peer groups consist of male and female students at college, at the residence, at the work place and at the coaching/tuition classes. A little more than half of male students and two thirds of female students disagreed with the statement "my friends mostly have sex for recreation/fun". Around 12% of male and female students agreed that their friends do not think safe sex important, and half of male students and around three fourths of female students agreed with the statement that their friends believe that a single steady sexual partner relation is no fun, whereas around 48% of male students and 56% female students disagreed that their friends believe that love is not necessary for sex. However, about 20–35% of students answered, "don't know" to responses of various statements on premarital sex. Double standards reflect their gender bias.

Differentials or differences?

The second part of this paper describes the association between individual and family characteristics and intervening attitude variables by using mean scores of variables to summarise the data. Quantitative information includes students' attitudes towards sexuality and its dimensions, such as premarital sex, sexual freedom, sexual thoughts, peer's attitudes and sex education. The attitudinal dimension was analysed by grouping students as being conservative, moderate or liberal, and this was cross-classified with selected student characteristics.

One-way analysis of variance (ANOVA) was applied to see whether the mean scores of attitudes towards sexuality issues differ significantly across the categories of male and female students. Using an attitudinal scale consisting of 23 items, students' attitudes towards various aspects of sexuality are assessed. For every permissive attitude, a score of 3 was given; for every neutral/don't know answer, a score of 1 was given; for every conservative attitude, a score of 0 was given. Guttman scaling techniques were applied by using responses to items of attitude towards sexuality to construct students' attitudes. The scale scores ranged from 25 to 61, with a higher score indicating more liberal attitudes. The overall mean of sexuality attitudes was 40.20, with and standard deviation (SD) of 5.89. Mean score obtained by male students was 42.06 ( $\pm$  6.21 SD ) and female students 38.06 ( $\pm$  4.67 SD).

Mean score of these students shows that junior and senior male students obtained higher attitudinal scores compared with junior and senior female students. Higher mean scores indicate more liberal attitudes of students on these issues. Senior students obtained higher scores compared with their junior counterparts. One-way ANOVA shows that the mean scores differed significantly across the categories of male and female students and level of education. The differences in attitude among male and female students according to their individual and family characteristics are presented.

### Individual Characteristics

Table 2 presents mean score of attitude towards sexuality, sex inhibitions, institutional control and peers' attitude among junior and senior male and female students by individual characteristics. The permissive attitude may be related to student age. An association was observed between age and attitude towards sexuality among male students. It was found that average attitudinal score increases with age for male students but not for female students. A review of earlier studies identifies the fact that age is positively related to attitude towards sexuality. The higher the age, the more permissive the attitude towards sexuality (Rakesh 1992; FPAI 1995; Rangaiyan 1996; Abraham 1997, Ghule 2004).

Students studying in arts and commerce faculties obtained higher scores on attitudes compared with their science counterparts. All religions maintained explicit statements about the inappropriateness of sex before marriage and emphasised sexual abstinence except within marriage. The extent to which religion influences individual attitudes, however, depends on the specific doctrines of each religion.

Individual	Mean score of attitudinal statements on sexuality issues										
characteristics	Male ( <i>n</i> = 800)			Female $(n = 700)$			Total $(n = 1500)$				
	Junior ( <i>n</i> = 392)	Senior $(n = 408)$	Total $(n = 800)$	Junior $(n = 283)$	Senior $(n = 417)$	Total $(n = 700)$	Mean	Total number			
Age											
16 years	40.1	47.5	40.2	38.0	37.5	38.1	39.0	243			
17-18 years	41.4	42.0	41.6	39.1	37.8	38.4	40.3	637			
19 years +	44.5	43.5	43.2	39.5	37.7	37.7	40.6	621			
	F = 10.97	1*		F = 1.270							
Faculty											
Arts	41.7	42.7	42.3	39.2	37.7	38.2	40.2	1,106			
Commerce	41.8	45.4	42.9	37.5	37.6	37.5	41.4	215			
Science	39.1	41.2	39.9	37.1	36.9	37.0	38.8	180			
	$F = 9.036^*$		F = 2.486								
Religion											
Hindu	41.0	42.6	41.8	38.7	37.7	38.1	40.1	1,374			
Muslim	46.7	44.5	45.5	36.5	35.3	36.0	41.5	42			
Buddhist/other	43.1	45.8	44.6	39.3	37.7	38.3	41.4	85			
	$F = 8.056^{\circ}$	*		F = 1.833							
Caste											
General	41.1	43.0	38.2	38.7	37.7	38.2	40.1	613			
Schedule caste	42.3	43.4	38.7	39.5	38.2	38.6	41.1	448			
OBC	40.1	41.9	37.1	37.9	36.5	37.0	39.4	381			
ST/NT	42.7	44.6	38.2	36.2	38.8	38.1	40.1	59			
	F = 3.865 **			F = 3.546							
Place of stay											
Parents	41.1	42.7	42.0	38.6	37.7	38.0	40.1	1,343			
Relatives	42.0	43.6	42.8	38.7	37.9	38.0	41.2	158			
	F = 1.981			F = .199							
Habits											
Never	40.9	42.2	41.6					715			
Ever tried	45.6	46.5	46.2					85			
	$F = 44.775^*$										
Working status											
Yes	42.7	43.1	43.0	37.3	38.5	38.2	41.9	205			
No	41.0	42.7	41.8	38.7	37.6	38.1	39.9	1,295			
-	$F = 4.351^{\circ}$			F = .050				,			

 Table 2
 Mean score of attitudes towards sexuality among male and female students by selected individual characteristics

Individual	Mean score of attitudinal statements on sexuality issues										
characteristics	Male ( <i>n</i> = 800)			Female $(n = 700)$			Total $(n = 1500)$				
	Junior ( <i>n</i> = 392)	Senior $(n = 408)$	Total $(n = 800)$	Junior ( <i>n</i> = 283)	Senior $(n = 417)$	Total $(n = 700)$	Mean	Total number			
Peer interaction	n										
No	39.6	40.5	40.0	38.1	37.2	37.5	38.7	638			
Yes	42.7	44.2	43.5	39.1	38.1	38.5	43.6	862			
	$F = 68.831^*$			$F = 6.686^{**}$							
Erotic exposure	9										
No	40.3	41.9	41.1	38.4	37.6	37.9	39.4	1,219			
Yes	44.5	44.9	44.7	40.1	38.7	39.5	44.7	281			
	F = 58.704*			$F = 6.772^{**}$							
Total knowledg	ge										
Low	39.6	40.0	39.7	38.2	37.3	37.8	38.5	253			
Moderate	41.3	42.7	42.0	39.0	37.6	38.1	40.2	1,001			
High	42.8	43.6	43.4	33.6	38.4	38.0	42.1	247			
	F = 11.058*			F = .350							

#### Table 2 continued

Higher the score liberal the attitude. Total attitude score ranges from 25 to 61

ST Schedule Tribe, NT Nomadic Tribe

 $*P \le .001; **P \le .01; ***P \le .05$ 

Studies have shown that religious affiliation influences attitudes and behaviour on sex, but the influence is insignificant (Miller et al. 1986). In this study, male Hindu students had comparatively lower conservative attitudes towards sex than did respondents from other religion i.e., Muslim, Buddhist and all others. The association was found to be significant. Peer interaction is one of the important components in the attitudinal influence. The influence of peers on students' attitude towards sexuality was found to be significant. It was found that male and female students who had a high level of peer interaction obtained higher attitudinal scores. Studies have shown that erotic exposure influences one's attitude and behaviour in relation to sex (Rakesh 1992; Rangaiyan 1996). In this study, it was found that male and female students who had high erotic exposure had more liberal attitudes towards sexuality. The ANOVA showed statistically significant differences in attitudes among male and female students categorised by varying levels of erotic exposure. Habits such as smoking, alcohol consumption and drugs are considered an important component of an individual's social networking and have an attitudinal influence. It was found that male students who had ever tried smoking, alcohol and drugs obtained higher scores compared with those who never tried any of the above. The attitudinal score differed significantly between students grouped by level of exposure to such habits.

Knowledge is important in determining the nature and direction of sexuality attitudes. In fact, it is also argued that knowledge and attitude are reciprocally related to each other. A more permissive attitude may induce the person to seek more knowledge. It is possible that as knowledge about sex increases, the attitude towards sex would become more permissive. It is well known that information alone does not bring change in attitude, and hence it is difficult to establish a cause and effect relationship. It needs BCC interventions where information is just one aspect. In this study, it was found that students who had low level of knowledge on various issues of reproductive health, sex and contraception and STDs, HIV and AIDS showed conservative attitudes towards sexuality while students who had high sexual knowledge reported higher scores, which displayed more liberal attitudes. The association between sexual knowledge and attitude towards sexuality was statistically significant among male students but not among female students. However, the relationship was found insignificant in multivariate analysis.

## Familial characteristics

Table 3 presents the attitudinal mean score for male and female students by family type, father's education, father's occupation, mother's education, mother's occupation and family income. Students whose father's occupation was farming, obtained a low score on attitude towards sexuality, whereas students whose fathers were either in business or in service such as clerical, skilled or technical jobs obtained higher scores. The association towards sexuality was significant among male students and statistically insignificant among female students. However, father's education and mother's occupation did not show any association among male and female students and attitude towards sexuality.

## Determinants of attitude towards sex

A multivariate analysis was used to examine the significant variables influencing sexuality attitudes. In addition, multiple regressions provided information on how accurately group status of an individual could be predicted from these variables. Composite index constructed on the basis of students' responses to 23 statements in the survey questionnaire was taken as the dependent variable. Multiple regressions were carried out for the total sample. The dependent variable used for multiple regressions was total score of attitudes towards all above issues. Table 4 presents the results of the multiple regressions in which two models were attempted, first with only individual and family characteristics as predictors (model 1), and second with knowledge variables along with individual and family characteristics as predictors (models 1 and 2).

When all explanatory variables were entered into the regression, the multiple regressions extracted six variables among male students and two variables among female students as significant predictors in explaining the variation in the sexuality attitudes. These six variables among male students are present age, caste, father's

Familial	Mean score of attitudinal statements on sexuality issues									
characteristics	Male ( <i>n</i> = 800)			Female $(n = 700)$			Total $(n = 1,500)$			
	Junior $(n = 392)$	Senior $(n = 408)$	Total $(n = 800)$	Junior $(n = 283)$	Senior ( <i>n</i> = 417)	Total $(n = 700)$	Mean	Total Number		
Family type										
Nuclear	41.4	42.6	41.7	38.8	37.4	38.0	38.8	951		
Joint/extended	41.5	43.1	42.4	38.0	38.4	38.4	40.9	550		
	F = 2.234			F = .542						
Family income										
Up to Rs. 2,500	40.6	42.1	41.3	39.0	37.6	38.1	39.8	637		
Rs. 2,501–5,000	41.2	43.6	42.5	38.6	37.4	38.0	40.4	377		
Rs. 5001–7500	42.1	42.5	42.3	38.9	38.4	38.6	40.7	247		
Rs. 7,501 & above	41.9	44.0	42.9	37.1	37.8	37.5	40.4	240		
	F = 2.765	*		F = .993						
Father's education										
Illiterate	43.4	43.3	43.4	39.7	36.7	38.8	42.1	83		
Primary	40.7	42.7	41.8	39.2	37.3	38.1	40.4	406		
Secondary	41.0	42.6	41.8	38.8	38.1	38.5	40.2	518		
Higher secondary+		43.3	42.4	37.7	37.5	37.6	39.7	494		
8	F = 1.386			F = 1.820						
Father's occupation										
Farming	40.2	41.8	41.1	37.8	37.8	38.1	39.9	607		
Service	41.4	43.4	42.4	38.3	37.6	37.9	40.1	614		
Business	42.8	45.7	44.1	38.6	37.8	38.2	41.0	217		
NA/father died	43.5	43.5	43.5	43.5	36.7	38.4	41.5	63		
i i pruiter alea	F = 7.874		1010	F = .254	2011	2011	1110	00		
Mother's education				1251						
Illiterate	42.1	42.8	42.5	39.3	37.9	38.6	41.2	306		
Primary	40.4	42.4	41.4	38.9	37.4	38.0	39.8	671		
Secondary	41.6	43.5	42.5	38.1	38.0	38.0	40.1	422		
Higher secondary+		45.1	43.2	37.7	37.5	37.6	40.7	102		
6	F = 2.604			F = .557						
Mother's occupatio										
Farming	42.1	41.8	42.0	38.5	35.0	36.2	41.4	55		
Service	41.4	46.1	43.0	37.1	39.1	38.1	40.9	77		
Business	41.1	45.6	45.6	37.0	35.0	36.3	42.1	8		
Housewife	_	42.8	42.0	38.7	37.7	38.1	40.1	1371		
	F = .837			F = .474						

 Table 3 Mean score of attitudes towards sexuality among male and female students by selected familial characteristics

Total attitude score ranges from 25 to 61

\*\*\*  $P \le .001$ ; \*  $P \le .05$ 

Dependent variables	Male	Female			
	Total attitud	le score	Total attitude score		
	Model 1	Model 2	Model 1	Model 2	
Present age					
Up to 17 years (ref)	.92*	1.04*	65	59	
18 years & above					
Faculty					
Arts (ref)	46	43	-1.20**	-1.15**	
Science/commerce					
Caste					
General (ref)	2.30**	2.30**	-47	49	
All others					
With whom do you stay					
Family (ref)	1.03	1.07	.18	20	
Other than family					
Self-religiosity					
Religious (ref)	.39	.44	32	30	
Not at all					
Type of family					
Nuclear (ref)	.35	.36	.44	.45	
Joint/extended					
Working status					
Working (ref)	48	49	13	11	
Not working					
Father's occupation					
Farming (ref)	1.85***	1.86***	.06	.04	
All others					
Mother's occupation					
Housewife (ref)	20	20	1.78	1.78	
Service/wage earning					
Peer interaction					
Low (ref)	2.64***	2.71***	.65	.70	
High					
Endia companya					

2.25\*\*\*

2.20\*\*\*

\_

2.33\*\*\*

2.30\*\*\*

-.55

1.21\*

NA

\_

1.20\*

NA

-.27

Reproductive health issues (continuous) \*\*\*  $P \le .001$ ; \*\*  $P \le .01 * P \le .05$ 

Erotic exposure

Low (ref) High Habits

No (ref) Yes Knowledge occupation, peer interaction, erotic exposure and habits. Peer interaction is another important socialising factor through which an individual forms an attitude or reinforces the one already formed. The higher the social networking, the higher the permissive attitude towards sexuality. When in model 2 knowledge variables were included, the impact was minimal. Habits have close positive impact on the attitudes of students, and habits of the respondents show positive and significant influence on the attitudes of male students. Students had habits were more liberal in attitudes towards sexuality. Among the selected explanatory variables, erotic exposure and peer interaction index had the maximum influence in models 1 and 2. Sexuality knowledge was negatively related to sexuality attitude. Mother's occupation had no significant relationship with attitude towards sexuality of male of students. Among female students, students from the arts faculty were more liberal in their attitude towards sexuality when compared with students from science and commerce. Female students who had erotic exposure were more likely to have liberal attitudes compared with those who had not exposed, which was found statistically significant.

#### **Discussion and conclusion**

The relationship between sexual attitudes and behaviour is a vital linkage for young people to decide upon and engage in premarital sex. Evidence shows that adolescents with more liberal attitudes toward sexuality are more likely to experience premarital sex. This study attempted to elicit students' attitudes towards various aspects on sex and sexuality, such as premarital sex, virginity and masturbation and their opinions regarding smooth functioning of sexual relationships. For the purpose of quantitative analysis, an attitudinal score was constructed, with high score indicating a liberal attitude and low score indicating a conservative attitude.

The results clearly showed that the majority of the students expressed conservative attitudes towards premarital sex. Many students not only disagreed with casual sex but still considered it immoral. For example, only one fifth agreed that sex is mainly for fun/recreation and extramarital sexual relations is not bad. However, about 20–35% students answered "don't know" to various statements on premarital sex. Double standards, i.e. permitting premarital sex for males and not for females, are reflected in their attitudes to some extent. It was observed from the interviews that some of the male and female students who had expressed a "liberal" attitude did not necessarily have premarital sexual experience.

Sexual thoughts are natural phenomena in the process of maturing. It is reasonable to expect that the nature and frequency of sex thoughts will have an important bearing upon sexual attitudes as well as behaviour. Three fifths of male students and a little over half of female student disagreed that they think about sex almost everyday. More than two fifths of both male and female students did not approve of pornographic writing being published. Overall, these statements show conscious control over one's sexuality. However, there were high proportions (one fourth of male and female respondents) of "don't know" to when students were asked about the views of their friends. This could be because the adolescents were independent in their thinking and did not care about their friends' views, or they wre not sure because they rarely discuss or share information related to sex. It was also noticed that male students obtained higher mean scores compared with their female counterparts and senior students compared with junior students, indicating more liberal attitudes towards sexuality.

The bivariate analysis showed positive association between age, peer interaction, erotic exposure, habits of gutaka, tobacco, smoking and alcohol consumption and knowledge about reproductive health issues with attitudes towards various sexuality issues. Multivariate analysis showed that female students who were studying in the commerce and science faculties were more liberal in attitude towards sexuality compared with boys. Even though sex education is not being taught in schools/colleges, education exposes youth to some form of facts about the functioning of the reproductive systems, which is taught in biology. Velhal (1993 cited in Rangaiyan 1996) reported a similar trend in his study among commerce students in Mumbai. The differences could be attributed to the nature of academic curricula of science/commerce students. However, the environment in those respective families/educational institutions, influence of peers or full time/part time employment of these students would be other possible contributing factors, which were not studied.

Male students with high erotic exposure (odds ratio 2.3), habits of gutaka, tobacco, smoking and alcohol consumption (odds ratio 2.7) and high peer interaction (odds ratio 2.3) had higher attitudinal scores indicating more liberal attitudes. Knowledge level about reproductive health issues was insignificantly related with attitude towards sexuality. The majority of the students in the study expressed conservative attitudes towards premarital sex. The programme on sexuality education and responsibility for in-school adolescents should be launched early in secondary schools/college at an early stage of the perception process and formulation of attitudes towards sexuality.

#### References

- Abraham, L. (1997). Understanding youth sexuality: A study of college students in Mumbai. A Report, International Center for Research on Women (ICRW), New Delhi.
- Abraham, L. (2001). Understanding youth sexuality: A study of college students in Mumbai City, India. Journal of Social Work, 62(2), April 2001.
- Alexander, C. S., Ensminger, M. E., Kim, Y. J., Smith, B. J., Johnson, K. E., & Dolam, L. J. (1989). Early sexual activity among adolescents in small towns and rural areas: Race and gender patterns. *Family Planning Perspectives*, 21, 261–266.
- Carrol, J. L., Volk, K. D., & Hyde, J. S. (1985). Differences between males and females in motives for engaging in sexual intercourse. Archives of Sexual Behaviour, 14, 131–139.
- Cernada, G. P., Chang, M.-C., Lin, H.-S., Sun, T.-H., & Chen Cernada, C.-C. (1986). Implications for adolescents sex education in Taiwan. *Studies in Family Planning*, 17(4), 181–187.
- Family Planning Association of India (FPAI). (1990). Attitude and perceptions of educated urban youth to marriages & sex, Bombay SECRT (Sex Education Counselling Research Training), Family Planning Association of India.
- Family Planning Association of India (FPAI). (1995). Youth sexuality: A study of knowledge attitudes beliefs and practices among urban educated indian youth, 1993–1994, Bombay, Sex Education Counselling Research Training/Therapy Department.

- Family Planning Foundation (FPF) and Operations Research Group (ORG). (1992). Study of population socialization among Indian teenagers, as reported in Population Head Lines, No. 217 (April 1993), New Delhi.
- Ghule, M. (2004). Sexual and reproductive health of youth: A study of male students in Maharashtra, India. Ph.D. Dissertation (unpublished), International Institute for Population Sciences, Mumbai.
- Goparaju, L. (1993). Unplanned, unsafe: Male students sexual behaviour. Paper Presented at the Workshop on Sexual Aspects of AIDS/STD Prevention in India, Tata Institute of Social Sciences, Mumbai.
- Hendrick, S., Hendrick, C., Sampion-Foote, M. J., & Foote, F. H. (1985). Gender differences in sexual attitudes. *Journal of Personality and Social Psychology*, 49, 1630–1642.
- Miller, B. C., McCoy, J. K., Olson, T. D., & Mallace, C. M. (1986). Parental discipline and control attempts in relation to adolescent sexual attitudes and behaviour. *Journal of Marriage and the Family*, 48, 503–512.
- Maharashtra Census Operations, Census of India. (2001). District Census Handbook.
- Operation Research Group (ORG). (1989). Family planning practices in India. Baroda: Third All India Survey.
- Orubuloye, I. O., Caldwell, C., & Caldwell, P. (1991). Sexual networking in Ekiti District of Nigeria. *Studies in Family Planning*, 22(2), 61–73.
- Promote, P., Chamrutrithirong, A., Bennett, A., Jitnagtanapataya, L., Isarabhakdi, P. (1987). Rural adolescent sexuality and the determinants of provincial urban premarital adolescent sex. Institute for Population and Social Research, Mahidol University, Bangkok.
- Rakesh, A. (1992). *Premarital sexual attitudes and behaviour among adolescent girls*. Jaipur: Print Well Publishers.
- Rangaiyan, G. (1996). Sexuality & sexual behaviour in the age of AIDS: A study among college youth in Mumbai. Ph.D. Dissertation (Unpublished), International Institute for Population Sciences (IIPS), Mumbai.
- Reddy, D. N., Meera, S., & Uma, G. (1993). A report on select urban (Madras) sexuality with reference to sexual aspects of AIDS/STDs. Paper presented at the workshop on sexual aspect of AIDS/STD prevention in India. Tata Institute of Social Sciences, Mumbai.
- Shaw, M. C., & Wright, J. M. (1967). Scales for the measurement of attitudes. New York, U.S.A.: McGraw Hiu Book Co.
- Watsa, M. C. (1993). Premarital sexual behaviour of urban educated youth in India. Paper Presented at the Workshop on Sexual Aspects of AIDS/STD Prevention in India, Tata Institute of Social Sciences, Mumbai.

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