ORIGINAL PAPER

Sexuality Related Attitudes and Behaviors of Turkish University Students

Duysal Askun · Bilge Ataca

Received: 14 February 2006/Revised: 21 July 2006/Accepted: 5 October 2006/Published online: 13 July 2007 © Springer Science+Business Media, LLC 2007

Abstract In this study, sexual attitudes and behaviors of Turkish university students were explored by taking many influential agents both at the distal and the proximal levels into consideration. A total of 563 students from three universities located in three cities completed a questionnaire that assessed their virginity status, first intercourse, sexual permissiveness, pornography usage, endorsement of traditional sexual double standards, and the perception of parental attitudes about sexuality. The results showed that women and students from rural areas were more traditional and conservative in their attitudes and behaviors regarding sexuality. The perception of maternal restriction about sexuality was related to sexual conservatism, negative affective reaction at first coitus, and endorsing traditional sexual double standards. The results are discussed in terms of various degrees of influences originating from proximal and distal variables in the Turkish context.

Keywords Sexuality · Virginity · First intercourse · Parental attitudes · Turkey · Sex differences

Introduction

Sexuality is an important part of our lives that reflects characteristics at the individual, familial, societal, and

D. Askun (⋈)
Department of Organizational Behavior, Marmara University, 34730 Istanbul, Turkey
e-mail: duysala@gmail.com

B. Ataca Department of Psychology, Bogazici University, Istanbul, Turkey cultural levels. It is shaped by social processes at both proximal and distal levels, including family and peer groups and sociocultural contexts (Miller & Fox, 1987). Most of the research on youth sexuality has focused on single variables or a class of variables (Werner-Wilson, 1998); however, it is important to integrate multiple classes of variables in studies concerning the sexual attitudes and behaviors of youth (Miller & Fox, 1987). The university student population is a suitable venue for studying sexual attitudes and behaviors as this age group has discovered sexuality recently and, hence, is at a stage of forming attitudes about sexual matters. In fact, university students have been widely employed in the literature on sexuality (e.g., Edmonds, Cahoon, & Shipman, 1991; Hatfield, Sprecher, Pillemer, Greenberger, & Wexler, 1988; Meston, Trapnell, & Gorzalka, 1996; Person, Terestman, Myers, Goldberg, & Salvadori, 1989; Sprecher, 1989; Sprecher & Regan, 1996). Nearly 25% of sexual behavior surveys in the U.S. have been carried out with unmarried college students (Ericksen & Steffen, 1996).

Many attitudes, behaviors, and concepts related to sexuality are socially constructed. Sexual attitudes may include general beliefs about the norms of the culture, personal decisions about when sex is permissible, and the perceived appropriateness of certain sexual behaviors (Marks & Fraley, 2005). For example, in the Turkish culture, premarital female virginity is considered to be an important social norm that is linked to the concept of sexual purity with the honor of the woman, her family, community, and, ultimately, the state. In many areas of Turkey, a woman is expected to remain a virgin until she is married. A woman who compromises her reputation as a virgin jeopardizes getting married. She might be banished by family members if she does not certify her virginity before marriage or if there is no vaginal bleeding after the first marital intercourse



(Ayotte, 2000). Virginity as a concept is subject to many modern feminist discussions (France: Turkish girl's family, 1995; Parla, 2001; Pelin, 1999; Turkey: Women's sexual freedom, 1992; Turkish government imposes, 1994). There have been quite a number of criticisms regarding virginity examinations in Turkey (Ayotte, 2000; Kinzer, 1998; Murray, 1998; Turkey, community morality, 1998; Virginity examinations in Turkey, 1999).

In relation to virginity, first intercourse is argued to be a generally critical moment for young people, whether they are actively seeking sexual intercourse, allowing the intercourse to happen, or having it imposed upon them. When the accounts of men and women are compared, the very general acceptance of first intercourse as a positive step into manhood has no equivalent for young women. The notion of first sex as being about a woman's pleasure, performance, and achievement of adult status is strikingly absent (Holland, Ramazanoglu, Sharpe, & Thomson, 2000).

Attitudes and behaviors related to sexuality are influenced by society and culture to a great extent. It is important, therefore, to study this influence on sexuality in a culture that is characterized by strong traditions, in which firmly established norms govern its practice.

Turkish culture and society

Turkish society is in a rapid transformation from a traditional, rural, agricultural, patriarchal society to a modern, urban, industrial, and egalitarian one. Approximately 70% of the Turkish population lives in cities; however, a very large proportion of urban residents were born in villages or are the children of village-born parents. While this is a very dynamic group, it remains close to its rural, traditional values and practices. In this regard, the culture can still be characterized as traditional, authoritarian, and patriarchal (Kagitcibasi & Ataca, 2005; Kagitcibasi & Sunar, 1992; Sunar, 2002; Sunar & Fisek, 2005).

Two family types with corresponding socialization practices are prevalent in Turkish society: the traditional rural family and the middle class urban family. One of the most salient characteristics of the traditional Turkish family is that it is male-dominated: It is a patriarchal system (Sunar, 2002). The dominant value in the system is *namus* or honor, which is maintained in large part through men being in control of the sexual behavior (chastity) of the women in the family (Kagitcibasi & Sunar, 1992). The middle class urban family, with its rural origins, maintains its collectivistic features. However, compared to rural traditional families, the separation of the sexes is much less strict and honor as a value has lost much of its power. There is relative autonomy in the management of young

people's affairs, including marital decisions. Male–female relations are less closely controlled and Western-style dating is common (see Ataca, 2006; Sunar & Fisek, 2005). Attitudes toward premarital intercourse are also more permissive, particularly among young people in the Western provinces of Turkey.

Sexual attitudes and behaviors

Young people indicate a variety of reasons for engaging in physical intimacy (Sprecher & McKinney, 1994). Women are more likely to mention love and affection, whereas men are more likely to mention physical pleasure (Wiederman, 1997). In fact, in many studies, men are reported to be more sexually permissive than women (Askun, 1998; Oliver & Hyde, 1993; Sprecher, 1989; Wilson, 1987).

In a study that examined Turkish medical university students' sexual attitudes and behaviors, Ozan, Aras, Semin, and Orcin (2005) found that physical pleasure, curiosity, and desire for experience were the primary reasons for the first sexual intercourse for men, while love was the leading reason for women. The general attitudes of both men and women were more negative for the premarital sexual experience of women than of men. These findings were similar to those of Aras, Orcin, and Ozan (2003) with Turkish university students.

Shapurian and Hojjat (1985) studied similarities and differences in the attitudes of younger Iranian men and women and Western students regarding premarital sex. They found that Iranian men and women differed significantly in their attitudes toward premarital sex for men, such that a higher percentage of women agreed on premarital sex for their male peers than for their female peers. The Iranian sample represented more traditional attitudes than their British peers.

Similarly, in a study that explored attitudes toward marriage and sexual behaviors in China and the United Kingdom, it was found that Chinese students were less comfortable about approving premarital sex compared to British students (Higgins, Zheng, Liu, & Sun, 2002). Chinese men were more permissive toward premarital sex than Chinese women. This difference was attributed to the fact that chastity was a valued characteristic of women, but not of men.

Weinberg, Lottes, and Shaver (2000) argued that there are many sociocultural correlates of permissive sexual attitudes, such as variations in religiosity, attitudes toward general gender egalitarianism, and the role of government with respect to sexual matters. They found that both male and female Swedish university students held more permissive attitudes toward sexuality compared to their American counterparts. Sprecher (1989) also argued that



sexual behavior in general becomes more acceptable with increasing stages of a heterosexual relationship, from the first date to engagement. The greatest increase is between casual dating and the serious dating stages. Related to sexual permissiveness, a sexual attitude that has attracted a lot of research interest is the sexual double standard. (Milhausen & Herold, 2001), which seems to be an ubiquitous phenomenon in contemporary society (Marks & Fraley, 2005).

In a study of over 500 Turkish university students in Ankara, Cok, Gray, and Ersever (2001) reported that 67% of the students indicated that they had not had sexual intercourse. The findings showed that 52% of men and 81% of women were virgins. In a study of Turkish medical students, Ozan et al. (2005) found that 67.8% of men and 11.4% of women had had sexual intercourse. The mean age for first sexual intercourse was 17.6 years for men and 19.3 years for women. The rate of having sexual intercourse with prostitutes (13.6% for first-year and 32.4% for sixth-year students) and sentimentally insignificant women (27.3% for-first year and 29.7% for sixth-year students) were high for men, while women reported that they had experienced their first sexual intercourse with their boyfriends (100% for first- and sixth-year female students).

With regard to the prevalence of virginity, some Western studies had documented that more men than women were non-virgins (De Gaston, Weed, & Jensen, 1996; Oliver & Hyde, 1993). Men have been much more likely than women to report that they have engaged in sexual intercourse (Herald, Valenzuala, & Morris, 1992; Meston et al., 1996).

In general, sexual behavior has been argued to be generally difficult to predict because it is impulsive and interactive (i.e., depends partly on partner's behavior). In addition, it is also affected by situational (Kupek, 2001), familial (Sanders & Mullis, 1988), and regional (Voeten, Egesah, & Habbema, 2004) factors. Villarruel (1998) argued that parental communication is a major means for the transmission of cultural values, including those associated with sexual behavior. In families with traditional family values, parental discussion of sexual matters with daughters was found to be associated with delays in and less frequent initiation of sexual activity (Moore, Peterson, & Furstenberg, 1986). College students rated parents to be the most influential on their sexual attitudes. Furthermore, students' attitudes toward premarital sexual permissiveness for both sexes were significantly related to their perceptions of their mother's attitudes (Sanders & Mullis, 1988). In addition, sexual permissiveness and intercourse were found to have a curvilinear relationship with parental

discipline and control (Miller, McCoy, Olson, & Wallace, 1986).

Regarding regional influences, in a cross-sectional study of sexual behavior and knowledge about HIV among urban, rural, and minority residents in Vietnam, the prevalence of premarital intercourse was highest (16%) in the mountainous area populated mainly by minorities. However, the prevalence of single men reporting that they ever had intercourse was highest (16%) in the urban area (Bui, Pham, Pham, & Hoang, 2001). In China, as in Turkey, a new liberal attitude to sexual behavior has developed among the urban youth (Higgins et al., 2002). Considering the differentiation of values among rural and urban Turkish residents, it is of importance to explore its influential role on sexual attitudes and behaviors.

The present study

The present study examined gender differences in sexual attitudes and behaviors of Turkish university students by taking distal and proximal variables into account. The effects of a proximal variable, parental attitudes, and of a distal variable, the region one was raised, were studied. The sexual attitudes of major interest were sexual permissiveness and sexual double standards; the sexual behavior indicators were age at first intercourse, the relationship context in which the first intercourse took place, prevalence of virginity, affective (actual and anticipated) reaction to first intercourse, and usage of pornography.

Method

Participants

A total of 563 Turkish university students from three regions of Turkey took part in the study: Eskisehir (Central Anatolia) (92 women, 88 men), Kutahya (Western Anatolia) (118 women, 111 men), and Istanbul (Cosmopolitan) (75 women, 79 men). The mean age for women was 20.8 years ranging from 17 to 29 with a *SD* of 1.72. The mean age for men was 21.3 ranging from 17 to 27 with a *SD* of 1.82.

Participants were categorized into regions according to the place in which they lived for the longest time after they were 10 years old. Participants from cosmopolitan cities such as Istanbul, Ankara, and Izmir represented Region 1; participants from other cities/counties in Anatolia represented Region 2; and those coming from towns/rural areas represented Region 3.



Measures

The instrument included demographic information such as age, sex, places of residence the participant lived throughout his/her life (including the length of time), year and major at university, and a questionnaire on sexual attitudes and behaviors, including sexual permissiveness, sexual double standards, sexual history, affective or anticipated affective reaction to first intercourse, usage of pornography, and perceived maternal and paternal attitudes about sexuality. In total, seven measures were used in the study.

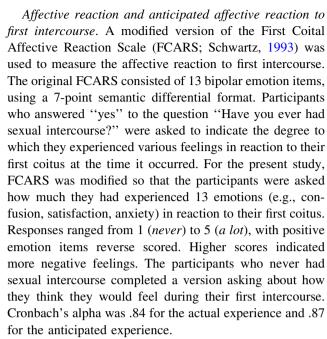
Sexual attitudes

Sexual permissiveness. The Premarital Sexual Permissiveness Scale (Sprecher, 1989) was used to assess attitudes toward premarital sexual intercourse in different relationships from casual to serious relationship contexts. The participants were asked to rate their level of endorsement of five items on a 5-point Likert format ranging from 1 (I definitely disagree) to 5 (I definitely agree). The list began with the item: I believe that sexual intercourse is acceptable for me on a first date and ended with the item: I believe that sexual intercourse is acceptable for me when I'm engaged to my partner. Analyses were conducted on the separate items of the scale and for an index that was created by summing the items. Cronbach's alpha for the scale was .77.

Sexual double standards. The Double Standard Scale (Caron, Davis, Halteman, & Stickle, 1993) was used to assess the endorsement of traditional sexual double standards. The scale consisted of 10 items on a 5-point Likert format ranging from 1 (strongly disagree) to 5 (strongly agree). A few sample items were: "A woman who is sexually active is less likely to be considered a desirable partner"; "A "good" woman would never have a onenight stand, but it is expected of a man"; "It's important for a man to have multiple sexual experiences in order to gain experience". A higher score indicated greater adherence to traditional double standards. Cronbach's alpha for the scale was .81.

Sexual behavior

The Sexual History Questionnaire, some parts of which were adapted from Cupitt (1992), was used to assess the participant's first coital experience in terms of his/her age at which it happened, the person with whom it happened, and the kind of relationship (i.e., long-term, short-term, transient relationship, one night stand, or prostitute).



Usage of pornography. Usage of pornography was assessed by a scale constructed for the present study (Askun, 2000). The participants were asked three questions about how often they utilized visual, auditory, and literary pornographic material with responses ranging from 1 (never) to 5 (always) with higher scores indicating higher frequency of usage (Cronbach's alpha, .75).

Perceived parental attitudes about sexuality. Perceptions of mother's and father's attitudes were measured separately by the Parental Attitudes about Sexuality Scale that was developed for the present study by Askun (2000). The scale consisted of 10 questions about the parent's attitude (in the past and/or today) about sexual matters such as "Would your mother/father approve of sexual relationship at a young age?", "After informing you about sexuality, would he/she allow you to experience it?" The participant rated the questions on a 5-point scale ranging from 1 (definitely no) to 5 (definitely yes). Higher scores indicated greater perception of parental restriction about sexuality. Cronbach's alpha was .85 for the mother's attitudes and .83 for the father's attitudes.

Procedure

The translation of the Sexual History Questionnaire, the First Coital Affective Reaction Scale, the Premarital Sexual Permissiveness Scale, and the Double Standard Scale were carried out with three psychology professors and three Turkish language experts who were also consulted about readability, clarity, and possible bias.

In Istanbul, students taking an introductory psychology course participated in the study in return for course credit.



The time and the place of the study were announced on the bulletin board of the psychology department and those who were interested signed up. In Eskisehir and Kutahya, the study was announced by a professor to students in the business administration and communication departments. Students who were willing to participate in the study were administered the questionnaire during class hours.

Results

Gender and region differences in sexual attitudes and behaviors

Gender and region differences were examined for all of the variables; the descriptive statistics are shown in Table 1.

Prevalence of virginity

Men (N = 187, 68%) significantly outnumbered women (N = 71, 25.18%) in being a non-virgin, and women (N = 211, 74.82%) significantly outnumbered men (N = 88, 32%) in being a virgin, $\chi^2(1) = 103.78$, p < .001. As can be seen in Table 2, these differences held true for each region.

First intercourse and the related variables

For age at first intercourse, a 2 (Sex) \times 3 (Region) analysis of variance (ANOVA) revealed significant main effects for Sex, F(1, 247) = 34.37, p < .001, and Region, F(2, 247) = 4.11, p < .05. It showed that men (M = 17.59, SD = 1.78) were significantly younger than women (M = 19.05, SD = 1.79) at the time of first intercourse. Students from cosmopolitan areas (M = 17.90, SD = 2.09) and other cities (M = 17.88, SD = 1.71) were younger at the time of first intercourse than their rural counterparts (M = 18.58, SD = 1.84).

The kind of relationship at the time of first intercourse showed differences among women and men. Most women were in a long-term relationship (N = 54, 78.26%) and only a few were in a short-term (N = 13, 18.84%) or transient relationship (N = 2, 2.90%), whereas half of the men were in a long-term relationship (N = 48, 49.48%), and the other half were in either a short-term (N = 36, 37.11%) or a transient (N = 13, 13.40%) relationship at the time of first intercourse, $\chi^2(2) = 14.92$, p < .01. No women engaged in a one-night stand or had sex with a prostitute at the time of first intercourse, whereas 12.59% men had a one-night stand and 12.95% had sex with a prostitute.

For affective reactions to first intercourse, a 2 (Sex) \times 3 (Region) ANOVA revealed only a significant main effect for Sex for both actual affect, F(1, 227) = 5.24, p < .05, and anticipated affect, F(1, 234) = 8.23, p < .01. Women

had more negative affective reactions to first intercourse (M = 33.72, SD = 11.84 for actual; M = 31.74, SD = 9.85 for anticipated) than men (M = 28.67, SD = 7.68 for actual; M = 27.84, SD = 7.40 for anticipated).

Usage of pornography

For pornography usage, a 2 (Sex) \times 3 (Region) ANOVA revealed a significant main effect for Sex, F(1, 544) = 132.27, p < .001. Men (M = 5.66, SD = 2.02) reported following pornographic material with higher frequency than women (M = 3.87, SD = 1.31).

Sexual permissiveness

For sexual permissiveness, 2 (Sex) \times 3 (Region) ANOVA revealed a significant main effect for Sex, F(1, 548) = 46.39, p < .001, and Region, F(2, 548) = 9.06, p < .001. Men had more permissive attitudes towards sexuality (M = 17.57, SD = 6.08) compared to women (M = 14.15, SD = 5.62). Tukey's HSD test revealed that the students from cosmopolitan cities (Region 1: M = 16.93, SD = 5.97) were more permissive than the students from other cities (Region 2: M = 15.53, SD = 6.00) and from rural areas (Region 3: M = 14.44, SD = 6.26). However, when each item was analyzed separately, it can be seen that the gender difference on permissiveness disappeared for more serious relationships (Table 3).

Sexual double standards

For sexual double standards, 2 (Sex) \times 3 (Region) ANO-VA revealed a significant main effect for Sex, F(1, 534) = 24.58, p < .001. Men had significantly more traditional sexual double standards (M = 26.64, SD = 8.69) than women (M = 22.70, SD = 7.63).

Perceived parental attitudes about sexuality

In terms of perceptions of parental attitudes about sexuality, a 2 (Sex) \times 3 (Region) ANOVA for mothers revealed a significant main effect for Sex, F(1, 510) = 43.24, p < .001, and for Region, F(2, 515) = 4.20, p < .05. Women regarded the mother as more restrictive in terms of her attitudes about sexuality (M = 29.99, SD = 9.09) compared to men (M = 24.46, SD = 8.35). Students from rural areas reported their mothers to be more restrictive compared to students coming from cosmopolitan areas and other cities.

A 2 (Sex) \times 3 (Region) ANOVA for fathers showed a significant main effect for Sex, F(1, 498) = 57.34, p < .001. Women (M = 28.10, SD = 9.16) also perceived the father to be more restrictive than men (M = 21.84, SD = 8.15).



Table 1 Descriptive statistics for study variables

Variable	N	Region 1		Region 2		Region 3		Combined	
		M	SD	M	SD	M	SD	M	SD
Age (in years)									
Women	284	20.8	1.94	20.5	1.48	21.5	1.56	20.8	1.72
Men	275	21.4	1.88	21.1	1.72	21.7	1.89	21.3	1.82
Combined	559	21.1	1.93	20.8	1.63	21.6	1.73	21.0	1.78
Age at First Se	exual Encount	er (in years)							
Women	71	19.0	1.83	18.7	1.75	20.3	1.22	19.0	1.79
Men	182	17.4	2.01	17.6	1.61	18.1	1.67	17.6	1.78
Combined	253	17.9	2.09	17.9	1.71	18.6	1.84	18.0	1.90
Sexual Permiss	siveness ^a								
Women	281	15.0	5.23	14.1	5.82	12.4	5.68	14.2	5.62
Men	273	19.2	6.01	16.9	5.88	16.3	6.24	17.6	6.08
Combined	554	16.9	5.97	15.5	6.00	14.4	6.26	15.8	6.09
Sexual Double	$Standards^{b} \\$								
Women	271	23.0	6.78	22.4	7.73	22.8	9.07	22.7	7.63
Men	269	27.8	8.74	26.3	8.48	25.5	9.05	26.6	8.69
Combined	540	25.3	8.11	24.4	8.33	24.2	9.11	24.7	8.40
First Coital Af	fective Reacti	on ^c							
Women	64	33.0	12.43	35.8	10.32	29.3	14.55	33.7	11.8
Men	169	27.2	6.60	28.9	7.31	31.2	9.94	28.7	7.68
Combined	233	29.1	9.27	30.7	8.68	30.8	10.75	30.1	9.27
First Coital Af	fective Reacti	on (Anticipate	ed) ^d						
Women	161	30.4	10.59	32.7	8.90	31.8	10.82	31.7	9.85
Men	79	26.1	6.86	28.6	7.75	28.4	7.11	27.8	7.40
Combined	240	29.2	9.84	31.2	8.70	30.7	9.81	30.5	9.28
Usage of Porne	ography ^e								
Women	284	3.9	1.57	3.8	1.07	3.9	1.28	3.9	1.31
Men	275	5.7	2.24	5.6	1.79	5.7	2.18	5.7	2.02
Combined	559	4.8	2.10	4.7	1.74	4.9	2.02	4.8	1.92
Perceived Mate	ernal Attitudes	s about Sexua	lity ^f						
Women	276	30.0	9.43	29.4	8.83	31.6	9.01	30.0	9.09
Men	240	22.6	7.56	24.7	8.68	27.3	8.17	24.5	8.35
Combined	516	26.7	9.38	27.2	9.05	29.5	8.83	27.4	9.17
Perceived Pate	rnal Attitudes	about Sexuali	ty ^g						
Women	261	28.0	9.08	28.1	8.99	28.4	9.93	28.1	9.16
Men	243	19.6	6.64	22.9	9.15	23.2	7.30	21.8	8.15
Combined	504	24.1	9.06	25.5	9.41	25.8	9.04	25.1	9.23

^a Absolute range, 5–25.



^b Absolute range, 10–50.

^c Absolute range, 13–65.

^d Absolute range, 13-65.

e Absolute range, 3–15.

f Absolute range, 10-50.

g Absolute range, 10-50.

Table 2 Prevalence of virginity by sex and region

Variable	Virgin		Non-Virgin	χ^2	
	N	%	\overline{N}	%	
Region 1					
Women	73	69	33	31	
Men	23	24	71	76	
Combined	96	48	104	52	39.35***
Region 2					
Women	98	77	29	23	
Men	44	34	84	66	
Combined	142	56	113	44	47.30***
Region 3					
Women	40	82	9	18	
Men	21	40	32	60	
Combined	61	60	41	40	18.69***

 $^{***}p \le .001.$

Table 3 Descriptive statistics for the items on the sexual permissiveness scale (N = 563)

Item	Region 1		Region 2		Region 3		F (gender)	F (region)
	\overline{M}	SD	\overline{M}	SD	M	SD		
I believe that	sexual interco	urse is accepta	ble for me on	a first date				
Women	2.07	1.12	1.92	1.28	1.63	1.09	29.78***	4.00*
Men	3.19	1.57	2.69	1.39	2.73	1.56		
I believe that	sexual interco	urse is accepta	ble for me who	en I'm casually	dating my pa	rtner		
Women	1.86	1.18	1.83	2.10	1.46	84	119.13***	3.68*
Men	3.60	1.51	2.98	1.46	3.04	1.51		
I believe that	sexual interco	urse is accepta	ble for me who	en I'm seriousl	y dating my pa	artner		
Women	3.52	1.45	3.34	1.52	3.06	1.63	23.17*	8.76*
Men	4.23	1.39	3.78	1.40	3.85	1.51		
I believe that	sexual interco	urse is accepta	ble for me who	en I'm pre-eng	aged to my par	rtner		
Women	3.67	1.37	3.51	1.56	3.12	1.62	1.55	5.04**
Men	3.95	1.55	3.63	1.50	3.31	1.77		
I believe that	sexual interco	urse is accepta	able for me who	en I'm engaged	d to my partner	•		
Women	3.84	1.33	3.67	1.52	3.14	1.62	.48	7.59***
Men	4.14	1.47	3.82	1.47	3.40	1.79		

 $^{**}p \le .01$.

The effect of distal and proximal variables on sexual attitudes and behaviors

Stepwise multiple regression analyses were carried out in order to examine the effects of region as a distal variable, perceived maternal and paternal attitudes as proximal variables, and gender on each dependent variable separately. The regression analyses are reported in Table 4.

For the six regressions shown in Table 4, gender was a significant predictor in five, accounting for 4–23% of the variance. Maternal attitudes were a significant

predictor in three regressions, accounting for 3–13% of the variance, and paternal attitudes made contributions to two, accounting for only 1–2% of the variance. Being a woman was associated with having first intercourse at an older age, having less permissive attitudes toward premarital sex, anticipating more negative feelings at the time of first intercourse, holding less traditional double standards, and using less pornography. The perception of mother and father as sexually restrictive was related to holding sexually less permissive attitudes, and more negative affective reaction to first intercourse. Perceiving mother as sexually restrictive was also associated with



 $^{***}p \le .001.$

Table 4 The effects of distal and proximal variables on sexual attitudes and behaviors (N = 563)

Variable	В	SE	β	R^2
Age at first intercourse				
1.Gender	1.46	.28	.34***	.12
2.Gender	1.49	.28	.35***	.15
Region 3(Rural)	.91	.34	.17**	
Sexual Permissiveness				
1.Mother's Attitudes	23	.03	35***	.12
2.Mother's Attitudes	19	.03	28***	.17
Gender	-2.73	.53	22***	
3.Mother's Attitudes	18	.03	27***	.18
Gender	-2.82	.53	23***	
Region 1(Cosmopolitan)	1.55	.53	.12**	
4.Mother's Attitudes	13	.04	20***	.19
Gender	-2.59	.54	21***	
Region 1	1.50	.53	.12**	
Father's Attitudes	08	.04	12*	
Affective reaction to first intercours	e			
1.Mother's Attitudes	.39	.07	.36***	.13
2.Mother's Attitudes	.24	.10	.22*	.15
Father's Attitudes	.23	.10	.21*	
Anticipated affective reaction to first	t intercourse			
1.Gender	3.81	1.29	.20**	.04
Sexual Double Standards				
1.Gender	-3.19	.74	20***	.04
2.Gender	-4.11	.76	25***	.07
Mother's Attitudes	.18	.04	.20***	
Pornography Usage				
1.Gender	60	.05	48***	.23

^{*} $p \le .05$.

holding more traditional double standards. The analyses also showed that students from rural areas were at an older age at the time of first intercourse and those from cosmopolitan areas were more sexually permissive.

Discussion

The present study examined the sexuality related attitudes and behaviors of Turkish university students by taking proximal and distal variables into account.

Sexual behaviors

A greater number of men compared to women reported being *non-virgin*, and this was the case for each region that the students came from. This finding has been shown in many studies involving various cultures (Bui et al., 2001; Coleman-Kenney, 1992; Isarabhakdi, 1997; Mistry, 1995). Virginity is still very much valued in Turkey (Cok, 2000). Carpenter (1999) argued that virginity is socially constructed. In her study based on in-depth interviews with American women and men, she found that women most likely regarded virginity as a gift whereas men viewed it as a stigma.

Men had their first sexual intercourse at a younger age compared to women, who constituted only about one fourth of the women sample. This finding is consistent with a recent study carried out with Turkish medical students (Ozan et al., 2005). This could be related to less restriction from the society on their part to remain virgin. In fact, there is the reverse pressure of having sexual intercourse as early as possible to become a "real man" and validate one's masculinity (see Rucibwa, 2001). Younger age at first



^{**} $p \le .01$.

 $^{***}p \le .001.$

intercourse for men was also found in a national survey in Britain (Wiederman, 1997). Apart from a cultural influence, it is also the case that men's sexual strategies are universally short-term or casual; men do not see a long-term committed relationship as a prerequisite for a sexual encounter to take place (Buss & Schmitt, 1993). In the present study, half of those men who have engaged in intercourse were in a short-term or a transient/casual relationship, whereas more than three quarters of women were in a long-term relationship at the time of first intercourse. Also, no women had first intercourse on a one-night stand or with a prostitute; however, approximately 13% men had it on a one-night stand and another 13% with a prostitute.

In a study that explored gender differences in motivation for sexual intercourse involving both university student and community samples, Horowitz (2000) found that women were more likely to engage in sex to express love and affection and men were more likely to engage in sex for pleasure. A word of caution is in order when interpreting the results related to the relationship context differences between men and women. It should be acknowledged that the relationship context was a perceived measure. Hence, it is possible that some of the differences, especially in the long-term, short-term, and transient relationship contexts, were due to how these relationships were perceived differently by the two groups rather than what they actually were.

Women indicated that they perceived more restrictive attitudes about sexuality by both the mother and the father compared to men. Turkish parents are said to exert strong restrictions on their daughters (Ataca, 1992; Kagitcibasi & Sunar, 1992), the sexual aspect of which is confirmed by the present study. As perceptions of parents' restrictive attitudes toward sexuality increased, negative feelings during first intercourse also increased in intensity. Women had more negative feelings during their first intercourse compared to men. Virgin women also anticipated more negative feelings compared to virgin men.

About the usage of pornographic material, men reported following pornographic material more frequently than women. This is in line with other studies in the literature (e.g., Kenrick, Stringfield, Wagenhals, Dahl, & Ransdell, 1980; Leitenberg & Henning, 1995). From a gender role socialization perspective (Kenrick et al., 1980), it is assumed that boys are brought up to equate intercourse with manhood (Hite, 1994) and that men objectify women and sexual activity along with the cultural reinforcement to view women as "sex objects" (Brooks, 1998).

Sexual attitudes

In the current study, men held more permissive attitudes toward sexuality compared to women. This finding is consistent with many studies involving many cultures and societies (Askun, 1998; Higgins et al., 2002; Oliver & Hyde, 1993; Remshard, 1998; Sprecher, 1989; Wilson, 1987). Women are generally more conservative than men (Hendrick, Hendrick, Foote, & Foote, 1985). Related to gender role socialization perspective, women are generally brought up to be sexually selective compared to men (Orlofsky, 1981; Sprecher, Sullivan, & Hatfield, 1994).

Item by item analysis of the sexual permissiveness measure revealed that women were predicted to hold less permissive attitudes compared to men in less committed relationships. However, there was no significant gender difference in accepting intercourse while being preengaged or engaged to a partner. These findings can be explained by the Turkish culture and the different socialization of girls and boys. The culture dictates that women should only have a sexual encounter in a strong bond like marriage. Because pre-engagement and engagement are serious steps towards marriage, sexual relationships may have not been regarded as threatening for women university students. Most of the women who have had intercourse in this study were in a long-term relationship, with the implication of a commitment. Because of the Western influence on the western regions of Turkey, a long-term relationship that encompassed love and commitment instead of marriage has become sufficient for women to have sexual intercourse with their partners.

In terms of the endorsement of traditional sexual double standards, men endorsed more traditional sexual double standards compared to women. Men were predicted to see premarital sex, active sexual activity, one night stands, frequent sexual experiences, a leading role in sexual encounters, and sexual promiscuity as more of a man's right, but not of a woman's. This finding might be related to the traditional way of perceiving women in a patriarchal society that is part of gender role socialization (Bettor, 1993). In fact, as the perception of the parents' restrictive attitudes toward sexuality increased, endorsement of the double standards increased.

The perception of the mother as sexually restrictive was the most important variable in explaining sexual conservatism and negative affective reaction to first intercourse. In contrast, the effect of the perception of the father's attitudes was relatively minor. Regarding parents as sources of sexual knowledge, Ozan et al. (2005) found that, for pre-adolescents, the internet and pornographic films were the main source of knowledge for men; however, the mother was the most significant source of knowledge for women. They also found that sixth-year women medical students were affected by the expectations of families to a greater extent than men. In a study of college students, Sanders and Mullis (1988) found that students had frequently viewed their parents as having a great deal of



influence on their opinions, beliefs, and attitudes toward sexuality. Similarly, in a study carried out in Shanghai in 1997, about 54% of the young people whose parents were opposed to sex before marriage agreed with this point of view, compared to 34% among those whose parents were not strict about it (Haixia, 2003).

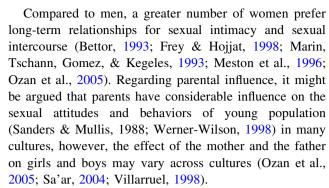
There were two major limitations of the current study. The first comes from the restricting usage of a university sample in exploring such a dynamic area, which may show variations in line with one's age, level of education, and status in society. Although this shortcoming is common in behavioral research in general, and sexuality research in particular (Hyde & DeLamater, 1997), this is even more limiting in a country such as Turkey where a smaller proportion of its population is college educated. The second limitation is its representativeness in terms of the sample. The aim of capturing a variety of attitudes and behaviors prevalent in the culture was achieved by including three regions, yet, the diversity might still have not been represented well. More representative samples including non-university samples should be the focus of future research.

Summary

The present study examined university students' sexuality related attitudes and behaviors, which are of major interest to researchers in many cultures. The results showed that women compared to men, and students from rural areas compared to those from cosmopolitan centers were more traditional and conservative in their attitudes and behaviors regarding sexuality.

Men were found to be more sexually permissive than women in line with studies in different cultures (Higgins et al., 2002; Laumann, Gagnon, Michael, & Michaels, 1994; Leiblum, Rosen, Platt, Cross, & Black, 1993; Oliver and Hyde, 1993; Reinholtz & Muehlenhard, 1995; Rucibwa, 2001; Wiederman, 1997). Men were found to hold more sexual double standards compared to women like most studies, however, recently, this concept has strongly been discussed to be cultural (Marks & Fraley, 2005; see also Okazaki, 2002).

Concepts around virginity might be considered universal as most studies reveal that there are fewer virgin men compared to virgin women and that women have more negative feelings at the time of first intercourse (Carpenter, 2001; Holland et al., 2000; Sprecher & Regan, 1996). However, the frequencies of men and women in terms of losing virginity and gender differences in age at first intercourse vary across cultures (see Higgins et al., 2002; Kupek, 2001; Meston et al., 1996; Ozan et al., 2005).



While gender differences in Turkish university students' attitudes and behaviors towards sexuality confirm crosscultural similarities, regional differences point to withinculture variation. Older ages at time of first intercourse, less permissive attitudes towards sexuality, and perception of more restrictive maternal attitudes in rural regions compared to cosmopolitan centers, showed the influence of traditional and conservative values in rural Turkey.

In sum, the current study showed the influence of various proximal and distal variables. There were gender differences in sexual attitudes and behaviors, while both region and parents, especially the mother, had a significant impact. The study showed that these variables were closely interconnected. Research has only recently begun to examine multiple influences on sexual attitudes and behavior (see Werner-Wilson, 1998). Future research should incorporate the effects of more proximal and distal variables on sexuality related attitudes and behaviors.

References

Aras, S., Orcin, E., & Ozan, S. (2003, March). Sexual knowledge attitudes and behaviors of DEU students. Poster session presented at the 13th National Child and Adolescent Psychiatry Congress, Ankara.

Askun, D. (1998). Sexual attitudes, behaviors and AIDS prevention: Gender and culture effects in an urban university context. Unpublished manuscript, Bogazici University, Istanbul, Turkey.

Askun, D. (2000). An investigation of sexual attitudes and behaviors of Turkish university students considering gender differences in a cultural context. Unpublished master's thesis, Bogazici University, Istanbul, Turkey.

Ataca, B. (1992). An investigation of variance in fertility due to sexrelated differentiation in child-rearing practices. Unpublished master's thesis, Bogazici University, Istanbul, Turkey.

Ataca, B. (2006). Turkey. In J. Georgas, J. W. Berry, F. J. R. van de Vijver, C. Kagitcibasi & Y. Poortinga (Eds.), Families across cultures: A 30 nation psychological study (pp. 467–474). Cambridge: Cambridge University Press.

Ayotte, B. L. (2000). State-control of female virginity in Turkey: The role of physicians. *Journal of Ambulatory Care Management*, 23, 89–92.

Bettor, L. L. (1993). Gender differences and perceived gender differences in love and sexual attitudes. *Dissertation Abstracts International*, 54(8), 4440B.



- Brooks, G. R. (1998). A new psychotherapy for traditional men. San Francisco: Jossey-Bass.
- Bui, T. D., Pham, C. K., Pham, T. H., & Hoang, L. T. (2001). Cross-sectional study of sexual behavior and knowledge about HIV among urban, rural, and minority residents in Vietnam. *Bulletin of the World Health Organization*, 79, 15–22.
- Buss, D. M., & Schmitt, D. P. (1993). Sexual strategies theory: An evolutionary perspective on human mating. *Psychological Review*, 100, 204–232.
- Caron, S. L., Davis, C. M., Halteman, W. A., & Stickle, M. (1993). Predictors of condom-related behaviors among first-year college students. *Journal of Sex Research*, 30, 252–259.
- Carpenter, L. M. (1999). Virgin territories: The social construction of virginity loss in the contemporary United States. *Dissertation Abstracts International*, 60(7), 2692A.
- Carpenter, L. M. (2001). The ambiguity of "having sex": The subjective experience of virginity loss in the United States. *Journal of Sex Research*, *38*, 127–140.
- Cok, F. (2000). Reflections on an adolescent sexuality education program in Turkey. *Siecus Report*, 28, 5–7.
- Cok, F., Gray, L. A., & Ersever, H. (2001). Turkish university students' sexual behavior, knowledge, attitudes and perceptions of risk related to HIV/AIDS. *Culture, Health & Sexuality*, 3, 81–99.
- Coleman-Kenney, K. R. (1992). The influence of selected family background variables on the reported sexual attitudes, sexual behavior, and sex education of traditional age college students at two universities in southeastern Pennsylvania. *Dissertation Abstracts International*, 53(4), 2081B.
- Cupitt, C. (1992). Cognitive factors in the decision to adopt safer sex practices. Unpublished master's thesis, University of London, London, England.
- De Gaston, J. F., Weed, S., & Jensen, L. (1996). Understanding gender differences in adolescent sexuality. Adolescence, 31, 217–231.
- Edmonds, E. M., Cahoon, D. D., & Shipman, M. (1991). Predictions of opposite-sex attitudes concerning gender-related social issues. *Bulletin of the Psychonomic Society*, 29, 295–296.
- Ericksen, J. A., & Steffen, S. A. (1996). What can we learn from sexual behavior surveys? The U.S. example. In S. Zeidenstein & K. Moore (Eds.), *Learning about sexuality: A practical begin*ning (pp. 73–97). New York: The Population Council.
- France: Turkish girl's family jailed in her death. (1995, Winter). Women's International Network News, 21, 44.
- Frey, K., & Hojjat, M. (1998). Are love styles related to sexual styles? Journal of Sex Research, 35, 265–271.
- Haixia, P. (2003, December 4). Young alter sexual attitudes. *China Daily*, pp. 3.
- Hatfield, E., Sprecher, S., Pillemer, J. T., Greenberger, D., & Wexler, P. (1988). Gender differences in what is desired in the sexual relationship. *Journal of Psychology and Human Sexuality*, 1, 39–52
- Hendrick, S., Hendrick, C., Foote, M. J. S., & Foote, F. H. (1985). Gender differences in sexual attitudes. *Journal of Personality and Social Psychology*, 48, 1630–1642.
- Herald, J. M., Valenzuela, M. S., & Morris, L. (1992). Premarital sexual activity and contraceptive use in Santiago, Chile. Studies in Family Planning, 23, 128–136.
- Higgins, L. T., Zheng, M., Liu, Y., & Sun C. H. (2002). Attitudes to marriage and sexual behaviors: A survey of gender and culture differences in China and United Kingdom. Sex Roles, 46, 75–89.
- Hite, S. (1994). Women as revolutionary agents of change: The Hite reports and beyond. Madison, WI: University of Wisconsin Press.
- Holland, J., Ramazanoglu, C., Sharpe, S., & Thomson, R. (2000). Deconstructing virginity: Young people's accounts of first sex. Sexual and Relationship Therapy, 15, 221–233.

- Horowitz, J. L. (2000). Gender differences in motivation for sexual intercourse: Implications for risky sexual behavior and substance use in a university and community sample. *Dissertation Abstracts International*, 63(2), 1030B.
- Hyde, J. S., & DeLamater, J. (1997). *Understanding human sexuality* (6th ed.). Boston: McGraw-Hill.
- Isarabhakdi, P. (1997). Sexual attitudes and behaviors of nevermarried, rural Thai youth. *Dissertation Abstracts International*, 58(5), 1932A.
- Kagitcibasi, C., & Ataca, B. (2005). Value of children and family change: A three decade portrait from Turkey. Applied Psychology: International Review, 54, 317–337.
- Kagitcibasi, C., & Sunar, D. (1992). Family and socialization in Turkey. In J. P. Roopnarine & D. B. Carter (Eds.), Parent-child relations in diverse cultural settings: Socialization for instrumental competency (pp. 75–88). Newark, NJ: Ablex.
- Kenrick, D. T., Stringfield, D. O., Wagenhals, W. L., Dahl, R. H., & Ransdell, H. J. (1980). Sex differences, androgyny, and approach responses to erotica: A new variation on the old volunteer problem. *Journal of Personality and Social Psychology*, 38, 517–524.
- Kinzer, S. (1998, January 8). Turks clash over defense of virginity tests. New York Times, pp. A3.
- Kupek, E. (2001). Sexual attitudes and number of partners in young British men. *Archives of Sexual Behavior*, 30, 13–27.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). The social organization of sexuality: Sexual practices in the United States. Chicago: University of Chicago Press.
- Leiblum, S., Rosen, R., Platt, M., Cross, R., & Black, C. (1993). Sexual behavior and attitudes of US medical students: Effects of gender, age, and year of study. *Journal of Sex Education and Therapy*, 19, 235–245.
- Leitenberg, H., & Henning, K. (1995). Sexual fantasy. *Psychological Bulletin*, 117, 469–496.
- Marin, B. V., Tschann, J. M., Gomez, C. A., & Kegeles, S. M. (1993).
 Acculturation and gender differences in sexual attitudes and behaviors: Hispanic vs. non-Hispanic white unmarried adults.
 American Journal of Public Health, 83, 1759–1761.
- Marks, M. J., & Fraley, R. C. (2005). The sexual double standard: Fact or fiction? *Sex Roles*, *52*, 175–186.
- Meston, C. M., Trapnell, P. D., & Gorzalka, B. B. (1996). Ethnic and gender differences in sexuality: Variations in sexual behavior between Asian and non-Asian university students. Archives of Sexual Behavior, 25, 33–72.
- Milhausen, R. R., & Herold, E. S. (2001). Reconceptualizing the sexual double standard. *Journal of Psychology and Human Sexuality*, 13, 63–83.
- Miller, B. C., & Fox, G. L. (1987). Theories of adolescent heterosexual behavior. *Journal of Adolescent Research*, 2, 269–282.
- Miller, B. C., McCoy, J. K., Olson, T. D., & Wallace, C. M. (1986). Parental discipline and control attempts in relation to adolescent sexual attitudes and behavior. *Journal of Marriage and the Family*, 48, 503–512.
- Mistry, Z. J. (1995). A descriptive review of the sexual attitudes and practices of college students across a decade. *Dissertation Abstracts International*, 57(1), 704B.
- Moore, K., Peterson, J., & Furstenberg, F. (1986). Parental attitudes and the occurrence of early sexual activity. *Journal of Marriage and the Family*, 48, 777–782.
- Murray, T. (1998, March 10). Virginity tests prompt suicide attempts. Medical Post. 101.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29–51.
- Okazaki, S. (2002). Influences of culture on Asian Americans' sexuality. *Journal of Sex Research*, 39, 34–41.



- Orlofsky, J. L. (1981). Relationship between sex role attitudes and personality traits and the sex role behavior scale-1: A new measure of masculine and feminine role behaviors and interests. *Journal of Personality and Social Psychology*, 40, 927–940.
- Ozan, S., Aras, S., Semin, S., & Orcin, E. (2005). Sexual attitudes and behaviors among medical students in Dokuz Eylul University, Turkey. *European Journal of Contraception & Reproductive Health Care*, 10, 171–183.
- Parla, A. (2001). The honor of state: Virginity examinations in Turkey. Feminist Studies, 27, 65–89.
- Pelin, S. S. (1999). The question of virginity testing in Turkey. *Bioethics*, 13(3/4), 1–5.
- Person, E. S., Terestman, N., Myers, W. A., Goldberg, E. L., & Salvadori, C. (1989). Gender differences in sexual behaviors and fantasies in a college population. *Journal of Sex and Marital Therapy*, 15, 187–198.
- Reinholtz, R., & Muehlenhard, C. (1995). Genital perceptions and sexual activity in a college population. *Journal of Sex Research*, 32, 155–165.
- Remshard, M. E. (1998). Adult attachment styles, love styles, sexual attitudes, and sexual behaviors of college students. *Dissertation Abstracts International*, 59(10), 5622B.
- Rucibwa, N. K. (2001). Family and peer influences on sexual attitudes and behaviors in Black and Hispanic adolescent males. *Disser*tation Abstracts International, 61(9), 3480A.
- Sa'ar, A. (2004). Many ways of becoming a woman: The case of unmarried Israeli- Palestinian "girls". Ethnology, 43, 1–18.
- Sanders, G. F., & Mullis, R. L. (1988). Family influences on sexual attitudes and knowledge as reported by college students. *Adolescence*, 23, 837–846.
- Schwartz, I. M. (1993). Affective reactions of American and Swedish women to their first premarital coitus: A cross-cultural comparison. *Journal of Sex Research*, 30, 18–26.
- Shapurian, R., & Hojjat, M. (1985). Sexual and premarital attitudes of Iranian college students. *Psychological Reports*, *57*, 67–74.
- Sprecher, S. (1989). Premarital sexual standards for different categories of individuals. *Journal of Sex Research*, 26, 232–248.
- Sprecher, S., & McKinney, K. (1994). Sexuality in close relationships. In A. L. Weber & J. H. Harvey (Eds.), *Perspectives on close relationships* (pp. 193–216). Boston, MA: Allyn & Bacon.

- Sprecher, S., & Regan, P. C. (1996). College virgins: How men and women perceive their sexual status. *Journal of Sex Research*, *33*, 3–15.
- Sprecher, S., Sullivan, Q., & Hatfield, E. (1994). Mate selection preferences: Gender differences examined in a national sample. *Journal of Personality and Social Psychology*, 66, 1074–1080.
- Sunar, D. (2002). Change and continuity in the Turkish middle class family. In E. Ozdalga & R. Liljestrom (Eds.), Autonomy and dependence in family: Turkey and Sweden in critical perspective (pp. 217–238). Istanbul: Swedish Research Institute.
- Sunar, D., & Fisek, G. (2005). Contemporary Turkish families. In U. Gielen & J. Roopnarine (Eds.), Families in global perspective (pp. 169–183). New York: Allyn & Bacon.
- Turkey, community morality (policy); minister defends practice of virginity testing. (1998, February 2). *Antiviral Weekly*, 2–3.
- Turkey: Women's sexual freedom is still denied (1992, Summer). Women's International Network News (WINN) 18, 65.
- Turkish government imposes "virginity control" of Women (1994, Summer). WINN, 20, 36.
- Villarruel, A. M. (1998). Cultural influences on the sexual attitudes, beliefs, and norms of young Latina adolescents. *Journal of the Society of Pediatric Nurses*, 3, 69–80.
- Virginity examinations in Turkey. (1999, December). *International Family Planning Perspectives*, 25, 159.
- Voeten, H. A. C. M., Egesah, O. B., & Habbema, J. D. F. (2004). Sexual behavior is more risky in rural than in urban areas among young women in Nyanza Province, Kenya. Sexually Transmitted Diseases, 31, 481–487.
- Weinberg, M. S., Lottes, I., & Shaver, F. M. (2000). Sociocultural correlates of permissive sexual attitudes: A test of Reiss's hypotheses about Sweden and the United States. *Journal of Sex Research*, 37, 44–52.
- Werner-Wilson, R. J. (1998). Gender differences in adolescent sexual attitudes: The influence of individual and family factors. *Adolescence*, 33, 519–531.
- Wiederman, M. W. (1997). Sexual behavior in Britain: The national survey of sexual attitudes and lifestyles. Archives of Sexual Behavior, 26, 332–337.
- Wilson, G. D. (1987). Man-woman differences in sexual activity, enjoyment and fantasies. *Personality and Individual Differences*, 8, 125–127.

