

Sexual knowledge levels among university students in Turkey: A survey research

Ogretir-Ozcelik, Ayse Dilek ✉
Gazi University, Turkey (dilekogretir@gmail.com)

Ersoy, Ozlem
Gazi University, Turkey (ozlemerso@gmail.com)



ISSN: 2243-7681
Online ISSN: 2243-769X

OPEN ACCESS

Received: 15 January 2017
Available Online: 16 April 2017

Revised: 23 March 2017
DOI: 10.5861/ijrsp.2017.1739

Accepted: 14 April 2017

Abstract

This research investigates the current situation of university students' sexual knowledge levels as well as perceptions, beliefs, attitudes, and practices of sexuality with a survey research in Turkey. The sampling of the research consists of 285 Turkish university students. The ages of the students are range from 20-24 years old. 58.2 % were women and 41.8 % were men. In order to measure the students' sexual knowledge and behaviors, the researchers were administered a questionnaire that includes statements about the students' sexual activities, their sexual experience, attitudes toward sexual and contraceptives behaviors, communication about sexuality, and their perception about sexual intercourse. The chi-square test were performed in order to find whether there was any statistically significant differences between the female and male participants. The results showed that the differences between gender and some variables about the sexuality were statistically significant. The variables that were tested by chi-square analysis were as follows: The curiosity about sexuality, the level of sexual knowledge, the sexual knowledge resources, the correctness of sexual knowledge, needs of sexual closeness, type of sexual action, having any sexual closeness, type of sexual closeness, initiation of sexual closeness, the definition of sexual intercourse, having any masturbation experience and having any masturbation orgasm differed between the female and male participants. In most of the variables, the female participants had higher scores than the male participants.

Keywords: university students; sexual knowledge; sexuality perceptions; sexual attitude; sexuality; Turkey

Sexual knowledge levels among university students in Turkey: A survey research

1. Introduction

Adolescence is a period characterized by a tremendous rate of physical growth with the development of sexual maturation occurring under the influence of sex hormones (Onyeonoro, Oshi, Ndimele, & Chuku, 2011). The definition of sexuality includes preparedness for engaging and involvement in sexual activity (Random House Dictionary). Sexuality has a strong presence in adolescence. The development of adolescent sexuality consists of three main components: biological, psychological and social/cultural (Ponton & Judice, 2004). There is a close link between sexuality and culture/religion. Attitudes toward sexuality are essentially determined by moral, ethical, and practical elements. Sexual education is one of the most important elements (Wood, 2012).

Sexual behaviors, attitudes, and perception are socially constructed. Sexual practices and attitudes have been varied with across cultures (Ogretir, 2008). If you look at historical and current data, it is shown that women all over the world are substantially more likely to be subordinated to sexual exploitation and control than men. A majority of young people in Turkey have extremely had inaccurate sexuality knowledge. Scholars, researchers, and civil society groups in the field of adolescent sexuality and reproductive health in Turkey consider poor sexuality knowledge to be the primary reason why unintended teenage pregnancy, lack of accurate knowledge about contraceptive methods, being parent, unhealthy relationships and STIs has caused their highest number of victims among young girls in the country due to the risky and insecure abortion procedures. One common explanation why young girls and boys in Turkey have inadequate and insufficient sexuality knowledge is that they basically depend on identically ignorant and uninformed friend groups and peers for their information and education on sexuality (Cok, Gray, & Ersever, 2001).

In Turkey, it is assumed that primary and early sources of sexual information are mainly peers and media. Families and schools are not main suppliers of subsequent sex education. The influence of media and peer are predominantly involved in wrong information and negative consequences (Genc & Ogretir, 2001). Knowledge of sex issues such as unprotected sex, early sexual initiation, and premarital sex are especially low among female adolescents. As a result, detrimental consequences of negative sexual behavior such as induced abortion and unplanned pregnancies have been increasing among adolescents in Turkey (Aras, Orçin, Ozan, & Semin, 2007). In short, the major factors influencing Turkish adolescent sexual behavior are culture, religion, poverty, and the absence of sex education both in schools and at home. It is a contentious issue to approach sexuality and sex education in many Muslim countries including Turkey (Ozan, Aras, Semin, & Orcin, 2005).

In Turkey, there is a lack of formal sex education in high school and university levels. There is no specific sex education course in high schools. Sex education subjects are covered only under the other courses such as biology, health science, and many others (Sungur, 2013). At the university levels, only certain departments such as health science and medical schools have sex education courses. There is no sex education for all university students at all levels in the academic curriculum. Moreover, there is even no detailed and structured sex therapy for health professionals or master and doctorate programs at the university levels (Sayin, 2015). Not only sex education is not part of Turkish national curriculum in schools and universities, even some departments such as psychological counseling only offer sex education course as elective in very few universities' faculties of education (Çuhadaroğlu, 2016). There is a need to have a holistic sex education in Turkey in order to improve sexual and reproductive health as well as human rights in Turkey (Colliander-Celik, 2014).

There are also regional and cultural differences in Turkey. In some parts of Turkey, especially in the Western part, sexual issues are more freely discussed than in other parts of Turkey. However, premarital sex is tagged as taboo and for that reason not discussed in many homes. Other than schools and homes, the majority of Turkish adolescents acquire sex education through the wrong means including peers, friends, TV screen and magazines,

the Internet, experimentation, eavesdropping adult discussion, and pornography (Askun & Ataca, 2007; Öğretir, 2006).

In order to help young girls and boys attain to accurate and sufficient sexuality knowledge, it has been recommended that family members and parents in Turkey require annihilating the cultural silence around sexual subjects and issues in the family environment and accepting the responsibility of speaking to their children about sexuality. The major barrier to parent-child communication on sexuality is the cultural constructing of the issue of sex as taboo in both urban and rural parts of Turkey. It is believed that sex is not a popular subject of discussion for many family members because culture/religion determines sexual attitudes, behaviors, and practices. Turkish parents are inclined to be cautious of overstepping acceptable cultural and traditional practices in regards to childrearing. Such puritanical attitudes and cultural restraints discourage communication among family members about sexual issues by putting parents in a delicate position when they voice the subject of sex in front of their children. Other main reasons of absence of parent-child sexual communication are poorly defined values, lack of knowledge on sexuality, inability to begin and continue conversation on the sexual issues, cultural values that put sex in a taboo subject and fears of early maturation of adolescents about sexual activity if they are introduced to sexual knowledge. Moreover, some other structural and social factors may be conducive to a lack of creation of the family environment that induce healthy conversation about sexual matters. These factors are low level of general education of parents, a low level of confidence, lack of self-efficacy, high parental conservatism and religiosity, inadequate communication skills and lack of sexual education of parents (Sungur, 2013).

In Turkey, parent-child communication about sexuality occurs usually in negative ways. Home-based sexuality education is poorly and negatively implemented because parents give deliberate misinformation to children via their fear-based tactics and the use of the authoritarian ideology. Parents usually portray sex with scary images. Also, youth's sexual behaviors are perceived as immorality, dishonor, and insubordination. Many Turkish youths misinform about sexuality with untruths, stereotypes, prejudices, hearsays and half-believed ideas (Oğretir & Özcelik, 2008). As a result, recipients of poor and negative sexuality education are often unaware of risky sexual behaviors and usually lack adequate sexual knowledge (Cok, 2000).

On the contrary, positive and good parent-child communication defined as the transmission of clear, accurate, and timely information about sexuality to adolescents is key for healthy society and individuals. Studies have shown that there is a correlation between good and positive family communication and high awareness of sexual risk, high use of contraceptive, fewer chances of sexually transmitted diseases (STDs), low involvement of risky sexual practices, and delayed onset of sexual activity. If adolescents have open and accurate family sexual communication, it reduces comply with peer pressure and popular expectation on sexual behavior. Also, young people more easily discuss sexual risks with their partners (Starbuck & Lundy, 2015). Adolescent sexuality is affected by the cultural experience. Formal and informal education must be the most influential factor in the development of teenage sexuality. Some studies suggest that liberal attitudes toward sex may result in lower teenage birth rates if there is a sexual education in formal and lifelong learning areas (Jones, Forrest, & Goldman, 1985).

In spite of cultural traditions, there is a growing globalization of sexuality and sexual behavior among adolescents. The most recent and important factor affecting adolescent sexual behaviors are electronic and digital sharing. The cultural norms used to guide traditional attitudes to sexuality and sex. However, the explosion of social networking, namely Facebook and Twitter rapidly removes existing barriers between different cultures. The cell phone technology and the internet could be easily accessed by the adolescents. Both can have negative and positive effects. Positive effects include delivering health interventions, increasing cognitive and/or social development, and empowerment via learning. There are also negative effects such as addiction, predatory sexual solicitation, and harassment (Guan & Subrahmanyam, 2009).

In Turkey, sexuality has been culturally seen as offensive and wrong. From the childhood to adulthood,

parents have been avoiding or ignoring the subject of sex. When a child grows up with this idea, he or she perceives sex as bad and ask no questions about the subject. Similarly, adolescents have followed the same perception and understanding about sex in the future. As a Muslim country, sexuality in Turkey is affected by Islamic teachings and rules. Islam defines explicitly that premarital and extramarital sexual relations are prohibited as well as anal intercourse and homosexual contact. Some Islamic scholars may permit the use of contraception methods for birth control, but all Muslim scholars agree that contraceptives should not be used for extramarital or homosexual relations (Odoms-Young & Abdulrahim, 2006). If the Muslim society thinks that women do not follow the cultural norms of sexual behaviors, women are perceived to cause shame for their husbands and to dishonor their families. Even women are sometimes expected not to discuss their sexual behavior with strangers, including health professionals or pollster (Kulwicki, 2006).

There have been different studies on Turkish university students and sexuality. The study conducted on 638 university students in southeast Turkey showed that students who masturbated were 53 %. The southeastern part of Turkey is culturally very conservative for women sexuality. As expected, only 9 % of women had experience of masturbation. 83 % of men reported masturbation. In the same study, the overall percentage for premarital sexual intercourse was 26 %. The female had significantly lower scores (3.5 %) than male (41 %) university students (Yaşan, Eşsizoğlu, & Yıldırım, 2009). In the Western region of Turkey, similar studies uncovered rates of masturbation and foreplay/sexual intercourse as close as the Western societies. The study taken place in İzmir found out that virginity and hymen are very important especially among the unmarried female adolescents and young adults that cause to use of other forms of sexual behaviors such as anal or oral sex (Aras, Orçin, Ozan, & Semin, 2004, 2007). It is also indicated that there is a double standard between gender about sexual intercourse in Turkey. If you are women and have a premarital sex, you are more likely face family and social pressures and blame for any consequences of your sexual acts. Even university students in the metropolitan city of Istanbul had lower rates of sexual activities than the Western counterparts. Among 647 students in Istanbul, the sexually active respondents were 26 % and the masturbation rates were 36 % (Rathfisch, Aydin, Bozkurt, Pehlivan, & Kaplica, 2012).

There are few research studies on Turkish adolescents' attitudes, behaviors, and practices about sexuality. Although the Western researchers have been moving toward a new generation of sexuality subjects such as lesbian, gay and bi-sexuality, Turkish scientific community still focuses on premarital sexual attitudes, virginity, double standards, first intercourse, etc. Since sexual attitudes, values, and beliefs change slowly, this study also makes an important contribution to shed light on sexuality issues in Turkey. This study is an important contribution to research on Turkish youth sexual behavior because the traditional culture in Turkey curbs both policy makers and researchers to make research on culturally sensitive topics such as sexuality. Consequently, quantitative research in this area is very limited.

2. Method

2.1 Research questions

This research is planned to determine the perceptions of university students about sexuality and sexual intercourse in terms of their gender for the descriptive and inferential purpose. The following questions were asked to the participants of this study:

- How do the university students describe the sexual curiosity subjects in terms of their gender?
- How do the university students describe the sexual knowledge resources in terms of their gender?
- Where do the university students' acquire their information about sexuality in terms of their gender?
- How do the university students describe the sexual knowledge correctness in terms of their gender?
- How do the university students describe the sexual actions in terms of their gender?
- How do the university students describe the intimacy with the opposite sex in terms of their gender?
- What is the age range for sexual intimacy among the university students in terms of their gender?
- What kind of sexual intimacy do the university students have with the opposite sex?

- What do the university students think whether there is a sexual need or not in terms of their gender?
- How do the university students describe the sexual intercourse with a word in terms of their gender?
- How do the university students express themselves why adolescents need to have a sexual intercourse in terms of their gender?
- How do the university students describe masturbation in terms of their gender?
- How do the university students describe masturbation orgasm in terms of their gender?

2.2 Instruments

For the data collection purpose, the researchers were designed a paper-pencil questionnaire that includes demographic as well as the students' perception and current situation about sexuality and sexual behaviors. The questionnaire form consists of two parts. In the first part, the participants were asked about their department, gender, age and marital status. In the second part, the students were answered questions related to their knowledge about sexuality, their sexual relationship, whether adults have any sexual needs, how they can define the sexual intercourse with one word, how they attained their knowledge about sexuality, their frequency and conditions of sexual intimacy with the opposite sex, what kind of sexual intimacy they prefer and whether they masturbate or not.

2.3 Procedure

The research questionnaires were administered in classroom settings through face-to-face interviews spanning for 20-30 minutes. The participation to the study is voluntary with full knowledge of relevant risks and benefits. A cover letter explained the purpose of the study that includes they do not need to include their names, there is no obligation to complete the survey, the collected data are only used for only research purpose and the anonymity is guaranteed were enclosed before they filled out data collection measures. Data from the questionnaires were adequately stored and protected within statistical software in order to protect the sensitive data. All analyses were performed using SPSS Software (version 20.0). Frequencies were used to characterize demographic background of the participants. For inferential statistical analysis, chi-square test was used for comparison between gender and other variables.

3. Results

The descriptive results are presented in the Table 1. The research sampling method that was used in this study was random sampling. The participants were selected randomly from the students who study at the Gazi University. There were a total of 285 students. All participants identified themselves single. The female participants' ratio is 58.2 % and the male participants' ratio is 41.8 %. They ranged in age from 19 to 25 years. The age range from 19-21 years old was 42.5 % and 22-25 years old were 57.5 %. The average age is 21.9 years old.

Table 1

Descriptive Statistics for University Students and their Parents

Demographic Variables		N (285)	%
Students Gender	Female	166	41.8
	Male	119	58.2
	Total	285	100
Students Ages	19-21 years old	121	42.5
	22-25 years old	164	57.5
	Total	285	100
Level of Sexual Knowledge	Very Adequate	25	8.89
	Adequate	123	43.77
	Somewhat Adequate	66	23.48
	Little Adequate	56	19.92
	Not Adequate	11	3.91
	Total	285	100

Table 2*Chi-Square Results of Sexual Knowledge Resources by Gender*

Sexual Knowledge	Female (n=135)		Male (n=83)		χ^2 Results χ^2
	Count	%	Count	%	
Family	39 (28.9%)	92.9	3 (3.6%)	7.1	31.380
Media	11 (8.1%)	35.5	20 (24.1%)	64.5	
Friends/Peers	67 (49.6%)	54.9	55 (66.3%)	45.1	
Teachers	18 (13.3%)	78.3	5 (6.0%)	21.7	
Total	135 (100%)		83 (100%)		

Note. * $p < .05$. Numbers in parentheses indicate column percentages.

When the participants were asked where they receive their sexual knowledge, there were statistically significant differences between men and women participants ($\chi^2_{(3)}=31.38$; $p<0.05$). The participants who said they received sexual knowledge from their family were 92.9% for females and 7.1% for males. There were 64.5% of males who got knowledge from media/press and 35.5% of females. Females who talked with their friends/peers for sexual knowledge were 54.9% and males were 45.1%. The sexual knowledge resource was teachers for 78.3% females and 21.7% males. The total of 83 males who responded this question, 66.3% of them indicated that they received sexual knowledge from their friends. Out of the total 135 females, 49.6% of them responded that they got their sexual knowledge from their friends. The least likely knowledge resource for males out of 83 was family (3.6%) and for females out of 135 were media (8.1%).

The chi-square results whether sexual knowledge is correct or not were statistically significant between gender ($\chi^2_{(3)}=11.43$; $p<0.05$). The answer for correct were 64.6% for females and 35.4% for males. 68% of females answered not correct and 32% of males answered not correct. 65.4% of females ticked "I don't know" choice and 34.6% of males. When the respondents asked whether knowledge is correct or not, the males who said partially correct were 83.3% and the females were 16.7%. The total respondents of 131 females, 72.5% of them believed the knowledge is correct. The total of 79 males, 65.8% of them indicated the sexual knowledge is correct.

From the statistical analysis, it can be concluded that there were statistically significant differences between gender and the participants' curiosity about sexuality ($\chi^2_{(3)}=19.36$; $p<0.05$). The females who had no curiosity were 46.7% and the males who had no curiosity about sexuality were 53.3%. When the participants asked what they were curious about sexuality, 21.1% of females had no curiosity about sexual subjects and 33.6% males had no interest on sexual subjects. Out of within 166 females participants, the subjects that they are curious about were as follows: 48.8% of them were sexual intercourse, 24.7% of them were sexual organs and functions, and 5.4% of them were kissing, masturbation and wet dreams. The total number of males who responded this question were 119. Out of 119, 27.7% of male participants were curious about sexual organs and functions, 25.2% of them were sexual intercourse and 13.4% of them were kissing, wet dreams and masturbation.

Table 3*Chi-Square Results of the Sexual Closeness Type by Gender*

Sexual Action Type	Female (n=57)		Male (n=46)		χ^2 Results χ^2
	Count	%	Count	%	
Hugging, Kissing	26 (45.6%)	66.7	13 (28.3%)	33.3	13.409
Caressing	9 (15.8%)	69.2	4 (8.7%)	30.8	
Kissing, Foreplay	18 (31.6%)	58.1	13 (28.3%)	41.9	
Sexual Intercourse	4 (7.0%)	21.1	15 (32.6%)	78.9	
Anal Sex	0 (0.0%)	0	1 (2.2%)	100	
Total	57 (100%)		46 (100%)		

Note. * $p < .05$. Numbers in parentheses indicate column percentages.

Using a chi-square analysis, there were statistically significant differences in types of sexual closeness and gender ($\chi^2_{(4)}=13.40$; $p<0.05$). Of those students, 78.9% of males expressed sexual intercourse, 21.1% of females

preferred sexual intercourse. The female group (66.7%) had higher scores on preferred sexual action as hugging and kissing than the male group (33.3%). The total answer to this question for female participants were 57 out of which 45.6% of them mentioned hugging and kissing. The total number of 46 males, 32.6% of them indicated sexual intercourse.

When the participants were asked about their most used sexual action, there were statistically significant differences between males' and females' ratings of the most used sexual action ($\chi^2_{(1)}=8.33$; $p<0.05$). In other words, the preferences of sexual activities differed between gender. Kissing and foreplay were preferred by 60% of males and 40% of females. Holding hands, hugging and caressing were chosen by 63.1% of females and 36.9% of males. Out of 165 females who data were collected 89.1% of them and out of 113 males, 76.1% of them had preferences for holding hands, hugging and caressing.

There was a significant difference between the scores of university men and scores of university women whether the participants had any sexual closeness with opposite sex ($\chi^2_{(1)}=13.86$; $p<0.05$). The university women had likely no sexual closeness to opposite sex (77.4%) than the university men (47.1%). To examine total score of 137 university women, 59.9% reported no sexual closeness to opposite sex. Out of 73 university men, 67.1% indicated sexual closeness to opposite sex.

The difference between gender about the rating of sexual closeness to opposite sex age range was statistically significant ($\chi^2_{(2)}=28.29$; $p<0.05$). The male participants (80.0%) were more likely engaged in sexual closeness to opposite sex than the female participants (20.0%) in 15-17 age group. The number of females who had a sexual closeness to opposite sex was 67.1% in the 18 and above age range. The number of males were 32.9%. The total number of 166 females, 64.1% of them indicated that they had sexual closeness 14 and below age range and 30.7% of them had sexual closeness 18 and above age range. Out of the total number of 119 males, 52.1% of them had sexual closeness 14 and below age range and 26.9% of them had sexual closeness 15-17 years age range.

A chi-square was used to determine whether differences between two groups (gender) about the question: "Is there any sexual need of adults until marriage?" The study sample had a significantly higher percentage of no sexual needs answer for females (83.7%) than males (16.3%) ($\chi^2_{(1)}=4.77$; $p<0.05$). The females who thought that the adults have sexual needs until they got married were 62.2% and the males were 37.8%. The females who answered this question was 59 out of 61.0% mentioned that there is no sexual need until the marriage. Out of 21 males, there were 66.7% of them mentioned that there is sexual need until a person get married.

Table 4

Chi-Square Results of the Sexual Closeness Initiation by Gender

Initiation Sex Act	Female (n=152)		Male (n=80)		χ^2 Results
	Count	%	Count	%	
Women Initiate	3 (2.0%)	23.1	10 (12.5%)	76,9	12.299
Men Initiate	36 (23.7%)	75.0	12 (15.0%)	25.0	
Both Women and Men Initiate	113 (74.3%)	66.1	58 (72.5%)	33,9	
Total	152 (100%)		80 (100%)		

Note. * $p < .05$. Numbers in parentheses indicate column percentages.

A one-sample chi-square test was conducted on the sample of university students who should initiate sexual closeness between gender. The overall test was significant ($\chi^2_{(2)}=12.29$; $p<0.05$). The proportion of female who reported that men should initiate the sexual closeness was 75.0%. The proportion of male who reported that women should initiate sexual closeness was 76.9%. Out of 152 female participants, 74.3% of them reported both partners should initiate the sexual closeness. Out of 80 male participants, 72.5% of them reported both men and women should play a role in initialization of sexual closeness.

Table 5*Chi-Square Results of the Sexual Intercourse Definition by Gender*

Sexual Intercourse Definition	Female (n=165)		Male (n=119)		χ^2 Results χ^2
	Count	%	Count	%	
Painful, Terrifying, Disgusting	14 (8.5%)	93.3	1 (.8%)	6.7	11.840
Pretty, Pleasant, Amusing	135 (81.8%)	54.4	113 (95.0%)	45.6	
Dangerous	16 (9.7%)	76.2	5 (4.2%)	23.8	
Total	165 (100%)		119 (100%)		

Note. * $p < .05$. Numbers in parentheses indicate column percentages.

When you look at the word that reminds about sexual intercourse, there is a big gender gap between female and male participants ($\chi^2_{(2)}=11.84$; $p<0.05$). We have asked the participant to write the word that remind them what the sexual intercourse is. The word “painful, terrifying, and disgusting” was mentioned 93.3% by female and 6.7% by male participants. The word “dangerous” was used by a female in 76.2% and by a male in 23.8%. The total of 165 female participants, there were 81.8% described sexual intercourse as “pretty, pleasant, and amusing”, 9.7% “dangerous”, and 8.5% “painful, terrifying and disgusting.” Out of total 119 male participants, the word “pretty, pleasant, and amusing” came across 95% and “dangerous” indicated 4.2%.

Table 6*Chi-Square Results of Masturbation Experience by Gender*

Masturbation	Women (n=84)		Men (n=57)		χ^2 Results χ^2
	Count	%	Count	%	
No	60 (71.4%)	76.9	18 (31.6%)	23.1	21.817
Yes	24 (28.6%)	38.1	39 (68.4%)	61.9	
Total	84 (100%)		57 (100%)		

Note. * $p < .05$. Numbers in parentheses indicate column percentages.

The researchers performed a chi-square to examine whether the gender differed by masturbation experience and status (No or Yes). Results showed that masturbation status and experience differed statistically significant between women and men ($\chi^2_{(1)}=21.81$; $p<0.05$). When the participants were asked whether have you ever tried masturbation, 76.9% of female participants had engaged in no masturbation experience. The male participants who have ever tried masturbation were 61.9%. Out of 84 female participants, 71.4% of them had never tried to masturbate. On the contrary, out of total 57 male participants, 68.4% of them had masturbation experience.

The researchers performed a chi-square to examine whether the gender differed by having ever experienced an orgasm with masturbation. Gender differences in experience toward masturbation were observed and were significantly associated with gender ($\chi^2_{(1)}=37.57$; $p<0.05$). The male participants who may have experienced orgasm during masturbation were 75.9%. The female participants who have not experienced orgasm during masturbation were 71.1%. Out of 80 female participants, 73.8% had no orgasm experienced as a result of masturbation. Out of 90 male participants, 73.3% responded that they had ever experienced orgasm.

4. Discussion

The current study basically aimed at exploring the relationship between sexual knowledge levels of university students in Turkey in terms of their gender. It provides both descriptive and inferential information on university students the perceptions, beliefs, attitudes and practices in Turkey. Overall this study presented strong evidence of lack of sexual knowledge among female students.

In this study, most of the students have talked about sexual subjects with their friends and family members. They have also taken information from press and media. Interestingly, there is almost nobody mentioning health services. The answer why there is a lack of sexual knowledge can be attributed to the participants' socio-economic background and school curriculum before they attend university. In Turkey, sex education is only a part of sexual health and biology courses. In university level, sexual education classes are part of some

institutions' curriculum. Another explanation of the lack of sexual knowledge is related to socio-economic and cultural issues. It may be hard to talk about the sex topics even within a family in many parts of Turkey. As a result, there may be some misinformation and misconceptualization of sexuality. The Turkish media may be another contributing factor in the lack of sexual knowledge. It can be concluded that comprehensive sex education is needed for the participants to receive accurate sexual knowledge, increase self-awareness about sexuality and provide interpersonal skills on sexuality.

This study also presents similar results in other researchers. A greater number of the female participants compared to the male participants reported a lack of sexual needs. The male participants tend to have more sexual activities than the female participants. They also had more sexual closeness with opposite sex and sexual intercourse than the female participants. It can be explained by the cultural acceptance and pressure toward Turkish men having sexual activities as early as possible to become masculine (Askun & Ataca, 2007).

In another study, it is shown that women prefer sexual activities to express their affection and love. For men, the real motivation for sex is the pleasure. Turkish women may have more restrictive preferences about sexuality. This restrictive preferences may be seen as negative feelings about sexual intercourse. It was reported that women may have more negative feelings during the first sexual intercourse than men (Crooks & Baur, 2017).

If we look at how the participants define masturbation, it can be seen that the female participants may have more restrictive behaviors toward masturbation and masturbated orgasm. There was a significant gender difference in accepting masturbation. This finding can be explained whether there are sexual needs until marriage. The Turkish culture may cause socialization of girls that only approve sexual activities until a strong emotional bond is found like marriage. Most of the women in Turkey expect long-term relationship and high level of commitment to have sexual activities. As a result, men in Turkey had more permissive behaviors, attitudes, and perceptions about sexuality than women.

There are some limitations in this study. First, it only uses university students as a sample that may miss the variations in terms of a level of education, age, and socio-economic status in the society. Second, sexuality research may have restrictions to acquire a variety of attitudes, perceptions, beliefs and behaviors because people tend to not answer sexuality questions.

5. Conclusion

The period of adolescents is usually characterized by common and popular belief. The only thing an adolescent think about is sexuality and sex. We assume that they always ask questions about sexuality: what people can do, with whom, where, when and how often. The curiosity about sexuality can be linked to sexual experience and sexual desire. In many Western societies, curiosity about sexuality is usually satisfied by the beginning of the mid-adolescence. Most adolescents claim that they know enough and their knowledge about sexuality is accurate or adequate. We may know from test to measure sexual knowledge that this assumption is far from reality. It is revealed that there are misunderstandings such topic as conception and contraception. The situation in Turkey may be similar to non-Western countries. Although there has been a rapid socio-economic and cultural transformation in Turkey, the lack of sexual knowledge put enormous strains on youth and institutions.

Sexual health education is not part of compulsory education or in the school curriculum in Turkey. Mostly young people do not have correct sexual knowledge. They gain sexual information from informal resources such as hearsay from peer/friends and pornographic publication. Most of the knowledge is mostly misinformation that adversely affect sexual behaviors of adolescents in Turkey. Gender discrimination is also important to provide sexual education to the adolescents. Males have had favorable conditions at every stage of education. After a basic education, most girls are unable to attend educational institutions because of school expenses and helping household chores and childcare. The reason why there is a lack of sexual knowledge is because "*families continue to support traditional attitudes about sexuality among youth as being taboo and shameful. They prefer*

not to speak to their children about issues concerning sexuality” (Ege, Akin, & Koçoğlu, 2014).

It should be noted that there were gender differences between how men and women approach and relate to sexuality in Turkey. Premarital intimacy is strongly affected by the cultural structure. A study conducted among university students in Turkey revealed that only 4.3 percent of women engaged in premarital sexual intercourse. The percentage of men was much higher reaching 44.2 percent. Nine out of ten of women and two out of three men reported that they had no sexual experience before marriage. Like Gazi University, the Middle Eastern Technical University (METU) located in Ankara. The study in METU concluded that “*both male and female students maintained more negative attitude toward women who have premarital sex*” (Ghanim, 2015). In another study, the higher number of the female students indicated that they had no sexual intercourse experience. About sexual knowledge, a study revealed that men were more satisfied their level of sexual knowledge than women (Sumer, 2006). Işık (2008) also found out that males respondents were more likely viewed honor with women’s virginity and holding men responsible for protecting it.

In a study in Turkey, 46% of male adolescents and 3% of female adolescents had sexual intercourse. Among those who had intercourse, 44% of males and 67% of females had their first experience with their lovers. The median age at the first intercourse was 17 years for males and 16 years for females (Dagdeviren, Set, & Aktürk, 2008). In another study, 61.2% of males and 18.3% of females indicated that they had sexual intercourse at the last year of their university education between 20-25 age range (Aras, Orçin, Ozan, & Semin, 2007).

Many studies have also shown like this study that boys tend to masturbate more than girls. In America, it was found that masturbation among women is relatively rare and it is usually common among boys than girls or adults. It is also important to mention that because boys usually have much more experience on masturbation than girls, it is more likely that males have higher knowledge about sexuality than females (Krishnan, Bagwe, Jacob, & Mohapatra, 2009). Differences among males’ masturbation experience would be hard to find because nearly all males have some masturbatory experience. It is possible to find differences between female participants. Interestingly, university students may not use masturbation for sensation seeking experience orgasm and sensation seeking among university women.

In short, this study found out that there were gender differences in Turkish university students’ perceptions, behaviors, attitudes, and beliefs about sexuality. Also, the level of sexual knowledge between gender differed between the male and female participants.

6. References

- Aras S., Orcin, E., Ozan, S., & Semin, S. (2004). Sexual attitudes and behavior characteristics of university students in Dokuz Eylül University. [Dokuz Eylül Üniversitesi öğrencilerinin cinsel tutum ve davranış özellikleri]. *Sağlık ve Toplum*, 14(1), 78-87. <https://doi.org/10.1080/13625180500282205>
- Aras, S., Orçin, E., Ozan, S., & Semin, S. (2007). Sexual behaviors and contraception among university students in Turkey. *Journal of Biosocial Science*, 39, 121-135. <https://doi.org/10.1017/S0021932006001258>
- Aras, S., Semin, S., Günay, T., Orcin, E., & Ozan, S. (2007). Sexual attitudes and risk-taking behaviours of high-school students in Turkey. *Journal of School Health*, 77(7), 359-366. <https://doi.org/10.1111/j.1746-1561.2007.00220.x>
- Askun, D., & Ataca, B. (2007). Sexual related attitudes and behaviors of Turkish university students. *Archives of Sexual Behavior*, 36, 741-752. <https://doi:10.1007/s10508-007-9186-z>
- 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. <https://doi.org/10.1080/136910501750035699>
- Colliander-Celik, L. D. (2014). Is Turkey ready for holistic sex education: Possibilities for design, application, and implementation in contemporary Turkey (Unpublished master thesis). University of Amsterdam.

- Crooks, R., & Baur, K. (2017). *Our sexuality* (13th ed.). Cengage Learning.
- Çuhadaroğlu, A. (2016). The effects of sex education on psychological counseling students in Turkey. *Sex Education, 17*(2), 209-219. <http://dx.doi.org/10.1080/14681811.2016.1164132>
- Dağdeviren, N., Set T., & Aktürk, Z. (2008). Sexual activity among Turkish adolescents: Once more the distinguished male. *International Journal of Adolescent Medicine and Health, 20*(4), 431-439. <https://doi.org/10.1515/IJAMH.2008.20.4.431>
- Ege, E., Akin, B., & Koçoğlu, D. (2014). Adolescent pregnancy in Turkey. In A. L. Cherry & M. E. Dillon (Eds.), *International handbook of adolescent pregnancy: Medical, psychosocial, and public health responses*. (pp. 605-627). USA: Springer. https://doi.org/10.1007/978-1-4899-8026-7_35
- Genç, Ş., & Öğretir, A. D. (2001). Investigating of adolescents sexual problems [Ergenlerin cinsellikle ilgili sorunlarının incelenmesi]. *Uluslararası Adölesan Sorunları Kongresi, 185*, 27-30.
- Ghanim, D. (2015). *The virginity trap in the Middle East*. New York: Palgrave MacMillan. <https://doi.org/10.1057/9781137507082>
- Guan, S. S., & Subrahmanyam, K. (2009). Youth internet use: Risks and opportunities. *Current Opinion Psychiatry, 22*(4), 351-356. <https://doi.org/10.1097/YCO.0b013e32832bd7e0>
- Işık, R. (2008). *The predictors of understanding of honor and attitudes toward honor related violence: Ambivalent sexism and system justification* (Unpublished master thesis). Middle East Technical University.
- Jones, E. F., Forrest J. D., & Goldman, N. (1985). Teenage pregnancy in developed countries: Determinants and policy implications. *Family Planning Perspective, 17*(2), 53-63. <https://doi.org/10.2307/2135261>
- Krishnan, S., Bagwe, V., Jacob, P., & Mohapatra, S. (2009). *Knowledge & attitudes of adolescents, their parents, and teachers on family life education in schools in Mumbai*. Mumbai: CCDT.
- Kulwicki, A. D. (2006). Health: HIV and AIDS the United States. In S. Joseph (Ed.), *Encyclopedia of women and Islamic cultures: Family, body, sexuality, and health* (Vol. 3, pp. 161-163). Leiden, NL: Brill Publisher.
- Odoms-Young, A., & Abdulrahim, S. (2006). Health practices and nutrition and dietary practices. In S. Joseph (Ed.), *Encyclopedia of women and Islamic cultures: Family, body, sexuality, and health* (Vol. 3, pp. 205-211). Leiden, NL: Brill Publisher.
- Öğretir, A. D. (2006). Emotional development and education: Non-verbal communication, problem solving and social skills [Duygusal gelişim ve eğitim: Sözsüz iletişim, problem çözme ve sosyal beceriler]. *Süleyman Demirel Üniversitesi Sosyal Bilimler Dergisi, 14*, 1-15.
- Öğretir, A. D. (2008). The relationship between culture and the conflict resolution styles: A survey method and a Statistical Analysis. *Middle-East Journal of Scientific Research, 3*(2), 96-104.
- Oğretir, A. D., & Ozcelik, S. (2008). The study of ethnocentrism, stereotype and prejudice: Psycho-analytical and psycho-dynamic theories. *Journal of Qafqaz University, 24*, 236-244.
- Onyeonoro, U. U., Oshi, D. E., Ndimele, E. C., Chuku, N. C., Onyemuchara, I. L., Ezekwere, S. E., Oshi, S. N., & Emelumadu, O. F. (2011). Sources of sex information and its effects on sexual practices among in-school female adolescents in Osisioma Ngwa LGA, South East Nigeria. *Journal of Pediatric Adolescent Gynecology, 24*, 294-299. <https://doi.org/10.1016/j.jpag.2011.05.002>
- Ozan, S., Aras, S., Semin, S., & Orcin, E. (2005). Sexual attitudes and behaviors among medical students in Dokuz Eylül University, Turkey. *European Journal of Contraception & Reproductive Health Care, 10*, 171-183. <https://doi.org/10.1080/13625180500282205>
- Ponton, L. E., & Judice, S. (2004). Typical adolescent sexual development. *Child & Adolescent Psychiatric Clinic of North America, 13*(3), 497-511. <https://doi.org/10.1016/j.chc.2004.02.003>
- Rathfisch, G., Aydin, M., Bozkurt, B. S., Pehlivan, M. D., & Kaplica, I. (2012). Evaluation of reproductive health and sexual behaviors of Istanbul university students in Turkey. *Contemporary Nurse, 43*(1), 47-55. <https://doi.org/10.5172/conu.2012.43.1.47>
- Sayin, U. (2015). *Problems in sexual education and sexual therapy in Turkey*. Paper presented in the International Anatolian Twin Congress on Neuroscience and Sexual Health.
- Starbuck, G. H., & Lundy, K. S. (2015). *Families in context: Sociological perspective*. New York: Routledge.

Sumer, Z. (2006). *Sexual knowledge and behaviors of Turkish university students: Are students at risk?* Paper presented at the European Conference on Educational Research, University of Geneva.

Sungur, M. (2013). The role of cultural factors in the course and treatment of sexual problems: Failures, pitfalls, and successes in a complicated case from Turkey. In K.S. K. Hall & C. A. Graham (Eds.), *The cultural context of sexual pleasure and problems: Psychotherapy with diverse clients* (pp. 307-333). New York: Routledge.

The Random House Dictionary of the English Language. (1987). 2nd ed., New York, Random House.

Wood, P. L. (2012). Teenage sexuality in different cultures. *Journal of Pediatric Adolescent Gynecology*, 25, 228-232. <https://doi.org/10.1016/j.jpag.2012.01.004>

Yaşan, A., Eşsizoğlu, A., & Yıldırım, E. A. (2009). Predictor factors associated with premarital sexual behaviors among university students in an Islamic culture. *International Journal of Sexual Health*, 21(3), 145-152. <https://doi.org/10.1080/19317610903113813>