ISSN (Print): 0974-6846 ISSN (Online): 0974-5645

A Study on Sexual Behavior, Sexual Knowledge, and Sexual Assertiveness among Korean College Students

Miok Kim and Jung-Hyun Choi*

Department of Nursing, Namseoul University, Cheonan-si, 331-707, South Korea; aprilsea@nsu.ac.kr, jhc@nsu.ac.kr

Abstract

Background/Objectives: This study aims to provide basic data for prevention of thoughtless sexual behaviors and development of a feeling of responsibility regarding sexual conduct among college students. **Methods/Statistical Analysis**: The research was carried out among the college students in dating with opposite sex and lived in Seoul, Kyunggi-do, and Chungnam province in Korea. The data collected were analyzed by means, standard deviations, Pearson's correlation using SPSS 18.0. **Findings**: The results of this study were as follows: First, the level of sexual behavior is 2.49±0.56 point (ranging 1–4) and the level of sexual knowledge is 1.37± 0.17 point (ranging1–2). The first and recent level of sexual assertiveness are 3.36±0.54 and 3.37±0.45 respectively (ranging 1–5). The level of sexual communication is the highest at the sexual communication with friend. Second, the higher scores on sexual behavior are related to lower sexual knowledge, higher scores on sexual assertiveness, and higher scores on sexual communication with friend. The sexual education program and counseling concerned with the needs of college students are necessary for a healthy youth and society. **Application/Improvements**: It is recommended that community health nurses and midwifes should be aware of the importance of sexual assertiveness and communication with friends on sexual matter.

Keywords: College Students, Korea, Sexual Assertiveness, Sexual Behavior, Sexual Knowledge

1. Introduction

Sexual behaviors and sexual libido are the critical concerns in late adolescence and youths. Among the stages of the life cycle, college years cover from the latter part of an adolescent period to the early part of adulthood, during which strong sexual urges and behaviors are regarded as the most important issue. Thus, undergraduate years of college are an important transitional period of development during which a person integrates biological, psychological, and social aspects¹.

World Health Organization (WHO) classifies the sexual health as "Sexual health is a state of physical, mental and social well-being in relation to sexuality. It requires a positive and respectful approach to sexuality and sexual relationships, as well as the possibility of having pleasurable and safe sexual experiences, free of coercion, discrimination and violence¹. Young adults are ready to

make long-term commitments to others. Especially, they become capable of forming intimate, reciprocal relationships with friends of the opposite sex, and willingly make the sacrifices and compromises that such relationships require. A successful adaptation during that period significantly affects the imminent process of development². Sexual drive affects a human life from the birth to the moment of death. This is one of the most important elements that show human characteristics. Sexual behavior is a way of expressing the emotion of love including intimacy and care. It is natural that the desire of physical contact gets stronger as the feeling of affection increases. In this context, an adult's sexual emotion and desire is normal, natural, and healthy3. Sexual relationship and job employment account for a large portion of counseling in college life⁴. College students have various opportunities to meet opposite sex in internal and external school

^{*}Author for correspondence

activities, which results in many opportunities to date with opposite sex as well. Accordingly, their interests and desire for sex are likely to grow as they have close relationship with opposite sex, which may involve actual sexual behaviors. However young people do not have adequate knowledge on sexually contraceptive methods and sexually transmitted infections, they are frequently exposed to the risk of unwanted pregnancy and sexually transmitted infections⁵.

In Korea, more and more young couples live together in college neighborhoods. In modern society, college students are sexually open-minded more than before, one survey shows that 84% of college students have dated with opposite sex⁶. One Internet portal surveyed 1,167 college students and found that 43 percent had no problems in living together with members of the opposite sex⁷. According to Korean Statistical Information Service (KOSIS), 57.7 % of Koreans in their 20s have no qualms about living with a member the opposite sex before marriage8. According to one survey conducted by a journal among male and female college students at four-yearcourse colleges, 52.3% of the respondents answered that they were currently dating, and 32.4% of the respondents also had dating experiences although they were currently not in a relationship. In sexual history, 45.6% of the respondents answered that they had experiences of having sex, and 59.9% of them were male, while 30.9% were female. Especially, 82.1% of those with experiences of having sex were 25 years or older. Among them, those of 21 to 22 years old, which account for 40.7%. As for reasons of having no experience of sexual relations, 44.8% respondents answered: 'Just there was no chance,' which indicates that college students have less resistance to sexual relation in modern society than before9. Sexual behavior is not only an act of reproduction in terms of biology but also an act that is affected by socio-cultural factors. It needs to be noted that in addition to the desire of preserving the species, various other elements such as expression of love, ease of tension, emotional relaxation, satisfaction, and a sense of belonging are prerequisites of upright sexual behavior¹⁰. According to one study on the relation between variables of psychological and social maturity among college students and their sexual attitudes and sexual knowledge, sexual behavior means an experience of sex-related extroverted behavior, which includes kiss, hugging, masturbation, premarital sex, and abortion10.

Sexual assertiveness is to exercise autonomy over one's body and mind based on personal assertiveness according to humans' basic rights applicable to every type of sexual experience¹¹. This is an ability to express one's feelings upon an undesired sexual contact since one can pursue autonomously ones' social honor, self-respect, gains, balanced emotions, and an owner spirit of one's body in a sexual context¹². Sexual assertiveness is a social skill that involves exhibiting assertive behaviors in sexual situations¹³. Sexual assertiveness has focused on its role in negotiating safer sex behaviors¹³. There were many researches11-13 that sexual behavior was associated with sexual knowledge. But there are few researches about sexual communication with friends.

This study aims to provide basic data for prevention of thoughtless sexual behaviors and development of a feeling of responsibility regarding sexual conduct among college students. This study conducted that college students dating with the opposite sex were surveyed regarding sexual behaviors, self-assertion on sexual matters, communication among family members and between friends on sex.

2. Methods

2.1 Study Design

This study used a cross-sectional research design to analyze the relationship of sexual behavior, sexual knowledge, sexual assertiveness among Korean college students.

2.2 Study Samples

The research was conducted in 2014 as a descriptive and cross-sectional study. The research was carried out among the college students who have dated with opposite sex and lived in Seoul, Kyunggi-do, and Chungnam province in Korea. The answer sheets from 304 respondents were gathered, and 215 of them were analyzed except for 89 incomplete ones. Before the distribution of the forms, the objective of the research was explained to the participations. It is not mandatory condition to write down their identification. The forms were completed by students who wished to participate in approximately 15min. The data collected were analyzed by Means, Standard Deviations, Pearson's Correlation, and Multiple Regression, using SPSS 18.0.

2.3 Measurements

2.3.1 Sexual Behavior

To measure sexual behavior, a short scale for sexual behavior developed by Lee¹⁴ was used. This scale consists of 12 items, which were based on a 4-point Likert scale (range=0[none] to 3[frequently]). A high score indicates that they experienced frequently sexual behavior. The Cronbach's alpha for sexual behavior in this study was 0.89.

2.3.2 Sexual Knowledge

To measure sexual knowledge, a screening scale for sexual knowledge developed by Choi¹⁵ was used. This scale consists of 40 items, which were based 7 regions including function of sex organs 10 items (Cronbach alpha .51), pregnancy 5 items (Cronbach alpha .62), contraception 5 items (Cronbach alpha .54), abortion 3 items (Cronbach alpha .62), sexually transmitted diseases 9 items (Cronbach alpha .57), sex physiology 5 items (Cronbach alpha .49), masturbation 3 items (Cronbach alpha .63). Response Range is a 3-point scale designed to mark the 'right', 'false', "do not know". If checked, the correct answer is 1, if an incorrect answer and 'do not know' is zero. A high score indicates that they have good sex knowledge. The Cronbach's alpha for total items of sexual knowledge in this study was 0.82.

2.3.3 Sexual Assertiveness

To measure sexual assertiveness, we used a sexual assertiveness scale (SAC) developed by Morokoff¹¹ and modified by Choi¹⁶. This scale consists of 3 regions for assertiveness of any sexual contact, refusal to unwanted sexual contact, and prevention of pregnancy and sexually transmitted infections in sexual intercourse with a regular sexual partner. But we take into account the Korean social and cultural environment we used 12 questions with composing unwanted sexual contact 6 items and pregnancy and sexually transmitted disease prevention 6 items. The scale was based on a 5-point Likert scale (range=1[strongly disagree] to 5[strongly agree]). A high score indicates that they reveal their sexual assertiveness. Cronbach alpha at the developing time was a 0.74 for unwanted sexual contact, 0.82 for preventing pregnancy and sexually transmitted diseases.

2.3.4 Sexual Communication

To measure sexual communication, we used a sexual communication scale developed by Hutchinson & Cooney¹⁷. This scale consists of 12 items to see their communication tendency with family. The scale was based on a 5-point Likert scale (range=1[strongly disagree] to 5[strongly agree]). A high score indicates that they communicate with their family openly on sexual subjects. Cronbach alpha was a 0.85 for sexual communication (father-children), a 0.89 for sexual communication (mother-children).

To measure sexual communication with friend, we used a sexual communication scale developed by Hutchinson & Cooney¹⁷. This scale consists of 10 items to see their communication tendency with friends. The scale was based on a 5-point Likert scale (range=1[strongly disagree] to 5[strongly agree]). A high score indicates that they communicate with their friends openly on sexual subjects. Cronbach alpha was a 0.93 for sexual communication with friends. To validity test, factor analysis was done [Table 1].

2.4 Data Analysis

Data were analyzed using logistic regression with PASW 18.0. Correlation analysis and t-test were carried out using

Table 1. Factor analysis of sexual communication

Items	Factor Loading	
Sexual communication with friend 5	.859	
Sexual communication with friend 8	.833	
Sexual communication with friend 9	.833	
Sexual communication with friend 10	.820	
Sexual communication with friend 1	.815	
Sexual communication with friend 3	.814	
Sexual communication with friend 4	.799	
Sexual communication with friend 6	.782	
Sexual communication with friend 7	.725	
Sexual communication with friend 2	.680	

SPSS/PC Win 18.0 program. The collected data were analyzed with the Statistical Package for the Social Sciences (SPSS) (version 18.0, Inc., Chicago, IL, USA). Descriptive statistics were used to identify the general characteristics of the participants. Correlation analysis was performed to determine the relationship between sexual behavior and sexual knowledge, sexual assertiveness among Korean college students. The significance level for all statistical analysis was pre-set at p < .05.

3. Results

3.1 General Characterristics

The baseline characteristics of the study participants are shown in Table 2. The number of participants is 215 college students. School year is as followed: 4^{th} grade students is 38%, 2^{nd} grade students is 25%, 3^{rd} grade students is 20%, freshman is 17%.

<insert table 2 here>

3.2 Descriptive Statistics for Variables

The level of sexual behavior is 2.49 ± 0.56 point (ranging 1–4) and the level of sexual knowledge is 1.37 ± 0.17 point (ranging1-2). The first and recent level of sexual assertiveness are 3.36 ± 0.54 and 3.37 ± 0.45 respectively (ranging 1-5). The level of sexual communication is the highest at the sexual communication with friend [Table 3].

<insert table 3 here>

3.3 Correlation Analysis among Variables

This finding indicates that higher scores on sexual behavior are related to lower sexual knowledge, higher scores on sexual assertiveness, and higher scores on sexual communication with friend [Table 4].

4. Discussion

This study examined the college students dating with the opposite sex were surveyed regarding sexual behaviors,

Table 2. General characteristics (N=215)

Variables	Categories	N(%)	
Calcada	Freshman	17%	
	2 nd grade	25%	
School year	3 rd grade	20%	
	4 th grade	38%	

Table 3. Descriptive statistics for variables(N=215)

Variables	Range	Mean±SD	
Sexual behavior	1-4	2.49±0.56	
Sexual knowledge	1-2	1.37±0.17	
Sexual assertiveness(first)	1-5	3.36±0.54	
Sexual assertiveness(recent)	1-5	3.37±0.45	
Sexual communication (father)	1-5	1.48±0.73	
Sexual communication (mother)	1-5	1.67±0.80	
Sexual communication (friend)	1-5	2.91±0.95	

Table 4. Correlation analysis among variables (N=215)

	2	3	4	5	6	7
1	351(< .001)	.053(.437)	.143(.036)	.066(.339)	.021(.763)	.257(< .001)
2	-	163(.017)	269(< .001)	052(.444)	019(.782)	253(< .001)
3		-	.877(<.001)	.108(.115)	.050(.463)	.030(.663
4			-	.132(.053)	.110(.108)	.079(.248
5				-	.836(< .001)	.293(< .001)
6					-	.378(< .001)

1: sexual behavior, 2: sexual knowledge 3: sexual assertiveness (first) 4: sexual assertiveness (recent), 5: sexual communication (father), 6: sexual communication (mother), 7: sexual communication (friends)

self-assertion on sexual matters, communication among family members and between friends. Sexual behavior has been developed by physiological, psychological and cultural factors⁵. College students are in transitional phase between adolescent phase and adulthood phase and experience the sexual behavior with opposite sex friend in advance before fully forming sense of value on sex¹⁸. Furthermore the reckless online sex video and avoidance of discussion on sexual matters on public in Korea, keep from attaining proper sense of value on sexual matters. Sexual education is life-long process of developing

knowledge, attitude, belief and values 5. From early age, well- timed sexual education program concerned to the needs of students are necessary to be structured in public education curriculum. In addition, the contents of sexual education are also continuously developed and upgraded for school nurses.

In this study, college students had the moderate sexual behavior (2.49 on a 4-point scale), low level of sexual knowledge (1.37 on ranging 1-2), and were somewhat on assertive on sexual matters (3.37 on a 5-point scale). They less communicate with father or mother about sexual matters (respectively 1.48, 1.67 on a 5-point scale), meanwhile, the level of sexual communication is the highest at the sexual communication with friend. These findings are partly consistent with previous studies that have examined that relationship between sexual knowledge, attitude and behavior experience¹⁴.

In this study, college students had the moderate sexual behavior. This result is partly consistent with the other research conducted in the women college students¹⁶. Research participants were 523 women college students in a metropolitan area in Korea. Of the 28.1% of women who experienced sexual intercourse, only 47.9% were using contraception methods consistently, with condoms used most often (63.7%)¹⁶. According to a survey of university students, "a half of 625 freshmen opposed to premarital sex while 48.9 percent assented to intercourse before marriage. When asked about the permissible extent of physical contact with a boy- or girlfriend, 315 or 49.5 percent of respondents answered a kiss or light hug, followed by putting arms around shoulders or holding hands with 20.9 percent and making love with 16.5 percent"19. The Korea Centers for Disease Control and Prevention surveyed students from 800 middle and high schools nationwide on the health-related activities of teenagers in 2007. Results revealed that over 10 percent of students in their second or third years of high school had experience of sexual intercourse. Among whom, 10.5 percent of girls had been pregnant. Approximately 5.2 percent of all respondents said they had had sexual intercourse, first experienced at an average age of 14 for both girls and boys. Boys started to have wet dreams at the age of 13.2 and girls started to menstruate at the age of 12.4, which is 1.5 to 2 years faster than 10 years ago²⁰." In modern society, college students are so open to sex that they even consider sexual relation a rite of passage in relations with opposite sex18. In addition, those who often have sexual communication with opposite sex tend to be more opened to sexual

behavior. Therefore, sexual education programs need to include upright interactive methods and positive sexual communication strategies that will induce positive sexual attitudes and appropriate sexual behavior²¹.

In this research, college students had a little low level of sexual knowledge (1.37 on ranging 1-2). This result is partly consistent with the study conducted in unmarried college students22. The study showed that the mean knowledge of sex was .55 (ranging 0-1), significantly different by gender and major. Girls know more about sex knowledge than boys. Overall Korean university students have little knowledge of healthy sex. Another survey showed that "in investigating 6,000 university students nationwide, their knowledge about healthy sex averaged 65.4 points. Boys lacked knowledge on sexually transmitted diseases such as AIDS23". Thus, importance of practical sexual knowledge in relationship with the opposite sex was stressed in when teacher take counsels with college students. In addition, it is found that insufficient and rigid sexual education do not meet the students' needs⁵. It is also important to aware how thoughtless sexual behavior and unsafe sex are related to health outcome. Health educator initiates the building of core knowledge of sexual matter for adolescents, and its healthy application in a real context.

In our study, college students were sort of assertive on sexual matter. Sexual assertiveness is an effective communication skill that is manifested based on one's sexual autonomy. Assertiveness is one way and ability of enhancing and expressing one's self-esteem. It is also a defensive technique to protect oneself through protective behavior¹². It is also important that girls express assertively "I don't like it" and protect self from unwanted or unsafe sexual activity11. However, under traditional gender roles, men mostly initiate sexual activity and women submissively followed as men's attempts, and women may be reluctant to refuse unwanted sex11. A survey, conducting on 1,414 male and female girl students and 604 staff, reported that almost half of male students and staff at university in Korea were found to have sexually harassed someone, with two out of five female students experiencing sexual harassment²⁴. Person with a high level of sexual assertiveness can handle and control sexual matters, prevent damage by rejecting undesired sexual situations²⁵. The level of sexual assertiveness may be different depending on the experience of sexual intercourse, and those with the experience tend to less reject in recent relations with opposite sex than in the first time. This indicates that communication of consensus is an important variable to sexual assertiveness. Thus, sexual education programs for female college students with opposite sex friends need to include contents of consensus in communication to enhance one's sexual assertiveness²⁵.

In addition, it is essential education that specific and substantial information of how to use condoms for prevention of sexual diseases and pregnancy need to be presented as well ¹⁶. Hence, a sex education program that uses practical knowledge and attitude of contraception to prevent conception should be developed rather than the present sex education that only attaches schoolbook knowledge¹⁰.

In our research, college students may less communicate with their parent about sexual matters than their friends. The extent of knowledge of sexual matters and communication with friends were in significant association with sexual behaviors among college students in date with the opposite sex. In contrast, it turned out that self-assertion on sexual matters and communication among family members were in no relation with sexual behaviors, which is somewhat different from findings of existing studies and thus a repetition of the research seems required⁵. Sexuality is still seen as a taboo in Korea as same as Asian countries. Under confucianism culture, children either limited or hesitated at communicating with their parent about sexual matters. Communication is a medium that is continually used to develop personal individualities and relations with others. As such, college students who are in the early period of adulthood would communicate regarding sex and sexual experiences with friends who have been with them during the years of adolescence^{26,27}. According to existing researches, means obtaining sex knowledge among students in Korea include friends (32.1%), internet (16.5%), teacher (13.9%), mass media (11%), books (5.7%) in the order¹⁶. It seems that college students in Korea have sexual information mainly by friend and internet. This leads young people to get information on sexuality from hidden, insufficient and deceptive resources⁵. Since communication is a key element which people express their attitudes, thoughts, affections, and ideas²⁸. On the other hand, a study showed that the higher level of sexual communication with parents was related to the more positive sexual attitudes, and the higher level of sexual communication between parents and children was related to the low level of reckless sexual behavior²¹. Another research also showed that communication with parents affects children's values, and open communication positively affects children's sexual behavior^{29,30}.

Since the values of students that are formed in the relations with parents and friends can be practiced in the time of adolescence, the types of communication with parents and friends can affect the youth's sexual attitudes and sexual behavior according to existing research findings³¹. Thus, this study specifically examines changes in sexual behavior depending on communication with parents and friends.

In modern society, college students are expected to have more sexual knowledge and positive sexual attitudes than before. Efforts need to be put forth into reducing problematic sexual behaviors through appropriate sexrelated communication²¹. Thus, it is necessary to verify factors that affect sexual behavior among college students in order to develop sexual education programs through which college students can cultivate desirable sexual behavior and upright sexual knowledge. In addition, domestic researches have examined sexual knowledge, attitudes, extent of experience, actual conditions of relations with opposite sex, and sexual behavior to provide a basis for sexual education; although most of them focus on the actual condition of sexual behavior^{21–23}, few examine specific factors related to sexual behavior. Furthermore, few researches touch on sexual behavior among college students although the understanding of college students' sexual behavior is of importance.

Accordingly, this study aims to develop a basis for counseling at college for upright relations with opposite sex, educator education, and development of sexual education programs in a way of preventing harmful sexual behavior³². To this end, this study includes a survey conducted among male and female college students who are open to relationships with opposite sex in order to verify college students' sexual behavior and sexual assertiveness, sexual communication with family members, sexual communication with friends, and relation with self-esteem³³. As for elements for sex education programs among college students in dating with the opposite sex, diversified aspects of knowledge of sexual matters and communication with friends on sex need to be taken into account in intervention programs. College students need to be induced to actively participate in sexual health management.

5. Acknowledgement

Funding for this paper was provided by Namseoul University.

6. References

- World Health Organization (WHO). Health Topic [Internet]. [Cited 2015 May 12]. Available from: http://www.who.int/topics/sexual_health/en/.
- Wikipedia. Erikson's stages of psychosocial development [Internet]. [Cited 2015 Oct 26]. Available from: https:// en.wikipedia.org/wiki/Erikson%27s_stages_of_psychosocial_development.
- 3. Bingham CR, Crokett LJ. Longitudinal adjustment patterns of boys and girls experiencing early, middle, and late intercourse. Developmental Psychology. 1996; 32(4):647–58.
- Lee KE. A study on heterosexual relationship satisfaction, the sexual behavior-attitude concordance and conflict management strategy in college student. Unpublished master's thesis, Seoul Women's University, Seoul; 2007.
- 5. Yazici S, Dolgun G, Zengin N, Bayram GO. The determination of university students' knowledge, attitudes and behaviors on the matter of sexual health. Sexuality and Disability. 2012; (30):67–75.
- Kang JH. The relationship among types of dating, emotional experience, conflict resolving strategies and romantic relationship satisfaction in college students. Unpublished master's thesis, Myongji University, Seoul; 2011.
- 7. The Chosonilbo Attitudes to 'living in Sin' are changing [Internet]. [Cited 2010 October 28]. Available from: http://english.chosun.com/site/data/html_dir/2010/10/28/2010102801038.html.
- 8. Korean Statistical Information Service (KOSIS). The attitude withsex [Internet]. [Cited 2015 May 13]. Available from: http://kosis.kr/statHtml/statHtml.do?orgId=154&tblId=DT_MOGE_154 0002216&vw_cd=&list_id=&scrId=&seqNo=&lang_mode=ko&obj_var_id=&itm_id=&conn_path=K1&path=.
- Foneo' blog. The sex opinion report of college students in 2014 [Internet]. [Cited 2015 October 26]. Available from: http://blog.joins.com/media/folderlistslide. asp?uid=foneo&folder=2&list_id=13415891.
- 10. Hur MH, Ahn AY, Kwak EA, Kim KM, Park JY, Lee JIR. A study on sexual behavior, and correlation between knowledge of contraception and attitude of contraception among university students. Journal of Korean Academy of Nursing. 2007; 37(3):267–75.
- 11. Morokoff PJ, Quina K, Harlow LL, Whitmire L, Grimley DM, Gibson PR, and Burkholder GJ. Sexual assertiveness scale for women: Development and validation. Journal of Personality and Social Psychology. 1997; 73(4):790–804.
- 12. Lee SK. Relationship between the level of sexual contacts and self-esteem, self-assertiveness of teenage girls who have or had boyfriends. Unpublished master's thesis, Yonsei University, Korea; 2000.

- 13. Menard AD, Offman A. The interrelationships between sexual self-esteem, sexual assertiveness and sexual satisfaction. The Canadian Journal of Human Sexuality. 2009; 18(1-2):35-45.
- 14. Lee YM. The sexual knowledge, attitude and behavior experience of the middle school students. Unpublished master's thesis, Kosin University, Korea; 2000.
- Choi MS, Ha NS. A study on knowledge, attitude, and experience in sex and sexual autonomy of college students. Korean Journal of Women Health Nursing. 2004; 10(4):318–30.
- Choi MH. Factors influencing sexual assertiveness among women college students. Unpublished master's thesis, Yonsei University, Korea. 2005.
- 17. Hutchinson, MK, Cooney TM. Patterns of parent-teen sexual risk communication: Implications for intervention. Family Relations. 1998; 47:185–94.
- 18. Cho SH. A study on sexual behavior of university students who experience dating. Unpublished doctoral thesis, Myongji University, Seoul; 2014.
- 19. The Chosonilbo Premarital sex 'Hangs in the balance' [Internet]. [Cited 2007 January 22]. Available from: http://english.chosun.com/site/data/html_dir/2007/06/22/2007062261028.html.
- 20. The Korea Centers for Disease Control and Prevention. Results of Korea youth risk behavior web-based survey (KYRBWS) 2006-2007 [Internet]. [Cited 2008 November 07]. Available from: http://www.cdc.go.kr /CDC/info/ CdcKrInfo0301.jsp?menuIds=HOME001-MNU1132-MNU1138-MNU0037-MNU1380&cid=12193.
- 21. Kim MO. Factors that influencing sexual behavior in nursing students. The Korea Academia Industrial Cooperation Society. 2013;14(8):3876–86.
- 22. Shin MA, Choi JH. Unmarried college students' knowledge of sex and cognition of prenatal education. Korean Journal of Human Ecology. 2010; 19(4):613–24.
- 23. Shin KR, Park HJ, Hong CM. Survey of the reproductive health for undergraduate students. Unpublished raw data; 2008.
- 24. The Chosonilbo Half of Male Students Commit Sexual Harrassment [Internet]. [Cited 2002]. Available from: http://english.chosun.com/site/data/html_ dir/2002/08/04/2002080461014.html.
- 25. Park SM. The effects of rape myth and date violence tolerance on the sexual assertiveness of college women. Konyang University, Korea; 2005.
- Baek SM. The relationship between parent-child communication and child's multiple intelligences. Unpublished master's thesis, Seoul National University of Education, Korea; 2003.

- 27. Kim YS. The importance of the communication of sex with friends: the communication, the Knowledge and the attitude of sex relationship. Unpublished master's thesis, Korea University, Seoul; 2007.
- 28. Lee YJ. A study on sexuality and sex education of the youth. Journal of Gender Equality Studies. 2000; 4:7–40.
- Kim JY. The analysis of sexual attitude and behavior of the university students by communication style. Unpublished master's thesis, Sookmyung Women's University, Seoul; 2005.
- 30. Ghorbanshiroudi S, Khalatbari J, Salehi M, Bahari S, Keikhayfarzaneh MM. The relationship between emotional intelligence and life satisfaction and determining their communication skill test effectiveness. Indian Journal of Science and Technology. 2011 Nov; 4(11):1560–4.
- 31. Hwang YK, Lee CS. Structural relationship between personal image, organization communication, organization effectiveness and psychological capital of office employees. Indian Journal of Science and Technology.2015 Oct; 8(25):1–8. DOI: 10.17485/ijst/2015/v8i25/80002.
- 32. Park JH. A study of the effects on sexual behavior among couples by communication characteristic between parents-late adolescent children, sexual attitude, and sexual communication among university student couples. Unpublished master's thesis, Sungshin Women's University, Seoul; 2004.
- 33. Min S, Yun S. A study on the differences between spiritual wellbeing and sexual attitude considering the type of university. Indian Journal of Science and Technology. 2015 Jan; 8(S1):54–8. DOI: 10.17485/ijst/2015/v8iS1/57582.