

## The Effect of Perception of Marriage and Sexual Knowledge on Sexual Behavior among Nursing Students

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**Abstract:** This study was to investigate the degree of sexual behavior of college students. A survey was distributed from September to October in 2015. Total 236 college students. The collected data were statistically processed using SPSS WIN 22.0 and the descriptive analysis, t-test, ANOVA and Pearson's correlation coefficient analyses were performed. The mean of sexual behavior was  $0.17.53 \pm 7.61$  (score of range 0~36),  $1.46 \pm 0.63$  (scale of range 0~3). The risk environment should be minimized on an individual basis so that college students have the right sexual behavior. The mean of perception of marriage was  $79.96 \pm 10.80$  point (score of range 23~115). The level of sexual knowledge was  $23.75 \pm 7.06$  point (score of range 0~40). Subjects with experience of sexual contact ( $t = 2.617, p = 0.009$ ) and higher number of partners ( $F = 2.197, p = 0.005$ ) showed higher perception of marriage with statistical significance. Subjects with later sexual contact ( $F = 4.215, p = 0.017$ ) showed higher sexual knowledge with statistical significance. Subjects with experience of date ( $t = 5.460, p < 0.001$ ), experience of sexual contact ( $t = 11.395, p < 0.001$ ), earlier sexual contact ( $t = 3.426, p = 0.001$ ), experience of sexual transmitted diseases ( $t = 5.459, p < 0.001$ ) and higher number of partners ( $F = 21.588, p < 0.001$ ) showed higher sexual behavior. There was no correlation between sexual knowledge and perception of marriage ( $r = 0.131, p = 0.044$ ). There was correlation between sexual knowledge and sexual behavior ( $r = 0.069, p = 0.288$ ) and correlation between sexual behavior and perception of marriage ( $r = 0.191, p = 0.003$ ). A careful assessment of the sex-related characteristics of the subject and the degree of sexual behavior is needed. Sex education is needed so that college students have the right sexual behavior. Sex education for college students should not only meet individual needs but also include appropriate communication strategies with the dating partner.

**Key words:** Knowledge, behavior, marriage, nursing, student, correlation

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### INTRODUCTION

Sex has a fundamental function to form life and family and it has a healthy meaning to maintain strong ties to the other person in terms of intimacy and affection in relation to love, maturity and personality based relationships (Yoon, 2000). In particular, since, adolescence and adulthood are periods for building psychological, social and physical maturity and forming sexual behavior, gender identity and gender roles (Yang, 2012), it is important to have a proper sexual identity and sexual behavior.

College students turn from adolescence to adult, hold the highest interest in sex and experience diverse environments that can affect their present and future. The responsibility and independence built in this period remain the base of their life-time behavior, through which

the person can develop their control power throughout their life (Kim and Lee, 2014). In addition, they choose their spouse through dating and form their value system about family and marriage (Han and Moon, 2015). In particular, college time in Korea is important as they are set free from the burden of highly-competitive college entrance exams (Ko, 2001) and establish their identity through free relationship with opposite sex and prepare their roles as a prospective parent (Huh, 2004). College students are considered to have the most frequently encountered realistic problems such as psychological confusion, sexual intercourse, unwanted pregnancy, abortion and sexually transmitted diseases due to sexual experience (Huh, 2004). Exposed to unfamiliar sexual information, it may have a greater negative impact than other age groups (Yang, 2012). Sexual knowledge includes a wide range of topics and the college students become

more and more only a interested in sex but the sex education tends to remain typical education focusing on sexual physiology (Lee, 2004) and the official education does not take the sex education as an important topic. Meanwhile, college students experience more sexual activities and non-marital pregnancy and mass media is delivering misleading knowledge about sex, distorting student's attitude and perception of sex, confusing their belief about openness and freedom regarding sex. College students are directly involved as perpetrators or victims of prostitution and sexual expressions are overflowing in the mass media through the culture of premarital cohabitation, sexual openness, sexuality instrumentation and commercialization (Yang, 2012). Therefore, systematic sex education at the college level is required for college students to form the right values for sex and to reduce risky behaviors through them.

Recently, extended period of higher-education and economic activities delayed the marriage of young people and the marriage, once taken for granted is considered optional by young people. Even increasing number of divorces are seen. While marriage becomes a personal choice, the Korean society is facing two serious phenomena: drastic decrease in birthrate and soaring divorce rate (Lee, 2006). These social phenomena made people consider sexual behavior as an important factor of a person's life, instead of a major factor of marital relationship and family. As personal behavior is affected by the person's knowledge, belief and attitude, this study aims to identify the relationship between college student's sexual behavior, sex knowledge and perception of marriage, building base data for sex education and sex counselling for college students.

## **MATERIALS AND METHODS**

**Research design:** The purpose of this study was to investigate the degree of perception of marriage, sexual knowledge and sexual behavior as a descriptive study.

**Participants:** A survey was distributed from October 1st-30th in 2015. The 236 college students participated in the survey after informed consent.

### **Outcome measures**

**Perception of marriage:** We used the tool developed by Jeong and improved by Lee for the perception of marriage. The tool consists of 23 questions, each scoring from 1 (definitely not) to 5 (definitely yes) with

higher score meaning more conservative. Cronbach's alpha was 0.82 in Lee (2006)'s study while it was 0.80 in this study.

**Sexual knowledge:** We used the tool of Choi and Ha (2004) for the sexual knowledge. The tool consists of 40 questions about sexual knowledge in 7 areas; 10 for the structure and functions of sexual organs, 5 for pregnancy, 5 for contraception, 3 for abortion, 9 for STD, 5 for sexual physiology and 3 for masturbation. Each question scores 2.5 for the correct answer, 0 for other answers, amounting to 100 score in total. Higher score means higher level of sexual knowledge. The Cronbach's alpha was 0.89 in Choi and Ha (2004) while it was 0.84 in this study.

**Sexual behavior:** We used the instrument developed by Lee (2000). This measurement for sexual behavior consists of 12 questions on a 4-point Likert scale (0 = nothing, 1 = once or twice, 3 = sometimes, 4 = much) and the total score ranges from 0-36.0 higher score indicates higher sexual behavior.

**General characteristics:** The general characteristics of the subject was measured by 11 questions on gender, year in college, residence type, religion, dating, sexual experience, number of sexual encounters for the last year, number of sexual intercourses for the last month, place for sex, contraception and STD and 6 questions on military service, first experience (time, place, partner, contraception, abortion), 17 in total.

**Data collection:** The researcher gave explanation about the purport and methods of this study to the participants and asked them to give a written consent to participation in the study before data collection from September to October, 2017. The researcher personally distributed and collected self-administered questionnaires which were completed in about 10 min. The collected data were neither published nor used for any other purpose than that of this study and the participants were given explanation about privacy and anonymity.

**Data analysis:** The collected data were statistically processed using SPSS WIN 22.0 and the following analyses were performed: the real number and percentage were estimated for the participant's general and sex-related characteristics and the differences in each variable by the sex-related characteristics were analyzed through t-test, ANOVA and Scheffe test. The mean and standard deviation were used to analyze the level of

perception of marriage, sexual knowledge and sexual behavior. The correlation between perception of marriage, sexual knowledge and sexual behavior by Pearson's correlation coefficient.

**RESULTS**

**General and sex-related characteristics:** The general characteristics of the subject are the same as Table 1. The sex-related characteristics of the subject are the same as Table 2.

**The level of perception of marriage, sexual knowledge and sexual behavior:** As shown Table 2, the mean of perception of marriage was 79.96±10.80 point (score of range 23~115). The level of sexual knowledge was 23.75±7.06 point (score of range 0~40). The mean of sexual behavior was 0.17 0.53±7.61 (score of range 0~36), 1.46±0.63 (scale of range 0~3) (Table 3). The level of experience of holding hands when dating and experience hugging when dating was the highest with 2.10±0.94, 2.07±0.97 point, respectively. The level of experience of contraceptive experience and masturbation experience was 1.04±1.08, 1.06±1.10 point, respectively.

**Perception of marriage, sexual knowledge and sexual behavior according to general and sex-related characteristics:** For general characteristics, subjects with male ( $t = -2.158, p = 0.033$ ) and hasa religion ( $t = 3.297, p = 0.001$ ) showed higher perception of marriage with statistical significance. Subjects with female ( $t = 2.193, p = 0.030$ ) showed higher sexual knowledge. Subjects with male ( $t = -4.261, p = <0.001$ ), commute to school more than dormitory and rented room with roommate more than commute to school ( $F = 5.234, p \leq 0.001$ ) showed higher sexual behaviors with statistical significance (Table 4).

For sex-related characteristics, subjects with experience of sexual contact (coitus) ( $t = 2.617, p = 0.009$ ) and higher number of partners ( $F = 2.197, p = 0.005$ ) showed higher perception of marriage with statistical significance.

Subjects with later sexual contact ( $F = 4.215, p = 0.017$ ) showed higher sexual knowledge with statistical significance. Subjects with experience of date ( $t = 5.460, p < 0.001$ ), experience of sexual contact ( $t = 11.395, p < 0.001$ ), earlier sexual contact ( $t = 3.426, p = 0.001$ ), experience of sexual transmitted diseases ( $t = 5.459, p < 0.001$ ) and higher number of partners ( $F = 21.588, p < 0.001$ ) showed higher sexual behaviors with statistical significance (Table 5).

Table 1: General characteristics of subjects (N = 236)

| Characteristics/Categories               | n (%)      |
|--|------------|
| <b>Sex</b>                               |            |
| Male                                     | 99 (41.9)  |
| Female                                   | 137 (58.1) |
| Commute to school                        | 93 (39.4)  |
| Rented room                              | 48 (20.3)  |
| <b>Type of residence</b>                 |            |
| Rented room with roommate (same sex)     | 30 (12.7)  |
| Rented room with roommate (opposite sex) | 5 (2.1)    |
| Dormitory                                | 60 (25.4)  |
| <b>Religion</b>                          |            |
| Yes                                      | 85 (36.0)  |
| No                                       | 151 (64.0) |

Table 2: Sex-related characteristics of the subject (N = 236)

| Characteristics/Categories                                | n (%)      |
|---|------------|
| <b>Experience of date</b>                                 |            |
| Yes   | 120 (50.8) |
| No  | 116 (49.2) |
| <b>Experience of sexual contact (coitus)</b>              |            |
| Yes   | 153 (64.8) |
| No  | 83 (35.2)  |
| <b>Time of first sexual contact (n = 153)</b>             |            |
| Middle school age   | 11 (7.2)   |
| High school age   | 40 (24.8)  |
| College   | 104 (68.0) |
| <b>Sexual partner (n = 153)</b>                           |            |
| Dating partner  | 122 (79.7) |
| First meeting   | 14 (9.2)   |
| Intimate person   | 4 (2.6)    |
| Only know   | 13 (8.5)   |
| <b>Reasons to have sex (n = 153)</b>                      |            |
| On the premise of marriage                                | 16 (10.5)  |
| Because of curiosity                                      | 3 (2.0)    |
| On the assumption of constant encounters                  | 60 (39.2)  |
| Because of pleasure seeking                               | 22 (14.4)  |
| Because of the request of date person                     | 3 (2.0)    |
| Other   | 5 (3.3)    |
| Missing   | 44 (30.8)  |
| <b>Number of sex partners (n = 153)</b>                   |            |
| 1   | 74 (66.5)  |
| 2~3   | 57 (17.8)  |
| 4~5   | 22 (6.4)   |
| <b>Experience of sexual transmitted disease (n = 153)</b> |            |
| Yes   | 9 (5.9)    |
| No  | 144 (94.1) |

Table 3: Level of perception of marriage, sexual knowledge and sexual behavior (N = 236)

| Variables              | Score of range | Mean±SD     |
|------------------------|----------------|-------------|
| Perception of marriage | 23~115         | 79.96±10.80 |
| Sexual knowledge       | 0~40           | 23.75±7.060 |
| Sexual behavior        | 0~36           | 17.53±7.610 |

**Correlation between perception of marriage, sexual knowledge and sexual behavior:** There was no sexual knowledge and perception of marriage ( $r = 0.131, p = 0.044$ ). There was correlation between sexual knowledge and sexual behavior ( $r = 0.069, p = 0.288$ ) and correlation between sexual behavior and perception of marriage ( $r = 0.191, p = 0.003$ ) as shown in Table 6.

Table 4: Perception of marriage, sexual knowledge and sexual behavior according to general characteristics of subjects (N = 236)

| Variables | Perception of marriage |         | Sexual knowledge |         | Sexual behavior       |          |
|-----------|------------------------|---------|------------------|---------|-----------------------|----------|
|           | Mean±SD                | t/F(p)  | Mean±SD          | t/F(p)  | Mean±SD               | t/F(p)   |
| Male      | 83.00±11.72            | -2.158  | 23.08±6.94       | 2.193   | 1.89±.56              | -4.261   |
| Female    | 79.11±10.08            | (0.033) | 25.44±6.17       | (0.030) | 1.53±.44              | (<0.001) |
| a         | 79.66±10.86            | 1.052   | 22.83±7.80       | 1.214   | 1.36±.62 <sup>a</sup> | 5.234    |
| b         | 81.68±12.05            | (0.381) | 24.25±6.25       | (0.306) | 1.63±.58 <sup>b</sup> | (<0.001) |
| c         | 78.30±10.24            | -       | 25.76±6.25       | -       | 1.78±.64 <sup>c</sup> | a<c, c>d |
| d         | 13.00±14.73            | -       | 21.40±6.14       | -       | 1.81±.82              | -        |
| e         | 80.45±10.80            | -       | 23.95±7.06       | -       | 1.28±.57 <sup>d</sup> | -        |
| Yes       | 82.98±11.03            | 3.297   | 23.70±6.98       | -0.072  | 1.46±.63              | 0.002    |
| No        | 78.25±10.31            | (0.001) | 23.77±7.12       | (0.943) | 1.46±.64              | (0.982)  |

A: sex, B: type of residence (a: commute to school b; rented room c: rented room with roommate (same sex) d; rented room with roommate (opposite sex)/e and dormitory), C: religion

Table 5: Perception of marriage, and sexual behavior according to sex-related characteristics (N = 236)

| Variables | Perception of marriage   |         | Sexual knowledge        |          | Sexual behavior         |          |
|-----------|--------------------------|---------|-------------------------|----------|-------------------------|----------|
|           | Mean±SD                  | t/F(p)  | Mean±SD                 | t/F(p)   | Mean±SD                 | t/F(p)   |
| <b>A</b>  |                          |         |                         |          |                         |          |
| Yes       | 80.19±10.38              | 1.384   | 24.40±6.94              | 1.441    | 20.05±7.03              | 5.460    |
| No        | 78.97±11.17              | (0.168) | 23.07±7.41              | (0.151)  | 14.93±7.34              | (<0.001) |
| <b>B</b>  |                          |         |                         |          |                         |          |
| Yes       | 81.30±11.16              | 2.617   | 24.11±6.70              | 1.086    | 20.88±6.54              | 11.395   |
| No        | 77.49±9.670              | (0.009) | 23.07±7.67              | (0.279)  | 11.37±5.25              | (<0.001) |
| <b>C</b>  |                          |         |                         |          |                         |          |
| a         | 80.32±8.140              | -0.083  | 18.63±6.97 <sup>a</sup> | 4.215    | 20.11±2.83              | 3.426    |
| b         | 81.17±11.90              | (0.934) | 24.17±5.42 <sup>b</sup> | (0.017)  | 23.82±5.70              | (0.001)  |
| c         | 81.34±10.94              |         | 24.68±6.92 <sup>c</sup> | a<b, a<c | 19.84±6.52              |          |
| <b>D</b>  |                          |         |                         |          |                         |          |
| a         | 81.22±10.65              | 1.349   | 24.50±6.86              | 2.160    | 20.24±6.37              | 2.436    |
| b         | 80.07±13.67              | (0.255) | 20.21±6.17              | (0.095)  | 21.64±7.38              | (0.050)  |
| c         | 88.00±5.290              | -       | 25.53±4.94              | -        | 27.33±5.13              | -        |
| d         | 83.38±13.11              | -       | 21.50±4.43              | -        | 24.84±5.94              | -        |
| <b>E</b>  |                          |         |                         |          |                         |          |
| a         | 82.12±9.800              | 1.366   | 24.85±8.85              | 0.693    | 18.87±7.44              | 2.299    |
| b         | 74.00±12.76              | (0.234) | 23.19±6.38              | (0.697)  | 12.33±4.16              | (0.039)  |
| c         | 82.61±10.85              | -       | 25.50±6.66              | -        | 22.36±6.12              | -        |
| d         | 78.27±10.37              | -       | 22.61±6.06              | -        | 21.22±6.26              | -        |
| e         | 73.33±12.58              | -       | 25.60±6.34              | -        | 15.33±3.78              | -        |
| f         | 86.60±14.01              | -       | 22.30±9.83              | -        | 19.60±9.23              | -        |
| <b>F</b>  |                          |         |                         |          |                         |          |
| Yes       | 74.80±13.55              | -0.795  | 24.22±5.82              | 0.048    | 22.00±9.49              | 5.459    |
| No        | 77.49±9.67               | (0.429) | 24.11±6.77              | (0.962)  | 11.37±5.25              | (<0.001) |
| <b>G</b>  |                          |         |                         |          |                         |          |
| 1         | 78.98±10.06 <sup>a</sup> | 2.197   | 25.18±6.77              | 0.094    | 15.12±7.09 <sup>a</sup> | 21.588   |
| 2~3       | 80.71±11.04              | (0.005) | 24.24±6.81              | (0.911)  | 21.02±6.78              | (<0.001) |
| 4~5       | 84.54±12.90 <sup>b</sup> | a<b     | 23.54±6.43              |          | 25.04±5.31 <sup>b</sup> | a<b      |

A. Experience of date, B. Experience of sexual contact (coitus), C. Time of first sexual contact (n = 153) (\*Middle school age/b. High school age/c. College), D. Sexual partner (n = 153) (\*Dating partner/b. First meeting/c. Intimate person/d. Only know), D. Reasons to have sex (n = 153) (\*On the premise of marriage/b. Because of curiosity/c. On the assumption of constant encounters/d. Because of pleasure seeking/e. Because of the request of date person/f. other), F. Experience of sexual transmitted disease (n = 93), G. Number of sex partners (n = 153)

Table 6: Correlation between perception of marriage, sexual knowledge and sexual behavior (N = 236)

| Variables        | Sexual behavior r(p) | Perception of marriage r(p) |
|------------------|----------------------|-----------------------------|
| Sexual knowledge | 131(0.044)           | 0.069(0.288)                |
| Sexual behavior  | -                    | 0.191(0.003)                |

### DISCUSSION

In this study, male students had more positive perception of marriage than female students which agrees with the results by Uecker and Stokes (2008) and Kim and Song (2012). On the contrary, some research found that

male students have more negative perception of marriage than female (Sohn and Kim, 2010), more research is needed to identify how college students perceive the value of and what are factors as well as develop education programs to help them form positive perception of marriage.

In this study, male students showed to involve in more sexual behaviors than female students which agree with the results by Kim *et al.* (2003) and Kim and Lee (2002). One of the reasons is that many young men consider sexual behavior as manly (Kim and Jeon, 2007).

On the other hand, sex knowledge was higher with female students. This can be interpreted that female students developed better the ability to control their sexual desire or convert it into other types of activities (Kim, 2003).

Korean society is still more forgiving for men's sexual behavior than for women and different standards for sex exist for men and women, resulting in different sexual behavior by gender. Sex plays an important role in life of both men and women. Therefore, it is important to provide them with neducation that can help them build a proper value system on sex, taking different approaches for male and female students. Perception of marriage, sex knowledge, sexual behavior of the students with dating experience showed high with statistical significances, which agree with the result of Kim *et al.* (2003) and (2011).

During college, students learn how to manage sexual desire and emotion in such a way that build relationship with opposite sex, establish ego and is acceptable by the society (Sung and Lim, 2009). Meantime, they have many opportunities for sexual experiences through dating and emotional and sexual impulses, exposing themselves to sexual activities (Kim and Jeon, 2007). Therefore, college students should make efforts to gain correct sex knowledge and refrain from problematic sexual behaviors.

### CONCLUSION

This study identified the relationship between perception of marriage, sex knowledge and sexual behavior of college students and understand their sexual behavioral problems in order to contribute a basic data necessary to provide them with counselling and build effective sex education programs.

We found that sexual behavior has positive correlations with perception of marriage and sex knowledge. This suggests that sexual behavior can be an important behavioral indicator for establishing positive perception of marriage. Instead of negative interpretation of high level of sexual behavior, one can accept it as a communication mean for exchanging emotions between two opposite-sex humans. Therefore, college students should equip themselves with sex knowledge and try to refrain from problematic sexual behaviors. In other words, the college should help them form sound perception of sex and marriage by providing sex education programs and sex counselling with topics including understanding healthy dating, sexual assertiveness and communication training.

### ACKNOWLEDGEMENT

Research was supported by a National Research Foundation of Korea Grant, funded by the Korean Government (NRF-2016R1D1A1B03936019).

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