This study was conducted to explore the effectiveness of a program teaching healthy sexuality values on adolescent sexual awareness and sexual behavior. For this study, the present researcher, along with two other professors, developed a 4-h program on 4 different subjects, and conducted the full education program through four different 4-h sessions for the same 160 students. This study obtained responses from 160 students through both a pre-survey and a post-survey. A qualitative study was also performed. Seventy students among the 160 students were randomized. They were individually interviewed. The results from the surveys complemented the findings from the qualitative interviews. An analysis of the reliability and validity of the pre-post surveys for this study showed that three different factors (sexual awareness, sexual behavior, and pure love family planning and acceptance) with 11 questions were reliable. A pre-post analysis using a paired t-test showed that after healthy sexuality values program, the sexual awareness index improved from 0.94(p<0.05) to 0.98(p<0.05) and pure love family planning and acceptance index jumped to 0.87(p<0.05), indicating that there were positive effects on those who participated. However, repeated measure analysis of variance showed nearly no changes between male and female students in sexual behavior (F=0.440, p>0.05). It turned out that female students improved their perception of sexual awareness (F=11.064, p<0.05), and pure love family planning and acceptance students (F=20.267, p<0.05) more than male. In other words, female students established more firm healthy sexuality values through this program. It clearly indicates that healthy sexuality values programs should be expanded for teenagers to firmly establish a healthy view of sexual awareness and behavior. Moreover, the gap between male and female students in pure love family planning and acceptance means that our youths accept double standards that apply to men and women differently. In order to resolve this problem, we need to put the healthy sexuality values education into practice on an equal basis, and make comprehensive changes in the general perceptions concerning sexuality.

**Key words:** Adolescent, healthy sexuality, values, sexual attitude, pure love, family planning.

**INTRODUCTION**

The development of the mass media and easy Internet access has led to an immoral and decadent trend including indecent sex information and sex sales. The result has been that Korea’s traditional sexuality values have been vanishing (Lee, 2003). Numerous adolescents whose sexual curiosity or sexual urge reaches its peak
during the adolescent period relentlessly obtain obscene information through the Internet before they are able to establish their sexuality identity. The problem is that they do not filter wrong information out, and these results in them engaging in deviant sexual behavior and wrong sexual awareness. According to a survey by Korea Sexuality Violence Relief Center, as many as 87.8% of middle school boys and 93% of high school boys are in agony over sex, as they have easy access to pornographic materials these days (Korea Sexuality Violence Relief Center, 1997).

In December 2007, there was a serious sexual assault incident in Dae-gu city where dozens of elementary school male students raped other girl students. The incident shocked the nation because the sexual crime was committed in school where our children study. It is evidence that middle and high school students have unhealthy sexual awareness and behavior (Shin, 2008). What is more serious is that the countermeasure that the Ministry of Education, Science and Technology came up with in the aftermath of the Dae-gu city incident proved ineffective. So, citizens criticized the fact that the countermeasure was futile (Shin, 2008). All of the elementary and middle and high schools in the nation are implementing teacher-delivered sexuality education programs (Kim, 2003). However, teachers strongly complain that they face limits in their ability to deliver sexuality education because many middle school students are exposed to too much obscene and pornographic information before entering high schools (Lee, 1997). Under these circumstances, there are limits to the effect of the current sexuality education system in schools. Early middle school students begin to go through physical changes as well as mental ones. In addition, they are highly likely to think irrationally or lose their control due to sexual curiosity or sexual urges. So many students during those periods feel identity loss or become atypical in sexuality (Lee, 1993).

Healthy sexuality values education is essential to help youths establish a healthy sexual awareness and behavior, and will serve as an important factor to help them to make responsible decisions about sex (Park, 1993; Gu 1997). Therefore, HSVE is required to help them establish sexual identity and prevent sexual crimes. Parents and schools should play their role as primary sexuality educators. Parents are the most significant contributor to helping their teenagers establish healthy sexual identity and sex-ual values. But they often fail to fulfill their role because there are rare chances to have conversations with their children as both of them have to go to work (Han, 1997). Schools are able to conduct intended sexuality education plans. However, studies on the effectiveness of school sexuality education showed that there were barely any studies on healthy sexuality values education (Yang, 1997). And the current sexuality education program only focuses on physical changes, pregnancy and dating with the opposite sex.

Meanwhile, international articles by David (2005), Goodson et al. (2005) and Holzner and Oetomo (2004) also show limits in the effectiveness of sexual education programs (David, 2005; Goodson et al., 2005; Holzner and Oetomo 2005). These papers say that sexual education programs to prevent sexual diseases and unexpected pregnancy can work through contraception education, dialogues and communication with parents and responsible decision-making. In their article of “abstinence-only education policies and programs”, Santelli et al. (2006) explained that abstinence-only programs are ethically problematic, being inherently coercive and often providing misinformation and withholding information needed to make informed choices. Schools and health care providers should encourage abstinence as an important option for teenagers Papaharitou et al. (2008) have written the article, "Exploring sexual attitudes of students in health professions." They emphasized that gender, personal values, and experiences influence students’ attitudes toward sexual issues. Since negative attitudes can impede effective sexual health consultations, it is imperative to incorporate courses on effective communication and human sexuality in the medical and allied health professions curricula that will enhance students’ awareness of their own values and prejudices.

In 2008, the article, "Beyond the big talk" explained that adolescents whose sexual communication with their parents involved more repetition felt closer to their parents, felt more able to communicate with their parents in general and about sex specifically, and perceived that discussions with their parents about sex occurred with greater openness than did adolescents whose sexual communication with their parents included less repetition. It insisted that it is very important that there be repetition of sexual discussions with parents (Martino et al., 2008).

However, these programs cannot fundamentally solve the sexual problems of adolescents. That is because people themselves decide to conduct sexual activities based on their own judgment. Education on healthy sexuality values is able to fundamentally solve sexuality problems because sound sexuality awareness can lead to right decisions that eventually result in healthy sexual activities. Accordingly, there is an urgent need to develop a concrete and effective sexual values program to help adolescents establish a healthy sexual identity, and free themselves from sex-related problems.

The core themes that were dealt with in the healthy sexuality values program for middle and high school students are first, the value of the genitals; second, the ownership of the genitals; and third, the principle reason for the existence of the genitals. All of these themes are crucial to helping teens establish proper sexuality values. This researcher and two professors who work in the Department of Pure Love at Sun Moon University in Asan, Korea have developed a health sexuality values program that is suitable for middle and high school students. In this study, it will be discussed whether or not
the program has positive educational effects on middle and high school students by analyzing pre and post changes after implementing the program. Researcher hopes this study will contribute to sexuality values programs by providing basic materials that help teachers conduct meaningful sexuality values education.

**Basis of health sexuality values program**

The basis of four themes of this program is on the teaching of Rev. Sun Myoung Moon who is a founder of the Department of Pure Love in Sun Moon University. Moon (2004) explains that God is the Lord and root of Pure Love. People who embody Pure Love are those who can feel the presence of God, appreciate life, and love all humankind. People who manifest Pure Love can communicate with God in the closest way (Moon, 2007). Pure Love is the foundation for true families. Moon describes the reproductive organs as representing human bodies that make men more masculine and women more. They are the source of which love between a man and a woman is unified. They are also keys to making harmonious family life by completing love. They create new lives and families. Moon said that genitals have the principle reason for the existence (Moon, 2004). He also said that couples who love each other want to maintain absolute, unchangeable and everlasting relationship and their love is completed through their genitals. Lee said that nature and all creatures go through the stage of development in accordance with the principles for existence (Lee, 1976). Whatever creatures are, all creatures should pass a certain period of time to complete themselves. Likewise, people should go through a certain period of time to be physically, emotionally, socially, and psychologically mature enough to make their sex play its role. Reproductive organs have their own purpose for existence (Moon, 2007). The purpose for existence is to make perfect love between husband and wife, to produce children and further to build a large community so that human history can keep moving and developing (Moon, 2004). Human being should think about who is the owner of one’s genitals. Moon said that the owners of male genitals are the wives and the owners of the female genitals are the husbands. We should not think that our genitals belong to us only because they are attached to our bodies. Therefore, couples are able to unite as one physically and mentally by having a sexual relationship (Moon, 2007). So he emphasized that only the spouses were allowed to hold their key of love. It should not be possible that men and female are united as one unless the owners of our genitals are our spouses. If genitals are not used appropriately this could lead to great tragedy namely the mounting tension between couples or parents and children. Moon said that there should be only one person whom you love, marry and have sex with (Moon, 2004). If there were many partners, whom you love, marry and have sex with, it will be impossible for you to enjoy happy life. He said that ideal use of the genitals is only possible when couples love each other, and make love after marriage (Moon, 2007). We are able to make love, and create order of love and a harmonious family life only when the genitals are properly used. Regrettably, however, our society suffers from distorted sexual values, sexual sales and atypical sexual activities (Moon, 2007).

**METHODS**

**Sampling plan**

The subjects of the study were largely middle school students in Korea whose parents wanted their children to participate in healthy sexuality values program. All of the total 160 students took part in the program on the recommendation of their parents. A qualitative study was performed with 70 of the students who were randomized. They were individually interviewed. The study lasted from August, 30, 2008 to September 20, 2008. Researcher and two professors conducted four programs of healthy sexuality values lasting for four hours each, on four consecutive Saturdays.

**Study participants**

Demographic characteristics of the survey respondents are summarized in Table 1.

We received responses from 108 male students (67.5%) and 52 female students (32.5%) making a total of 160 students. Of these students 140 were middle school students (87.5%), 12 were high school students (7.5%) and 8 students (5.0%) did not identify their status. According to their academic year, 56 students (35.0%) were first year students, 60 students (37.5%) were second year students, 40 students (25.0%) were third students and 3 students did not identify the year he was in. According to the residential area of these students, 52 were from Seoul, 28 were from Gyeong gi-do, 4 was from In cheon, 8 were from Gang won-do, 24 were from Gyeong sang-do, 16 were from Jeol la-do, 12 were from Chung cheong-do, and 16 did not respond.

**Procedure**

**Education program for this study**

There were a total of 160 students in this program sent by their parents who had wanted their children to be taught about sexual valves. Most of the students who participated attended this program by recommendations of their parents. There were educations four times from August, 30, 2008 to September 20. Each program had each theme and lasted four hours, so it took a total of 16 h to complete the whole program. Four teachers drew up and carried out these programs. We received answers to 11 questions before and after the program respectively. In the program for this study, we chose appropriate 4 themes for education. And those parents who wanted to join the program participated as observers.

For the first education program, the first theme of the healthy sexuality values program was about the importance and value of the reproductive organs. The purpose of this program was as follows: First, it sought to help the students understand the importance and value of the genitals, and recognize all reproductive organs including ours as precious treasures like palaces of love, life and lineage. Second, it sought to make students aware of the importance and value of the reproductive organs. The purpose of this program was as follows: First, it sought to help the students understand the importance and value of the genitals, and recognize all reproductive organs including ours as precious treasures like palaces of love, life and lineage. Second, it sought to make students aware of the importance and value of the reproductive organs.
the complex relationship between a man and a woman. Third, it sought to help them establish a healthy sexual awareness and behavior through which they are able to maintain pure and clean organs of generation. In the process, we made two rooms, one depicting pure genitals and the other depicting obscene genitals. The goal of these rooms was to help them realize values of having pure genitals on their own.

For the second week program, the second theme of the program was to let them understand about the purpose of his or her genital. The goals of the program were as follows: First, it sought to help students become aware of the truth that each one of them was born to love. Second, it sought to realize that each one of them was born to fulfill a great mission of life, namely the creation of new life, children. Third, it sought to help the students realize that each one of them is an invaluable person. Each one of them is able to be a part of history by making a good family. During the education program, students wrote down and presented what they felt about genitals. And then we played a group puzzle game related to the theme. Next, we built 3 palace rooms of love, life and lineage, and had the students experience each room. The goal of these rooms was to help the students realize the purpose of the existence of their own genitals.

For the third week program, the third theme was about "Who are the owners of one's genitals?" The purpose of this education was as follows: First, it sought to let the students know that the only owners of their genitals are their future spouses. Second, it sought to help them realize that the most valuable gift for their future spouses is to let their spouses know that their genitals are pure. In the process, we had each student write letters to their spouses. And then by watching a video that featured two trees, one with appetizing fruit and the other with bad fruit, the students were able to realize that only the tree with purity could produce good fruit. The message of the lesson was that only couples who consider purity of love as the most valuable treasure can lead a harmonious life based on mutual trust. Only pure love couples will be able to have good prenatal care. However, couples who do not keep their pure love before marriage cannot make a happy life.

The last week’s theme of the education was about the principles behind the existence of their own genitals. The goal of this education was to help the students realize that they had to be physically, emotionally and socially mature enough to use their own genitals. In the process, we had each of them try a ripe fruit and an unripe fruit and made them choose which fruit tasted good. The message in this lesson was to help them acknowledge that sex should be determined rationally. As we mentioned, we chose 4 important subjects and implemented the program according to its goals, contexts and methods.

**Measured outcomes**

**The questionnaire survey**

These surveys were conducted on 160 students who took part in
the program. We recorded the general circumstances of those
surveyed and included their school, grade, and region there are
living in. The questionnaire, made by this researcher including two
professors at the department of pure love in Sun Moon University
in Korea, consisted of 11 questions and covered three large catego-
ries. Students could respond on a four-point Likert scale (Spector,
1992). An example of a statement is: ‘having sex with someone you
don’t love’, to which the students could respond by choosing
between: disagree completely, disagree, agree and agree com-
pletely, which were assigned to each statement. To avoid bias
produced by response tendency and to enhance internal validity,
we included both positively and negatively worded items
(Varkevisser and Pathmanathan, 2003). The questionnaire was
distributed to students in the classroom and only members of the
research team were present during completion of the questionnaire.

The first category is about the questions of sexual awareness
and questions 3, 6, 7, 8, 10, 11 are included in this category. The
questions are as follows. “Is it okay to have sex with someone you
don’t love?” “Do you think prostitute activity is not okay?” “Do you
want to date the opposite sex?” “Do you want to watch obscene
materials?” “It is not okay for a man and a woman to have sexual
intercourse when they date” “Do you want to practice what you see
on pornographic videos?” The second category is about sexual
behavior and activities and questions 2, 4 and 5 are included in this
category. These questions are as follows. “Do you have sex when
you feel a sexual urge?” “Do you want to have sex when you are
dating?” “Do you think it is okay to live with your boy or girl friends
before marriage?” The last category is about pure love, family
planning awareness and acceptance. The questions are as follows.
“Do you think the goal of life is to make a good family?” “Do you
think you can keep your purity before marriage?”

The qualitative interview

In order to probe deeper into certain issues, a total number of 70
students randomized, were interviewed individually. Students
received information about the study and those interested
approached the research team to decide on a suitable time and
date for interviewing. A semi-structured interview guideline with
open-ended responses was used (Pope and Mays, 2000) to
explore the students’ values and attitudes towards adolescents’
sexual values in relation to pure love. The interviews were held in a
classroom in Sun Moon University, by this researcher together with
the two professors. For this article we have selected part of the
qualitative findings to complement the survey data. The student
interview consisted of 6 questions pertaining to how valuable
respondents felt the HSVE program was to them personally. Each
of the questions is presented below, along with a survey of the
responses.

Has the HSVE (Healthy sexuality values education) program
increased your conviction about the value of a life of Pure Love? If
so, how?

Every student responded positively to this question, and specified
the sources or nature of their conviction. The majority (62 students)
mentioned that the programs they participated in were the source of
their conviction. Eight students noted that extra- activities in the
programs, such as a role play of husband and wife convinced them
of the value of Pure Love.

Has the HSVE program adequately familiarized you with values of
Pure Love? If so, which program has been most helpful?

While no student gave a negative response to this question, the
majority (58 respondents) qualified their responses by commenting
on the need for more academic development of the program in
order to present Pure Love effectively to other students who have
already had sexual intercourse. Courses that were mentioned were
those that would be helpful in familiarizing them with the Pure Love
program.

Identify three aspects of the HSVE program that you learned or
gained the most from. Identify three aspects of the program that
you found least useful or did not like.

Two aspects of the HSVE program were identified by the majority of
respondents as most valuable: the importance of their reproductive
organs and pure love (61 students) and the fact that most courses
are based on Pure Love (9 students). There was a lesser consensus on which were the least useful aspects of the program.
In fact, twelve students responded that there were “no unbene-
ficial” aspects to this program. Ten students mentioned that they did not
like the fact that the content of some of the programs overlapped;
six others noted that some programs need more practical
demonstration while at least as useful or least liked include: the materials of the program.

What specific courses have been most useful, and why?

Each program was answered by more than three students as the
most useful: the program on ‘Who are the Owners of one's Genitals’
(25 students); the program on ‘The Importance and Value of the
Reproductive Organs’ (14 students), the program on ‘About the
Principles behind the Existence of Their Own Genitals’ (16
students), the program on ‘The Purpose of Their Own Genitals’ (3
students). Ten students said that “most courses were useful,” and
two said that “the programs where we have presentations and
discussions are the most useful.

What specific courses have been least useful, and why?

Almost half (34 respondents) replied that there were “no useless
programs” or that “most programs were useful in different aspects.”
Other responses to this question showed that although one or two
programs were considered least useful by some students, each
program was mentioned by a small number (less than three) of the
students.

Would you recommend the HSVE program to others? Why or why
not?

All who responded (67 students) gave a positive response. The
reasons given for being glad to study HSVE included being happy
and proud to live a life of Pure Love (23 students), being happy to
live for the sake of their future spouse (22 students), and wanting to
educate others about Pure Love (ten students). Three students
expressed some concern that they need to further develop their
ability to maintain the values of Pure Love, and twelve that they had
anxiety about their sexuality and sexual desire after the
HSVE program. Although all who responded said they would
recommend HSVE to others, a large number (43) expressed con-
cerns about how to overcome their sexual desire.

Data analysis

For this study, researcher used Cronbach alpha to make an
analysis of the reliability and validity of the analysis tools, and
utilized PCA (principal component analysis)-Factor analysis to study
factors. In order to interpret the factors, researcher made use of
Varimax (Orthogonal Rotation) and carried out t-test analysis for
pre-post analysis. To figure out the changes about sexual aware-
ness and behavior, ANOVA with repeated measurement with SPSS
software was implemented. Data from individual interviews were
DISCUSSION

The purpose of sexual education lies in how it can help students make healthy families and society by promoting trust and cooperation between men and women as members of society (Lee, 1997). Several researches were conducted to prevent sexual harassment and sexual violence. Sexuality educators, Yoon et al. put an emphasis on healthy sexual awareness and sexual behavior to conduct appropriate sexual value and ethical education (Yoon et al., 2002). Bennett and Assefi said in their paper, ‘School-based Teenage Pregnancy Prevention Programs,’ that it is very effective to carry out pregnancy (Bennett and Assefi, 2005). In a similar vein, analyzed with qualitative content analysis. Analysis started when all data was collected and members of the research team read the interview responses in order to obtain the outcomes of the assessment data of this program.

RESULTS

Researcher received valid response forms from a total of 160 students. 108 of these were male students and 52 were female students. 140 were middle school students and 12 were high school students and 8 did not record what kind of school they attended. 140 of the students were 12 to 14 years old and 12 were 15 to 17 years old and 8 did not record how old there were. Results from the questionnaire survey are presented under three main headings: (i) sexual awareness; (ii) sexual behavior; (iii) pure love family planning awareness and acceptance. There were several changes among students after conducting this program. For sexual awareness, the figures improved by 0.94, from 3.75 to 4.69(p<0.05). In terms of sexual behavior, it improved by 0.98 from 3.68 to 4.66(p<0.05). For pure love family planning awareness and acceptance, the figure went up by 0.87 from 3.62 to 4.49(p<0.05). According to these statistics, there were pre-post changes in all sectors including sexual awareness, sexual behavior and pure love family planning awareness and acceptance. So it was concluded that this program had very positive effects on the students. It was found that female students showed more positive effects from this program than male students did suggesting that females have stronger pure love awareness than men. Under each heading, the results from the questionnaire survey are complemented with findings from the qualitative interviews.

Table 2. The result of factor and reliability analyses.

<table>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>p8</td>
<td>.878</td>
<td>.228</td>
<td>.263</td>
</tr>
<tr>
<td>p10</td>
<td>.851</td>
<td>.111</td>
<td>.248</td>
</tr>
<tr>
<td>p3</td>
<td>.799</td>
<td>.231</td>
<td>.105</td>
</tr>
<tr>
<td>p11</td>
<td>.765</td>
<td>.180</td>
<td>.073</td>
</tr>
<tr>
<td>p6</td>
<td>.687</td>
<td>.573</td>
<td>-.010</td>
</tr>
<tr>
<td>p7</td>
<td>.667</td>
<td>.571</td>
<td>.151</td>
</tr>
<tr>
<td>p4</td>
<td>.061</td>
<td>.877</td>
<td>.222</td>
</tr>
<tr>
<td>p5</td>
<td>.413</td>
<td>.825</td>
<td>.003</td>
</tr>
<tr>
<td>p2</td>
<td>.363</td>
<td>.460</td>
<td>.379</td>
</tr>
<tr>
<td>p1</td>
<td>.310</td>
<td>.012</td>
<td>.816</td>
</tr>
<tr>
<td>p9</td>
<td>.011</td>
<td>.181</td>
<td>.762</td>
</tr>
<tr>
<td>eigen-value</td>
<td>4.037</td>
<td>2.500</td>
<td>1.610</td>
</tr>
<tr>
<td>Explanatory Power</td>
<td>36.703</td>
<td>22.729</td>
<td>14.635</td>
</tr>
<tr>
<td>Cumulative Explanatory Power</td>
<td>36.703</td>
<td>59.432</td>
<td>74.067</td>
</tr>
<tr>
<td>Cronbach’s</td>
<td>0.909</td>
<td>0.744</td>
<td>0.541</td>
</tr>
</tbody>
</table>

Validity of the standard and the reliability of the analysis for the questionnaire survey

For this study, researcher made a questionnaire containing 11 questions about sexual awareness, sexual behavior, and pure love family planning. To verify the hypothesis, the validity and reliability of the tools to measure the variables used for the hypothesis needed to be strictly verified (Che, 1992). Reliability means that multiple measurements should produce the same results, and that the items composing a fact have internal consistency among them. Item analysis can be used to verify the reliability of the variables that use multi-item standards. Among the various methods of item analysis, Cronbach alpha is the method to enhance the reliability of a measuring tool by excluding the items undermining the reliability from the measuring tool was used. Reliability coefficient was determined to be more than 0.5 (Hair et al. 1998).

Validity means that the measuring tool is properly used to measure what should be measured. There is a method to verify what the measuring tool is actually measuring and whether the measuring tool is properly measuring the abstract concept that the researchers actually intend to measure. That is construct validity.

There are multiple-principle matrix factor and factor analysis as the methods to measure the construct validity. In this study, factor analysis is used to verify the validity. Principal component analysis (PCA) was used to extract factors, which generally means linear combination of measured factors. Varimax (Orthogonal Rotation) was used as the factor rotation for clear interpretation of factors that were obtained initially. Factor loading that represents correlations between variables and factors can be said to be meaningful when it is more than 0.4 in case of factor analysis on a unidimensional scale (Lim, 1992) (Table 2).

The analysis showed that there were three factors, and the total explanatory power of the three was about 74.1%. The prime factor 1 consists of 6 questions such as Questions 3, 6, 7, 8, 10 and 11. Factor I was named “Sexual Awareness” because these questions indicate the general attitude toward gender. Factor 2 was named “Sexual behavior” because the three questions such as question 2, 4 and 5 are related to sexual behaviors. Factor 3 was named as “pure love family planning awareness and acceptance” because the two questions such as question 1 and 9 are related to the mind set with higher level of Sexual Awareness valuing the purity and consummation of love. The analysis of the reliability of each factors consisting of these questions showed that their reliability were 0.909, 0.744 and 0.541 respectively which are all over the 0.50. That represents that the questions under the factors maintained internal consistency among them, showing that they have a proper level of reliability.
Green and Documét (2005) also said in their paper that it proves to work out well to promote dialogues between parents and their children with the aim of prevention of teenage pregnancy. In the United Kingdom, the government took the lead in preventing teenage pregnancy by enacting relevant laws (Davey, 2005). For example, In March 2005, the Medicak Foundation for AIDS and Sexual Health published a comprehensive set of ten sexual health standards to improve the quality of sexual health service delivery. They were developed with the aim of enabling people to have prompt and convenient access to consistent, equitable and high quality sexual health care. Likewise, there have been a lot of researches and efforts such as creating programs and enacting laws to help adolescents develop healthy sexual awareness. However, no concrete sexual awareness education programs have been found. Therefore, my ultimate goal was to help adolescents develop sound sexual awareness and behavior by educating them healthy sexual awareness. Therefore, the purpose of this study is to examine how much of a positive our healthy sexuality values program has on female and male students. In addition, this study sought to find out how much gap there is between male and female students in terms of sexual awareness, sexual behavior and the desire to create a pure love family. And it is discussed in what the results of this study imply while examining the current situation in detail.

**Difference of pre-post analysis**

To determine the effectiveness of the sexual awareness program, researcher studied if there were any significant changes in students “Sexual awareness”, “Sexual behavior” and “pure love family planning awareness and acceptance” after going through the healthy sexuality values program. It was used the paired sample t-test. The results are summarized in Table 3.

From the results in Table 3, “sexual awareness” positively improved by about 0.94 points from 3.75 to 4.69, and statistically there was a significant difference between pre-post analysis in "sexual awareness" (p<0.05). Consequently, the healthy sexuality values program made a contribution to the improvement of students’ positive sexual awareness. "Sexual behavior" showed about 0.98-point improvement from 3.68 to 4.66, and statistically there was a significant change between pre-post analysis in "sexual behavior" (p<0.05). Accordingly, the healthy sexuality values program made a contribution to the improvement of students’positive sexual behavior. Also statistically there was a significant improvement in pure love family awareness and acceptance increasing by 0.87 points from 3.62 to 4.49 (p<0.05). In sum, the healthy sexuality values program made a contribution to the improvement of students’positive sexual awareness and acceptance of pure love family plan.

### Changes in pre-post analysis according to gender

This analysis showed the results that if there were any differences between male and female students’ changes in pre-post analysis in terms of their sexual attitudes and behavior. To analyze this, an ANOVA with repeated measurement was used.

### Sexual awareness

First, this study analyzed differences in Sexual awareness, and the results are summarized in Table 4.

According to the analysis, there was significant difference in before-after changes concerning sexual awareness according to gender (F=11.064, p<0.05). In sum, the degrees of changes in sexual awareness between male and female students are much different. Figure 1 showed the changes and differences.

From Figure 1, the female students showed a steeper change than did male students in pre-post comparison. And, statistically the difference is significant in terms of a level of significance 0.05. And, statistically the difference is significant in terms of a level of significance of 0.05.

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**Table 3. Analysis result of pre-post changes on sexual awareness, sexual behavior, and pure love family planning awareness and acceptance.**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Division</th>
<th>N</th>
<th>Average</th>
<th>Std</th>
<th>t-value</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual awareness</td>
<td><strong>Before</strong></td>
<td>36</td>
<td>3.75</td>
<td>0.45</td>
<td>-16.401</td>
<td>0.000***</td>
</tr>
<tr>
<td></td>
<td><strong>After</strong></td>
<td>36</td>
<td>4.69</td>
<td>0.48</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sexual behavior</td>
<td><strong>Before</strong></td>
<td>37</td>
<td>3.68</td>
<td>0.50</td>
<td>-16.571</td>
<td>0.000***</td>
</tr>
<tr>
<td></td>
<td><strong>After</strong></td>
<td>37</td>
<td>4.66</td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Awareness of pure love family planning</td>
<td><strong>Before</strong></td>
<td>39</td>
<td>3.62</td>
<td>0.64</td>
<td>-12.009</td>
<td>0.000***</td>
</tr>
<tr>
<td></td>
<td><strong>After</strong></td>
<td>39</td>
<td>4.49</td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p<0.05; **p<0.01; ***p<0.001.*
### Table 4. Difference of analysis on pre-post changes in sexual awareness according to gender.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type III Sum of squares</th>
<th>Degree of freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual awareness</td>
<td>64.000</td>
<td>1</td>
<td>64.000</td>
<td>292.637</td>
<td>0.000</td>
</tr>
<tr>
<td>Sexual awareness by gender</td>
<td>2.420</td>
<td>1</td>
<td>2.420</td>
<td>11.064</td>
<td>0.001***</td>
</tr>
<tr>
<td>Error</td>
<td>31.056</td>
<td>142</td>
<td>0.219</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05; ** p<0.01; *** p<0.001

![Figure 1. Male and female students’ pre-post changes in sexual awareness.](image)

### Table 5. Male and female students’ pre-post changes in sexual behavior.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type III Sum of Squares</th>
<th>Degree of freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sexual behavior</td>
<td>59.572</td>
<td>1</td>
<td>232.623</td>
<td></td>
<td>0.000</td>
</tr>
<tr>
<td>Sexual behavior according to gender</td>
<td>0.113</td>
<td>1</td>
<td>0.440</td>
<td></td>
<td>0.508</td>
</tr>
<tr>
<td>Error</td>
<td>37.389</td>
<td>146</td>
<td>0.256</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05; ** p<0.01; *** p<0.001

### Sexual behavior

This analysis looked at the results that if there were any differences between male and female students in pre-post changes with regards to their sexual behavior. The results are summarized in Table 5.

According to analysis, statistically there was no significant difference in sexual behavior according to gender (F=0.440, p>0.05). Consequently, we could not say that there were differences in the degree of changes between male and female students. Figure 2 showed the changes and differences.

As we can see from the Figure 2, the male and female students showed the similar degrees of changes in sexual behaviors.

### Pure love family planning awareness and acceptance

Lastly, the analysis showed the differences in pre-post change in pure love family awareness and acceptance between male and female students. The results are
summarized in Table 6.

According to the analysis, statistically there was a significant difference in changes in pure love family awareness and acceptance according to gender (F=20.267, p<0.05). So we could say that the degrees of changes in pure love family awareness and acceptance are different according to gender. Figure 3 demonstrated that fact.

In accordance with Figure 3, the female students showed a greater change than male students did in pure love family planning awareness and acceptance. This means that through the purity awareness program, female students’ pure love family awareness and acceptance was more positively improved than it was in male students. In conclusion, this program made positive changes on both male and female students in terms of sexual awareness, sexual behavior and the desire to create pure love families. This study is in the line with the researches conducted by Sun (1993) and Yeon (1997) who both emphasized the significance of sexual awareness education to bring about positive changes in sexual awareness and behavior. What differentiates this research from researches in the 1990s is that it suggests what sexual values are in detail. It is also designed to educate students what sexual values are in detail. That is what differentiates it from international researches. In other words, such programs to raise sexual awareness are very effective in bringing about positive changes on the students. After implementing the program, although there was a change, it was not big in terms of sexual awareness and behavior of males and females. However, when it came to pure love family relationship plans, there were pre-post changes. Female students saw a more remarkable improvement than did male students after the program. This is the same as the studies conducted by Kim (1991) and Lee (2003). Pil Wha Jang (1995) said that this was because of our social structure. He argued that while male students had separated views on sex, love and marriage, female students tended to observe ideal social rules as they were united. That is mainly because even when men separated from sex, love and disadvantages women experience, the gap between men and women in perception of pure sexual awareness means that they just accept the double standards of our society which treats men and females differently. In order to resolve this problem, we need to implement a sexual

---

**Figure 2.** Male and female students’ pre-post changes in sexual behavior.

**Table 6.** Differences of analysis in pre-post change in pure love family planning awareness and acceptance.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Type III Sum of Squares</th>
<th>Degree of freedom</th>
<th>Mean Square</th>
<th>F</th>
<th>Significance probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>pure love family planning awareness and acceptance</td>
<td>66.692</td>
<td>1</td>
<td>66.692</td>
<td>182.402</td>
<td>0.000</td>
</tr>
<tr>
<td>pure love family awareness and acceptance according to gender</td>
<td>7.410</td>
<td>1</td>
<td>7.410</td>
<td>20.267</td>
<td>0.000***</td>
</tr>
<tr>
<td>Error</td>
<td>56.308</td>
<td>154</td>
<td>0.366</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<0.05; ** p<0.01; *** p<0.001.
Figure 3. Male and female students’ pre-post changes in pure love family planning awareness and acceptance.

awareness education program and make an effort to change the prevailing social perceptions about sexuality. What researcher suggests with regards to a sexual awareness program is that we need to conduct comprehensive research on emotional, physical or social difficulties that females suffer from when they have sex without establishing healthy sexual values. Moreover, sexual awareness that has prevailed in our society should be changed as teenagers are very subject to social and cultural effects in forming their healthy sexuality values. Therefore, we should make all our effort to conduct a more concrete study on the relevance between the sexual values of our society and the sexual awareness of our teenagers.

Study limitations
Quantitative attitude scales have well-known limitations for measuring complicated ethical and moral issues (Oppenheim, 2000), but are useful if one wants to get an overall picture from groups. By combining qualitative and quantitative data we have tried to obtain both a broad, as well as an in-depth view of students’ sexual awareness and behaviors. Sexual awareness and behaviors of students may differ and findings may, therefore, be specific to the research setting in which they were undertaken. Matters of adolescents’ sexuality value are sensitive issues in Korea and one might expect students’ answers to be biased towards that which is socially acceptable rather than their own personal views. In the survey, the confidentiality of the situation makes any such bias unlikely, and in the interviews our impression is that students talked very freely and with confidence. The language barrier is an inevitable limitation in qualitative studies where translation is needed, which we tried to overcome by careful scrutiny of the meanings of central concepts.

Conclusion
This study is to provide basic materials to educate our teenagers to establish healthy sexuality values. It is expected that if the healthy sexuality values program is conducted in schools, definite positive effects will be witnessed. Therefore, we suggest that schools try to expand their current sexuality education programs into a health sexuality values program in order to overcome the current sexuality education problems. Against this backdrop, it is all the more important that our society as a whole need to accept that there is need to conduct sexuality education for adolescent in order to expand the healthy sexuality values education across the nation.

REFERENCES