

To the Graduate Council:

I am submitting herewith a thesis written by Sharon M. Ballard entitled "University Students' Perceptions of Sexuality Education: Information Sources, Educators, and Topics." I have examined the final copy of this thesis for form and content and recommend that it be accepted in partial fulfillment of the requirements for the degree of Master of Science, with a major in Child and Family Studies.

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**UNIVERSITY STUDENTS' PERCEPTIONS
OF SEXUALITY EDUCATION:
INFORMATION SOURCES, EDUCATORS, AND TOPICS**

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Part 1: Introduction

Sexuality education is an issue that has generated and continues to generate a great deal of controversy and debate (Bruess & Greenberg, 1994). Sexual learning, through both informal and formal sources, starts during early childhood and continues throughout the lifespan (Roberts, 1980). Although a majority of sexual information comes from informal sources, much of the focus of sexual learning has been on formal sexuality education programs. Many people limit their view of sexuality education to the biological dimension. According to the Sex Information and Education Council of the United States (SIECUS, 1992), a comprehensive sexuality education program includes the biological, socio-cultural, psychological, and spiritual dimensions of sexuality. These four dimensions are approached in the cognitive, affective, and behavioral domains. A majority of states require or encourage sexuality education, yet many middle school and high school sexuality programs are not comprehensive in nature (SIECUS, 1992). A majority of parents support sexuality education for their children (Kenney & Orr, 1984); however, the controversy ensues regarding the content and the instructional activities included in a program (Bruess & Greenberg, 1994).

There are data that clearly support the argument for the usefulness of sexuality education. A report from the Alan Guttmacher Institute (1994) disclosed that 3 million adolescent females and males contract a sexually transmitted disease (STD) each year, individuals in their twenties account for 20% of diagnosed AIDS cases, most of whom contracted HIV during adolescence, and one million adolescent females become pregnant each year with half of the pregnancies resulting in birth. These facts are important

considerations when discussing sexuality education; however, sexuality encompasses more than social problems. Engel, Saracino, and Bergen (1993) proposed “sexual health” as an appropriate goal for sexuality education. Education efforts often are aimed at the negative consequences of adolescent sexuality and employ scare tactics to try to educate and reduce rates of adolescent pregnancy and STDs. A comprehensive sexuality curriculum that encompasses the idea of “sexual health” may be more effective in helping young people develop a positive sense of their own sexuality that includes responsible sexual decision making.

General Overview

This thesis project is divided into three manuscripts, each of which addresses issues relevant to effective sexuality education. The androgogical model of education (Knowles, 1984) is employed as a framework for examining sexuality education in an undergraduate human sexuality course. Andragogy is a model often used in adult education, but has exciting possibilities when applied to sexuality education at the university level. Androgogy is more student-driven rather than the traditional teacher-driven pedagogical model. Androgogy also emphasizes respect for the needs, interests, and previous knowledge of the learner. In addition, the educator is encouraged to present material in a real life context.

The first manuscript addresses the component of the androgogical approach that includes examination of and respect for student’s previous knowledge. Sources of previous sexuality information for the university students in this sample are explored.

Whom have they discussed sexuality with and what preferences for different sources of sexuality information emerge? Many opponents of sexuality education argue that sexuality education should occur at home. Others argue that sexuality education is not occurring at home and if it is not done at school, students will not receive any formal sexuality education. In order for sexuality information to be more effectively delivered, different sources could be integrated in a sexuality education curriculum. Such opportunities for family, school, peers, and others to work together toward comprehensive sexuality education are explored.

The second manuscript of this thesis project explores the relationship between the learner and educator roles in an undergraduate human sexuality course. Part of the focus is on the sexuality educator and the qualities that are necessary for an effective sexuality educator to possess. Many scholars in the field of sexuality education have recognized the importance of personal characteristics (e.g., respect for students, ability to listen) in effectively teaching sexuality education (Cook, Kirby, Wilson, & Alter, 1984; Scales, 1981). These personal characteristics are essential for facilitating an andragogical learning environment. The role of the student is addressed by identifying those sexuality topics and presentations of these topics that they find applicable, enjoyable, and understandable. The role of the student is linked to the role of the educator by examining the relationship between the student perceptions of topics and presentations and student perceptions of the instructor.

The third manuscript of this thesis project expands upon the learner's needs and

interests. What do students really want to know about sexuality? This is a critical piece of the androgical model. In order to empower students to take charge of their own learning, it is imperative to find out what it is that students feel is interesting and relevant to their lives.

Overall, these three manuscripts examine issues critical to sexuality education and provide important implications for effective sexuality education utilizing some of the components of the andragogical model of education. This research links student interests in sexuality with the influences of sexuality educators, family, school, peers, and others in students' sexual learning and explores ways everyone can work together to help students achieve the goal of "sexual health."

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Part 2

Sources of Sexuality Information for

University Students

Abstract

The purpose of this study was to examine sources of sexuality information and to determine those sources that have had the most influence on university students' sexual learning. 203 students in an undergraduate human sexuality course rated 34 potential sources of sexuality information. The students also rank ordered the five sources of information that have most influenced their knowledge of human sexuality. Results indicate that females consider parents more influential than males and that mothers discuss sexuality more with both sons and daughters than fathers do. Peers, parents, and media emerged as the 3 most prominent sources of sexuality information.

Introduction

Sexual learning occurs continuously throughout the lifespan in a variety of ways (Roberts, 1980). Strouse and Fabes (1985) examined informal sources of sexuality information and posited that the home is the most important context of sexual learning and that sexuality programs offered at school are only supplementary to parents and home. School sexuality education programs are just one source of information for young people yet formal sexuality education has dominated much discussion and debate regarding sexual learning. The purpose of this study was to examine different sources of sexuality information and to determine those sources that have had the most influence on university students' sexual learning.

Understanding where people receive their sexuality information can be important for curriculum planning and policy decisions regarding sexuality education. Research consistently shows that young people report receiving sexuality information from several different sources (Andre, Frevert, & Schuchmann, 1989; Gebhard, 1977; Tjaden, 1988). Knowledge regarding the importance of different sources will provide sexuality educators with opportunities to incorporate and complement a variety of these sources such as the media and parent involvement into their curriculum. For example, educators could incorporate viewing and discussion of excerpts from popular television shows, movies, or popular magazines into their lesson plans or give assignments parents and students can complete together. Consequently, integrating and complementing the different sources of sexual learning can maximize the effectiveness of sexuality education.

In reviewing the literature relating to sources of sexual information, several themes emerged. First, there are mixed results concerning the importance of the family's influence in student's sexual learning. One consistent finding is that females clearly receive more sexuality information from their parents than males do (Andre, Dietsch, & Cheng, 1991; Davis & Harris, 1982; Gebhard, 1977; Goldman & Goldman, 1981; Green, 1985; Thornburg, 1981; Tjaden, 1988). The majority of sexuality education received from parents is from the mother only. Fathers do not appear to play a major role in the provision of sexuality information, although Spanier (1977) did find that fathers were more important for males than mothers were in providing sexuality information. When Handelsman, Cabral, and Weisfeld (1987) asked about preferred source and major source of sexuality information, 60% of the students listed parents as their preferred sexuality information source. Bates and Joubert (1993) found that higher parent-child communication about sexuality was related to higher self-esteem and more frequent church attendance for college students. Although parents appear to be important in the sexuality education of young people, siblings do not seem to play a large part (Davis & Harris, 1982; Goldman & Goldman, 1981).

Second, studies have yielded conflicting results concerning the importance of peers in imparting sexuality information. Regardless of whether or not peers are the most important source, they do appear to play a major role in the sexual learning of young people, particularly for males. In their review of literature, Andre et al. (1991) point out that peers as the leading source of sexuality information is a misleading conclusion.

Many of the respondents in the studies reviewed actually listed a source other than peers as their most prominent source of sexuality information. For example, Goldman and Goldman (1981) found that for respondents in all five countries included in their study, mothers were rated higher than peers as a source of sexuality information. Andre et al. (1991) provided another example of sources other than peers being cited as the leading source of sexuality information. In their study involving university students, they found that reading was the highest rated source of information on most sexuality topics with peers usually listed as the second most important source. Spanier (1977) also found reading to be a major source of sexuality information for two-thirds of the males and females in his study. Andre et al. (1989) suggested that the importance of different sources of information might change depending on the developmental and experiential level of the students. Other empirical studies revealed peers as the most important source of sexuality information. Davis and Harris (1982) found that both males and females received a great deal of information from their peers but males relied on peers for their sexuality information more than females did. Green (1985) also found that both sexes were more likely to obtain sexuality information from their peers than from their parents.

The third finding to emerge from the literature is that the source of sexuality information appears to vary depending on the sexuality topic (Andre et al. 1991; Andre et al. 1989; Coles & Stokes, 1985; Gebhard, 1977; Thornburg, 1981; Tjaden, 1988). Schools are often cited as the most important source of information about sexuality topics such as reproduction, anatomy, and STDs (Andre et al. 1991; Andre et al. 1989;

Thornburg, 1981; Tjaden, 1988), whereas mothers were frequently cited as providers of information on menstruation (Gebhard, 1977; Scott-Jones, & Turner, 1988; Thornburg, 1981). Peers and the media are often listed as sources of controversial sexuality topics such as abortion and homosexuality (Gebhard, 1977; Tjaden, 1988; Thornburg, 1981). Many sexuality programs focus solely on the biological dimension of sexuality and fail to incorporate the other dimensions of sexuality that are included in a comprehensive curriculum. Thus, if students are not exposed to issues such as homosexuality in their formal sexuality education, other sources become their primary source of information.

Finally, one of the most consistent findings from previous empirical research is that most people feel that they received their sexuality education from more than one source (Andre et al. 1989; Gebhard, 1977; Tjaden, 1988); however, limited detail about the different sources of sexuality information has been obtained. Participants are often asked to list the single most important source of their sexuality education, making it difficult to compress their learning into one source. Having students list several sources in rank order is helpful, but a rank order does not provide information concerning the relationship between sources. In other words, it is difficult to tell if the first and second sources listed were considered to be close in importance or if the first source listed was considered to be of much greater importance than the second source listed.

The current study had students rate 34 different sources of sexuality information that provided the advantage of analyzing the differences between sources. This study not only has students' ratings of each of 34 sources but also obtains a rank order of the top

five most influential sources. The list of 34 sources is more extensive than many previous studies in that it offers more detail about various sources. For example, many studies include school as a single category. The instrument used in this study separated teachers by gender and grade level. Friends and siblings are categories also separated by age and gender. Media was broken down into television, movies in, trade books, and sexuality textbooks. This more comprehensive list will provide more complete information about the sources of sexuality education.

Research Objectives

The current study is exploratory in nature and addresses the following research objectives: (a) to determine how university students rate 34 potential sources of sexuality information as to the amount of discussion that has occurred with each source; (b) to determine, given the list of 34 sources, which five sources do university students consider to have been most influential in their own sexual learning; (c) to make gender comparisons of both the ratings of the 34 sources of sexuality information and the rank order of the five most influential sources of sexuality information.

Considering the findings of the empirical studies reviewed here, it is hypothesized that the current study will show female students receiving more information from parents than do male students and that mothers will play a more predominant role in sexuality education than fathers do. Based on the findings of Andre et al. (1989), Andre et al. (1991) and Spanier (1977) that reading was an important source of information for college students, it is expected that reading either trade books (i.e., romance novels,

popular magazines, etc.) or sexuality textbooks will be also be an important source of information for the university students in this study.

Methods

Sample Description

This study was conducted using a sample of 203 students in three different sections of a comprehensive, undergraduate human sexuality course. The course was a 200-level (sophomore) class offered at a large southeastern university.

Demographic data provided by the students showed that 145 students were female and 58 students were male. The age of the students ranged from 18 to 46 years with a mean age of 22 years. Distribution of academic majors was diverse with 22% of the students from Liberal Arts, 20% from Human Ecology, 20% from Engineering, 10% from Communications, 10% from Nursing, and the remaining 18% from Agriculture, Business Administration, Education, and Law. The majority of students (147) were either juniors or seniors. Of the 203 students, 9.4% were married, 41.9% were engaged, cohabiting, or exclusively dating, 7.9% were steadily dating, 18.2% were casually dating, and 18.7% were friends only or casually attracted. Thirty-six percent of the sample reported that their relationship status had changed since the start of the semester. The students reported an average of 8.5 hours spent in previous sexuality education classes, largely through churches or schools.

Instrument and Procedures

Students were asked to rate 34 potential sources of sexuality information. The students indicated the influence these sources had had on their knowledge regarding human sexuality prior to the class in which they were currently enrolled. A 6-point

Likert-type scale was used with the following response options: 0=not applicable (only use if you do not have this relative), 1=never discussed, 2=rarely discussed, 3=occasionally discussed, 4=usually discussed, and 5=always discussed. Using the list of 34 sources, the students were then asked to rank order the five sources that had most influenced their knowledge of human sexuality. Despite the instructions to use the given list of sources, several students put sources in their rank order that were not from the list. These new sources were coded and frequencies tabulated for them as well as the 34 original sources.

Results

Ratings

The mean response of the rating of each of the 34 sources of sexuality information is listed in Table 1. Based on these mean responses, same-age male and same-age female friends are the two most influential sources of sexuality information for the university students in this sample. Mother is third followed by older female friend, television, movies in theaters, and sexuality textbooks. Male and female elementary school teachers and male grandparents were the lowest rated sources.

The ratings were subjected to a t -test in order to make gender comparisons. The results of this t -test are presented in Table 2. Significant gender differences were found for 14 of the 34 sexuality information sources. Looking within gender, males rated same-age male friend, same-age female friend, older male friend, and television as the sources they had most frequently discussed sexuality with. Females rated same-age female friend, mother, older female friend, and older sister the highest. Overall the sources were rated higher by the female students than by the male students.

As hypothesized, female students discussed sexuality with their mother more than male students did. Male students found fathers to be slightly more influential than did female students but this difference was not statistically significant. However, based on mean responses, males rated fathers eleventh which is lower than both mothers and older siblings. Both stepfathers and stepmothers were rated significantly higher by females than they were by males.

There was no significant gender difference in the perceived importance of television but females did find movies significantly more influential in terms of their sexuality education than males did. However, the ratings reveal that both males and females see the media as an important source of sexuality information.

Rank Ordering

Frequencies were tabulated for the open-ended list of the five most influential sources of sexuality information. Despite the instructions to use the given 34 sources for the rank, students listed several additional sources. The following categories were created based on these responses: peers/friends, parents, the current sexuality class, teacher/school, spouse/partner, myself (i.e., the student listed themselves as a source of sexuality information). The sources listed first in the rank order (i.e. perceived to be the most influential source of sexuality information) were father (3.4%), mother (22.7%), stepmother (.5%), uncle (.5%), aunt (1.5%), other male relative (1%), older brother (1%), older sister (3.4%), younger brother (.5%), younger sister (1%), other (1%), male high school teacher (.5%), older male friend (4.9%), older female friend (4.9%), same-age male friend (5.9%), same-age female friend (12.3%), younger female friend (.5%), television (1%), movies in (1.5%), sexuality textbooks (3.4%), clergy (1%), current class (3.4%), friends/peers (11.3%), teacher/school (2%), parents (1%), spouse/partner (2.5%), and myself (.5%).

Same-age male friend and same-age female friend were listed by 18.2% of the students as the most influential source of their sexuality information, whereas 22.7%

ranked mother as their most influential source. However, a total of 39.8% of the students listed some form of peer as their most influential source of sexuality information, resulting in the overall category of peers as the most influential source of sexual learning for the students in this sample. Parents as a general category was the second most influential source of sexual learning with 26.1% of the students listing mother, father, or parents.

Only 2.5% of the students listed television or movies in first in their rank order, although another 32% listed one or both of them somewhere in their list. While it was not a choice from the given list of sources, 11.3% of the students listed their spouse, partner, girlfriend or boyfriend somewhere in their rank order.

Overall, trade books were not identified as a major source of sexual learning for these university students. Only 1% listed trade books as one of their five most influential sources and this was in the fifth spot. Sexuality textbooks were more important with 17.3% listing sexuality textbooks somewhere in the list.

These frequencies for the rank order of the five most influential sources of sexuality information were also separated by gender. Overall, 71% of female students listed mother and another 7.7% listed parents as one of their five sources that most influenced their knowledge of sexuality. Male students also found their mothers to be important sources of information as 51.8% of male students listed mother and another 3.4% listed parents somewhere in the rank order of their five most influential sources. In contrast, only 36.2% of males and 15.3% of females listed fathers somewhere in the

rank order.

Twenty-four percent of both males and females put television somewhere in their list of the five most influential sources. Movies in do not appear to be as influential as television with 10.4% of females and 8.5% of males listing them in their rank order.

Discussion

Based on both the ratings and the rank order, peers, parents, and popular media (i.e., television, movies, and sexuality textbooks) are the three most influential sources of sexuality information for the students in this study. Schoolteachers were not found to be a major source of information. Amonker (1980) also found friends, mass media, and parents to be the main sources of sexuality information with teachers being a negligible source. The importance of peers, parents, and reading is consistent with the findings of previous research (Andre et al., 1991; Davis & Harris, 1982; Goldman & Goldman, 1981). Yet, these same studies have also found teachers and school sexuality programs to be important sources of information. In addition, the importance of television and movies has not been so clearly demonstrated. However, Shirreffs & Dezelsky (1979) found that the influence of media, including books, magazines, and movies, increased in the period from 1972 to 1978.

A discussion of these sexuality information sources (peers, parents, popular media, and schools) will be included here in addition to siblings and other family members, religion, and community agencies.

Peers

In the list of 34 sources of sexuality information, peers were broken down by age and gender. Same-age peers were more influential than older peers who were in turn more influential than younger peers. There appears to have been some cross-gender learning, yet peers of the same sex seemed to play the largest role in providing sexuality

information. For example, male students rated same-age male friends significantly higher than females did and female students rated same-age female friends significantly higher than males did.

Although same-sex peers play a larger role in sexual learning, peers, overall, are equally important to both males and females. Rank order results supported the rating results in that 39.5% of males and 40% of females identified some form of peer or friend as their first source in the rank order. This contradicts previous research that indicated that peers were a more important source of sexuality information for males than for females (Davis & Harris, 1982; Thornburg, 1981).

In the rank order, 44.5% of the students did not indicate a friend by gender or age (i.e., same-age female friend) but instead listed peers or friends for one of their five most influential sources of sexuality information. This may be because students had a difficult time determining which peer was the most influential when perhaps a whole peer group was influential in their sexual learning.

Spouse/partner was another response that was not one of the given choices, yet 11.3% of the students listed it somewhere in the rank order. This may be an indication of the mature relational status of the students in this sample as over 50% of the students were either married, engaged, cohabiting, or exclusively dating. Coles and Stokes (1985) found sexual partners to be an important source of information about sexuality topics such as sexual techniques. Other students in the current study may have perceived a partner as an important source of sexual learning but included this person in one of the

peer categories or felt they could not have included him/her because it was not one of the options given. To better assess the influence of other sources, the instrument created and used for this study purposefully omitted spouse or partner as a choice. However, it appears that spouses and partners play a large role in sexual learning and should be included in future research.

Parents

Mothers did not emerge as the most influential source of sexuality information, yet results indicated that they do play a large role. Overwhelming support was found for the hypothesis that females are more strongly influenced by mothers than males. This finding supports previous research (Andre, Dietsch, & Cheng, 1991; Davis & Harris, 1982; Gebhard, 1977; Goldman & Goldman, 1981; Green, 1985; Thornburg, 1981; Tjaden, 1988). This may be in part because of communication between mothers and daughters about menstruation. Menarche is a clear marker event for girls reaching puberty and provides an opportunity where mothers must communicate with their daughter about the realities of menstruation. Spermarche (nocturnal emissions) is the closest counterpart for boys reaching puberty. However, it is a process that often results in less communication than menarche. Menarche is a natural process that is removed from sexual arousal and intercourse; whereas nocturnal emissions for boys, although a natural process, is directly related to sexual arousal and may result in more embarrassment and discomfort.

As hypothesized, the role of fathers is much less than that of mothers according to

both the ratings and the rank order. In an attempt to explain this phenomenon, Allgeier (1983) has suggested that perhaps parents and in particular fathers and daughters are affected by the "incest taboo" often present in families. Parents and children both may feel uncomfortable thinking about the other in sexual terms given the strong societal taboo against incest.

Both stepmothers and stepfathers have discussed sexuality significantly more with females than with males. One possible explanation for this is that the basis of many stepparent – stepchild relationships is friendship rather than a biological parent-child relationship. If this is the case, perhaps the "incest taboo" between stepfathers and stepdaughters is downplayed and a stronger friendship or even peer influence is evident.

Media

Contrary to the findings of Andre et al. (1991) and Spanier (1977) the university students in this study did not perceive reading to have been a major influence in their acquisition of sexuality knowledge. However, sexuality textbooks, rated similarly to television and movies, were found to be more influential than trade books. Trade books were defined for the students as books or magazines whose sole purpose was not sexuality education, such as romance novels and popular magazines. Despite this explanation, some of the students might not have understood what was meant by this term. Although instructed to rate the sources based on sexuality discussion prior to the current class, students might have been thinking of the sexuality textbook used for the class. This conclusion is based on the fact that many listed "this class" in their rank order

even though it was not one of the given choices.

Television and movies in emerged as prominent sources of sexuality information for both female and male students in this study. Movies in was significantly more influential in terms of sexuality knowledge for females than for males. This may be a result of the type of movies that females go to as opposed to those that males go to. Females may have a tendency to go to more movies with romantic themes and males may go to more action-packed movies that include fewer sexual issues. There was no significant gender difference in television's influence on sexuality knowledge. The high rating and ranking of television by both males and females supported Brown and Newcomer's (1991) finding that all adolescents except for black males, reported television as equally or more encouraging about sexuality than either best male or best female friends.

Schoolteachers

According to the ratings, schoolteachers played a minor role in students' sexuality education. However, because the teachers were separated by grade level and gender, it is difficult to discern the overall impact of school sexuality education programs. High school teachers were rated slightly higher than elementary or junior high teachers. This may be because more of the students were exposed to sexuality education programs in high school than in the lower grades. It may also be that the students felt they learned more from their high school teachers because it was more recent or because the program was more comprehensive in nature and covered topics beyond anatomy and reproduction.

These findings suggest that more sexuality education should occur in the earlier grades.

Female teachers at all three grade levels were rated higher than male teachers, but this may be because students have had more female teachers over their school years and therefore more opportunities for discussion about sexual issues. Although female teachers were rated higher overall, gender comparisons revealed that students in this study discussed sexuality more with same-sex teachers than they did from opposite sex teachers (see Table 2). These differences approached statistical significance for female elementary teachers, male junior high school teachers, and female high school teachers with these teachers being rated higher by students of the same-sex.

Teachers or schools were listed by 16.3% of the students rather than one of the given teacher choices. Another 7.0% did list one of the teachers from the given list making a total of 23.3% of the students in the study who perceived teachers and schools to be influential in their sexuality education. It is possible that some of the students were not thinking of a sexuality education course when listing a teacher but maybe a teacher they were particularly close to who taught a course other than a specific sexuality education course. Some of the teachers that students listed might have taught science, physical education, or family and consumer science and not a specific course on sexuality. Some schools also have school nurses or other outside individuals teach units on sexuality. Students often develop a rapport with a certain teacher that they approach with sexuality questions or concerns. Future research in this area would benefit from such distinctions.

Many of the students in the study misunderstood the instruction to base their responses on experiences prior to the human sexuality class they were currently in. This is evident by the 7.4% of the students who listed either the instructor's name or "this class" in their rank order of the five most influential sources of sexuality information.

Siblings and Other Family Members

Previous research shows that siblings play a negligible role in the sexuality education of students (Davis & Harris, 1982; Goldman & Goldman, 1981). However, results indicated that the students in the current study do engage in discussion about sexuality with their siblings, particularly older ones. Although sisters are more likely to discuss sexuality with each other and brothers with each other, males are more apt to discuss sexuality with older sisters than females are with older brothers (see Table 2). The opposite is true with younger siblings. Females are more likely to discuss sexuality with younger brothers than males to discuss sexuality with younger sisters.

Results of the rank order revealed older siblings as a more important source than aunts, uncles or cousins. Older sisters (22.6%) were more influential than older brothers (12.8%). Older sisters almost equaled fathers in importance as only 23.5% of students listed fathers in the rank order. Only 3.5 % of the students listed uncle and 7.9% listed aunt in their top five sources of sexuality information. Cousins yielded similar results with 3.0% of the students listing male cousin and 7.5% listing female cousin.

Agency Sponsored Programs and Religion

For the students in this study, the role of clergy members and youth group leaders

in sexual learning is more prominent than that of schoolteachers (see Table 1). There were no significant gender differences in clergy members and youth group leaders indicating that they are influential for both males and females (see Table 2). This study took place at a large university in the Bible belt region of the Southeast. University students in other regions of the country may not rate clergy and youth group leaders as high as these students did; therefore, caution should be exercised in generalizing the results of this study to other regions of the country.

Generally, religious organizations have not been willing to play a role in the sexuality education of young people. There is a need for sexuality educators to educate religious leaders in the facilitation of sexuality education within their organizations. Emphasizing the concept of “sexual health” as a natural phenomenon rather than strictly sexual intercourse may be critical to education efforts.

Agency sponsored programs were rated similarly to schoolteachers and they were significantly more influential for females than for males. Programs such as Family Planning would fall under this category and often provide sexuality education as part of their services. These agencies are often utilized more by females than by males. Consequently, females would find them more influential regarding their knowledge of human sexuality.

Limitations

One limitation of this study is the lack of data regarding sources of sexuality information in relation to the sexuality topic. Research has consistently shown that the

source of information does vary depending on the sexuality topic (Andre et al. 1991; Andre et al. 1989; Coles & Stokes, 1985; Gebhard, 1977; Thornburg, 1981; Tjaden, 1988) and this is an important avenue to further explore. Information about not only the current source of topical information but the preferred source would help sexuality educators to better plan the delivery of sexuality information.

A great deal of sexuality information is acquired through informal sources such as observation in the home and socialization experiences. This type of learning is very difficult to measure. The response options for rating the different sources of sexuality information on the instrument in this study used the term "discussed." When asked to rate the amount of sexuality discussion with parents, students may think of formal discussion about sexuality and not reflect on discussion about relationships, love, or gender issues. The instrument for this study was administered to the students toward the end of the semester-long course on human sexuality. Consequently, the students might have had a greater awareness of the comprehensive nature of sexuality, which would be reflected in their responses. Future research should attempt to encompass sexual learning through casual observation at home and school as well as more formal sources of sexuality education.

Implications for Practice and Future Research

One of the major findings of this study is that students overwhelmingly discuss and learn about sexuality from same-sex individuals. This has implications for parenting as well as for school sexuality education programs. Fathers were shown to be a negligible

source of sexuality information even for their sons. The results of this study clearly show that males are more likely to discuss sexuality with other males more than they do with females. Is this because males prefer to discuss sexuality with other males or do males want to discuss sexuality more with females but find it uncomfortable or are not provided with opportunities to do so? Perhaps mothers feel that their husbands are talking with their sons and do not make attempts or provide opportunities for sexuality discussion with their sons. For whatever reason, males rated other males higher than females leading to the conclusion that males might prefer their fathers rather than their mothers as a source of sexuality information. However, fathers may be unwilling to discuss sexuality with their sons, leaving them to seek out other males to discuss sexuality with.

Clearly there is a need for sexuality educators to help parents participate more effectively in the sexuality education of their children. Geasler, Dannison, and Edlund (1995) discovered that lack of sexuality knowledge and scope and sequence (i.e., what is developmentally appropriate) of sexuality as well as lack of discussion about sexuality with their own parents are barriers to parents' involvement in the sexuality education of their children. Parents need to be educated in basic knowledge and the scope and sequence of sexuality. In addition, they need guidance in resolving the imbalance between experiences with their own family of origin and their desire to do better with their own children. Education efforts directed at fathers as well as mothers, that focus on these areas may equip parents with the knowledge, skills, and confidence to discuss sexuality with their children.

In terms of school sexuality education programs, results disclose that students have discussed sexuality more with same-sex teachers than with opposite-sex teachers. Does this mean that males and females should be segregated and taught sexuality education by same-sex teachers? Perhaps co-teaching is a better alternative. As pointed out earlier, it is difficult to limit these results strictly to sexuality educators as students may have been reflecting upon other teachers whom they were close to and discussed sexuality with. Further research should determine what the teachers taught and whether the discussion took place in the classroom or individually.

Peers were found to be a major influence in student's knowledge regarding human sexuality. Rogers and Strover (1980) suggested that adolescents with a low level of sexual knowledge are more apt to interact with peers with a similar knowledge base leading to misinformation. Peer education programs have some possibilities for effective sexuality education, yet care should be taken to select peer leaders who are truly peers of the group in question. In other words, white, middle-class, college-prep students should not be selected to work with black, working class students with low self-esteem.

Television and movies emerged as a fairly prominent source of information for students. Sexuality educators might be able to incorporate more discussion of sexual issues included in popular television shows and movies. Parenting education programs that focus on talking with your children about sexuality could include tips and suggestions for using television shows and movies as a point of sexual discussion. Examples of teachable moments could be shared (e.g., a recent television episode of Ellen

could be used as a discussion starter about homosexuality).

Sexuality textbooks were shown to be a fairly influential source of information for students. More up-to-date, interesting, and realistic books need to be made available to students by parents, libraries, and schools. Out-of-date books or books where the information is presented in an unrealistic or sterile manner should be replaced with books that contain accurate, interesting and comprehensive sexuality information.

Results of this study support previous research that student's knowledge of sexuality is influenced by many different sources. Integration of these different sources through greater cooperation between home, school, and community agencies may increase the amount of healthy discussion about sexuality as well as student's acquisition of accurate, comprehensive information about human sexuality.

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Table 1

Student Responses to 34 Sources of Sexuality Information Ranked by Mean (n=203)

Sources of Sexuality Information	Mean	SD
Male Grandparent	1.18	.57
Female Grandparent	1.54	.90
Father	2.20	1.02
Mother	3.15	1.11
Stepfather	2.03	1.45
Stepmother	1.74	1.42
Uncle	1.33	.81
Aunt	1.65	1.06
Other Male Relative (cousin)	1.67	1.07
Other Female Relative (cousin)	1.90	1.16
Older Brother	2.47	1.36
Older Sister	3.03	1.47
Younger Brother	2.11	1.17
Younger Sister	2.39	1.31
Male Elementary School Teachers	1.15	.61
Female Elementary School Teachers	1.23	.61
Other	1.86	1.44
Male Jr. High School Teachers	1.46	.91
Female Jr. High School Teachers	1.56	.91
Male High School Teachers	1.62	1.01
Female High School Teachers	1.81	1.02
Older Male Friend	2.86	1.25
Older Female Friend	3.09	1.26
Same-age Male Friend	3.35	1.11
Same-age Female Friend	3.74	1.06
Younger Male Friend	2.25	1.17
Younger Female Friend	2.51	1.28
Television	3.07	1.04
Movies in Theatres	3.06	1.04
Trade Books	2.09	.97
Sexuality Textbooks	3.06	1.32
Clergy (Pastor)	1.64	.90
Church Youth Group Leader	1.84	1.00
Agency Sponsored Programs	1.53	.92

Table 2

Gender Comparisons of the Importance of 34 Sources of Sexuality Information

Source	Males	Females	t - value	p- value
Male Grandparent	1.27	1.13	1.28	.205
Female Grandparent	1.28	1.65	-3.12	.002**
Father	2.35	2.13	1.30	.196
Mother	2.64	3.35	-3.93	.000*****
Stepfather	1.00	2.19	-4.06	.000*****
Stepmother	1.00	1.89	-3.10	.004**
Uncle	1.44	1.28	1.24	.217
Aunt	1.45	1.73	-1.67	.099
Other Male Relative (cousin)	2.08	1.50	3.03	.003**
Other Female Relative(cousin)	1.68	1.98	-1.62	.109
Older Brother	2.93	2.22	2.24	.030*
Older Sister	2.50	3.24	-1.95	.060
Younger Brother	2.20	2.08	.41	.683
Younger Sister	1.95	2.56	-2.25	.028*
Male Elem. School Teachers	1.12	1.16	-.43	.671
Female Elem. School Teachers	1.13	1.26	-1.78	.076
Other	1.71	1.96	-.52	.608
Male Jr. High School Teachers	1.65	1.37	1.80	.075
Female Jr. High Teachers	1.42	1.61	-1.36	.176
Male High School Teachers	1.81	1.55	1.61	.111
Female High School Teachers	1.60	1.89	-1.95	.054*
Older Male Friend	3.07	2.78	1.51	.133
Older Female Friend	2.61	3.28	-3.38	.001***
Same-age Male Friend	3.81	3.15	4.27	.000*****
Same-age Female Friend	3.25	3.93	-3.98	.00*****
Younger Male Friend	2.61	2.09	2.77	.007**
Younger Female Friend	2.25	2.62	-1.83	.070
Television	3.05	3.08	-.18	.856
Movies in Theatres	2.84	3.15	-1.95	.053*
Trade Books	2.26	2.00	1.64	.104
Sexuality Textbooks	2.79	3.17	-1.79	.076
Clergy (Pastor)	1.82	1.57	1.47	.147
Church Youth Group Leader	1.93	1.80	.78	.437
Agency Sponsored Programs	1.29	1.62	-2.17	.033*

Note: *p<.05 **p<.01 ***p<.001 ****p<.0001 *****p<.0000

Part 3

Documenting the Effectiveness of a Sexuality Educator
in an Undergraduate Human Sexuality Course

Abstract

The purpose of this study was to document teaching effectiveness in a human sexuality course. A sample of 203 undergraduates from 3 sections of a comprehensive human sexuality course completed both daily and final evaluations of topic presentations as well as a summative evaluation of the educator. From t tests, gender differences were found in college students' perceptions of topics and presentations and perceptions of the educator. The data were subjected to stepwise regressions revealing that only a few topic presentations throughout the course make a difference in the final evaluation of the course. Rapport and a nonauthoritarian approach were educator traits important in the final evaluation of the educator.

Introduction

Sexuality education has been an area of controversy for many years, yet much of the controversy has revolved around the content and methodology of sexuality education programs rather than if there should be a program (Bruess & Greenberg, 1994). Parents, educators, administrators, and various citizen's groups have expressed opinions about what content should be included in a program to be offered in their school or community. In addition, legislative action regarding sexuality education has focused almost exclusively on content (Earl, Fraser, & Sumpter, 1992), but what do the students themselves want to know? What role do students play in their own sexuality education? What about the sexuality educator? Who teaches sexuality education and what role does he or she play in the success of a program? Many scholars have recognized the importance of the personal qualities of sexuality educators (Cook, Kirby, Wilson, & Alter 1984; Hyde, 1990; and Scales, 1981) but instruments are needed to document the importance of these qualities in determining teaching effectiveness. This study examines both the learner and the educator roles using instruments that provide tools for educators to link these roles in an effort to better determine teaching effectiveness.

Teaching effectiveness is addressed in this study by taking an andragogical approach to sexuality education. Andragogy is a student-driven rather than a teacher-driven, pedagogical model (Knowles, 1984). Andragogy emphasizes respect for the needs, interests, and previous knowledge of the learner and the educator is encouraged to present material in a real life context. Consequently, androgogy provides an appropriate

model for exploring the learner and the educator roles in a college human sexuality course. The following research questions are addressed: (a) What do university students find applicable, enjoyable, and understandable in terms of topics and presentation of those topics in sexuality education? (b) What is the relationship between student perceptions of the instructor and evaluation of topics and presentation of topics? (c) What is the relationship between daily evaluations of presentation and a final evaluation of overall course presentation?

The Role of the Educator in Sexuality Education

Many scholars have agreed that the educator is paramount to the success of a family life education program (Barozzi & Engel, 1985; Czaplewski & Jorgenson, 1993; Fohlin, 1971; Hughes, 1994; McFadden, 1981; Whatley, 1973). Czaplewski and Jorgenson (1993), stated that "the educator may be the most important element in a family life program"(p.52). Hughes (1994) asserted that "a program can fail due to inadequately developed teaching plans or poor presentation of the information" (p. 19). Indeed, it is the educator who implements the program, facilitates activities and discussion, interacts with the students, and often designs the program.

Sexuality education is often thought to be synonymous with family life education, yet, it is just one of many subject areas within the field. Although important to any family life education program, the importance of the educator in determining the success of a program may be even more germane when the focus is on sexuality education. Sexuality education is controversial for many people with far-ranging ideas about what should be taught. Current thinking runs the gamut from "abstinence only" to a candid exposure to a variety of sexuality issues (Bruess & Greenberg, 1994). Gordon (1986) proposed that promoting abstinence to young people may be useful but a "double message" is more effective. For example, instead of telling young people "no," it is more effective to say "no, but if you do, use a condom." This diversity of ideas about sexuality education, together with the sensitive nature of the topic, emphasizes the importance of the careful selection of a sexuality educator.

Cook et al. (1984) have suggested that teaching sexuality education is different from teaching many other subjects such as mathematics because the sexuality educator "must continually deal with the sensitive areas of physical and emotional growth and development and will in many ways become a role model." "Honesty, integrity, acceptance of others, caring about people, and self respect" were cited as qualities that are more important than age or marital status (p.55).

Scales (1981), in a review of sexuality education literature, found that personal characteristics such as respect for young people and sensitivity to individual differences were perceived to be more important to the success of a sexuality education program than credentials and training. Besides education and knowledge, two qualifications for sexuality educators identified by Hyde (1990) reflect personal characteristics: comfort in sexual communication and an ability to listen, understand questions, and assess needs.

Although scholars in sexuality education believe in the importance of the personal qualities and skills of the sexuality educator, few evaluations have documented the link between these characteristics and teaching effectiveness. The instrument used in the present study differs from other teaching evaluations in that it focuses directly on the personal characteristics and skills of the educator. Issues such as assignments, textbooks, and knowledge about the subject are not included. Educators, like group leaders, can be trained in various techniques and skills; however, these skills cannot be separated from perceptions of the educator as a person. It is the educator's choice of which techniques and skills to develop and use and how and when to use them. These decisions are a

reflection of the educator's personality (Corey & Corey, 1997). This instrument provides a much-needed tool for looking at the importance of these characteristics in determining teaching effectiveness.

The Role of the Learner in Sexuality Education

Along with the gap in the literature regarding the role of the educator, gaps exist regarding the role of the student in terms of students' needs and interests in sexuality education (Campbell & Campbell, 1986; Davis & Harris, 1982). One operational principle of family life education as defined by Arcus, Schvaneveldt, and Moss (1993) is that "family life education should be based on the needs of individuals and families" (p. 15). However, Sears (1992) claimed that "the placement of sexuality in the school curriculum does not parallel students' needs and concerns" (p.9). Arcus, Schvaneveldt, and Moss (1993) differentiated between "felt needs" and "ascribed needs." Felt needs are "those expressed by potential learners and ascribed needs are "those identified by someone other than the learner" (p.15). This idea can be likened to the ideas of andragogy and pedagogy (Knowles, 1984). Andragogy is a student-driven, task-oriented approach to learning (felt needs) whereas pedagogy is a teacher driven, subject-centered approach (ascribed needs). Sexuality education has traditionally taken a more pedagogical approach, which involves the teacher making decisions about what topics will be covered and the instructional format used (Knowles, 1984).

Andragogy is a model for adult learning that Knowles (1984) has based on a psychological definition of adulthood, which includes responsibility for and self-direction in one's own life. Knowles posited that even young children are self-directing and can benefit from an andragogical approach to learning. College students in particular are more "self-directed than their earlier counterparts," need to have relevant and immediately

applicable information, and are beginning to demand a more prominent role in their education (Roe, 1989, p.86). McKeachie (1971) established that student-centered instruction results in more favorable educational outcomes. Koch (1992) proposed that the educator and the students must “engage in reflective dialogue based on trust and mutual respect” in order to achieve the goal of the “development of greater knowledge and understanding” (p.255). Regarding sexuality education, Philips and Fine (1992) stated that “student-centered classrooms that authorize student voices, stories, and interpretations allow for much needed active exploration and ongoing explicit critique of ideas” (p.248). The ideas described above support the use of an andragogical model in designing an effective sexuality education curriculum for college students.

Much of the research that has analyzed student interests has been retrospective in nature. Using focus groups, Ward and Taylor (1992) found that teens felt that their sexuality education did not provide the information that they wanted to know about sexuality and relationships. Woodcock, Stenner, and Ingham (1992) found similar results when they asked young people to comment on their past sexuality education. In both studies, females expressed a greater desire than did men to learn more about relationships. Many courses in sexuality education over-emphasize biology and give limited attention to the complex relationships and decisions that are part of young people's lives.

Another methodology used to explore student interests in sexuality is analyzing students' anonymous questions about sexuality issues. The questions that students ask

appear to vary with age (Campbell & Campbell, 1986; Davis & Harris, 1983). Younger students (seventh and eighth graders) asked more questions about basic anatomy and clarification of slang terms whereas older students (sophomores in high school) were concerned more with birth control, health risks, and communication (Campbell & Campbell, 1986).

It appears that as students move from high school to college their interests continue to include birth control, health risks, and communication but expand to include topics such as sexual arousal and sexual intercourse. Valois and Waring (1991) and Caron and Bertran (1988) looked at college students' anonymous questions. Valois and Waring (1991) found few gender differences; yet, women asked more questions relating to pregnancy/fertility and contraception than men who asked more questions relating to anatomy/physiology. Caron and Bertran (1988) found that the questions they commonly received fell into two broad categories: "those based on the need for specific factual information and those that reflect the student's intense concern with their physical/sexual normality"(p.24). The greatest number of questions across both studies and for both men and women fell into the category of arousal/response.

Both developmental differences and gender differences in sexuality interests have implications for curriculum planning and the timing of sexuality education in schools, yet more information is needed. Bruess and Greenberg (1994) suggested that the criteria used to measure the effectiveness of sexuality education be expanded to include the learner's role. For example, the content must be "interesting to the learners," "relevant to their

lives,” and “necessary for them to know” (p.291). Davis and Harris (1982) proposed similar ideas when they suggested that three types of student information would be most useful: “what they can understand, what they already know, and what they want to know” (p.473). Carter and Carter (1993) identified the three components of a student's receptivity to a topic as the “values or importance students place on a concept,” the “personal meaning” they derive from the topic, and the “relevance” to current or future behaviors (p.235). One portion of the present study builds on these ideas by looking specifically at 22 topics in human sexuality as applicable, enjoyable, and understandable to the students. This study introduces a different methodology that does not ask students to reflect on past sexuality education or to develop questions about sexuality in general. With this method students were asked about their interests in given sexuality topics through daily evaluations. These evaluations provided more comprehensive information in that knowledge was gained about students’ interests in all dimensions of human sexuality as each topic is presented to them.

Research Objectives

Because the learner and the educator are both central to an andragogical model, this study has a combined focus on the roles of educator and learner in a university human sexuality class. The specific objectives of this research study are as follows: (a) to determine the human sexuality topics and presentations of these topics that university students find applicable, enjoyable, and understandable and to make gender comparisons of these student perceptions, (b) to make gender comparisons of university students' perceptions of the teaching effectiveness of a human sexuality educator, (c) to determine the role of students' perceptions of the educator in predicting summative evaluations of course presentation, (d) to determine the role of daily formative evaluations of topic presentations on summative evaluations of course presentation.

Methods

Sample Description

This study was conducted using a sample of 203 students in three different sections of a comprehensive, undergraduate, human sexuality course. The course was a 200 - level (sophomore) class offered at a large southeastern university. The average class size for each section was approximately 65 students and the data were collected over two different semesters. The class met twice a week for fifteen weeks and each class period was 75 minutes in length.

Demographic data provided by the students showed that 145 students were female and 58 students were male. The ages of the students ranged from 18 to 46 years with a mean age of 22 years. Distribution of academic majors for the classes was diverse with 22% of the students from Liberal Arts, 20% from Human Ecology, 20% from Engineering, 10% from Communications, 10% from Nursing, and the remaining 18% from Agriculture, Business Administration, Education, and Law. The majority of students (147) were either juniors or seniors. Of the 203 students, 9.4% were married, 41.9% were engaged, cohabiting, or exclusively dating, 7.9% were steadily dating, 18.2 % were casually dating, and 18.7% were friends only or casually attracted. Thirty-six percent of the sample reported that their relationship status had changed since the start of the semester. The students reported an average of 8.5 hours spent in previous sexuality education classes, largely through churches or schools.

Instruments

Three sets of instruments were completed by participants over the semester: (a) two daily evaluations of topic and presentation of the topic, (b) two overall, summative evaluations of topic and presentation, and (c) a summative evaluation of the educator.

Daily evaluations

In order to track and document teaching effectiveness throughout the semester, students completed daily evaluations of both presentation and topic. The first daily, formative evaluation that students completed was a rating of their perceptions of the *topic* (both class content and chapter content) as enjoyable, applicable, and understandable. The second was a rating of the *presentation* of the topic area as enjoyable, applicable, and understandable. The students decided how to define the terms enjoyable, applicable and understandable, although the following explanations were given: applicable is how useful the student found the material and how relevant it was to his or her life, understandable is how well the material was comprehended, and enjoyable is whether there was an aversion to the material or whether it was found to be a pleasant topic. Both evaluations included a 3-point, Likert-type format with the following response options: not=1, somewhat=2, or extremely=3.

Final course evaluations.

A summative evaluation rating the course as a whole was administered at the conclusion of the semester using the same instrument that was used for the daily evaluations. Using the same 3-point Likert-type scale (not=1, somewhat=2 or

extremely=3), the students globally rated both the course topics (e.g., content) and the presentation of the course topics as applicable, enjoyable, and understandable.

Educator evaluation.

To measure the students' perceptions of the educator, participants completed an additional summative evaluation on the course educator. Morris (1994) adapted the instrument from the Self-Assessment of Group Leader Skills (Corey & Corey, 1987). The 41-item instrument is a 7-point Likert-type agreement scale (strongly disagree=1; strongly agree=7). Through factor analysis, the 41 items loaded into seven factors labeled Facilitation, Nonauthoritarian, Rapport, Ethics, Self-Awareness, Respect, and Communication. The factors in this study relate back to many of the previously outlined criteria for sexuality educators such as respect for young people and a ability to listen, understand questions, and assess needs (Scales, 1981 & Hyde, 1990).

A .4 criteria was used for the procedure and those items that split loaded were kept in the factor where they loaded the highest. The items originally loaded into ten factors but three of the factors had only five items combined. Four of these items were conceptually grouped with one of the other seven factors, enhancing or having no effect on the original Cronbach's alphas. The fifth and lowest loading factor was omitted from the analysis. Cronbach's alphas for these seven subscales were .91, .76, .73, .92, .84, .87, and .91 respectively. The instrument items for each factor are reported in the Appendix.

Procedures

Twenty-two topics covering all dimensions of sexuality were included, with a new

topic being covered each class day. Our Sexuality (Crooks & Baur, 1993) was the textbook used for the class. The 22 topics included in the course corresponded to the chapters in the textbook (e.g., chapter 1=History of Sexuality and lecture 1=History of Sexuality). Exams, films, and special guests comprised the remaining days of the course but were not included in the study.

The same male instructor taught the class in a lecture and discussion format. This male instructor has consistently received high evaluations for his teaching of human sexuality as well as other courses. Female guest speakers taught the topic areas of female anatomy, contraception, conception, and sexual assault. Male guest speakers taught the topic areas of gay/lesbianism and HIV/AIDS. The topics on these days plus the presentations by these guest speakers were included in this study.

Assigning all students a number maintained confidentiality; this number was used for identification on each instrument. Students signed an informed consent after being told the purpose of the evaluations and how the information would be used. The main purpose of these educator evaluations was for research. The traditional university and department teaching evaluations were done at the end of the semester. The daily evaluations, however, were also used for attendance records. Attendance was mandatory for the students, but participation in filling out the evaluations was strictly voluntary. Students were not required to fill out the evaluations but were required to turn them in with their number on it. Although the numbers were recorded for attendance purposes, the instructor did not connect the number to individual students in an effort to ensure

confidentiality.

Along with research and attendance-keeping purposes, the feedback from these daily evaluations played a formative role during the semester they were obtained even though the feedback was specific to the daily topic and presentation. A graduate teaching assistant, when entering the data into the computer, examined the evaluations. General information about the evaluations was reported to the instructor and this feedback influenced the way in which the topics were presented in future class sections as well as in future sections of the course.

Results

The rank order, mean responses, and standard deviations for each of 22 sexuality education *topics* as being applicable, enjoyable, and understandable are included in Table 1. Table 2 includes the rank order, mean responses, and standard deviations for the *presentation* of the sexuality education topics in terms of the presentation being applicable, enjoyable, and understandable. The topics are listed in the order in which they were presented both in the class and in the textbook. The rank has been assigned based on mean responses. Topics in Table 1 are ranked in a similar order for applicability, understandability, and enjoyability (e.g., communication, love, contraception, conception, celibacy/masturbation, children/adolescent sexuality, and adult sexuality are in the top ten for all three aspects of the topic). Table 2 shows that when rating the presentation of topics, topics ranked high in Table 1 were similarly ranked high in Table 2 (e.g., communication, love, contraception, conception, celibacy/masturbation, and adult sexuality are also in the top ten for all three aspects of the presentation).

Gender Differences

Significant gender differences in the ratings of the presentation of the chapter topics in terms of being applicable, understandable, and enjoyable were determined by t tests. As for *applicability*, female students perceived 12 topic presentations significantly more applicable. The only topic presentation that males found significantly more applicable than females was that of male anatomy ($t = 3.96$, $p = .000$). The 12 topic presentations that females found more applicable than men were: gender ($t = -2.67$, $p = .009$), female

anatomy ($t = -6.93$, $p = .000$), conception ($t = -4.99$, $p = .000$), children/adolescents and sexuality ($t = -2.89$, $p = .005$), adult sexuality ($t = -2.87$, $p = .005$), later life sexuality ($t = -2.39$, $p = .019$), sexuality and disabilities ($t = -2.48$, $p = .015$), sexual difficulties ($t = -2.12$, $p = .036$), sexual satisfaction ($t = -2.53$, $p = .012$), STDs ($t = -3.40$, $p = .001$), HIV/AIDS ($t = -3.08$, $p = .003$), and sexual assault ($t = -4.14$, $p = .000$).

Concerning gender differences in the *enjoyability* of topic presentation, males did not find any of the presentations significantly more enjoyable than females. Females, however, found the presentations of gender ($t = -3.19$, $p = .002$), female anatomy ($t = -3.90$, $p = .000$), love ($t = -2.34$, $p = .021$), communication ($t = -1.93$, $p = .057$), gay/lesbian issues ($t = -3.60$, $p = .000$), conception ($t = -4.52$, $p = .000$), adult sexuality ($t = -3.27$, $p = .002$), later life sexuality ($t = -2.22$, $p = .029$), sexuality and disabilities ($t = -1.96$, $p = .052$), HIV/AIDS ($t = -2.79$, $p = .006$), and sexual assault ($t = -3.24$, $p = .002$) significantly more enjoyable than males did.

Finally, for the *understandability* of the presentation, females found seventeen of the topic presentations significantly more understandable than male students. These topic presentations were history of sexuality ($t = -2.74$, $p = .008$), sexuality research ($t = -2.22$, $p = .029$), gender ($t = -3.49$, $p = .001$), female anatomy ($t = -2.97$, $p = .004$), sexual arousal ($t = -3.36$, $p = .001$), love ($t = -2.65$, $p = .010$), gay/lesbian ($t = -2.79$, $p = .006$), conception ($t = -3.31$, $p = .001$), children/adolescents and sexuality ($t = -2.58$, $p = .012$), adult sexuality ($t = -3.76$, $p = .000$), later life sexuality ($t = -3.33$, $p = .001$), sexuality and disabilities ($t = -2.51$, $p = .014$), sexual satisfaction ($t = -2.27$, $p = .025$), STDs ($t = -3.56$,

$p = .001$), atypical sexual behavior ($t = -2.81$, $p = .006$), HIV/AIDS ($t = -2.09$, $p = .039$), and sexual assault ($t = -3.44$, $p = .001$).

Educator Traits

A t test was performed to make gender comparisons of the summative evaluation of the educator using the seven factors created from the factor analysis. Significant differences were found for six of the seven factors: female students rated the educator higher than male students did on the factors of Facilitation ($t = -2.53$, $p = .013$), Nonauthoritarian ($t = -1.99$, $p = .050$), Rapport ($t = -2.77$, $p = .007$), Ethics ($t = -1.93$, $p = .056$), Respect ($t = -3.01$, $p = .003$), and Communication ($t = -2.17$, $p = .032$). Self-Awareness, the seventh factor, approached statistical significance ($t = -1.77$, $p = .079$).

Correlation analyses were performed to determine if significant relationships existed between the seven educator traits and the final evaluations for the applicability, enjoyability, and understandability of all 22 topic presentations. The correlation analyses were separated by gender. For males there was a significant relationship between Respect and the overall applicability of the course ($r = .26$, $p = .051$), Rapport was related to the overall enjoyability ($r = .33$, $p = .013$) and understandability of the course ($r = .33$, $p = .011$) and Communication was also related to the understandability of the course ($r = .25$, $p = .054$).

Educator traits were more related to the final course evaluations for female students than for male students. Nonauthoritarian ($r = .19$, $p = .026$), Rapport ($r = .21$, $p = .011$) and

Respect ($r=.17$, $p=.043$) were related to the perceived applicability of the course as a whole. As for female students' perceived enjoyability of the overall course, Facilitation ($r=.22$, $p=.008$), Nonauthoritarian ($r=.28$, $p=.001$), Rapport ($r=.30$, $p=.000$), Self-Awareness ($r=.20$, $p=.016$), and Respect ($r=.20$, $p=.022$) were positively related. Finally, there was a significant positive relationship between Nonauthoritarian ($r=.21$, $p=.015$) and Respect ($r=.19$, $p=.022$) with the overall rating of the understandability of the course by female students.

Stepwise regression analyses were performed to explore the predictive power of a model comprised of the seven educator traits on the final evaluation of presentation applicability, enjoyability, and understandability. The use of stepwise regression (e.g., variables entered on the basis of statistical rather than theoretical reasons) has raised some concerns (Cohen & Cohen, 1983). However, Tabachnick and Fidell (1983) have suggested that stepwise regression is appropriate when model building is the purpose rather than model testing because of its ability to eliminate superfluous variables.

Regression analyses assessing the overall course evaluations on students' perceptions of presentation applicability, enjoyability, and understanding as predicted by the seven clusters of educator traits are shown in Tables 3 and 4. Perception of educator traits had a greater influence in female students' overall presentation evaluations than did those of male students. Rapport was the only educator trait that entered the equations for males for the presentations being enjoyable and understandable. Nonauthoritarian and Rapport were the educator traits that were most influential for females. Rapport entered

for presentation applicable and presentation enjoyable and Nonauthoritarian entered for presentation enjoyable and presentation understandable. Communication also entered for presentation enjoyable.

Daily Evaluations

Correlation analyses were performed to determine any significant relationships between the daily evaluations of the applicability, enjoyability, and understandability of the topic presentations and the final evaluation of the overall course applicability, enjoyability, and understandability. Results of correlation analyses separated by gender are shown in Table 5. For male students, a strong relationship existed between the perceived applicability, enjoyability, and understandability of the presentation of sexual satisfaction and the perceived course applicability, enjoyability, and understandability. More topic presentations emerged with significant correlations for the female students than for the male students. In particular, several significant relationships existed between female students' daily evaluation of understandability of topic presentations and their evaluation of the understandability of the course as a whole (e.g., communication, later life sexuality, sexual difficulties, and atypical behavior).

Stepwise regression analyses were also performed to explore the predictive power of a model comprised of daily evaluations on all 22 topic presentations on the final evaluation of overall topic presentations. These results are shown in Tables 6 and 7 and are separated by gender. The presentation on sexual satisfaction clearly influenced males' rating of all aspects of the overall course presentations. Sexual Arousal entered the

equation for presentation understandable. As with the correlation analyses, the topic presentations that predicted females' overall evaluation of course presentations were more varied than they were for the males with celibacy/masturbation, female anatomy, and adult sexuality predicting females' overall rating of the applicability of course presentation. Females' ratings of the class presentations on love and STDs predicted their overall rating of the enjoyability of the course presentations. Finally, their perceptions of the understandability of the presentations of sexual difficulties, conception, later life sexuality and contraception predicted their rating of the overall course understandability.

Discussion

The results of the students' rating of the 22 topics and topic presentations provide support for a comprehensive approach to sexuality education. Overall the topics and topic presentations were rated high, indicating that the students found most of the topics and presentations applicable, enjoyable, and understandable.

Communication and love were the two most applicable topics and topic presentations. This supports previous findings that suggest young people want to know more about relationships in general (Ward & Taylor, 1992; Woodcock, Stenner, & Ingham, 1992). Contrary to the findings of Carter and Carter (1993), the current study revealed no significant gender differences in terms of applicability of the presentations of love and communication although there were differences in terms of enjoyability and understandability. The perceived applicability of the topics of love and communication by both males and females may be indicative of the maturity level of the relationships of these students because more than 50% of the students in the current study were married, engaged, cohabiting, or exclusively dating.

Many sexuality education programs are restricted to a short length of time and educators are forced to carefully choose what should be included in a program (Kirby, 1984 as cited in Arcus, Schvaneveldt, & Moss, 1993). Relationship issues such as love and communication are imperative to a comprehensive curriculum and appear to be topics about which students want to learn. In programs where time is a constraint, the topics of love and communication could be integrated into other topics such as gender, HIV/AIDS,

and sexual arousal.

The high rating by both males and females of the topic and presentation of sexual arousal is consistent with the findings of Valois and Waring (1991) and Caron and Bertran (1988). The topic of sexual arousal includes information on the stages of sexual response including physiological changes and orgasm. The material covered in this presentation may have answered questions the students had about their own bodies; questions that may not have been answered in previous sexuality education programs. Students' own sexual response may have also been normalized by this presentation. For example, after learning about the phenomenon of sex flush students might be relieved to know that their own physiological reactions to sexual arousal are normal.

It is important to note not just the topics and presentations that had a high rating for being applicable, enjoyable, and understandable, but to note those that received lower ratings. Sears (1992) advocated that a sexuality education program is most effective when it is based on the needs and interests of the students. However, the interests of the students may not be congruent with the needs of the student. In a comprehensive sexuality education program, it is important to include topics covering all domains of sexuality (Bruess & Greenberg, 1994). For example, both the topic and the presentation of gay/lesbianism were rated very low and emerged at the very bottom of the rank order list in all aspects of the topic presentation and two out of three of the aspects of the topic itself (see Tables 1 and 2). This topic should not be excluded based on the apparent lack of interest, but instead poses a challenge to educators to explore new ways to present the

topic of gay/lesbianism and stimulate students' perception of the topic for being applicable, enjoyable, and understandable.

There were significant relationships between the perception of daily topic presentations and the perception of the course as a whole. Female students in particular rated the overall understandability of the course high if they understood the presentation of certain topics. Many of these topics, such as sexual difficulties, later life sexuality, and atypical sexual behavior may be topics that were new to the students and they appreciated the clear and understandable presentation of this new information.

Although students rated the topic presentations high overall and there were significant correlations found between daily evaluations and final evaluations, the results of the stepwise regression of the daily evaluations of topic presentation on the final evaluation of overall course presentation indicated that only a few class sessions out of an entire semester made a difference in the way students evaluated the course. Sexual satisfaction and sexual arousal were the two topic presentations that most affected males' perceptions of the course presentation as a whole. Interestingly, female students found sexual satisfaction more applicable and more understandable than males did, yet these topic presentations did not affect females' ratings of the course presentation as a whole.

More topic presentations made a difference for female students than for male students. The presentations on celibacy/masturbation, female anatomy, and adult sexuality made a difference in the way the female students rated the overall applicability of the course. The presentation of love and STDs impacted females' overall rating of the

enjoyability of the course and the presentations of sexual difficulties, conception, later life sexuality and contraception made a difference in their overall understandability of the course. Many of these topics are ones that females may feel a sense of responsibility for and consequently might have questions about. For example, the topic of sexual difficulties outlined potential difficulties at each phase of sexual arousal. It is often thought that women are socialized to be the "gatekeeper" of sexual pleasure and knowledge and the students may feel relieved to know that sexual difficulties are natural and not a result of being inept sexually (Masters, Johnson, & Kolodny, 1995). Mutual responsibility was emphasized throughout the course; however, it appears that females still see more importance in learning about contraception, conception, and STDs than males do.

Data in this study have provided support for the idea that certain educator traits play an important role in determining the effectiveness of a program (Cook et al., 1984; Hyde, 1990; Scales, 1981). The factors of Nonauthoritarian and Rapport may be the two most important traits for a sexuality educator to possess. In other words, feeling that they are not being judged or made to feel inferior is important for students, as well as feeling that the educator is sensitive to their needs and their viewpoints and that he or she is available to the students. Although these two factors emerged through the regressions as having the strongest impact, the strong correlations of many of the other educator traits (e.g., Respect and Self-Awareness) with the perceived course applicability, enjoyability, and understandability is noteworthy.

Females, in particular, found Nonauthoritarian to be important in the overall applicability, enjoyability, and understandability of the course presentation. Males found that Rapport was a more important characteristic particularly in terms of the enjoyability and understandability of the overall course presentation. The importance of Rapport supports Koch's (1992) idea of "reflective dialogue based on trust and mutual respect" (p.255). It appears that a nonauthoritarian approach to teaching and skill in establishing rapport with students does play a role in effective teaching. Rapport and Nonauthoritarian are traits that help the educator created respect for the needs and experiences of the learner, a condition for learning in an andragogical model of education (Knowles, 1984). These results emphasize the importance of not only the proper training of, but the careful selection of sexuality educators.

Significant gender differences were found for six of the seven factors with females rating the male educator higher. The female students also found more of the topic presentations applicable, enjoyable, and understandable than male students did so it might follow that they would rate the professor of the course higher as well. However, it is important to remember that result may differ depending on the instructor. The instructor evaluated in this study is known for his relaxed and gentle nature and has consistently been given strong teaching evaluations by both male and female students. Further research should address the interaction between educator gender and student gender.

Dwinell and Higbee (1993) found that most students perceive teacher-rating forms to be an effective tool for evaluating teaching effectiveness. Previous research on

teaching evaluations in general shows that gender appears to play a part in students' evaluation of teaching effectiveness, yet; the results of these studies are not consistent. Murray (as cited in Dukes & Victoria, 1989) suggested that students are competent as raters of teaching effectiveness. Dukes and Victoria (1989), suggested that students, as competent raters, base their evaluations on actual teaching rather than perceived societal standards of gender-related teaching effectiveness. Bennett (1982) posited that personal characteristics of the educator such as warmth and charisma, rather than the gender of the educator, are responsible for higher evaluations in terms of effectiveness. These research findings provide support for the methodology used to measure teaching effectiveness in this study. The teaching evaluations used provide an avenue for the evaluation of actual teaching based on the perceived personal characteristics of the educator. The daily evaluations provide a continuity of measurement over time and equip the student with a unique lens through which to view the course. Consistent with the ideas of androgogy, the students are able to play a formative role by providing ongoing input into their own learning. These evaluations also allow the educator to see how each class session has shaped the students' receptivity to the course as a whole.

Morris adapted the summative educator evaluation (1994) from the Self-Assessment of Group Leader Skills (Corey & Corey, 1987). Bruess and Greenberg (1994) emphasize the importance of sexuality educators having a basic understanding of group dynamics and skill in facilitating groups. Sexuality overall is an area that may be very emotional for people and skill in meeting a group's socioemotional needs as well as educational needs

is necessary. Many of the instrument items can be related to group work providing an original and useful tool for measuring the effectiveness of a sexuality educator.

Limitations

One limitation of the current study is the omission of students' attitudes toward sexuality issues such as, premarital sex, abortion, and gay/lesbianism. It is important to recognize that the sample used in the current study represented a conservative area of the Southeast and the attitudes of the students toward topics such as gay/lesbianism may be very different from those in other regions of the country. The students in the current study were also self-selected into the class. The attitudes of these students may be more liberal than students who elected not to take this course. Consequently, results of this study may not be generalizable to other regions of the country or other university populations. Further research integrating the components of this study (applicable, enjoyable, and understandable) with attitudes and various teaching techniques and methods will provide further information regarding teaching effectiveness in sexuality education.

Previous studies have shown that teacher characteristics such as knowledge of subject, and organization and grading policies are important in students' perceptions of an educator (Dukes & Victoria, 1989; Feild, Holley, and Armenakis, 1976). This study did not examine those issues. Further research encompassing these types of teacher characteristics and class structure as it relates to sexuality education is warranted.

Conclusions

Overall, the results of this study show that university students are interested in a

wide range of topics in all dimensions of human sexuality, providing support for comprehensive sexuality education for university students. Topics such as love, communication, and sexual arousal are particularly important for educators to include when curriculum planning. If students find topics applicable, enjoyable, and understandable, they are more likely to rate the educator as effective. This poses a challenge for sexuality educators to not only find new techniques for presenting material but to help students take responsibility for their own learning.

The perceived effectiveness of a sexuality educator is enhanced by personal characteristics and skills such as acceptance of students' differing opinions and views, demonstrating sensitivity, and making himself or herself available to the students. These findings emphasize the importance of proper selection and training of sexuality educators. Sexuality educators may benefit from more training in group dynamics and other interpersonal skills.

The results of this study also advocate for more in depth program and teaching evaluation. Daily evaluations have been shown to provide unique insight into students' needs and interests and allow the educator to gauge students' receptivity to the material presented in the course.

Finally, this study has demonstrated that the andragogical model of education is an appropriate model for sexuality education at the university level. Integrating the educator role and the learner role by creating an environment of respect and recognizing the needs and interests of the learners provide opportunities for effective sexuality education.

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Appendix

Items included in the Summative Educator Evaluation

Instrument Scales and items (paraphrased)

Factor 1: Facilitation

- Summarized key elements
- Blocked nonproductive behaviors
- Encouraged students to express their thoughts
- Empathized with students
- Allowed diversity in student's responses
- Revealed his own feelings at appropriate times
- Solicited interaction from the students
- Assisted students in clarifying goals/thoughts
- Avoided bombarding students with nosy questions

Factor 2: Nonauthoritarian

- *I felt judged by the instructor
- *The instructor made me feel inferior
- *The instructor was like an overprotective parent

Factor 3: Rapport

- Referred students to other resources
- Led students during role-playing situations
- Made himself available after class
- Made me feel like a close friend

Factor 4: Ethics

- Abstained from inappropriate personal relationships
- Abstained from inappropriate language

Factor 5: Self-Awareness

- Modeled behaviors desired to be emulated
- Clearly communicated his own value system
- Adapted to students' ideas that conflicted with his own
- Expressed own sense of awareness and need for personal growth

Factor 6: Respect

- Admitted and assumed responsibility for mistakes
- Conveyed an attitude of respect to students
- Demonstrated a genuine sense of caring
- Appropriately used humor
- *Acted like a know-it-all
- I completely trusted the instructor
- *I felt intimidated by the instructor

(Appendix continues)

Appendix

Items included in the Summative Educator Evaluation

Instrument Scales and items (paraphrased)

Factor 7: Communication

- Listened fully and attentively to students
- Clarified conflicting feelings for others
- Interpreted behaviors/comments without judging
- Connected the viewpoints of students
- Managed confrontations in non-threatening manner
- Diagnosed behaviors/thoughts/feelings without labeling
- Maintained a sense of confidentiality

* Code was reversed

Table 1

Student Responses of Sexuality Education Topics Ranked by Mean (n=203)

Chapter Topic	Applicable			Enjoyable			Understandable		
	Rank	Mean	SD	Rank	Mean	SD	Rank	Mean	SD
History of Sexuality	16	2.21	.48	15	2.34	.50	2	2.91	.28
Sexuality Research	20	1.82	.50	22	1.81	.53	14	2.71	.44
Gender Roles/Diff.	12	2.45	.47	11	2.39	.50	10	2.77	.37
Female Anatomy	4	2.68	.51	10	2.44	.48	15	2.71	.42
Male Anatomy	13	2.44	.52	13	2.38	.51	5	2.84	.33
Sexual Arousal	5	2.66	.42	7	2.55	.44	12	2.75	.37
Love	2	2.84	.31	1	2.72	.41	3	2.86	.30
Communication	1	2.84	.32	3	2.71	.42	7	2.82	.35
Celibacy/Mast.	7	2.58	.42	8	2.52	.48	6	2.82	.32
Gay/Lesbianism	22	1.52	.64	21	1.89	.58	22	1.66	.65
Contraception	3	2.82	.32	2	2.72	.39	1	2.91	.22
Conception	8	2.57	.50	4	2.62	.48	8	2.79	.38
Child/Adol. Sex.	9	2.54	.46	6	2.58	.45	4	2.85	.29
Adult Sexuality	6	2.59	.39	5	2.58	.39	9	2.78	.31
Later Life Sexuality	15	2.25	.52	14	2.36	.52	17	2.69	.39
Sexual Difficulties	11	2.50	.46	9	2.48	.44	13	2.73	.37
Sexual Satisfaction	19	2.10	.58	16	2.28	.52	16	2.71	.41
Sex. & Disabilities	18	2.16	.58	17	2.23	.52	20	2.65	.42
STDs	14	2.35	.53	18	2.21	.59	21	2.61	.42
Atypical Behavior	21	1.64	.58	19	2.04	.56	19	2.66	.39
HIV/AIDS	10	2.53	.51	12	2.39	.57	11	2.77	.35
Sexual Assault	17	2.21	.56	20	1.98	.60	18	2.67	.40

Table 2

Student Responses of the Presentation of Sexuality Education Topics Ranked by Mean
(n=203)

Presentation Topic	Applicable			Enjoyable			Understandable		
	Rank	Mean	SD	Rank	Mean	SD	Rank	Mean	SD
History of Sexuality	14	2.43	.51	11	2.55	.47	2	2.92	.26
Sexuality Research	19	2.20	.57	20	2.16	.54	12	2.78	.39
Gender Roles/Dif.	12	2.51	.48	9	2.58	.45	8	2.81	.35
Female Anatomy	5	2.69	.49	15	2.46	.51	16	2.75	.40
Male Anatomy	13	2.49	.52	12	2.53	.51	6	2.85	.32
Sexual Arousal	4	2.71	.40	8	2.63	.43	11	2.80	.35
Love	2	2.84	.31	2	2.80	.37	4	2.87	.28
Communication	1	2.84	.32	4	2.77	.39	3	2.89	.28
Celibacy/ Masturbation	7	2.61	.43	6	2.65	.43	5	2.86	.28
Gay/Lesbianism	22	1.66	.65	22	1.91	.58	22	2.27	.53
Contraception	3	2.84	.32	3	2.78	.35	1	2.93	.18
Conception	9	2.57	.54	7	2.64	.44	7	2.83	.33
Child/Adolescent Sexuality	8	2.85	.45	1	2.85	.29	21	2.58	.43
Adult Sexuality	6	2.62	.39	5	2.67	.37	10	2.81	.28
Later Life Sexuality	16	2.35	.54	13	2.52	.45	15	2.76	.37
Sexual Difficulties	11	2.53	.46	10	2.56	.43	13	2.78	.36
Sexual Satisfaction	18	2.20	.56	16	2.40	.47	14	2.76	.34
Sexuality and Disabilities	17	2.26	.56	17	2.39	.49	17	2.71	.39
STDs	15	2.37	.52	18	2.30	.55	18	2.70	.37
Atypical Sexual Behavior	21	1.85	.62	19	2.25	.49	19	2.68	.38
HIV/AIDS	10	2.54	.49	14	2.49	.51	9	2.81	.33
Sexual Assault	20	2.17	.55	21	2.00	.59	20	2.67	.43

Table 3

Stepwise Regression Analyses of Educator Traits on Final Evaluation of PresentationApplicability, Enjoyability, and Understandability for Male Participants (n=58)

Factor	R ²	Beta	F	Sig. of F
Presentation Enjoyable				
Rapport	.106	.326	6.65	.0125
R ² = .106				
F = 6.65				
Sig. of F=.0125				
Presentation Understandable				
Rapport	.110	.331	6.90	.0111
R ² = .110				
F = 6.90				
Sig. of F=.0111				

Note. No factors entered to equations for Presentation Applicable.

Table 4

Stepwise Regression Analyses of Educator Traits on Final Evaluation of Presentation
Applicability, Enjoyability, and Understandability for Female Participants (n=145)

Factor	R ²	Beta	F	Sig. of F
Presentation Applicable				
Rapport	.045	.213	6.60	.0112
R ² = .045				
F = 6.60				
Sig. of F = .0112				
Presentation Enjoyable				
Rapport	.088	.384	12.75	.0005
Non - Authoritarian	.037	.227	7.40	.0074
Communication	.029	-.232	4.69	.0322
R ² = .155				
F = 8.35				
Sig. of F = .0000				
Presentation Understandable				
Non - Authoritarian	.042	.205	6.10	.0147
R ² = .042				
F = 6.10				
Sig. of F = .0147				

Table 5

Correlation Analyses of Daily Evaluations of Presentation Applicability, Enjoyability,
and Understandability with Final Evaluations of Presentation Applicability, Enjoyability,
and Understandability (n=203)

Topic Presentation	Males (n=58)			Females (n=145)		
	App.	Enjoy.	Under.	App.	Enjoy.	Under.
History of Sexuality	.0868	-.0405	.0459	.0355	.1133	.1816*
Sexuality Research	-.1230	.0391	-.0029	.0810	.0625	.0829
Gender Roles/Diff.	.1017	.0489	.0194	.1844*	.2256**	.0075
Female Anatomy	.0475	-.0590	.3620**	.2439**	.1017	.1262
Male Anatomy	.0475	.0300	.2876*	.1185	.1750*	-.0307
Sexual Arousal	.2107	.0604	.4053**	.2000*	.2380**	.2034**
Love	.1137	-.0146	.1947	.0173	.3341****	.1689*
Communication	.1554	.0075	.3056*	.1605*	.1019	.2779***
Celibacy/Mast.	.0551	-.0193	.1287	.3116****	.0990	.2580**
Gay/Lesbianism	-.1512	.1681	.0915	.0438	.1251	.1913*
Contraception	.1914	.1440	.3249**	.1439	.0707	.2617***
Conception	-.0284	-.0100	.0792	.2087**	.0927	.2677***
Child/Adol. Sexuality	.2483	.1269	.2101	.0296	.1737*	.2101**
Adult Sexuality	.1595	.0813	.2800*	.2306**	.1262	.2435**
Later Life Sexuality	.2196	.1590	.2541	.2150**	.2185**	.3547***
Sexual Difficulties	-.1334	-.0834	.0241	.0756	.1386	.3557****
Sexual Satisfaction	.3138*	.4182****	.4025**	.0665	.1732*	.1031
Sex. & Disabilities	.0413	.1259	.2956*	.1229	.1303	.2206**
STDs	.1637	.2203	.1943	.1126	.2500**	.1537
Atypical Behavior	.1326	.2696*	.0565	.0817	.1275	.3117****
HIV/AIDS	.1842	.2970*	.1202	.1254	.1029	.2044**
Sexual Assault	.1964	.2495	.1535	.1342	.2209**	.2210**

Note: * p<.05 **p<.01 ***p<.001 ****p<.0001

Table 6

Stepwise Regression Analyses of Daily Evaluations of Presentation Applicability,
Enjoyability, and Understandability on Final Evaluations of Presentation Applicability,
Enjoyability, and Understandability for Male Participants (n=58)

Topic Presentation	R ²	Beta	F	Sig. of F
Presentation Applicable				
Sexual Satisfaction	.009	.314	6.12	.0164
R ² = .099				
F = 6.12				
Sig. of F = .0164				
Presentation Enjoyable	.175	.418	11.87	.0011
Sexual Satisfaction				
R ² = .175				
F = 11.87				
Sig. of F = .0011				
Presentation Understandable				
Sexual Arousal	.164	.346	8.86	.0043
Sexual Satisfaction	.114	.343	8.68	.0047
R ² = .278				
F = 10.60				
Sig. of F = .0001				

Table 7

Stepwise Regression Analyses of Daily Evaluations of Presentation Applicability,Enjoyability, and Understandability on Final Evaluations of Presentation Applicability,Enjoyability, and Understandability for Female Participants (n=145)

Topic Presentation	R ²	Beta	F	Sig. of F
Presentation Applicable				
Celibacy/Masturbation	.097	.255	10.74	.0013
Female Anatomy	.040	.209	7.33	.0076
Adult Sexuality	.040	.201	6.80	.0101
R ² = .177				
F = 10.11				
Sig. of F = .0000				
Presentation Enjoyable				
Love	.112	.291	13.21	.0004
STDs	.031	.181	5.09	.0256
R ² = .142				
F = 11.79				
Sig. of F = .0000				
Presentation Understandable				
Sexual Difficulties	.136	.302	16.49	.0001
Conception	.087	.207	7.39	.0074
Later Life Sexuality	.048	.219	8.20	.0049
Contraception	.033	.187	6.30	.0133
R ² = .304				
F = 14.40				
Sig. of F = .0000				

Part 4

Gender Comparisons of University Students' Interests in Human Sexuality Topics

Abstract

This exploratory study examines undergraduate university students' evaluations of the topics included in a comprehensive human sexuality course. Through daily evaluations, 145 female students and 58 male students rated 22 human sexuality topics in terms of being applicable, enjoyable, and understandable. Love, communication, and contraception were topics perceived by the students to be highly applicable, enjoyable and understandable. Significant gender differences were determined through *t*-tests with female students perceiving more topics as applicable, enjoyable, and understandable than male students. Male anatomy was the only exception with males finding the topic more applicable. The most significant gender differences were found in the topics of gender roles/differences, female anatomy, conception, adult sexuality, and sexual assault.

Introduction

The majority of parents want their children to receive sexuality education, many states mandate it, yet fewer than 10% of students receive it (SIECUS, 1992). Kenney and Orr (1984) reviewed sexuality programs and policies and found that despite ongoing controversy, there is overwhelming support from parents and educators for sexuality education. Although, there is not much controversy about whether or not a sexuality program should exist, there is a great deal of controversy about the sexuality content and the instructional activities to be included in such a program (Bruess & Greenberg, 1994; SIECUS, 1992). Parents, educators, administrators, and community members have expressed opinions about what content should be included in sexuality education programs; however, students seldom have a voice in their own sexuality education needs.

The current study examines undergraduate university students' evaluations of the topics included in a comprehensive human sexuality course. A comprehensive sexuality education program includes the biological, socio-cultural, psychological, and spiritual dimensions of sexuality from the cognitive, affective and behavioral domains (SIECUS, 1992). The human sexuality curriculum, which is part of this study, is comprehensive in that it encompasses all four domains and includes the six key concepts that are part of the guidelines advocated by the Sex Information and Education Council of the United States (SIECUS), (i.e., human development, relationships, personal skills, sexual behavior, sexual health, and society and culture, SIECUS, 1992).

The Learners' Role in Sexuality Education

An extensive literature review exploring the role of the university students' own informational needs and interests in sexuality education revealed that this area has received limited attention. One operational principle of family life education as defined by Arcus, Schvaneveldt, and Moss (1993) is that "family life education should be based on the needs of individuals and families" (p.15). However, Sears (1992) claimed that "the placement of sexuality in the school curriculum does not parallel students' needs and concerns" (p.9). Ward and Taylor (1992) asserted that "because sexuality education fails to incorporate the issues and concerns teens themselves say are important, their needs are not being met" (p. 198). Arcus, Schvaneveldt, and Moss (1993) differentiated between *felt needs* and *ascribed needs*. Felt needs are "those expressed by potential learners" and ascribed needs are "those identified by someone other than the learner" (p. 15). This idea can be likened to the ideas of andragogy and pedagogy (Knowles, 1984). *Andragogy* is a student-driven, task-oriented approach to learning (felt needs), whereas, *pedagogy* is a teacher driven, subject-centered approach (ascribed needs). University students in particular, tend to be more self-directed than younger students, need to have relevant and immediately applicable information, and overall, are beginning to demand a more prominent role in their education (Roe, 1989). Koch (1992) proposed that the educator and the students must "engage in reflective dialogue based on trust and mutual respect" in order to achieve the goal of the "development of greater knowledge and understanding" (p.255). Regarding sexuality education, Philips and Fine (1992) stated that "student-

centered classrooms that authorize student voices, stories, and interpretations allow for much needed active exploration and ongoing explicit critique of ideas” (p.248). These ideas support the use of an andragogical model in designing an effective sexuality education curriculum for university students.

Characteristics of the Learner

The developmental readiness, needs and interests, and gender of the learner are important factors to be considered when designing a sexuality curriculum. Developmental readiness includes an awareness of the cognitive and socio-cultural education dimensions influencing the learner by giving attention to the age appropriateness and experiential appropriateness of the curricula and related instructional activities. Awareness of the knowledge base and the sexual experience level of the learner would help alleviate the education misfortunes of sexuality educators, including parents, who have prepared and provided their sexuality information for learners who have already surpassed or not yet arrived at the intended development level for the designed curricula. Engel, Saracino, and Bergen (1993) have suggested that "education that is offered too early, when the potential learner is not yet ready to learn, interested, or capable of understanding is ineffective" (p.65). Likewise, in those cases where sexuality information is made available too late, misinformation may prevail hampering the learner from being able to make responsible choices concerning their sexuality.

In order to facilitate the appropriate timing (e.g., developmental and experiential readiness of the learner) of sexuality education, it would be necessary to solicit the involvement of what topics are most interesting and relevant in addressing the needs of the learner (Knowles, 1984). Bruess and Greenberg (1994) suggested that the criteria used to measure the effectiveness of sexuality education should be expanded to include the learner's needs and interests as the content should be "interesting to the learners,"

"relevant to their lives," and "necessary for them to know" (p.291). Davis and Harris (1982) had similar ideas and suggested that three types of student information would be most useful: "what they can understand, what they already know, and what they want to know" (p.473). Carter and Carter (1993) identified the three components of a student's receptivity to a topic as the "values or importance students place on a concept," the "personal meaning" derived from the topic, and the "relevance" to current or future behaviors (p.235).

Efforts to examine learners' interests in sexuality have received limited research attention, but in reviewing the available empirical literature, three prevalent themes have emerged: (a) based on learners' questions, needs and interests vary with age and experience level (Campbell & Campbell, 1986; Davis & Harris, 1982); (b) overall both male and female students want to know more about sexual arousal, response, and intercourse as well as dating, relationships and the social aspects of sexuality (Croft & Asmussen, 1992; Gordon, 1986; Ward & Taylor, 1992; Woodcock, Stenner, & Ingham, 1992); and (c) few gender comparisons have been made regarding interest in sexuality topics, yet when comparisons are made, females often express a greater interest than males in learning about relationships and sexuality in general (Ward & Taylor, 1992; Woodcock, Stenner, & Ingham, 1992; Valois & Waring, 1991).

In terms of determining students' needs and interests, the analyses of students' anonymous questions have yielded results that indicate that students' questions vary with age and sexual experience level (Campbell & Campbell, 1986; Davis & Harris, 1982).

Campbell and Campbell (1986) found that younger students (seventh and eighth graders) asked more questions about basic anatomy and clarification of slang terms, whereas, older students (sophomores in high school) had questions concerning birth control, health risks, and communication. Davis & Harris (1982), in their study of 11- to 18-year-olds also found that older students were more interested in pregnancy, birth control pills and birth control in general. It appears that as students move from high school to college their interests continue to include birth control, health risks, and communication, but also expand to include sexual arousal and sexual intercourse (Valois & Waring, 1991).

Concerning students' desire to learn more about dating and relationships, Gordon (1986) found that many teenagers' questions about sexuality were related to love. In their study of 12- to 19-year-olds, Croft and Asmussen (1992) found that students were less interested in the biological dimension of sexuality and more interested in learning about contraception and relationship development. In addition, Ward and Taylor (1992) and Woodcock, Stenner, and Ingham (1992) found that students did not think their own sexuality education had devoted enough time to sexuality and relationships.

Valois and Waring (1991) analyzed college students' anonymously submitted questions and found that their interests clustered into the following six categories: sexual arousal/response, general anatomy/physiology, contraception, dating/relationships, pregnancy/fertility, and sexually transmitted disease. A high number of questions from both men and women fell into the category of dating/relationships. Pregnancy/fertility and STDs were the two categories that received the fewest questions from students.

Caron and Bertran (1988) examined questions that college students wrote anonymously on the first day of a human sexuality class. The submitted questions were divided into two broad categories: "those based on the need for specific factual information and those that reflect the student's intense concern with their physical/sexual normality" (p.24). Topics of questions received included interpersonal relationships, masturbation, virginity, homosexuality, intercourse, orgasm and ejaculation, birth control and pregnancy, and sexually transmitted diseases.

As for students' desire to learn more about sexual arousal, response, and intercourse, Gordon (1986) found that many teenagers have questions about female orgasm, sexual desire, and oral and anal sex. The majority of questions analyzed by Valois and Waring (1991) fell into the category of arousal and response. In addition, Caron and Bertran (1988) commented that students had a particular interest in information about sexual techniques. This may reflect the experiential level of the students. As students become more sexually active, they want more information about sexual intercourse itself.

Third, there have been few studies that have included gender comparisons for interest in sexuality topics. Valois and Waring (1991) made gender comparisons with the anonymously submitted sexuality related questions they obtained from college students. Few gender differences were found in the types of questions asked. However, females more frequently asked questions relating to pregnancy/fertility and contraception than males and males more frequently asked questions relating to anatomy and physiology. In

their survey of Australian high school students, Carter and Carter (1993) measured students' receptivity to statements encompassing key sexuality concepts. Significant gender differences were found with females expressing more interest in relationships, communication, choice, and trust. Davis and Harris (1982) also found that the 11- to 18-year-old females in their study had more interest in several sexuality terms including pregnancy and birth, venereal disease, and sex offenses (i.e., sexual assault, child sexual abuse, etc.).

Previous Research Methodology

Previous research examining learners' interest in sexuality has utilized methodologies that are potentially problematic psychometrically and may have limited our understanding of learners' interests. Much empirical literature has been based on students' anonymously submitted questions about sexuality, asking students to reflect on their past sexuality education or asking students to mark a brief list of sexuality terms to indicate their level of interest.

The majority of the literature examining student interests in sexuality topics has been based on students' anonymously submitted questions about sexuality (Valois & Waring, 1991; Caron & Bertran, 1988; Campbell & Campbell, 1986; Gordon, 1986). Bruess and Greenberg (1994) advocated that listening to students' questions can be important in curriculum planning. While this method of exploring student interests may avoid embarrassment and allows for candid information, there are potential limitations. First, qualitative techniques (e.g., the wording used when asking students to submit questions) may influence the types and breadth of responses. For example, if students were asked to write down, in an open-ended format, any questions they have related to "sex," some students may limit their thinking to the physical act of sexual intercourse. Sexuality as a concept is a more inclusive and comprehensive term (Snegroff, 1988). Second, even if the term "sexuality" is used in asking students to write questions, students may not expand their thinking to include topics that are part of a comprehensive curriculum (e.g., love and communication).

A second research methodology frequently used in previous research involves retrospective techniques such as asking participants to think back to their past sexuality education (Ward & Taylor 1992; Woodstock, Stenner, & Ingham, 1992). The importance of word choice when presenting this task is again apparent. If people do not understand that sexuality includes more than the biological dimension then they will fail to respond comprehensively. Also, studies depending upon reflective techniques may have been flawed because of distorted memories that might affect the internal validity of responses. Catania, Gibson, Marin, Coates, and Greenblatt (1990) identified "behavioral recall" as a factor influencing response bias in sexuality research that asks participants to recall sexual behavior. This recall problem could possibly affect participant's responses in recalling sexuality education experiences.

Therefore, this study introduces a different methodology that does not ask students to reflect on past sexuality education or to develop questions about sexuality in general. Instead, students were asked to provide immediate feedback through the use of ongoing daily evaluations that rate the applicability, enjoyability, and understandability of each topic in a comprehensive sexuality curriculum. The current study provides up-to-date information on and gender comparisons of university students' interests in specific sexuality topics. This information is based on students' concurrent assessment of 22 human sexuality topics presented in a comprehensive, 15-week course on human sexuality. After a lengthy and extensive literature search, no evidence was found that a similar methodology (i.e., gathering concurrent assessments of a comprehensive

curriculum) had recently been used in sexuality education studies.

Methods

Sample Description

This study was conducted using a sample of 203 students in three different sections of a comprehensive, undergraduate, human sexuality course. The course was a 200- level (sophomore) class offered at a large southeastern university. The average class size for each section was approximately 65 students and the data were collected over two different semesters. The class met twice a week for fifteen weeks and each class period was 75 minutes in length.

Demographic data provided by the students revealed that 145 students were female and 58 students were male. The ages of the students ranged from 18 to 46 years with a mean age of 22 years. Distribution of academic majors was diverse with 22% of the students from Liberal Arts, 20% from Human Ecology, 20% from Engineering, 10% from Communications, 10% from Nursing, and the remaining 18% from Agriculture, Business Administration, Education, and Law. The majority of students (147) were either juniors or seniors. Of the 203 students, 9.4% were married, 41.9% were engaged, cohabiting, or exclusively dating, 7.9% were steadily dating, 18.2 % were casually dating, and 18.7% were friends only or casually attracted. Thirty-six percent of the sample reported that their relationship status had changed since the start of the semester. The students reported an average of 8.5 hours spent in previous sexuality education classes, largely through churches or schools.

Instruments

Students completed daily evaluations of each sexuality topic covered in the human sexuality course. The daily evaluation, confidentially completed by each student, requested students to rate their perceptions of the topic (both chapter content and class discussion of the content) as enjoyable, applicable, and understandable. For example, at the end of the class session covering the topic of male anatomy, students indicated how enjoyable, how applicable, and how understandable the topic of male anatomy was to them in terms of their own sexuality education. Each of the three items included a 3-point, Likert-type response format with the following response options: not =1, somewhat=2, or extremely=3. Definitions and explanations for the terms enjoyable, applicable and understandable were given to the students as follows: applicable is how useful and relevant the student found the material to her or his life, enjoyable is whether or not students found the topic aversive or pleasant to study, and understandable is how well the student comprehended the topic being studied. It was anticipated that giving definitions for the global terms would decrease the error variance by providing consistency in the students' interpretations of the terms and thereby increasing the psychometric strength of the study.

Procedures

Twenty-two topics comprehensively covering all dimensions of sexuality were included, with a new sexuality topic introduced and discussed each class session. Our Sexuality (Crooks & Baur, 1993) was the textbook used for the sexuality topics and

discussions. The 22 topics included in the course corresponded to the 22 chapters in the textbook (e.g., chapter 1=History of Sexuality and lecture 1=History of Sexuality).

Exams, films, and special guests supplemented the course content but were not included in the study. The same male instructor taught the class in a lecture and discussion format.

Female guest speakers taught the topic areas of female anatomy, contraception, conception, and sexual assault. Male guest speakers taught the topic areas of gay/lesbianism and HIV/AIDS. The topics presented by these guest speakers were included in this study.

Results

Table 1 includes the rank order, mean responses, and standard deviations for each of 22 sexuality education topics as applicable, enjoyable, and understandable. The topics are listed in the order in which they were presented both in the class and in the textbook. The rank was assigned based on mean responses. Topics in Table 1 are ranked in a similar order for applicability, understandability, and enjoyability (e.g., communication, love, contraception, conception, celibacy/masturbation, children/adolescent sexuality, and adult sexuality are in the top ten for all three aspects of the topic).

Numerous significant gender differences were revealed by *t*-tests and these results are summarized in Table 2. In terms of the topics being *applicable*, male anatomy was the only topic that males found significantly more applicable than females. Females perceived gender roles/differences, female anatomy, communication, gay/lesbianism, conception, adult sexuality, later life sexuality, sexual satisfaction, sexuality and disabilities, STDs, HIV/AIDS, and sexual assault as significantly more applicable than males.

Within gender results indicated that males rated the topics of love, contraception, male anatomy, and communication as the most applicable topics, whereas, they rated the topics of gay/lesbianism, atypical behavior, sexuality research, and sexual assault as the least applicable. Overall, females rated the topics of love, communication, female anatomy, and contraception the most applicable topics; whereas, they rated the topics of gay/lesbianism, atypical behavior, and sexuality research the least applicable topics.

As for gender differences in the *enjoyability* of topics, significant differences were found for the topics of gender roles/differences, female anatomy, love, gay/lesbianism, conception, child/adolescent sexuality, adult sexuality, later life sexuality, sexuality and disabilities, HIV/AIDS, and sexual assault with females rating them as more enjoyable.

Within gender comparisons indicated males rated the topics of communication, contraception, and love as the most enjoyable topics, whereas, they rated gay/lesbianism, sexual assault, and sexuality research as the least enjoyable topics. Overall, females rated the topics of love, communication, and contraception as the most enjoyable, whereas, they rated the topics of sexuality research, gay/lesbianism, and atypical sexual behavior as the least enjoyable topics.

Significant differences were found for the majority of topics in regard to *understandability*. The topics that females found significantly more understandable than males: gender roles/differences, female anatomy, sexual arousal, love, communication, gay/lesbianism, contraception, conception, child/adolescent sexuality, adult sexuality, later life sexuality, sexuality and disabilities, STDs, atypical sexual behavior, HIV/AIDS, and sexual assault.

Males, overall, rated the topics of male anatomy, contraception, and history of sexuality as the most understandable, whereas, they rated the topics of gay/lesbianism, STDs, and sexual assault as the least understandable. Overall, females rated the topics of history of sexuality, contraception, and love as the most understandable topics, whereas, they rated the topics of gay/lesbianism, STDs, and atypical sexual behavior as the least

understandable topics.

Discussion

The results of the students' rating of the 22 topics support a comprehensive approach to sexuality education. Overall, the topics were rated high, indicating that the students found most of the topics applicable, enjoyable, and understandable. The topics were also rated similarly for all three aspects, particularly for applicable and enjoyable. In other words, if students found the topic applicable, they were also likely to find it enjoyable and understandable (see Table 1).

Communication and love were the two most applicable topics. These topics were rated high by both genders although there was a significant gender difference for communication with females rating it more highly than males. This supports previous findings that found that young people want to know more about relationships in general (Gordon, 1986; Valois & Waring, 1991; Ward & Taylor, 1992; Woodcock, Stenner, & Ingham, 1992). The perceived applicability of the topics of love and communication by both males and females may be indicative of the existing relational status of these students because more than 50% of the students in the current study were married, engaged, cohabiting, or exclusively dating.

The high rating by both university-age males and females for the topic of sexual arousal was consistent with the findings of Valois and Waring (1991) and Caron and Bertran (1988) in their studies of college students' anonymous sexuality questions. The topic of sexual arousal includes information on the stages of sexual response including physiological changes and orgasm. The material included in this topic may have

answered questions the students had about their own body - questions that may have not been answered in previous sexuality education programs. Students' own sexual response may have also been normalized by learning about this topic. For example, after learning about the phenomenon of sex flush, students might be relieved to know that their own physiological reactions to sexual arousal are normal.

It is important to note not just the topics that had a high rating for being applicable, enjoyable, and understandable, but to note those that received lower ratings. Based on the combined mean responses of males and females, sexual satisfaction was ranked 19 for applicability, 16 for enjoyability, and 16 for understandability. Sexual satisfaction included information on types of sexual therapy as well as information on enhancing sexual intercourse, such as specific suggestions for women on becoming orgasmic. The student ratings may have reflected more perceptions about the information on therapy rather than suggestions for sexual enhancement. Sexual therapy may have appeared far removed from their own sexual experiences. Female students did find the topic of sexual satisfaction significantly more applicable than male students. This may be a topic for which females feel a sense of responsibility. Women have been socialized to be the "gatekeepers" of sexual pleasure and knowledge and the female students may feel that they are responsible for enhancing sexual pleasure (Masters, Johnson, & Kolodny, 1995).

Atypical sexual behavior is another topic that emerged at the bottom of the overall ranking of topics. This topic included issues such as exhibitionism, voyeurism,

transvestitism, among others. Again, these issues may have seemed far removed from students' own sexual experiences and therefore, were not applicable, enjoyable, or understandable.

HIV/AIDS, STDs, and Sexual Assault ranked 10, 14, and 17 respectively in terms of applicability. It could be argued that university students should view these topics as more salient in their lives. Heterosexual AIDS constitutes the fastest growing category of new AIDS cases and HIV infection, and HIV infection and AIDS is now among the top three causes of death for males between the ages of 15 and 44 in the United States (Center for Disease Control as cited in Masters, Johnson, & Kolodny, 1995). Some college and university health services are reporting rates of chlamydia infection as high as 17% in undergraduate women (Center for Disease Control, as cited in Masters, Johnson, & Kolodny, 1995) and in 1992, 73% of the cases of gonorrhea occurred in persons ages 15 to 29 (Masters et al., 1995). Mills & Granoff (1992) examined acquaintance rape at the University of Hawaii-Manoa and found that as many as 28% of the female participants in their sample had been victims of rape or attempted rape. Just over 29% of the male participants in the same study reported having continued to make sexual advances after their partner had said "no."

These statistics suggest that HIV/AIDS, STDs, and sexual assault are issues relevant to the lives of college and university students. Upon closer examination of the mean responses to the applicability of these three topics, the difference between the perceived applicability of communication (the highest ranked topic) and that of sexual

assault (ranked 17) is only .63. HIV/AIDS, STDs, and Sexual Assault all were rated above 2.0 which was considered somewhat applicable. It may not necessarily be that the topics were not considered applicable to the students' lives, but perhaps some of the other topics were seen as more salient to them. This again may be a reflection of their relationship status at the time of this study, as more than 50% of the sample was in what could be considered a monogamous relationship (i.e., married, engaged, cohabiting, or exclusively dating). Geographic location and religiosity of the students may also be reflected in perceptions of these topics, particularly the topic of HIV/AIDS. The study was conducted at a university in a conservative and religious area of the south. Consequently, they may see HIV/AIDS as far removed from their own lives.

The university students in this study may also be experiencing denial that a problem with STDs, HIV/AIDS, or sexual assault exists. Elkind's theory of egocentrism (1967) suggested that adolescents have the feeling that they are invincible. It appears that the university students in this study may still be subscribing to their "personal fable" in that they feel that HIV/AIDS, STDs, and sexual assault are not a concern for them because nothing bad will happen to them.

It is important, however, to look not just at overall mean responses or at cross gender issues, but to look at within gender issues. In examining the ratings of sexual assault within each gender, important issues appear. Although the overall mean rating for sexual assault was 2.21, males only rated it a 1.89. Males rated sexual assault as one of the least applicable, enjoyable, and understandable topics. Research has shown that 84%

of the college males who had committed rape did not think that their behavior constituted rape (Warshaw, 1988 as cited in Masters et al., 1995). Some men may think of sexual assault in terms of stereotypical stranger rape (e.g., a strange man who jumps out of the bushes and violently rapes a woman). Males may not associate sexual assault with date or acquaintance rape. Therefore, they may tune out the lecture and discussion on sexual assault and perceive the topic as not applicable to them because they do not fit the stereotypical mold of a sexual assailant.

Conversely, males as well as females, consistently rated contraception as one of the most applicable, enjoyable, and understandable topics. This supported previous research that found males asked a lot of questions concerning contraception (Campbell & Campbell, 1986). This indicated a feeling of mutual responsibility for contraception. There might have also been increased interest in contraception in terms of STD and HIV/AIDS prevention.

Implications for Practice

Sears (1992) advocated that a sexuality education program is most effective when it is based on the needs and interests of the students. However, the interests of the students may not be congruent with the needs of the student. In a comprehensive sexuality education program, it is important to include topics covering all domains of sexuality (Bruess & Greenberg, 1994). For example, the topic of gay/lesbianism was rated low and emerged last on the rank order list in two out of three aspects of the topic (see Table 1). However, female students found the topic significantly more applicable,

enjoyable, and understandable than male students (see Table 2). This supported the results of Kurdek (1988) who found that males hold more negative attitudes toward homosexuals than females. Negative attitudes may lead to increased harassment, discrimination, and violence toward homosexual individuals (Green, Dixon, & Gold-Neil, 1993). This finding suggested that topics like gay/lesbianism should not be excluded from future sexuality education programs based on the apparent lack of interest, but instead poses a challenge to educators to explore new ways to present the topic of gay/lesbianism and stimulate students' perception of the topic as applicable, enjoyable, and understandable.

Result of this study suggested that sexuality educators must discover new teaching techniques to enhance the applicability, enjoyability, and understandability of the topic of sexual assault for male students. Dallager and Rosen (1993) found that acceptance of rape myths among males increases the chance that they will sexually assault a female. However, sexuality education that includes a component on sexual assault has been effective in reducing the acceptance rate of rape myths (Dallager & Rosen, 1993; Fischer, 1986). Furthermore, males who know a victim of sexual assault tend to be less likely to express a willingness to sexually assault (Hamilton & Yee, 1990). The effectiveness of various teaching techniques (e.g., inviting a panel of sexual assault victims to lead a discussion) in the area of sexual assault needs to be further explored.

The human sexuality course in the current study had the benefit of 45 hours of educational training in 22 sexuality topics and could be considered comprehensive in

nature. Unfortunately, many sexuality education programs are restricted to a shorter length of time (e.g., 8-10 hours) and sexuality educators are forced to carefully choose what instructional content should be included in a program, in turn omitting various topics (Kirby, 1984). Relationship issues such as love and communication are imperative to a comprehensive curriculum and appear to be topics about which students want to learn. Data from this study indicated that in programs where time is a resource constraint, the topics of love and communication should be integrated into other topics such as gender, HIV/AIDS, and sexual arousal.

The integration of gay/lesbianism with other topics may also be beneficial. Including the needs and issues of homosexuals only as a separate topic perpetuates the polarization of this population. It is necessary to foster an appreciation of diversity and highlight the similarities of homosexual and heterosexual people in a relational context and integrated with all other areas of sexuality.

Integrating sexuality topics may also provide students with the opportunity to process factual information and apply it to social situations in their lives. Teaching techniques that exemplify the educational model of androgogy may facilitate this process. Andragogy is a model for adult learning that Knowles (1984) has based on a psychological definition of adulthood that includes responsibility for and self-direction in one's own life. Brunner (1992), illustrated this concept when she examined the reading of literature as an avenue for students to make meaning of sexual knowledge and to broaden their perspective in all dimensions of sexuality. The students read and discussed a variety

of literature that included relevant sexual issues such as adolescent pregnancy. Brunner played a minimal role in the discussion offering only occasional questions to further facilitate the student's learning. This approach to learning exemplified the educational model of androgogy because the students in Brunner's study took charge of their learning by exploring their own interpretations and perceptions of the readings through student-centered discussion (Knowles, 1984). This is the type of teaching technique that could not only empower students in their own learning, but could provide opportunities to integrate many topics such as love, communication, gender roles, and gay/lesbianism with some of the more traditional fact-based topics such as contraception and STDs, thus providing opportunities for more comprehensive sexuality education to occur.

Females have been shown to have a stronger sexuality knowledge base than males. (Davis & Harris, 1982). Females in the current study found 17 out of 22 topics significantly more understandable than males. Females also found a majority of the 22 topics significantly more applicable and enjoyable than males (see Table 2). Having a strong sexual knowledge base prior to this course may lead to greater receptivity and understanding of the topics. These gender differences could be explained in several ways. First, many popular women's magazines deal with sexuality issues on a regular basis and may serve as a source of sexual learning for many women (e.g., Cosmopolitan and Glamour). Second, research has indicated that more parent-child sexual communication occurs between parents and their daughters than between parents and their sons (Nolin & Peterson, 1992). Third, agencies such as Planned Parenthood serve primarily women and

provide education on a variety of sexual issues as a part of their services. Fourth, high school Family and Consumer Science (i.e., home economics) courses often integrate a variety of sexuality topics (i.e., family living and parenting). These courses are often electives and tend to have a higher enrollment of females than males (Sommerville, 1971). These courses may, therefore, provide another avenue for females to be exposed to sexuality education.

These ideas discussed above, lead to the implication that sexuality educators must focus more on educating males in all areas of sexuality. Beemer & Fallek (1993) identified negative attitudes communicated to males as one potential barrier to males' participation in sexuality education programs. Specifically, they suggested that "programs are interested in them only insofar as their behaviors create problems for young women" (p.12). A comprehensive approach to sexuality that emphasizes "sexual health" for males and not just the negative outcomes of adolescent sexuality (e.g. unwanted pregnancy, STDs, etc.), might be more inclusive of the needs of male students as well as female students. Educators, regardless of their gender, need to be aware of the needs and interests of both males and females. Needs assessments prior to the course might provide useful insight that will assist with curriculum development and lesson planning. Community agencies, such as Family Planning, could also do more to educate males by encouraging males to accompany their partners when they visit their facility and to participate in the educational services that they provide.

Mutual responsibility was emphasized throughout the course. However, it appears

that females continued to feel a greater responsibility for some sexuality issues than males (e.g., communication, conception, sexual satisfaction, and STDs). One exception, however, is the topic of contraception. This was one of the highest rated topics by both males and females for all three aspects of the topic. No significant gender differences were found in the applicability and enjoyability of this topic. The fact that the sample was a well-educated group may reflect perceptions of contraception. Similar findings might not occur in other same-aged populations (i.e., non-university students).

Strengths and Limitations

The limitations of the previous empirical literature involving college and university students' interests in sexuality topics and the ways that we feel that this study will strengthen our understanding of university students' interest included the following observations:

- Much of the previous empirical literature is dated in the 1980's or earlier.
- Many of the previous studies have not included university students.
- Some of the previous studies included populations outside of the United States (Carter & Carter, 1993; Woodcock, Stenner, & Ingham, 1992).
- Gender comparisons were omitted and/or received limited attention in previous studies.
- Anonymous questions or reflective techniques were used to measure student interest in previous studies.
- Data were not collected based on a comprehensive sexuality course in previous

studies.

The present study has avoided these limitations by providing up-to-date information on and gender comparisons of university students' interests in specific sexuality topics. This information was based on students' concurrent assessment of 22 human sexuality topics presented in a comprehensive, 45-hour course on human sexuality.

A limitation of the current study was the omission of students' attitudes toward sexuality issues such as premarital sex, abortion, and gay/lesbianism. These topics were incorporated into the course but specific attitudes about these issues were not explored. It is important to recognize that the sample represented a conservative area of the southeast and the attitudes of the students toward topics such as gay/lesbianism may be very different from those in other regions of the country. The students in the current study were also self-selected into the class. The attitudes of students electing to incorporate a human sexuality course in their undergraduate curriculum may be more liberal than students who elected not to take a human sexuality course. Consequently, results of this study may not be generalizable to other regions of the country or other university populations. Further research integrating the components of this study (i.e., applicable, enjoyable, and understandable) with attitudes and various teaching techniques and methods is warranted.

Another limitation of this study was the imbalance in the number of male and female students in the sample. This may indicate another challenge for sexuality educators to recruit more males into various sexuality programs. Although the course was

taught by a male instructor, the course was offered in a female-dominated department (Child & Family Studies) with the majority of students (80%) coming from other academic colleges within the university (e.g., College of Engineering). Social learning theory might suggest that males have been socialized to think that they are supposed to have all of the answers regarding sexuality and, therefore, should not have to take a course in human sexuality. Males may feel that they have an image to uphold and taking this course might indicate inadequacies in the area of sexuality. Educators must be sensitive to these misconceptions and the gender differences in the understanding and the relevance of various sexuality topics.

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Table 1

Student Responses of Sexuality Education Topics Ranked by Mean (n=203)

Chapter Topic	Applicable			Enjoyable			Understandable		
	Rank	Mean	SD	Rank	Mean	SD	Rank	Mean	SD
History of Sexuality	16	2.21	.48	15	2.34	.50	2	2.91	.28
Sexuality Research	20	1.82	.50	22	1.81	.53	14	2.71	.44
Gender Roles/Diff.	12	2.45	.47	11	2.39	.50	10	2.77	.37
Female Anatomy	4	2.68	.51	10	2.44	.48	15	2.71	.42
Male Anatomy	13	2.44	.52	13	2.38	.51	5	2.84	.33
Sexual Arousal	5	2.66	.42	7	2.55	.44	12	2.75	.37
Love	2	2.84	.31	1	2.72	.41	3	2.86	.30
Communication	1	2.84	.32	3	2.71	.42	7	2.82	.35
Celibacy/Mast.	7	2.58	.42	8	2.52	.48	6	2.82	.32
Gay/Lesbianism	22	1.52	.64	21	1.89	.58	22	1.66	.65
Contraception	3	2.82	.32	2	2.72	.39	1	2.91	.22
Conception	8	2.57	.50	4	2.62	.48	8	2.79	.38
Child/Adol. Sex.	9	2.54	.46	6	2.58	.45	4	2.85	.29
Adult Sexuality	6	2.59	.39	5	2.58	.39	9	2.78	.31
Later Life Sexuality	15	2.25	.52	14	2.36	.52	17	2.69	.39
Sexual Difficulties	11	2.50	.46	9	2.48	.44	13	2.73	.37
Sexual Satisfaction	19	2.10	.58	16	2.28	.52	16	2.71	.41
Sex. & Disabilities	18	2.16	.58	17	2.23	.52	20	2.65	.42
STDs	14	2.35	.53	18	2.21	.59	21	2.61	.42
Atypical Behavior	21	1.64	.58	19	2.04	.56	19	2.66	.39
HIV/AIDS	10	2.53	.51	12	2.39	.57	11	2.77	.35
Sexual Assault	17	2.21	.56	20	1.98	.60	18	2.67	.40

Table 2

Gender Comparisons in Response to Applicability, Enjoyability, and Understandability of Human Sexuality Topics Males (n=58) Females (n=145)

Chapter Topic	Applicable			Enjoyable			Understandable		
	M	F	t-value	M	F	t-value	M	F	t-value
History of Sexuality	2.10	2.26	-2.28*	2.23	2.38	-2.12*	2.80	2.95	-2.82**
Sexuality Research	1.81	1.83	-.26	1.87	1.78	1.00	2.62	2.75	-1.84
Gender Roles/Diff.	2.27	2.53	-3.71****	2.20	2.46	-3.40***	2.59	2.84	-3.75****
Female Anatomy	2.24	2.86	-6.84****	2.24	2.52	-4.03****	2.54	2.78	-3.32***
Male Anatomy	2.76	2.32	6.66****	2.41	2.37	.57	2.87	2.83	.84
Sexual Arousal	2.57	2.70	-1.83	2.51	2.56	-.75	2.59	2.81	-3.41***
Love	2.79	2.86	-1.42	2.57	2.78	-3.24*	2.79	2.89	-1.97*
Communication	2.76	2.88	-2.10*	2.64	2.74	-1.48	2.71	2.86	-2.46*
Celibacy/Mast.	2.52	2.60	-1.34	2.47	2.55	-1.14	2.78	2.84	-1.23
Gay/Lesbianism	1.38	1.57	-2.01*	1.72	1.96	-2.72**	2.09	2.30	-2.45*
Contraception	2.78	2.84	-1.09	2.63	2.75	-1.89	2.84	2.94	-2.01*
Conception	2.30	2.68	-4.62****	2.38	2.71	-4.46****	2.58	2.88	-4.17****
Child/Adol. Sex.	2.46	2.57	-1.65	2.43	2.64	-2.79**	2.74	2.89	-2.84**
Adult Sexuality	2.41	2.66	-4.17****	2.42	2.64	-3.62****	2.61	2.85	-4.23****
Later Life Sexuality	2.13	2.30	-2.18*	2.23	2.41	-2.37*	2.53	2.76	-3.59***
Sexual Difficulties	2.42	2.53	-1.53	2.46	2.49	-.39	2.65	2.75	-1.65
Sexual Satisfaction	1.96	2.15	-2.33*	2.19	2.31	-1.47	2.62	2.74	-1.88
Sex. & Disabilities	2.02	2.21	-2.19*	2.12	2.27	-1.96*	2.47	2.72	-3.60***
STDs	2.21	2.40	-2.40*	2.10	2.25	-1.65	2.46	2.66	-3.02**
Atypical Behavior	1.62	1.65	-.32	2.07	2.02	.59	2.54	2.70	-2.60**
HIV/AIDS	2.39	2.59	-2.21*	2.25	2.45	-2.18*	2.66	2.81	-2.46*
Sexual Assault	1.89	2.33	-5.01****	1.78	2.05	-3.26***	2.51	2.74	-3.23**

Note: *p<.05 **p<.01 ***p<.001 ****p<.0001

Part 5

Conclusion

Summary of Results

This thesis project has explored three overarching aspects of sexuality education: sources of sexuality information, the role of the sexuality educator, and students' interests in the sexuality topics included in a comprehensive human sexuality course. The androgogical model of education has provided an effective framework for examining sexuality education in a university setting. Results and implications for sexuality educators from the overall thesis project will be summarized here.

The first manuscript included in this thesis (part 2) yielded the following results concerning students' sources of sexuality information:

- Peers emerged as the source of sexuality information that was most influential in the sexual learning of both males and females in this study.
- Mothers discuss sexuality more with their children than fathers.
- Mothers discuss sexuality more with their daughters than with their sons.
- Fathers' influence on their children's sexuality knowledge is negligible.
- Both males and females report that television and movies have been influential in their knowledge about human sexuality.
- Sexuality textbooks played a larger role than trade books in students' sexual learning.
- Schoolteachers emerged toward the bottom of the rank order of information sources, indicating that they did not play a large role in the sexual learning of these students.
- Both males and females rated same-sex individuals higher than opposite sex individuals.

Summarized next are some of the key findings from the second manuscript in which student interests in sexuality topics and the effectiveness of sexuality educators was addressed.

- Communication, love, and contraception are perceived to be the three most applicable topics by the students in this study.
- Gay/Lesbianism was consistently rated low by both males and females in terms of applicability, enjoyability, and understandability.
- A nonauthoritarian approach to teaching and establishing a good rapport with the students were the two most important qualities in a sexuality educator.
- Only a few class presentations throughout the semester influenced students' overall evaluation of the course.

The third manuscript expanded on student interests in sexuality topics from the previous manuscript. These are a few of the key findings.

- Communication, love, contraception, conception, celibacy/masturbation, children/adolescent sexuality, and adult sexuality were topics rated in the top ten for all three aspects of the topic (e.g., applicable, enjoyable, understandable).
- Female students evaluated all topics higher than males in terms of applicability except for the topic of male anatomy.
- Overall, females rated the topics as being more applicable, enjoyable, and understandable than males.
- The topic of contraception was consistently rated high by both males and females, in

terms of applicability, enjoyability, and understandability.

- Males rated the topic of sexual assault low in regard to applicability, enjoyability, and understandability.

Implications for Practice

The three aspects of sexuality education examined in this thesis: sources of information, teaching effectiveness, and interests in sexuality topics are three aspects of sexuality education that receive limited attention. Attention is often focused on the content of sexuality programs with little thought about who is teaching that content or if the content is interesting and relevant to the students. Educators often focus sexuality education on negative aspects of sexuality rather than a goal of "sexual health" that fosters a positive sense of sexuality that includes responsible sexual decision making.

The findings from these three manuscripts tie together and create some important linkages between teachers and students. Overall, teachers were not rated as an influential source of sexuality information. Results from this study indicate that it is not enough to have sexuality programs offered to students. It may be more important to look at who is teaching these programs. More training for sexuality educators is necessary, particularly in group dynamics skills. Skills in facilitating a group on sensitive issues might increase the effectiveness of sexuality educators.

Teachers may be more effective if they shift toward an adrogological model of education where they change their traditional teaching techniques and views of education in order to empower students to take charge of their own learning. It is clear that students learn about sexual issues from a variety of sources. They also have an interest in a wide variety of topics. Integration of these different topics (e.g. love, communication, sexual arousal) with different sources (e.g., books, television, parents, peers, and teachers) in a

learning environment that recognizes the characteristics of the educator as well as the learner might be the most effective approach to comprehensive sexuality education and the goal of “sexual health” for all students.

VITA

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