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Talking about Sexuality: Parent's Communication and Its Influence on their Children's Attitudes and Behaviors

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**TALKING ABOUT SEXUALITY:
PARENT'S COMMUNICATION AND ITS INFLUENCE ON THEIR
CHILDREN'S ATTITUDES AND BEHAVIORS**

By

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B.S. University of Maine, 2000

A THESIS

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Requirements for the Degree of

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(in Human Development)

The Graduate School

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May, 2002

Advisory Committee:

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Thesis Advisor: Dr. Sandra L. Caron

An Abstract of the Thesis Presented
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The purpose of this study was to determine if there is in fact any relationship between the amount of interaction and influence parents have with their children, and their children's later sexual behavior and attitudes. This study analyzed data collected from students enrolled in a human sexuality class from 1990 to 2002.

Results of the study show that clearly parents and children are not talking about sex very frequently. In all the years studied, the majority of the students said that they never asked their mother or father a question about sex.

While few significant differences in sexuality attitudes and behaviors were found between males who often asked their parents questions about sex and those who never did, many significant differences were found for females. In addition, when comparing those who said their parents were their most important influences, females (not males) were found to have significant differences on nearly all the sexual attitude and behavior questions. In other words, when females said that their

parents were their most important influence, they were more likely to engage in responsible sexual behavior. This is supported by findings that parent-child communication is linked with more responsible patterns of sexual behavior of the child. Limitations and implications are discussed.

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TABLE OF CONTENTS

ACKNOWLEDGEMENTS	ii
LIST OF TABLES.....	v

Chapter

1. REVIEW OF THE LITERATURE	1
Age of Discussion.....	3
Timing of Discussion.....	4
Content of Discussion.....	5
Feelings about Talking about Sex.....	8
Influence of Gender.....	10
Impact on Subsequent Attitudes and Behavior.....	14
Purpose of Study and Research Questions.....	18
2. METHODOLOGY.....	19
Subjects.....	19
Instrument and Procedure.....	19
Data Analysis.....	21
3. RESULTS	22
Responses to Parental Interaction and Influence Questions from 1990 to 2002.....	22
Responses by Males and Females on Attitude and Behavior Questions by Parental Interaction and Influence.....	28
Responses Grouped by Years on Attitude and Behavior Question by Parental Interaction and Influence.....	37
4. DISCUSSION.....	47
Parental Interaction and Influence.....	47
Comparing Males and Females.....	48
Findings for the Entire Sample.....	54
Limitations.....	56
Implications.....	58
REFERENCES.....	59

APPENDICES.....	64
Appendix A: Questions as they appear on the Human Sexuality Inventory.....	64
Appendix B: Resource List.....	68
Biography of The Author.....	69

LIST OF TABLES

Table 1: Class make-up by sex.....	20
Table 2: Responses by year to the question, “How often did you ask your mother questions about sexuality before you came to college?”.....	23
Table 3: Responses by year to the question, “How often did you ask your father questions about sexuality before you came to college?”.....	24
Table 4: Responses by year to the question, “Which has been your most important influence on your sexual attitudes?”.....	26
Table 5: Comparison of males and females to their reports of parental interaction and influence.....	27
Table 6: Males responses on attitude and behavior questions by parental interaction and influence.....	30
Table 7: Females responses on attitude and behavior questions by parental interaction and influence.....	34
Table 8: Responses grouped by “Never” and “Often” for 1990-1991, 1995-1996, 2001-2002, and all years to the question, “How often did you ask your mother questions about sexuality before you came to college?”.....	39
Table 9: Responses grouped by “Never” and “Often” for 1990-1991, 1995-1996, 2001-2002, and all years to the question, “How often did you ask your father questions about sexuality before you came to college?”.....	42
Table 10: Responses grouped by “Parents” and “Other” for 1990-1991, 1995-1996, 2001-2002, and all years to the question, “Which has been your most important influence on your sexual attitudes?”.....	44

Chapter 1

REVIEW OF THE LITERATURE

Much of the information available to us today regarding parent-child communication about sexuality was studied over the past three decades. Although things have not changed drastically in the way parents and children communicate, circumstances that emphasize the importance of open dialogue about sexuality have. Premarital pregnancy and sexually transmitted diseases have long been regarded as consequences of sexual activity among adolescents and young adults. However, the rise of HIV and AIDS in the past 20 years has presented a new, far deadlier fear for young people as a consequence of engaging in unprotected intercourse. It is more important than ever that we look at how parents and their children communicate about sex, and the impacts and implications of these discussions. Due to HIV/AIDS, there has been a renewed interest in the topic of family discussion about sexuality.

We may wonder why it is even important to study the effects of parent-child communication about sex and sexuality. Hutchinson and Cooney (1998) noted that the reason for examining parent-child sexuality communication is that it may influence the subsequent sexual behaviors of the child. In their study, Hutchinson and Cooney interviewed 173 women aged 19-20, and asked about sex communication with their parents, and then about their own sexual behavior. A significant association was found that when the amount of information the women received about sex from parents was compared with the women's condom use ($p=.005$), sexual communication ($p=.002$), and asking a sexual partner about number of partners ($p=.08$). Their findings suggest that for young women, parent-teen

communication could reduce sexual risk-taking behavior through condom use, self-efficacy, sexual risk communication, and negotiation for condom use.

The question is often raised about who should provide sexuality information to children and adolescents, and if parents should be the primary sex educators of their children. In a study of 374 parents of students in grades 7-12, Jordan, Price, and Fitzgerald (2000) found that 80% of the parents surveyed indicated that they felt the majority of sex education should occur in the home and should only be supplemented by outside sources such as the school, and the majority of the parents ranked themselves as the leading source of sexuality information for their children. It is interesting to note however, that when asked about perceptions of other parents, only 9% of the respondents thought most parents adequately communicate with their teenage children about sexuality.

How parents perceive themselves in the sexuality education process of their children has been somewhat of a point of contention among reports from members of families involved in these studies. Kotva & Schneider (1990) determined that parents (particularly mothers in this study) feel they are doing a better job communicating about sexuality than the children feel they actually are. The 50 mothers in their study rated their communication with daughters significantly higher than the daughters did. Interestingly, Feldman and Rosenthal (2000) found in their survey of 209 teens, 156 mothers, and 91 fathers, all from Australia, that on virtually all measures of the study, parents in general significantly rated themselves as better sex educators than their children did. There was also a moderate discrepancy between mothers and their children in the description of frequency of discussions, with mothers feeling that they

communicated more frequently, influencing their perception of themselves as sex educators.

The present literature review examines how parent-child discussion about sexuality correlates with the later sexual attitudes and behaviors of the child. The purpose of this literature review is to examine the different research studies that have looked at parent-child communication about sexuality and its potential effects. Areas of research include the impact of the age of the child, the timing of the discussion, the content of the discussion, parents' feelings about talking to their child, the influence of gender, and the impact of sexual discussion on later attitudes and behavior. It should be noted that there has been much research done on the actual effectiveness of parent-child communication about sexuality. However, these studies have yielded inconsistent results, leading to an ongoing debate over the effects of parental communication and the subsequent impact on the child's sexual attitudes and behavior.

Age of Discussion

Age appears to be an important factor when looking at the rates of parent-child communication about sexuality. Mueller and Powers (1990) surveyed college students and reported on 143 subjects, looking at perceived parent communicator style and its' correlation with the college students' sexual activity in junior high school, high school, and college. It was found that students who perceived their parents as being "friendly" ($r = -.22, p < .01$) and "attentive" ($r = .27, p < .01$) communicators reported significantly less sexual activity in junior high, college, and overall. A significant correlation was also found between "friendly" ($r = .55, p < .04$)

and “attentive” ($r = .58, p < .01$) parent communicator styles and teen contraceptive use for the junior high group. For the college-age group, significant relationships were found between “friendly”, “contentious”, “attentive”, “dramatic”, and “open” parent communicator styles and contraceptive use. The researchers determined that communication may be a factor in influencing the sexual behaviors of junior high school children and college-aged individuals, but not adolescents at the high school level.

Other studies have focused on the amount of communication as related to the child’s age. For example, in a 10-year longitudinal study, Karofsky, Zeng and Kosorok (2000) found that communication with parents about sexuality decreases with age. Two hundred and three teenagers, aged 12-21 years were surveyed, and it was found that after adjusting for age, the adolescents in the group who had never had sex had a higher rating on a scale of 1-10 (10 being the best) of communication with their parents ($p < .001$). The researchers also found that the subjects’ communication with their mother was significantly better for those who stayed virgins ($p < .01$). The study further explained that age increase, and the subsequent communication decrease, raises the risk of engaging in sexual intercourse.

Timing of Discussion

One of the main reasons for studying parent-child communication about sexuality is to find out whether or not any impact can be made on the sexual risk-taking of the child. An important factor in looking at the outcomes of communication is making sure that the communication occurs early enough to be effective.

Jordan et al. (2000) found in a study of 374 parents, that most who were surveyed (64% of the parents in the sample) believed that sexuality education should begin before seventh grade. It has however been found that intentions to engage in sexual intercourse increase sometime between sixth grade and junior high school (Robinson, Telljohann, & Price, 1999), indicating that perhaps parents need to talk with their children even earlier than was previously thought necessary. In fact, in a study of 372 sexually active adolescents, Miller, Levin, Whitaker, and Xu (1998) found that talking about condoms with their mother before their first sexual encounter significantly increased the likelihood ($p < .01$) that they would use condoms compared to those teens who did not talk to their mothers about condom use. In this study they also found that discussion during or after the year of the adolescents' first intercourse was not associated with greater condom use, indicating that parents need to talk to their children before they become sexually active. This is particularly important because condom use at first intercourse was also associated with lifetime condom use by a 20-fold increase.

Content of Discussion

It is not only important to look at "if" and "when" parents discuss sexuality with their children, but it is also crucial to determine if the content of the discussions is important in determining any possible effects on the child's later sexual behavior. In a focus-group study, Yowell (1997) found that most attempts that parents make at providing sexuality information to their children tend to be in a top-down style. This type of communication denies opportunity for discussion of the teens' thoughts,

feelings, and desires and fails to allow for drawing links between the teen's own and their parents' perspectives.

In a focus-group type of study by Brock and Jennings (1993) many of the 30 women interviewed expressed recurring themes of wishing their mothers had given more positive messages about sexuality and had discussed more personal topics such as feelings about sexuality rather than just the biological aspects of sex. The women also reported their messages from their mothers being limited and negative, and including the use of warnings and rules. A study by Hutchinson and Cooney (1998) consisted of telephone interviews with 173 women ages 19-20 years. These subjects also reported similar feelings that their sexuality education was not comprehensive enough. Of these women, 73.8% of their mothers, and just 20.9% of their fathers gave them any information on human sexuality. Nearly two-thirds of the women said that their mother had taught them about sexual risk-related topics such as resisting sexual pressure, but only half of the mothers gave any information on STD's and condom use. The majority (97%) of the young women in the study identified at least one sexuality topic that they wished their mothers had provided more information on.

Whitaker, Miller, May, and Levin's (1999) study of 372 teens found that sexuality discussions between a parent and teenager were significantly correlated to a teenager's communication with a sexual partner ($r = .25, p < .001$) and also significantly related to condom use ($p = .02$), when the parent was responsive. In other words, when the parent's responsiveness was high, condom use and partner communication was high, and if parental responsiveness was low, condom use and partner communication was low. This indicates that parent-child discussions about

sex need to not only occur, but also need to be responsive in order to have beneficial outcomes for the child. Dutra, Miller, and Forehand (1999) found in their study of 332 adolescents that the process and content of sexual communication between parents and adolescents is significantly positively correlated, indicating that open communication leads to the discussion of more sexual topics. For sexual communication, variables were correlated ranging from $r = .21-.50$, and all findings were significant at $p < .01$. Interestingly, these findings were correlated for both mothers and fathers, a finding not often discovered in previous research. This indicates that it is important to examine the content as well as the process of parent-child communication about sex to understand how the communication affects the child's later sexual behavior.

Some parents feel more comfortable discussing certain topics more than others. Jordan, Price, and Fitzgerald (2000) studied 374 parents and found that the parents reported discussing certain topics a "great deal"; responsibilities of being a parent (46%), STD's (40%), dating relationships/behavior (37%) and abstinence (36%). Parents said that the topics they did "not discuss very much" or "not at all" were masturbation (79%), prostitution (68%), pornography (63%), and abortion (55%). This finding shows that parents do seem to favor talking about certain topics more than others. This differs somewhat from what most of the parents felt sexuality education programs in school should include: information on sexually transmitted diseases, birth control methods, safer sex practices, and an emphasis on sexual abstinence.

When studying 449 mother-teenager dyads, Fox and Inazu (1980) found that early in the girl's life, "educational" topics such as menstruation and sexual morality were most likely to have been discussed. When asked about recent conversations about sexuality, the most frequently discussed topics were dating and boyfriends (67% of the mothers and 61% of the daughters reported this). The least frequent recently discussed topic was conception. Although 80% of the sample had discussed conception at some point, it was not a highly discussed topic, suggesting that there was not a lot of elaboration made on the conversation. These findings indicate that the further removed a topic is from sex, the more likely it is to be discussed.

Rosenthal and Feldman (1999) studied 298 high-school aged teens (156 males and 142 females) about topics they communicated about with their parents. They found that the parents did not seem to feel comfortable discussing sex in general, and when they did communicate, topics were significantly more likely to be limited to more "developmental and societal concerns" topics such as puberty changes. The parents communicated significantly less frequently about personal and experiential aspects of sex, such as masturbation, and the emotional aspects of sex.

Feelings about Talking about Sex

In general, parent-child communication about sex is low. A possible reason for this might have to do with the feelings of embarrassment or discomfort some individuals have regarding topics like sexuality.

In a study by Hutchinson and Cooney (1998) of 173 young women aged 19-20, the subjects were asked about the amount of sexuality information given by parents, their own comfort and their parents' comfort in discussing sexuality, and

whether there were topics that they wish that they had received additional information on. The subjects were additionally questioned about sexual attitudes and behaviors. It was found that nearly half (45%) of the young women in their study reported feeling “somewhat” or “very” uncomfortable discussing sexuality topics with their parents. It was also determined that approximately a third (32%) of the women in the study thought that their parents were “somewhat” or “very” uncomfortable discussing sexuality as well. These researchers attribute the generally low rates of sex communication between parents and children with this apparent discomfort in discussing sex. Henshaw and Kost (1992) studied 1,500 unmarried minors who were having an abortion, to look at level of parental involvement. It was found that only 24 percent of the subjects felt that they could discuss their feelings, problems and fears freely with their mothers, and even less felt that they could openly talk about sexuality issues with them. The research found that although nearly half of the teens said that they felt close to their mother, only 21% could talk freely about sexual issues (only 4% reported feeling able to talk with their father). This indicates that generally rates of parent-child communication about sex are low, even though a teen may be close to his or her parent.

Jordan et al. (2000) found interesting results in their study of 374 parents, in which only 20% of the parents in their study reported that they were “uncomfortable” or “very uncomfortable” discussing sex with their teen. Sixty five percent of the parents said that they were comfortable discussing sexuality with their children, however only 9% of the parents believed that most parents adequately discuss sexuality with their children. This may be due to the fact that of the 63% of parents

who returned the survey, most (87%) were female, and as other studies have shown, mothers tend to be the primary sex educators of their children. It was interesting to note however, that almost as many parents (22%) believed that their teen did not want to talk about sex. Seventeen percent of the parents reported that they were not sure how their teen felt about talking with them about sexuality. It is interesting to note that Kotva and Schneider (1990) found a significantly high correlation between general and sexual communication between mothers ($r = .57$) and daughters ($r = .54$). Their findings indicate that if families can communicate well in general, they can communicate well about sexuality. The researchers note that more communication is essential, because of the relationship with responsible sexual practices.

Influence of Gender

Gender has been found to be an influence on the discussion of sexuality related topics in families. Jory, Rainbolt, Karns, Freeborn, and Greer (1996), who studied communication patterns, found that the gender of both the teen and the parent influences the style and substance of discussions. In their study, 20 adolescent boys and 20 adolescent girls along with their parents were asked to play a game together and their actions were recorded with a video camera. The contacts between the family members were analyzed and the researchers found a significant relationship between alliances, contacts, and communication patterns among family members and gender. In a study of the effects of parental communication on sexual behavior, Mueller and Powers (1990) conducted a study in which two hundred thirty four college students answered questionnaires about the communicator style of the subjects' parents, which was correlated to sexual activity, contraceptive use, and

sexual information accuracy. The researchers found no significant difference between male and female adolescents regarding sexual activity or contraceptive use. On the other hand, Holtzman and Rubinson (1995) conducted a study of data collected from a sample of 8,098 high school students, and found that parent communication about multiple partners significantly lowered the number of partners for young women, but not for young men. However, it was found that female students in the survey appeared to have a higher level of sexual knowledge than the male students.

Leland and Barth (1992) substantiate this with their findings that young women are significantly more likely ($p < .001$) to have talked about contraception, pregnancy, and abstinence with their parents than young men are. These researchers examined data collected from 1,033 students in California schools and found that 63% of the males and 37% of females reported that they had not communicated with their parents about sexuality issues. In a study of 650 teenagers by the Henry J. Kaiser Family Foundation (1998), it was found that nearly 40 percent of the female teenagers said that they had received advice from a parent on talking about sex with a partner or potential partner, but only 25 percent of the male teens reported receiving this advice. Similarly, Nolin and Petersen (1992) conducted a study of 84 mother-father-child triads, asking subjects about discussion on 17 key topics. The results showed that daughters are more likely than sons to have more wide-ranging sexual discussions, especially for factual and moral discussions that are most likely to transmit information and values. This was determined because communication between mothers and daughters was the most wide-ranging in topics. The mean

number of topics discussed between mothers and daughters was 11.6 items ($SD= 3$). The father sometimes discussed topics with the daughter as well, but it was infrequent ($X= 6.5$, $SD= 4.4$). Mothers and sons talked about fewer than half of the topics the researchers asked about ($X= 6.5$, $SD= 4.1$), however this still exceeded the father-son discussions ($X= 5.9$, $SD= 2.7$). The researchers further concluded that mother-daughter communication is likely to include more information on sexual health issues than either parent's discussions with sons, and that father-daughter communication exceeds father-son communication on the same issues, although still infrequent.

Feldman and Rosenthal in their survey of 209 teens, 156 mothers, and 91 fathers, (2000) found that girls evaluated their mothers as better sex educators than their fathers, while boys evaluated their parents more equally. On a six- point scale (6 being rated the best), girls rated their fathers an average of a 3.1, while mothers were rated an average 4.3. Boys rated their father an average of a 3.3, and rated their mother as a 3.8. In the 363 families that were surveyed about sexual communication by Fisher (1993), it was found that there was more sex communication between males and males and between females and females. Specifically, when results were compared, if there were significant gender differences in sexual communication, the gender with the higher score was the same sex as the parent about whom the sexual communication was being reported.

The findings of studies looking at the effect of the gender of the parent have been contradictory. For example, Mueller and Powers (1990) found no significant differences between father and mother as primary sources of sexual information, and that sexual activity, contraceptive use, and sexual information accuracy is not affected

by the gender of the parent providing information. However, Dutra et al. (1999) determined that Black and Hispanic female adolescents communicated about sex more with their mothers, but that the male adolescents communicated about sex with both parents equally ($p < .01$). For example, only 31% of the fathers, but 51% of the mothers discussed when their child should start having sex. Twenty-three percent of fathers and 46% of the mothers discussed birth control with their child, and 40% of the fathers and 69% of the mothers discussed STD's. Jaccard et al. (1996) surveyed 751 adolescents and found that perceptions of good relationships with mothers, and maternal disapproval of sexual activity were related significantly to delaying initiation of intercourse. Maternal discussions about contraceptives were significantly related to more consistent use of contraception among those youth who were sexually active ($p < .01$).

Jordan et al. (2000) found in their study that most of the fathers in their sample chose not to respond to the survey, indicating that the mother is the parent who primarily takes the initiative to educate the children about sexual topics. Of those parents surveyed, 87% of the respondents were mothers. Hutchinson and Cooney (1998) discovered similar results in their study of 173 young women. They found that father-teen communication about sex was particularly low. Only 20.9% of their fathers had given their daughters some information on sexuality and less than one quarter of the fathers had ever provided any information on topics like STD, HIV infection, and condoms. This further indicates that with daughters, at least, mothers are the primary communicators of information about sex. Feldman and Rosenthal's work (2000) supports this with their study, which reported that mothers are more

likely to be the sex educators of their children. Mothers tend to evaluate themselves as better sex educators than fathers do, and parents of daughters rate themselves as better educators than parents of sons. It should be noted that very few studies can be found that deal specifically with fathers as sexuality communicators with their children, and of those that do exist the fathers in the samples are primarily White.

Impact on Subsequent Attitudes and Behavior

Several studies have looked at the relationship between parent-child discussions and subsequent sexual attitudes and behavior. The majority of studies to date have found a relationship between parent-child communication and sexual attitudes and behavior. Results of earlier studies found that sex communication between parents and children was associated with lower levels of sexual activity, pregnancy, and more responsible patterns of sexual behavior. (Brody, Ottey, & Lagarnage, 1976, Fox & Inazu, 1980, Furstenburg, 1971; Shah & Zelnick, 1981).

More recent research supports these earlier findings. Results of a longitudinal study by Karofsky et al. (2000), found that better parent-adolescent communication about sex, as perceived by the teenager, was associated with abstinence from sexual intercourse. Two hundred fifty nine subjects were asked to complete questionnaires to find correlates with early sexual activity. Communication between parents and subjects who were classified as “virginal” was higher than those subjects in the “nonvirginal” group. Virginal teens rated their parents as an average 7.9 on a scale of 1-10 (10 being the best) while nonvirginal teens on average, only rated their parents a 6.4. In a study of 1,033 teens, Leland and Barth (1993) found that sexually experienced teens that attempted to avoid HIV were more likely to have had

discussions with their parents regarding a variety of topics related to sexuality ($p < .01$ for those who discussed pregnancy, and $p < .001$ for those who discussed birth control and STD/AIDS). Specifically, of those who had attempted to avoid HIV, 72% (versus 60% of those who did not discuss) had discussed pregnancy, 61% (versus 40%) had discussed birth control, and 66% (versus 43%) had discussed STD/AIDS with a parent. Similarly, Holtzman and Robinson (1995) found in their study of 8,098 high school students that teens who discuss HIV with parents are significantly less likely to engage in unprotected sexual intercourse.

In a study by Shoop and Davidson (1994), communication with parents about sexuality was linked to ability to communicate with a partner about AIDS. These researchers had 80 male and female adolescents complete a questionnaire about sexual behavior, condom use, AIDS knowledge, partner communication, and parent communication about sex. When findings were analyzed, it was determined that those individuals who reported previous discussion with parents about sex were 7 times more likely to feel they could communicate with a partner about AIDS.

Hutchinson and Cooney (1998) surveyed and interviewed 173 women aged 19-20 years and reported that parent-teen communication about sexuality is associated with higher levels of condom use, partner sexual communication, and asking a partner about STDs and number of past partners. Similar results were found in a study of 351 adolescents reported by Blake, Simkin, Ledsky, Perkins, and Calabrese (2001). It was discovered that adolescents who completed homework assignments with a parent, designed to supplement the school's abstinence-only curricula, had stronger intentions to remain abstinent than other adolescents who had not done the homework

assignments. Resnick et al. (1997) determined that adolescents who report feeling connected to parents, family and school, and who have a higher grade point average are more likely to delay initiating sexual intercourse than other teens.

Some studies have linked parental discussion with incidence of pregnancy. In a study of 124 pregnant versus non-pregnant adolescents by Barnett, Papini, and Gbur (1991) it was determined that pregnant adolescents were more likely to perceive communication with their parents as closed and problematic, and that adolescent perceptions of parent-adolescent communication was a predictor of the pregnancy status of the adolescent. Similar findings were reported in a study by Adolph, Ramos, Linton and Grimes (1995) when they looked at 335 Hispanic teenagers. If there was good communication between the mother and the daughter, the teen was less likely to be pregnant, suggesting that pregnant Hispanic teenagers have poorer communication with their parents than non-pregnant teens do.

On the other hand, some studies have found no apparent relationship between parent-child communication and sexual behavior and decisions. Studies by Fisher (1987) Moore, Peterson, and Furstenberg (1986), and Newcomer and Udry (1985) found no relationship between parent-child sexual communication levels and teen sexual activity. Weeks et. al. (1997) conducted a study in which parent-interactive conditions were added to the standard classroom curricula for a group of high school students (n = 2392). It was subsequently discovered that for the experimental group in which parent-interactive conditions were introduced to the regular school curricula, there was no effect on the AIDS related knowledge, attitudes, behavioral intentions, communications patterns and behaviors of the students, indicating that parental

involvement had no effect. Similarly, in a study of 363 college students and their parents, Fisher (1993) found no significant relationship between parent-child communication about sexuality and the sexual activity and contraceptive use of the college students. Furstenberg, Herceg-Baron, Shea and Webb (1984) interviewed 290 adolescent family planning clinic patients about the amount of discussion of sexual matters with their families. The researchers found in their study that teenagers who communicated little with their mothers were just as likely to use effective contraception as the teenagers who reported communicating well with their mothers. This indicates that family communication has no impact on birth control use.

Some studies have yielded mixed results. In a study done by Kotva and Schneider (1990) the results of their study of 50 mother-daughter pairs was mixed. It was found that mother-daughter communication about sex was significantly related to the consistent use of birth control, but not to sexual activity. Lehr, DiIorio, Dudley, and Lipana, (2000) found that communication with parents affects the sexual activity college students. In their study of 732 individuals, when comparing parental sex communication to age of first intercourse, the researchers looked at whether a subject had initiated intercourse before or after age 18 and it was determined that Caucasian individuals with the most open sex communication, and those with the least open communication with parents, were both likely to have initiated sex early.

In conclusion, many of the findings regarding the impact of parent-child communication about sexuality have been contradictory. This leads to many implications for further research and inquiries into why the results are so mixed.

Purpose of Study and Research Questions

From Spring 1990- Spring 2002, students in CHF 351: Human Sexuality have taken a sexual survey. The present study explored the responses to specific questions on the Human Sexuality Survey in the years 1990-2002 to determine if there was a relationship between parent-child communication and sexual attitudes and behaviors. Specifically, this study compared those students who indicated that they had very frequent discussions with their parents about sexuality with those who said they were never able to discuss sexuality issues with their parents and their responses to several sexual attitude and behavior questions (see Appendix A for specific questions). Comparisons were also made between those who indicated that their parents were the most important influence on their sexual attitudes versus those who did not. This study focused on six research questions:

Is there a relationship between parent-child communication and/or influence and:

1. age of first intercourse?
2. number of sex partners?
3. use of contraception?
4. use of condoms?
5. importance of love in a sexual relationship?
6. ability to communicate with partner about safer sex issues?

Chapter 2

METHODOLOGY

Subjects

The sample was obtained from those students who were enrolled in the undergraduate class in Human Sexuality at the University of Maine from 1990 to 2002. Only students aged 18-22 years of age who completed the sexuality survey are included in this study. This sample looks at a total of 2,824 students. Of those, 68% are females, (n = 1,933) and 32% are males (n = 891). See Table 1.

Instrument and Procedure

The questions to be analyzed for this study were obtained from a sexuality survey distributed each year to students enrolled in CHF 351: Human Sexuality. The same course instructor taught the Human Sexuality course during the 1990-2002 period. On the first day of class, the instructor distributed the Human Sexuality Survey, a 104-question sexuality survey on sexual attitudes and behaviors. Students were instructed to complete and return the survey anonymously in an envelope. No identifying information (i.e. name, address) was requested on the survey. Participation was completely voluntary.

Responses for those students who answered “very frequently” and “often” versus those who answered “never” to the questions about how often they communicated with their parents (mother versus father) about sex were compared to responses to questions related to age of first intercourse, number of sex partners, use of contraception, use of condoms, importance of love in a sexual relationship, and

Table 1
Class make-up by sex

YEARS:	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	All Years
Female	56%	68%	63%	66%	67%	68%	78%	75%	65%	73%	74%	65%	70%	68%
Total (n)	102	106	126	122	133	162	152	161	155	165	213	159	177	1,933
Male	44%	32%	37%	34%	33%	32%	22%	25%	35%	27%	26%	35%	30%	32%
Total (n)	80	49	75	63	67	76	44	55	84	62	76	86	74	891
Total (N)	182	155	201	185	200	238	196	216	239	227	289	245	251	2,824

ability to communicate with partner about safer sex issues. Responses for those students who indicated that their major source of influence on their sexual attitudes was their parents (mother, father, or both parents) versus other influences (friends, siblings, school, etc.) were also compared on the questions of interest (See Appendix A).

Data Analysis

Frequency and percentages were reported for responses to each question. In addition, Chi-square analysis were performed for the total sample and by sex (male versus female) for each of the questions.

Chapter 3

RESULTS

The present study explored students' responses to specific questions on the Human Sexuality Survey in the years 1990-2002 to determine if there is a relationship between parent-child interaction and/or parental influence and students' sexual attitudes and behaviors. Responses to the parent-child interaction and parental influence questions for the thirteen years under study are presented below (Tables 2, 3, 4, and 5). This is followed by analysis of male and female responses to specific attitude and behavior questions by parental interaction and influence (Tables 6, and 7). Finally, responses to specific attitude and behavior questions by parental interaction and influence are examined for significant differences over three time periods (Tables 8, 9, and 10).

Data were examined for each year, for three distinct time periods, and for all years together. The data were analyzed to look for changes that might have occurred from year to year, but few were found. It was however useful to look at these slices of trends that were occurring over each of the time periods. Looking at the group of respondents for all years, and then at respondents for three time periods helped to determine if any of the significant differences for the entire sample was driven by major changes in one of the time periods. These findings do not show that any one of the time periods was largely responsible for significant findings for the total sample.

Responses to Parental Interaction and Influence Questions from 1990 to 2002

Students were asked to respond to the question, "How often did you ask your mother questions about sexuality before you came to college?" Response options

Table 2
Responses by year to the question, "How often did you ask your mother questions about sexuality before you came to college?"

YEARS	1990 (n=18 2)	1991 (n=155)	1992 (n=201)	1993 (n=185)	1994 (n=200)	1995 (n=238)	1996 (n=196)	1997 (n=216)	1998 (n=239)	1999 (n=227)	2000 (n=289)	2001 (n=245)	2002 (n=251)	Total (n=2,824)
Very Frequently	8%	5%	6%	8%	6%	6%	5%	8%	7%	9%	6%	9%	6%	7%
Often	8%	8%	5%	7%	4%	5%	9%	3%	4%	8%	2%	8%	5%	6%
Occasionally	12%	11%	16%	12%	11%	17%	11%	12%	13%	14%	15%	12%	14%	13%
Rarely	17%	16%	13%	17%	22%	15%	19%	20%	17%	19%	18%	17%	18%	17%
Very Infrequently	24%	23%	24%	21%	25%	22%	20%	24%	24%	21%	24%	22%	22%	23%
Never	31%	37%	36%	35%	32%	35%	36%	33%	35%	29%	35%	32%	35%	34%

Table 3

Responses by year to the question, "How often did you ask your father questions about sexuality before you came to college?"

YEARS	1990 (n=182)	1991 (n=155)	1992 (n=201)	1993 (n=185)	1994 (n=200)	1995 (n=238)	1996 (n=196)	1997 (n=216)	1998 (n=239)	1999 (n=227)	2000 (n=289)	2001 (n=245)	2002 (n=251)	Total (n=2,824)
Very Frequently	1%	2%	0%	3%	1%	2%	0%	0%	1%	1%	1%	2%	2%	1%
Often	1%	2%	1%	1%	1%	0%	4%	2%	2%	2%	0%	1%	3%	2%
Occasionally	4%	2%	4%	3%	4%	3%	5%	5%	3%	4%	4%	4%	2%	4%
Rarely	15%	5%	13%	7%	10%	8%	9%	6%	9%	11%	7%	8%	8%	9%
Very Infrequently	16%	9%	11%	9%	13%	8%	10%	12%	8%	16%	9%	12%	14%	11%
Never	63%	80%	71%	77%	71%	79%	72%	75%	77%	66%	79%	73%	71%	73%

ranged from “Very Frequently,” “Often,” “Occasionally,” “Rarely,” “Very Infrequently,” to “Never.” As noted in Table 2, every year the majority of students indicated that they “Rarely,” “Very Infrequently,” or “Never” asked their mother a question about sex (74% of the total sample). The most frequent response was “Never” (ranging from 29% to 37% of the sample). Only a very small percentage (ranging from 2% to 9%) indicated that they asked their mother questions “Very Frequently” or “Often.”

Students were also asked to indicate how often they asked their father a question related to sexuality before they came to college. The response options were the same as above. As seen in Table 3, most students (63% to 80%) responded that they have “Never” asked their father a question about sex. Only a handful of students indicated that they were able to ask questions “Very Frequently” or “Often” (ranging from 0% to 4% of the sample).

A third question on the Human Sexuality Survey asked students to choose from a list of options as to, “Which has been your most important influence on your sexual attitudes?” The options included: “Mother,” “Father,” “Both parents,” “Religion,” “Media,” “Siblings – same sex,” “Siblings – other sex,” “Friends – same sex,” “Friends – other sex,” and “School.” Responses are presented in Table 4 from most to least often selected influence. In every year from 1990 to 2002, students indicated “Friends - same sex” (43% for all years) as their most important influence. For all years, other important influences were “Mother,”(14%) “Friends – other sex,”(12%) and “Both Parents”(10%). Students were least likely to choose “Siblings – other

Table 4

Responses by year to the question, "Which has been your most important influence on your sexual attitudes?"

YEARS	1990 (n=182)	1991 (n=155)	1992 (n=201)	1993 (n=185)	1994 (n=200)	1995 (n=238)	1996 (n=196)	1997 (n=216)	1998 (n=239)	1999 (n=227)	2000 (n=289)	2001 (n=245)	2002 (n=251)	Total (n=2,824)
Friends – same sex	52%	47%	48%	40%	40%	43%	42%	49%	44%	39%	45%	38%	42%	43%
Mother	15%	12%	17%	17%	12%	12%	16%	13%	11%	19%	13%	15%	9%	14%
Friends – other sex	10%	9%	7%	11%	16%	17%	11%	9%	11%	12%	11%	15%	12%	12%
Both Parents	12%	9%	10%	11%	12%	7%	6%	11%	12%	12%	11%	6%	13%	10%
School	3%	8%	2%	6%	8%	6%	7%	5%	6%	4%	8%	8%	4%	6%
Siblings – same sex	0%	5%	5%	5%	4%	4%	6%	5%	4%	4%	8%	11%	11%	6%
Media	4%	5%	7%	2%	3%	6%	7%	4%	5%	7%	0%	0%	0%	4%
Religion	2%	1%	2%	3%	1%	2%	1%	2%	4%	1%	2%	5%	4%	2%
Father	2%	1%	1%	4%	1%	1%	2%	1%	2%	1%	1%	1%	3%	2%
Siblings – other sex	0%	3%	1%	1%	3%	2%	2%	1%	1%	1%	1%	1%	2%	1%

Table 5

Comparison of males and females to their reports of parental interaction and influence

	Males (n=891)	Females (n=1,933)	Significance
Ask Mother Questions			.001
Very Frequently	4%	8%	
Often	3%	7%	
Occasionally	9%	15%	
Rarely	16%	18%	
Very Infrequently	21%	24%	
Never	47%	28%	
Ask Father Questions			.001
Very Frequently	3%	1%	
Often	3%	1%	
Occasionally	6%	2%	
Rarely	13%	7%	
Very Infrequently	15%	9%	
Never	60%	80%	
Important Influence			.001
Mother	7%	17%	
Father	4%	1%	
Both parents	9%	11%	
Religion	2%	2%	
Media	5%	3%	
Siblings– same sex	8%	5%	
Siblings – other sex	1%	1%	
Friends – same sex	43%	44%	
Friends – other sex	15%	10%	
School	6%	6%	

sex,” (1%) “Father,” (2%) and “Religion” (2%) as the most important influence on their sexual attitudes. Further analysis compared responses of males and females to these three major questions over all years. As reported in Table 5, Chi-Square tests for independence determined that there were significant differences between males ($n = 891$) and females ($n = 1,933$) on these questions. Specifically, females were more likely to report that they had asked their mother questions related to sexuality, whereas males were significantly more likely to indicate that they had never asked their mother a question ($X^2 = 114.00, p = .001$). Significant differences were found between males and females on how often they asked their father a question about sex. While almost everyone said they never asked their father a question, males were more likely to indicate that they had asked a question (even if it was only rarely or occasionally) as compared to females ($X^2 = 134.65, p = .001$).

Finally, significant differences were found between males and females in terms of the important influence on their sexual attitudes ($X^2 = 108.85, p = .001$). Females were more likely than males to choose their mother as an important influence (17% versus 7%), while males were more likely than females to choose their father as an important influence (4% versus 1%).

Responses by Males and Females on Attitude and Behavior Questions by Parental Interaction and Influence

Students were asked to respond to a series of questions about their sexual attitudes and behaviors. These included questions about age of first intercourse, number of sexual partners, use of birth control in last three months (if sexually active), likelihood to refuse sex if no condom is available, and importance of sex and love.

Seven questions asked about their likelihood to communicate with their sexual partner about his/her number of previous sexual partners, condom use, IV drug use, past sexual involvement with IV drug user, exposure to HIV, past sexual involvement with a gay man, and having ever been tested for HIV.

Their responses to these attitude and behavior questions were compared with their responses to the three major questions about parental interaction and influence. Specifically, analysis compared those who indicated they had never been able to ask their parent (mother or father) questions about sex versus those who were able to ask questions often of their parents. Due to the small number of students who indicated they asked their parent a question “Very Frequently” or “Often,” these groups were combined to make up the new group labeled “Often.” In terms of important influence, two comparison groups were developed. The “Parent” group was created by combining responses of those who chose “Mother,” “Father,” or “Both Parents” and the “Other” group was created by combining responses to all the other sources.

Male responses on the sexual attitude and behavior questions were compared against the three major questions about parental influence and interaction. In terms of comparing those males who reported they never asked their mother a question ($n = 416$) versus those who were able to ask questions often ($n = 63$), some significant differences were found in their sexual attitudes and behaviors. As reported in Table 6, males who said that they were often able to ask their mother questions about sex, were significantly more likely to report that they could communicate with their sexual partner on issues such as IV drug use ($\chi^2 = 6.04$, $p = .014$), previous sexual partner’s IV drug use ($\chi^2 = 4.60$, $p = .032$), exposure to HIV ($\chi^2 = 9.60$, $p = .002$), and

Table 6
Males responses on attitude and behavior questions by parental interaction and influence

	Ask Mother Question			Ask Father Question			Important Influence		
	Never (n=416)	Often (n=63)	Sig	Never (n=530)	Often (n=49)	Sig	Other (n=719)	Parents (n=168)	Sig
Age of first intercourse									
15 or <	21%	26%	.620	20%	34%	.079	22%	21%	.809
16 years	21%	20%		21%	12%		19%	16%	
17 years	24%	28%		22%	27%		24%	24%	
18 or >	34%	26%		37%	27%		35%	39%	
Number of sex partners									
0	7%	8%	.155	8%	6%	.782	7%	16%	.008
1	21%	16%		20%	25%		18%	18%	
2	14%	6%		12%	8%		13%	13%	
3-4	30%	37%		32%	26%		32%	31%	
5-6	19%	16%		19%	25%		19%	15%	
7 or >	9%	17%		9%	10%		11%	7%	
Use birth control every time									
Yes	77%	60%	.010	77%	65%	.084	76%	80%	.252
No	23%	40%		23%	35%		24%	20%	
Refuse sex if no condom									
Likely	63%	62%	.968	64%	61%	.681	63%	67%	.251
Unlikely	37%	38%		36%	39%		37%	33%	
How important is love with sex									
Important	47%	56%	.389	47%	49%	.787	45%	62%	.001
Somewhat	31%	27%		31%	27%		33%	24%	
Unimportant	22%	18%		22%	24%		22%	14%	

Table 6 continued
Males responses on attitude and behavior questions by parental interaction and influence

	Ask Mother Question			Ask Father Question			Important Influence		
	Never (n=416)	Often (n=63)	Sig	Never (n=530)	Often (n=49)	Sig	Other (n=719)	Parents (n=168)	Sig
Ask about number of partners									
Likely	70%	81%	.063	70%	78%	.264	71%	79%	.041
Unlikely	30%	19%		30%	22%		29%	21%	
Discuss condom use									
Likely	84%	86%	.696	86%	90%	.488	87%	90%	.261
Unlikely	16%	14%		14%	10%		13%	10%	
Ask partner if used IV drugs									
Likely	28%	44%	.014	27%	35%	.234	27%	39%	.002
Unlikely	72%	57%		73%	65%		73%	61%	
Ask if had sex with IV user									
Likely	24%	37%	.032	23%	33%	.130	23%	32%	.027
Unlikely	76%	64%		77%	67%		77%	68%	
Ask if exposed to HIV									
Likely	44%	65%	.002	44%	60%	.042	46%	53%	.097
Unlikely	56%	35%		56%	40%		54%	47%	
Ask if had sex with gay man									
Likely	14%	22%	.072	14%	20%	.209	14%	19%	.157
Unlikely	86%	78%		86%	80%		86%	81%	
Ask if ever tested for HIV									
Likely	35%	53%	.005	37%	50%	.074	40%	42%	.707
Unlikely	65%	47%		63%	50%		60%	58%	

willingness to ask their partner if they have ever been tested for HIV ($X^2 = 7.77$, $p = .005$). When looking at only those males who had been sexually active in the past three months ($n = 348$), those who had never spoken to their mother ($n = 301$) were found to be significantly more likely to say they used birth control every time ($X^2 = 6.59$, $p = .010$) as compared to those who were able to talk with their mother often ($n = 47$). There were no significant differences between males who never asked their mother a question and those who were able to do so often on age of first intercourse, number of sex partners, refusing sex if no condom, importance of love with sex, and likelihood of asking partner about number of previous sex partners, discussing condom use, and asking about previous sex with a gay man.

No significant differences were found on the sexual attitude and behavior question between those males who indicated they never asked their father a question about sex ($n = 530$) as compared to those who said they often asked their father ($n = 49$). The fact that the “Often” group was so much smaller (only 8% of the sample) may explain the inability to find any significant differences between these two groups.

In terms of the important influence on their sexual attitudes, males who indicated that their parents were the most important influence ($n = 168$) were significantly different from those who chose other influences in terms of reporting that they had zero sexual partners ($X^2 = 15.54$, $p = .008$), and to say that love with sex is important ($X^2 = 15.42$, $p = .001$). These males were also significantly more likely than those who chose other influences to ask their partner about number of past sexual partners ($X^2 = 4.19$, $p = .041$), partner’s IV drug use ($X^2 = 9.39$, $p = .002$), and past sexual involvement with an IV drug user ($X^2 = 4.87$, $p = .027$). No significant

differences were found between these two groups in terms of age of first intercourse, use of birth control every time in the past three months, refusing sex if there is no condom, likelihood to discuss condom use, exposure to HIV, past sex involvement with a gay man, and being tested for HIV.

Female responses on the sexual attitude and behavior questions were also compared against the three major questions about parental influence and interaction. See Table 7. In terms of comparing those females who reported they never asked their mother a question about sex ($n = 538$) to those who were able to ask their mother questions often ($n = 289$), significant differences were found in their ability to communicate with their partner. Those females who said they were able to ask their mother questions about sex often, were significantly more likely to be able to ask their partner about number of past sexual partners ($\chi^2 = 8.66$, $p = .003$), discuss condom use ($\chi^2 = 6.15$, $p = .013$), ask about IV drug use ($\chi^2 = 13.89$, $p = .001$), ask about past sexual involvement with an IV drug user ($\chi^2 = 11.31$, $p = .001$), ask if a previous partner had ever been exposed to HIV ($\chi^2 = 11.89$, $p = .001$), ask if a previous partner had ever had sex with a gay man ($\chi^2 = 10.57$, $p = .001$), and ask if they had ever been tested for HIV ($\chi^2 = 11.99$, $p = .001$). No significant differences were found between the two groups on age of first intercourse, number of sex partners, use of birth control every time in the last three months, refusing sex without a condom, and importance of love with sex.

When females indicated how often they were able to ask their father a question about sex, only 29 females in this sample were in the "Often" group. The overwhelming majority of females ($n = 1,533$) indicated they never asked their father

Table 7
Females responses on attitude and behavior questions by parental interaction and influence

	Ask Mother Question			Ask Father Question			Important Influence		
	Never (n=538)	Often (n=289)	Sig	Never (n=1,533)	Often (n=29)	Sig	Other (n=1,390)	Parents (n=536)	Sig
Age of first intercourse									
15 or <	23%	27%	.376	27%	15%	.043	28%	21%	.001
16 years	20%	20%		22%	10%		22%	19%	
17 years	24%	25%		23%	50%		23%	24%	
18 or >	33%	28%		28%	25%		27%	36%	
Number of sex partners									
0	9%	12%	.421	10%	28%	.022	10%	14%	.001
1	23%	19%		21%	14%		19%	27%	
2	16%	13%		15%	14%		14%	16%	
3-4	32%	34%		33%	27%		34%	29%	
5-6	15%	16%		17%	7%		19%	11%	
7 or >	5%	6%		4%	10%		5%	3%	
Use birth control every time									
Yes	78%	86%	.019	81%	93%	.244	79%	85%	.014
No	22%	14%		19%	7%		21%	15%	
Refuse sex if no condom									
Likely	89%	87%	.322	87%	90%	.693	86%	90%	.025
Unlikely	11%	13%		13%	10%		14%	10%	
How important is love with sex									
Important	73%	72%	.885	73%	79%	.239	71%	81%	.001
Somewhat	20%	21%		22%	11%		23%	14%	
Unimportant	7%	7%		6%	10%		6%	5%	

Table 7 continued
 Females responses on attitude and behavior questions by parental interaction and influence

	Ask Mother Question			Ask Father Question			Important Influence		
	Never (n=538)	Often (n=289)	Sig	Never (n=1,533)	Often (n=29)	Sig	Other (n=1,390)	Parents (n=536)	Sig
Ask about number of partners									
Likely	84%	91%	.003	86%	97%	.098	86%	89%	.077
Unlikely	16%	9%		14%	3%		14%	11%	
Discuss condom use									
Likely	90%	95%	.013	92%	90%	.612	92%	95%	.077
Unlikely	10%	5%		8%	10%		8%	5%	
Ask partner if used IV drugs									
Likely	38%	52%	.001	42%	48%	.493	41%	53%	.001
Unlikely	62%	48%		58%	52%		59%	47%	
Ask if had sex with IV user									
Likely	31%	42%	.001	32%	35%	.740	31%	42%	.001
Unlikely	69%	58%		68%	65%		69%	58%	
Ask if exposed to HIV									
Likely	58%	70%	.001	60%	76%	.091	59%	69%	.001
Unlikely	42%	30%		40%	24%		41%	31%	
Ask if had sex with gay man									
Likely	19%	29%	.001	20%	38%	.019	19%	25%	.007
Unlikely	81%	71%		80%	62%		81%	75%	
Ask if ever tested for HIV									
Likely	53%	66%	.001	57%	76%	.038	56%	65%	.001
Unlikely	47%	34%		43%	43%		44%	35%	

a question about sex. When comparing these two groups on the sexual attitude and behavior questions, very few significant differences were found. Those few females who were able to ask their father questions often were significantly more likely to begin having sexual intercourse at 17 years of age – a later age than the “Never” group ($X^2 = 8.18$, $p = .043$), and to have had zero sexual partners ($X^2 = 13.20$, $p = .022$) as compared to those females who never asked their father a question about sex. These females were significantly more likely to ask a partner if they had had sex with a gay man ($X^2 = 5.53$, $p = .019$), and ask if their partner had ever been tested for HIV ($X^2 = 4.29$, $p = .038$). No significant differences were found between the two groups of females on all the other sexual attitude and behavior questions.

In terms of the important influence on their sexual attitudes, females who indicated that their parents were the most important influence ($n = 536$) were significantly different from those who chose other influences ($n = 1,390$) on nearly all of the sexual attitude and behavior questions. Specifically, the females who said their parents were their most important influence were significantly more likely to begin having sex at a later age ($X^2 = 16.12$, $p = .001$), have fewer sexual partners ($X^2 = 36.19$, $p = .001$), use birth control every time they had sex in the past three months ($X^2 = 6.02$, $p = .014$), refuse sex if there is no condom ($X^2 = 5.05$, $p = .025$), and feel that love with sex is important ($X^2 = 22.46$, $p = .001$).

In terms of their likelihood to communicate with their sexual partner, females who identified their parents as their most important influence on their sexual attitudes were significantly more likely to ask a sexual partner about IV drug use ($X^2 = 22.68$, $p = .001$), their partner’s previous involvement with an IV drug user ($X^2 = 22.80$, $p =$

.001), exposure to HIV ($X^2 = 14.79$, $p = .001$), any sexual relationships with a gay man ($X^2 = 7.36$, $p = .007$), and having been tested for HIV ($X^2 = 14.34$, $p = .001$). No significant differences were found between the two groups of females and likelihood of asking a partner about past number of partners, and discussion of condom use. For both questions, the majority of women in both groups were likely to ask.

Responses Grouped by Years on Attitude and Behavior Questions by Parental

Interaction and Influence

Further analysis of the data included looking at three separate time periods to determine if there were any significant differences in responses to sexual attitude and behavior questions in relation to the three major parental interaction and influence questions across the thirteen years. See Table 8, 9, and 10. The three time periods included responses for 1990 and 1991, 1995 and 1996, and 2001 and 2002. Results for the total sample are also presented in the tables.

Comparisons were made for responses on the sexual attitude and behavior questions for all students who completed the Human Sexuality Survey from 1990 to 2002 (All Years). Significant differences were found for those who reported they never asked their mother a question ($n = 954$) versus those who were able to ask questions often ($n = 353$). As found in Table 8, those students who said they were able to ask their mother questions often, were significantly more likely to think that sex with love is important ($X^2 = 7.03$, $p = .030$), and to be more likely to communicate with their sexual partner. Specifically, the "Often" group was significantly more likely than the "Never" group to ask their partner about number of previous sexual partners ($X^2 = 22.89$, $p = .001$), discuss condom use ($X^2 = 9.31$, $p = .002$), ask about

IV drug use ($X^2 = 29.37$, $p = .001$), ask about sexual involvement with an IV drug user ($X^2 = 22.00$, $p = .001$), ask about exposure to HIV ($X^2 = 31.71$, $p = .001$), ask about sex with a gay man ($X^2 = 19.74$, $p = .001$), and ask about ever being tested for HIV ($X^2 = 34.22$, $p = .001$). No significant difference was found for the total sample on age of first intercourse, number of sex partners, use of birth control in the last three months, and refusal of sex if there is no condom.

A closer examination of the three selected time periods revealed some significant differences between those who “Never” asked their mother a question versus “Often.” In both 1990-1991 and 1995-1996, those who indicated they asked their mother questions often were significantly more likely to ask a partner about their past number of partners ($X^2 = 8.40$, $p = .004$; $X^2 = 5.29$, $p = .021$), IV drug use ($X^2 = 3.86$, $p = .049$; $X^2 = 5.29$, $p = .021$), exposure to HIV ($X^2 = 11.43$, $p = .001$; $X^2 = 6.04$, $p = .014$) and having ever been tested for HIV ($X^2 = 12.91$, $p = .001$; $X^2 = 4.52$, $p = .034$). In 2001-2002, those in the “Often” group were significantly more likely to ask a partner about exposure to HIV ($X^2 = 6.75$, $p = .009$), previous sexual involvement with a gay man ($X^2 = 12.03$, $p = .001$), and having been tested for HIV ($X^2 = 6.06$, $p = .014$).

In terms of responses to sexual attitude and behavior questions by those who reported that they asked their father questions “Often” ($n = 78$) versus “Never” ($n = 2,067$), only responses to two questions were found to be significantly different for the total sample. It should be noted that only 4% of the total sample (All Years) said they “Often” asked their father a question about sex. As reported in Table 9, those students who asked a question “Often” of their father were more likely to say they

Table 8

Responses grouped by "Never" and "Often" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "How often did you ask your mother questions about sexuality before you came to college?"

	1990-1991			1995-1996			2001-2002			All Years		
	Never (n=113)	Often (n=50)	Sig	Never (n=154)	Often (n=50)	Sig	Never (n=165)	Often (n=67)	Sig	Never (n=954)	Often (n=353)	Sig
Age of first intercourse												
15 or <	13%	20%	.605	19%	27%	.662	19%	26%	.581	22%	27%	.143
16 years	25%	18%		20%	18%		19%	23%		20%	21%	
17 years	20%	22%		30%	31%		25%	21%		24%	25%	
18 or >	42%	40%		31%	24%		37%	30%		34%	27%	
Number of sex partners												
0	2%	8%	.144	9%	8%	.619	9%	15%	.219	8%	11%	.168
1	25%	14%		22%	16%		27%	21%		22%	18%	
2	15%	10%		10%	6%		20%	15%		15%	12%	
3-4	34%	33%		34%	40%		26%	37%		31%	35%	
5-6	14%	25%		17%	16%		11%	9%		17%	16%	
7 or >	10%	10%		8%	14%		7%	3%		7%	8%	
Use birth control every time												
Yes	78%	81%	.693	74%	68%	.489	86%	88%	.674	78%	81%	.249
No	22%	19%		26%	32%		14%	12%		22%	19%	
Refuse sex if no condom												
Likely	69%	71%	.740	75%	84%	.167	75%	74%	.962	78%	82%	.064
Unlikely	31%	29%		25%	16%		25%	26%		22%	18%	
How important is love with sex												
Important						.118		70%	.435		70%	.030
Somewhat	54%	72%	.096	63%	64%		61%	20%		61%	21%	
Unimportant	34%	20%		21%	30%		24%	10%		25%	9%	
	12%	8%		16%	6%		15%			14%		

Table 8 continued

Responses grouped by "Never" and "Often" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "How often did you ask your mother questions about sexuality before you came to college?"

	1990-1991			1995-1996			2001-2002			All Years		
	Never (n=113)	Often (n=50)	Sig	Never (n=154)	Often (n=50)	Sig	Never (n=165)	Often (n=67)	Sig	Never (n=954)	Often (n=353)	Sig
Ask about number of partners												
Likely	61%	84%	.004	83%	96%	.021	78%	87%	.138	78%	90%	.001
Unlikely	39%	16%		17%	4%		22%	13%		22%	10%	
Discuss condom use												
Likely	86%	90%	.465	90%	90%	.978	84%	91%	.168	87%	93%	.002
Unlikely	14%	10%		10%	10%		16%	9%		13%	7%	
Ask partner if used IV drugs												
Likely	30%	46%	.049	35%	53%	.021	41%	54%	.068	34%	50%	.001
Unlikely	70%	54%		65%	47%		59%	46%		66%	50%	
Ask if had sex with IV user												
Likely	27%	36%	.222	28%	42%	.062	31%	42%	.113	28%	41%	.001
Unlikely	73%	64%		72%	58%		69%	58%		72%	59%	
Ask if exposed to HIV												
Likely	34%	62%	.001	61%	81%	.014	52%	70%	.009	52%	69%	.001
Unlikely	66%	38%		39%	19%		48%	30%		48%	31%	
Ask if had sex with gay man												
Likely	15%	22%	.278	20%	30%	.160	16%	37%	.001	17%	28%	.001
Unlikely	85%	78%		80%	70%		84%	63%		83%	72%	
Ask if ever tested for HIV												
Likely	20%	48%	.001	57%	74%	.034	45%	63%	.014	45%	64%	.001
Unlikely	80%	52%		43%	26%		55%	37%		55%	36%	

would refuse sex if there was no condom ($X^2 = 4.44$, $p = .035$) and believe that love with sex is important ($X^2 = 6.97$, $p = .031$). When looking across the three separate time periods, only one significant difference was found. Those in the 2001-2002 sample, who said they could ask their father questions often about sex, were more likely to say that they would ask their partner if they had ever been exposed to HIV ($X^2 = 4.29$, $p = .038$). No other significant differences were found across the three separate time periods.

The final analysis looked at the responses to the sexual attitude and behavior questions by the student's most important influence on their sexual attitudes. As seen in Table 10, students were grouped by "Parent" ($n = 708$) or "Other" ($n = 2,054$). For the total sample (All Years), significant differences were found between these two groups on all sexual attitude and behavior questions. Students who said their parents were their most important influence were more likely to begin sex at a later age ($X^2 = 11.78$, $p = .008$), have fewer sexual partners ($X^2 = 47.87$, $p = .001$), use birth control every time they had sex in the past three months ($X^2 = 8.25$, $p = .004$), refuse sex if there was no condom ($X^2 = 13.59$, $p = .001$), and believe love with sex is important ($X^2 = 49.62$, $p = .001$). They were also more likely to be able to communicate with their partner. Specifically, those who chose their parents as their most important influence were more likely to ask their partner about number of previous sexual partners ($X^2 = 11.73$, $p = .001$), discuss condom use ($X^2 = 6.35$, $p = .012$), ask about IV drug use ($X^2 = 39.98$, $p = .001$), ask about sexual involvement with an IV drug user ($X^2 = 32.75$, $p = .001$), ask about exposure to HIV ($X^2 = 23.22$, $p = .001$), ask

Table 9

Responses grouped by "Never" and "Often" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "How often did you ask your father questions about sexuality before you came to college?"

	1990-1991			1995-1996			2001-2002			All Years		
	Never (n=238)	Often (n=10)	Sig	Never (n=326)	Often (n=12)	Sig	Never (n=354)	Often (n=18)	Sig	Never (n=2,067)	Often (n=78)	Sig
Age of first intercourse												
15 or <	15%	30%	.590	23%	46%	.166	25%	29%	.546	25%	28%	.067
16 years	20%	10%		24%	9%		20%	7%		22%	11%	
17 years	21%	20%		26%	36%		24%	36%		23%	34%	
18 or >	44%	40%		27%	9%		31%	28%		30%	27%	
Number of sex partners												
0	4%	0%	.586	8%	0%	.495	15%	22%	.278	10%	14%	.287
1	21%	0%		19%	17%		23%	39%		20%	21%	
2	17%	20%		12%	8%		15%	0%		14%	10%	
3-4	33%	40%		37%	33%		29%	28%		33%	27%	
5-6	17%	30%		17%	25%		14%	6%		17%	18%	
7 or >	8%	10%		5%	17%		4%	5%		6%	10%	
Use birth control every time												
Yes	79%	89%	.461	78%	64%	.274	84%	82%	.825	80%	72%	.183
No	21%	11%		22%	36%		16%	18%		20%	28%	
Refuse sex if no condom												
Likely	73%	60%	.377	81%	67%	.207	78%	72%	.582	81%	72%	.035
Unlikely	27%	40%		19%	33%		22%	28%		19%	28%	
How important is love with sex												
Important												
Somewhat	67%	60%	.906	63%	59%	.065	64%	61%	.926	66%	60%	.031
Unimportant	24%	30%		25%	8%		24%	28%		24%	21%	
	9%	10%		12%	33%		12%	11%		10%	19%	

Table 9 continued

Responses grouped by "Never" and "Often" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "How often did you ask your father questions about sexuality before you came to college?"

	1990-1991			1995-1996			2001-2002			All Years		
	Never (n=238)	Often (n=10)	Sig	Never (n=326)	Often (n=12)	Sig	Never (n=354)	Often (n=18)	Sig	Never (n=2,067)	Often (n=78)	Sig
Ask about number of partners												
Likely	68%	70%	.876	86%	92%	.587	85%	89%	.649	82%	85%	.515
Unlikely	32%	30%		14%	8%		15%	11%		18%	15%	
Discuss condom use												
Likely	82%	90%	.865	91%	82%	.299	89%	89%	.997	91%	90%	.768
Unlikely	12%	10%		9%	18%		11%	11%		9%	10%	
Ask partner if used IV drugs												
Likely	34%	20%	.357	37%	27%	.526	41%	39%	.880	38%	40%	.713
Unlikely	66%	80%		63%	73%		59%	61%		62%	60%	
Ask if had sex with IV user												
Likely	27%	10%	.225	29%	42%	.337	30%	28%	.864	29%	33%	.454
Unlikely	73%	90%		71%	58%		70%	72%		71%	67%	
Ask if exposed to HIV												
Likely	43%	40%	.858	59%	60%	.938	53%	78%	.038	56%	66%	.098
Unlikely	57%	60%		41%	40%		47%	22%		44%	34%	
Ask if had sex with gay man												
Likely	19%	0%	.134	23%	33%	.398	17%	33%	.084	19%	27%	.062
Unlikely	81%	100%		77%	67%		83%	67%		81%	73%	
Ask if ever tested for HIV												
Likely	28%	30%	.899	60%	83%	.098	46%	61%	.207	52%	60%	.159
Unlikely	72%	70%		40%	17%		54%	39%		48%	40%	

Table 10

Responses grouped by "Parents" and "Other" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "Which has been your most important influence on your sexual attitudes?"

	1990-1991			1995-1996			2001-2002			All Years		
	Parent (n=86)	Other (n=250)	Sig	Parent (n=93)	Other (n=338)	Sig	Parent (n=114)	Other (n=379)	Sig	Parent (n=708)	Other (n=2,054)	Sig
Age of first intercourse												
15 or <	11%	15%	.333	24%	25%	.463	23%	24%	.894	21%	26%	.008
16 years	15%	20%		165	24%		19%	22%		19%	21%	
17 years	21%	23%		28%	25%		26%	23%		24%	23%	
18 or >	53%	42%		32%	26%		32%	31%		36%	30%	
Number of sex partners												
0	9%	5%	.231	10%	7%	.037	18%	13%	.068	14%	9%	.001
1	20%	17%		28%	16%		39%	21%		25%	19%	
2	18%	14%		10%	13%		16%	15%		15%	14%	
3-4	33%	34%		31%	37%		25%	31%		30%	33%	
5-6	16%	21%		19%	18%		7%	16%		12%	19%	
7 or >	4%	9%		2%	9%		4%	4%		4%	7%	
Use birth control every time												
Yes	78%	77%	.855	82%	77%	.345	86%	82%	.420	84%	78%	.004
No	22%	23%		18%	23%		14%	18%		16%	22%	
Refuse sex if no condom												
Likely	77%	67%	.091	90%	77%	.006	78%	76%	.592	85%	78%	.001
Unlikely	23%	33%		10%	23%		22%	24%		15%	22%	
How important is love & sex												
Important	80%	62%	.006	65%	63%	.735	76%	61%	.011	77%	62%	.001
Somewhat	15%	28%		24%	24%		17%	26%		16%	26%	
Unimportant	5%	10%		11%	14%		7%	13%		7%	12%	

Table 10 continued

Responses grouped by "Parents" and "Other" for 1990-1991, 1995-1996, 2001-2002, and all years to the question, "Which has been your most important influence on your sexual attitudes?"

	1990-1991			1995-1996			2001-2002			All Years		
	Parent (n=86)	Other (n=250)	Sig	Parent (n=93)	Other (n=338)	Sig	Parent (n=114)	Other (n=379)	Sig	Parent (n=708)	Other (n=2,054)	Sig
Ask about number of partners												
Likely	77%	65%	.050	89%	86%	.352	87%	81%	.139	86%	81%	.001
Unlikely	23%	35%		11%	14%		13%	19%		14%	19%	
Discuss condom use												
Likely	91%	88%	.503	96%	90%	.097	92%	88%	.237	94%	90%	.012
Unlikely	9%	12%		4%	10%		8%	12%		6%	10%	
Ask partner if used IV drugs												
Likely	42%	30%	.049	46%	37%	.092	55%	38%	.001	50%	36%	.001
Unlikely	58%	70%		54%	63%		45%	62%		50%	64%	
Ask if had sex with IV user												
Likely	35%	25%	.067	43%	27%	.003	42%	29%	.009	40%	28%	.001
Unlikely	65%	75%		57%	73%		58%	71%		60%	72%	
Ask if exposed to HIV												
Likely	49%	41%	.200	62%	61%	.920	67%	50%	.002	65%	55%	.001
Unlikely	51%	59%		38%	39%		33%	50%		35%	45%	
Ask if had sex with gay man												
Likely	17%	16%	.755	28%	21%	.149	29%	18%	.009	24%	18%	.001
Unlikely	83%	84%		72%	79%		71%	82%		76%	82%	
Ask if ever tested for HIV												
Likely	34%	27%	.213	72%	60%	.038	59%	44%	.005	60%	50%	.001
Unlikely	66%	73%		28%	40%		41%	56%		40%	50%	

about sex with a gay man ($X^2 = 12.12$, $p = .001$), and ask about ever being tested for HIV ($X^2 = 18.26$, $p = .001$). Further examination of the data by the three time periods revealed some significant differences between the “Parent” and “Other” important influences groups. In 1990-1991, three questions were significant. Those who identified their parent as their most important influence were significantly more likely to believe that sex with love is important ($X^2 = 10.02$, $p = .007$), were more likely to ask a partner about number of previous sex partners ($X^2 = 3.85$, $p = .050$), and to ask a partner about IV drug use ($X^2 = 3.87$, $p = .049$). In 1995-1996, those who said their parents were their most important influence had significantly fewer sex partners ($X^2 = 11.84$, $p = .037$), were more likely to refuse sex without a condom ($X^2 = 7.68$, $p = .006$), to ask a partner if they had had sex with an IV drug user ($X^2 = 8.56$, $p = .003$), and to ask if they had ever been tested for HIV ($X^2 = 4.29$, $p = .038$). In the 2001-2001 sample, the “Parent” group was significantly more likely to believe sex with love was important ($X^2 = 8.96$, $p = .011$), to ask a partner about IV drug use ($X^2 = 10.18$, $p = .001$), past involvement with an IV drug user ($X^2 = 6.92$, $p = .009$), exposure to HIV ($X^2 = 9.95$, $p = .002$), previous sexual involvement with a gay man ($X^2 = 6.77$, $p = .009$), and having ever been tested for HIV ($X^2 = 7.94$, $p = .005$).

Chapter 4

DISCUSSION

The purpose of this study was to determine if there is in fact any relationship between the amount of interaction and influence parents have with their children, and their children's later sexual behavior and attitudes. This study analyzed data collected from students enrolled in a human sexuality class from 1990 to 2002. The results will be discussed in this chapter. Additionally, the implications of those results and the limitations of the study will be reviewed.

Parental Interaction and Influence

Results of the study show that clearly parents and children in this sample are not talking about sex very frequently. In all the years studied, the majority of the students said that they never asked their mother or father a question about sex. This is consistent with previous research, which has found that communication between children and parents about sex is low (Furstenberg, Herceg-Baron, Shea and Webb, 1984; Hutchinson and Cooney, 1998; Nolin and Petersen, 1992; Rosenthal and Feldman, 1999). This finding was particularly pronounced when examining the results for how often students asked their father a question, with nearly three quarters of the total sample indicating that they never asked their father a question. Consistent with this study, Feldman and Rosenthal (2000), Hutchinson and Cooney (1998), and Jordan, Price, and Fitzgerald (2000) found that fathers are generally not very involved in educating their children about sexuality.

When looking at the gender of the respondent, the males were more likely than the females to say that they had never asked their mother a question about sex.

On the other hand, females were more likely to say that they had never asked their father a question about sex. Many studies have found that mothers do more of the talking about sexuality. If fathers are involved, they are most likely to talk with their sons and mothers are more likely to talk to their daughters (Fisher, 1993; Kotva and Schneider, 1990; Jordan, Price, and Fitzgerald, 2000 and Lehr, DiIorio, Dudley, and Lipana, 2000). These results did not support findings from a study by Nolin and Petersen (1992), which found that while levels of communication about sex were generally low, father-daughter communication exceeded the father-son communication on sexual health issues.

When examining the most important influence on their sexual attitudes, over half of the respondents indicated their friends were their most important influence, especially same-sex friends. This is consistent with findings that friends are the primary source of sex information for young people in the United States (Kreinin et al., 2001; Papini et al., 1988; Starr, 1997). Mothers were identified as the second most important influence but were identified by only 14% of the sample. Father was at the bottom of the list of sources, with only 2% of the sample identifying their father as an important influence. Although parents would like to think of themselves as the leading source of information on sexuality for their children (Jordan, 2000), this study shows that this is not be the case.

Comparing Males and Females

In looking at the male respondents versus the female respondents, each group was divided up into the categories “Never” and “Often” when looking at the question about how often a respondent asked their mother or father a question. Males and

females were also grouped by whether they listed “Parents” or “Other” as important influences on their sexual attitudes. While few significant differences in sexuality attitudes and behaviors were found between males who often asked their parents questions about sex and those who never did, many significant differences were found for females. In addition, when comparing those who said their parents were their most important influences, females (not males) were found to have significant differences on nearly all the sexual attitude and behavior questions. In other words, when females said that their parents were their most important influence, they were more likely to engage in responsible sexual behavior. This is consistent with findings that parent-child communication is linked with more responsible patterns of sexual behavior of the child. (Brody, Ottey, & Lagarnage, 1976; Fox & Inazu, 1980; Furstenburg, 1971; Shah & Zelnick, 1981).

The responses of males who said that they could never talk to their parents were compared to those who said that they could ask their parents questions often. When looking at the results, it is not clear if parents influence males at all. This may be a result of the small numbers involved when looking at the males who responded “Often” as to how often they could ask questions. For males, there was no significant difference between those who were able to ask their mother or father question “Never” or “Often” and there was no significant difference on this measure for those males who listed their parents as their most important influence on sexual attitudes versus those who listed other sources.

When looking at the number of sex partners, males who listed their parents as their most important influence on their attitudes were significantly more likely to

have had fewer partners. Their ability to ask either parent questions about sexuality had no significant impact on their number of sex partners. These findings are consistent with research conducted by Holtzman and Robinson (1995), which found that parent communication about multiple partners did not significantly lower the number of partners for the males in their study.

When males were asked whether they had used birth control every time in the last three months, those who felt that they had never asked their mother a question about sexuality were significantly more likely to have used birth control. This finding may be attributed to the fact that there were not very many people in the “Often” group ($n = 63$) which was being compared to the much larger “Never” group ($n = 416$). There was some research done which found that those who did not communicate with their parents were just as likely to use contraception as those who did (Herceg-Baron, Shea, and Webb, 1984). However, this finding goes against much of the research, which states that good parent-child communication about sexuality leads to increased use of birth control (Brody, Ottey, & Lagarnage, 1976; Fox & Inazu, 1980; Furstenburg, 1971; Hutchinson and Cooney, 1998; Kotva and Schneider, 1990; Shah & Zelnick, 1981, Holtzman and Robinson, 1995). When looking specifically at males, Jaccard, Dittus, and Gordon, (1996) found that parent-child discussions about birth control were related to consistent birth control use for males only (but not for females).

No significant differences were found for the males on likelihood to refuse sex if there was no condom available. When looking at the importance of love with sex, a significant difference was found for males who indicated that their parents were their

most important influence on attitudes. Males who listed their parents as their most important source were more likely to think that love is important with sex. This is consistent with findings that state that parent-child communication is linked with more responsible patterns of sexual behavior of the child (Brody, Ottey, & Lagarnage, 1976, Fox & Inazu, 1980, Furstenburg, 1971; Holtzman and Robinson, 1995; Shah & Zelnick, 1981).

While some communication questions were significant for the males, most were not. Specifically, males who could ask their mother a question about sexuality often were significantly more likely to be able to ask their partner if they had ever used IV drugs, had sex with an IV drug user, been exposed to HIV, or ever been tested for HIV. In addition, those males who listed their parents as their most important influence on attitudes were more likely to be able to communicate with their partner about asking about number of previous partners, asking about IV drug use, and asking a partner about sexual involvement with an IV drug user. This is consistent with research by Hutchinson and Cooney (1998) and Shoop and Davidson (1994) who found that parent-teen communication is linked with partner communication.

There were no significant differences in terms of those who asked their father questions often versus those who never asked a question about sexuality. This is supported by previous research by Weeks et al. (1997) who found that there is no relationship between parental involvement levels and AIDS-related communication patterns and behaviors of the children.

Many findings for females as they relate to parent influence and parent interaction were significant. There was a significant difference between those females who reported that had “Never” asked their father a question and those who reported that they had “Often”. Females were significantly more likely to have had a lower number of sex partners if felt that they could “Often” ask their father a question. This is supported by research done by Holtzman and Robinson (1995) who found that parent communication about multiple partners did significantly lower the number of partners for the females in their study.

There was also a significant difference between those females who listed “Parents” versus those who listed “Other” as their most important influence on their attitudes. For those females who felt that their parents were their most important influence, again, it was significantly more likely that they had a fewer number of sex partners. For the females who felt that someone or something other than their parents was their most important influence on sexual attitudes, they were more likely to have used birth control every time in the last three months. This finding was not consistent with previous research, which states that sex communication between parents and children is associated with more responsible patterns of sexual behavior. (Brody, Ottey, & Lagarnage, 1976, Fox & Inazu, 1980, Furstenburg, 1971; Shah & Zelnick, 1981).

Only those females who listed their parents as their most important influence on attitudes were more likely to refuse sex without a condom. This finding is consistent with the previously mentioned research by Holtzman and Robinson (1995), Hutchinson and Cooney (1998), and Leland and Barth (1993), which found

discussion between parents and children about sexuality is correlated with higher levels of condom use or less likelihood of unprotected sex. Females who indicated their parents as their most important influence were also more likely to think that love is important with sex. Again, this is consistent with findings that parent-child communication is linked with more responsible patterns of sexual behavior of the child. (Brody, Ottey, & Lagarnage, 1976; Fox & Inazu, 1980; Furstenburg, 1971; Shah & Zelnick, 1981).

In terms of the communication questions, if they were able to ask their mother questions often, females were significantly more likely to be able to communicate with a partner on all of the communication measures (i.e., more likely to ask a partner about number of previous partners, condom use, use of IV drugs, sexual involvement with an IV drug user, exposure to HIV, having had sex with a gay man, and having ever been tested for HIV). In addition, females who indicated that their parents were their most important influence on attitudes were more likely to be able to ask a partner about use of IV drugs, having had sex with an IV drug user, exposure to HIV, having had sex with a gay man, and having ever been tested for HIV. Shoop and Davidson (1994) are consistent with these findings, with their research which found that those who reported that they discussed sexual issues with their parents were seven times more likely to feel that they are able to communicate with a partner about AIDS than those who did not, and by Hutchinson and Cooney (1998) who found that parent-teen communication is linked with teen-partner communication. Essentially, if a female respondent could communicate with her mother, she could most likely communicate with her partner about other things. There were no significant

differences in terms of those who could or could not ask their father questions about sexuality. These results show that parents seem to have played a more influential role with females in terms of educating about sexuality.

Findings for the Entire Sample

In terms of looking at results for the entire sample ("All Years") significant differences were found between those who never asked their mother a question and those who often did on many of the sexual attitude and behavior questions. Those who often asked their mother questions about sex were more likely to say that love is important with sex and that they were more likely to communicate with their partner. (i.e., ask about number of previous partners, condom use, IV drug use, involvement with an IV drug user, exposure to HIV, sex with a gay man, and testing for HIV.) This is consistent with previous research by Shoop and Davidson (1994) and by Hutchinson and Cooney (1998) who found that parent-teen communication is linked with teen-partner communication.

When looking at the entire sample for how often respondents asked their father a question about sex only two items were found to be significantly different. In terms of significant differences, those who said they often asked their father a question about sex were more likely to refuse sex without a condom, and think that love is important with sex, as opposed to those who never asked their father a question. These findings are consistent with previous research. As stated earlier, Holtzman and Robinson (1995), Hutchinson and Cooney (1998), and Leland and Barth (1993) found that discussion between parents and children about sexuality is correlated with higher levels of condom use or less likelihood of unprotected sex.

The finding that love is important with sex is supported by findings that state that parent-child communication is linked with more responsible patterns of sexual behavior of the child. (Brody, Ottey, & Lagarnage, 1976, Fox & Inazu, 1980, Furstenburg, 1971; Shah & Zelnick, 1981). It should be noted that the comparison groups, "Often" (n = 78) and "Never" (n = 2,067) were vastly different in size and may explain why so few significant differences were revealed.

When students' responses were compared for those who listed their parents as their most important influence, versus those who listed others, significant differences were found for all sexual attitude and behavior questions. Respondents who said that their parents were their most important influence on attitudes were more likely to have initiated intercourse later, have fewer sex partners, use birth control every time in the last three months, refuse sex without a condom, and think that love is important with sex. They were also more likely overall to be able to communicate with their partner. This is consistent with research that states that parent-child communication is linked with more responsible patterns of sexual behavior of the child (Brody, Ottey, & Lagarnage, 1976, Fox & Inazu, 1980, Furstenburg, 1971; Shah & Zelnick, 1981). In addition, research by Hutchinson and Cooney (1998) and Shoop and Davidson (1994) found a correlation between parent-child discussion of sex and ability to communicate with a partner.

One interesting finding is related to the actual way in which the questions were worded on the survey. When comparing the findings for the two different survey questions asking about parent interaction and parental influence, an interesting methodological issue is revealed. Asking how often a respondent asked his or her

parent a question about sex might not be as good an indicator of the effects on attitudes and behaviors as asking about how important an influence their parent is. Important influence of the parents rather than communication with parents seems to show the strongest relation to later attitudes and behaviors.

It was also interesting to note that while 34% of the sample said that they could “Never” ask a question of their mother, and 73% said that they could “Never” ask their father a question, 26% indicated their parents were their most important influence on attitudes. This implies that even though a child was not able to talk to their parent about sex, they are still seen as an important influence. It also raises issues about how to measure parent-child communication in a survey.

What also became apparent is that females seem to be more influenced by their parents than males. Many studies have found that girls tend to receive more sexuality information than boys (Fisher, 1987; Henry J. Kaiser Family Foundation, 1998; Holtzman & Robinson, 1995; Leland & Barth, 1992; and Nolin & Petersen, 1992). Overall, these findings suggest that we have a long way to go in terms of parent-child communication about sex, since most respondents indicated that they could never talk to their parents.

Limitations

While important findings were discovered, it is important to recognize that this study has some limitations. First, the students in the CHF351 Human Sexuality class who took the Human Sexuality Survey may not be representative of other college students at the University of Maine, or any other college campus. Their answers on the Human Sexuality Survey may not even reflect the attitudes or behaviors of those

students in the class who decided not to complete the survey. A second factor to consider is the fact that the University of Maine is a small, geographic-specific proportion of college students in the United States.

It is also important to realize that all data for these surveys relied on the subjects' self-reporting, and as a result, there is no way to determine whether or not the students were truthful in their answers. Essentially, with a topic as sensitive as sexuality, people may not be totally truthful. While one might assume that the students were honest because the survey was submitted voluntarily and completed in privacy on their own time, this cannot be determined through the data available. Additionally, when looking at the influence of parents on their children in this study, it's not obvious if the respondent is reporting positive or negative influence. Just because a parent was identified as an important influence, it does not necessarily mean that they were a positive one.

Another limitation to keep in mind is the fact that in this data analysis, the groups were dramatically different in size. Specifically, most people said that they never asked their parents a question about sex, and very few said that they often asked questions. This difference was particularly pronounced when looking at how people responded about their fathers (2,067 respondents who said they never asked a question about sex, versus only 78 who said they often did). In fact, finding that the majority of students in this study reported that they never asked their father a question about sex offers some insights for the implications of this study.

Implications

These findings offer several implications for further research and ideas for improving parent-child communication.

- For this sample, it was apparent that there was not a lot of communication about sex between the subjects and their parents, the fathers in particular. If this finding were generalized to the rest of the population, it might be an important implication to look at how parents can become more involved with the sexuality education of their children. (See Appendix B)
- An area that needs further study is to look at gender differences in terms of parents being more likely to educate their daughters versus their sons about sexuality. Fisher (1987), Holtzman and Robinson (1995), Henry J. Kaiser Family Foundation (1998), Leland and Barth (1992), and Nolin and Petersen (1992) all found that girls tend to receive more sexuality information than boys. Why is this?
- The content of discussions between parents and children needs to be examined further. Just because there were frequent discussions between parent and child, or the child ranked his or her parents as their most important influence on sexual attitudes, does not mean that the parents had a positive impact. These findings suggest that the perceived importance of influence may be as important as the actual influence itself. Future studies should go beyond just asking if their parent was an influence, to ask if that influence was negative or positive.

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Appendix A:

QUESTIONS AS THEY APPEAR ON THE HUMAN SEXUALITY SURVEY

Three Independent Variables:

Parent-child Interaction:

Question 42. How often did you ask your mother questions about sexuality before you came to college?

- a. Very frequently (more than 15 occasions)
- b. Often (about 10-15 occasions)
- c. Occasionally (about 5-10 times)
- d. Rarely (a few times)
- e. Very infrequently (once or twice)
- f. Never

Question 44. How often did you ask your father about sexuality before you came to college?

- a. Very frequently (more than 15 occasions)
- b. Often (about 10-15 occasions)
- c. Occasionally (about 5-10 times)
- d. Rarely (a few times)
- e. Very infrequently (once or twice)
- f. Never

Parental Influence:

Question 41. The following are some sources of influence on sexual attitudes. Which has been your most important source?

- a. Mother
- b. Father
- c. Both parents equally
- d. Religion
- e. Media
- f. Siblings of the same sex
- g. Siblings of the other sex
- h. Friends of the same sex
- i. Friends of the other sex
- j. School

Six Dependent Variables:

1. Age of first intercourse

Question 21. If you have had sexual intercourse, at what age did you first have sexual intercourse?

- a. 11 or younger
- b. 12
- c. 13
- d. 14
- e. 15
- f. 16
- g. 17
- h. 18
- i. 19 or older
- j. Not applicable, I have never had sexual intercourse

2. Number of sex partners

Question 76. How many sexual partners have you had in your lifetime?

- a. 0
- b. 1
- c. 2
- d. 3-4
- e. 5-6
- f. 7-9
- g. 10-14
- h. 15-19
- i. 20-24
- j. 25 or more

3. Use of contraception

Question 23. During the past three months, I or my partner(s) used birth control every time we had sexual intercourse.

- a. Yes
- b. No
- c. Not applicable, I did not have intercourse during the past three months.

4. Use of condoms

Question 68. Please indicate how likely is it you would refuse sexual activity with partner who would not use a condom:

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

5. Importance of love in a sexual relationship

Question 50. How important is it for you to be in love with the person you are having sex with?

- a. Very important. I would not have sex with an individual I was not in love with.
- b. Important. Sex is more enjoyable when I am in love with my partner.
- c. Somewhat important. Love is nice, but I would consider having sex with someone I wasn't in love with.
- d. Not very important. You don't need to be in love with someone to enjoy sex with them.
- e. Unimportant. Sex and love are two different things.

6. Ability to communicate with partner about safer sex issues

Question 55. Please indicate how likely is it you would ask how many sexual partners he/she has had

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 56. Please indicate how likely is it you would discuss using a condom before having sexual intercourse

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 57. Please indicate how likely is it you would ask if he/she has used drugs intravenously (with a needle)

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 58. Please indicate how likely is it you would ask if he/she has had a sexual relationship with an intravenous drug user

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 60. Please indicate how likely is it you would ask if he/she has been exposed to HIV/AIDS

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 65. Please indicate how likely is it you would ask if the person has had a sexual relationship with a gay man

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Question 66. Please indicate how likely is it you would ask the person if they have been tested for HIV

- a. Very unlikely
- b. Somewhat unlikely
- c. Somewhat likely
- d. Very likely

Appendix B:

RESOURCE LIST

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