# Sex Among Siblings: A Survey on Prevalence, Variety, and Effects

David Finkelhor, Ph.D.1

In a survey of 796 undergraduates at six New England colleges and universities, 15% of the females and 10% of the males reported some type of sexual experience involving a sibling. Fondling and touching of the genitals were the most common activities in all age categories. One-fourth of the experiences could be described as exploitative either because force was used or because there was a large age disparity between the partners. Reactions to the experiences were equally divided among those who considered them positive and those who considered them negative. Females were more likely than males to have been exploited and feel badly about it. Few participants of either sex ever told anyone. The research finds evidence that such experience may have long-term effects on sexual development. Females who report sibling sexual experiences, both positive and negative, have substantially higher levels of current sexual activity. Their level of sexual self-esteem may also have been affected, but more selectively. Those with positive sibling experiences after age 9 have more sexual self-esteem. However, experiences with much older siblings taking place before age 9 are associated with generally lower levels of self-esteem and no increase in current sexual activity.

**KEY WORDS:** sibling; incest; sexual abuse; sexual development; childhood sexuality; sexual socialization.

## INTRODUCTION

A large number, probably a majority, of children engage in sexual activities prior to puberty. It is less widely recognized that an important

Family Violence Research Program, Department of Sociology, University of New Hampshire, Durham, New Hampshire 03824.

fraction of these experiences occur with brothers and sisters. This should hardly come as a surprise. Sexual activities occur between children who are in close contact with one another, and siblings are among those in closest contact.

Public and professional opinion has moved in the last several generations toward a greater tolerance of childhood sexual activities. However, where such opinion lies on the matter of sex between siblings is much less clear. There is little general awareness of the prevalence of sibling sex. Moreover, there is little reliable information on the basis of which an intelligent scientific or public discussion could be based. To the extent that attitudes toward sibling sex exist, they are based on rather crude stereotypes, some quite contradictory to others.

Many people are undoubtedly uneasy a priori about the idea of sibling sexual activity of whatever sort, at whatever age, simply because it connotes a violation of the incest taboo. Articulated more psychologically, many adults would worry that it sets a bad precedent for a child: it can lead to guilt, a sense of stigma, and unmanageable feelings that might plague the child later in life. Most American parents, even ones who fully accept the sexual curiosity of childhood, take this attitude toward sibling sex. Some evidence of this is the widespread pattern of segregating siblings, particularly opposite-sex siblings, into separate bedrooms, even at a very early age.

On the other hand, there are certainly many parents and professionals who are not disturbed by sibling sex. Some who take a highly positive attitude toward childhood sexual exploration in general would make little distinction between sex with playmates and sex with siblings, as long as it was confined to something that is generally called "sex play." Sex play usually means activities of young children of the same age, engaged in mutually, that are limited to the showing and touching of genitals, and that go on for short periods of time. It excludes sex engaged in by force, among older children or among children of a large age difference, attempts at intercourse, or compulsive activity that goes on too long.

However, some who would approve of sibling sex would take a more radical outlook. This group tends to see the incest prohibition as another Victorian legacy, and it doubts that there is any justification for restricting sexual activity between any consenting parties, even if related (Masters, 1963). Such people approve of sex between siblings and other relatives, including intercourse, and relationships of some emotional intensity and duration (Constantine, 1977). Only sex which occurs as a result of coercion or duress comes in for their censure and sometimes not even this. The sexually oriented, popular magazines appear to support this philosophy and carry, among other things, letters from readers telling of highly positive sibling sexual experiences, many of them starting in childhood (Readers dis-

cuss, 1977). Reports of as yet unpublished research claim to show that a high proportion of sibling incest experiences are in fact positive (Nobile, 1978).

Still another point of view about sibling sex, however, has emerged from the concern about child abuse. In the last few years the number of reported cases of sexually abused children has grown dramatically. A significant number of these reports are cases where a child is victimized by an older sibling, particularly a younger sister by an older brother (Burgess et al., 1978). Feminists and child welfare workers have expressed concern that sibling sex often is a form of sexual exploitation in which little girls are most often the victims.

These points of view present different images of sex among siblings: as guilty sex play, as healthy sex play, as romantic incest, as exploitation. The differences pose many questions. To what extent is sibling sex confined to the activities of young children? How often is sibling sex exploitative? Do the participants in these experiences feel positively or negatively about them? Are there any long-term effects, and, if so, are these harmful or helpful? Are these experiences any different in quality or effect from other childhood sexual experiences? We will in the next few pages try to answer some of these questions about sibling sex.

## SAMPLE AND METHODOLOGY

The data for this research on sibling sexual experiences come from a survey of 796 college undergraduates about their childhood sexual experiences. A more detailed description of the study is available in Finkelhor (1979a). The survey was conducted at six New England colleges and universities in the fall and winter of 1977-1978. The schools were selected for their diversity and included a prestigious private college, three large state universities, and two nonresidential community colleges.

Questionnaires were distributed to whole classes of students to be filled out during class time. The classes themselves were ones in which the subject matter or the personal interest of the instructor could enhance the motivation of the students to participate and answer truthfully. As a result, the courses represented were primarily lower- and upper-level social science and human sexuality courses. The participation rate was high: 92% of the students in attendance in the classes surveyed.

The questionnaire approached the matter of sibling sex indirectly. It asked the respondents many questions about family background, family dynamics, family attitudes toward sex, and sources of sex information. Then two detailed sections of the questionnaire asked for information about childhood sexual experiences with any other children (including

siblings) and any lifetime sexual experiences with family members. Only 10% of the respondents chose to skip these sections.

No claims can be made that this sample is representative of any larger population. It is nonetheless quite diverse in its social class and ethnic makeup. It is somewhat more middle class than the New England population as a whole. It has a particularly large group of students (61%) who grew up in nonmetropolitan areas. There are also very few blacks (under 1%) in the sample. But unlike many college student populations, there is also a sizable subgroup of people (17%) over the age of 24.

Sexual experiences were defined by a list of activities provided to the respondent. This list included an invitation to do something sexual, showing sex organs, fondling in a sexual way, touching sex organs, attempted or simulated intercourse, and intercourse. Respondents were encouraged, however, to write in any other kind of experience they considered sexual beside the choices available. Sibling sexual experiences were any such experiences that occurred between siblings. For the purposes of experiences presented in this article, step-siblings and half siblings were not distinguished from natural siblings.

#### **PREVALENCE**

Thirteen percent of the sample<sup>2</sup> reported a sibling sexual experience. Reports were more numerous for females than for males, 15% of the females mentioning such an experience but only 10% of the males.

Moreover, our figures are almost certainly underestimates. Some respondents no doubt concealed their experiences because of embarassment or shame, while others simply had forgotten. Not only had many of these experiences occurred a long time ago, but also many may have occurred before the children acquired the conceptions necessary to label an experience as "sexual." In addition, our figures are probably low estimates for the general population because the nature of our college student group underrepresents the lower-income strata of the population which tend to have higher rates.

Heterosexual-type experiences predominated (74%), but a number of homosexual sibling contacts were also reported. Sixteen percent of the experiences were homosexual ones between brothers and another 10% were between sisters.

<sup>&</sup>lt;sup>2</sup>Rather than the percent of the whole sample, the real figure of interest is the percent of persons with siblings who had a sibling sexual experience. However, there were just 32 only children in the sample, so the rounded percentages are virtually the same whether the base used is the whole sample or just the respondents with sibs.

#### AGE OF PARTICIPANTS

One popular image of sibling sexual contact is that it occurs primarily among very young children, as part of early "sex play." Many people make a distinction in their minds between such "sex play" and sexual contact among older siblings and adolescents, in which case the activity is more likely to be termed "incest" (Hunt, 1974). The distinction between sex play and incest is associated with the Freudian scenario of sexual development, which postulates one intense period of sexual interest before the age of 8 and another one after the onset of puberty, the two being separated by a latency period in which sexual interest abates.

A large number of the experiences did occur to young children, but by no means the majority. Forty percent of the respondents were under 8 at the time of their experience. However, 73% of the experiences occurred when at least one of the partners was older than 8 and 35% occurred when one was older than 12.

Table I, the combined age distribution of both respondents and their partners, shows that the experiences scattered themselves throughout the age spectrum from age 3 into adulthood. There was certainly no evidence

**Table I.** Age at Time of Sibling Sexual Experience

Age	Number of persons <sup>a</sup>
3	1
4 5	5
5	17
6	17
7	23
8	25
9	18
10	23
11	22
12	22
13	11
14	10
15	8
16	10
17	6
18	2
19+	6
Total	221
Median age	10.2

a The age for each respondent and his or her partner was taken from each questionnaire.

for a latency period during which sexual activity abated. In fact, more experiences were reported between ages 8 and 11, the middle of the so-called latency period, than in any other period.

Two conclusions appear warranted on the basis of this age distribution: (1) To the extent that sex play is thought of as the sexual activity of young children, sibling sex cannot be described as mostly sex play. Although some of it occurs among young children, most does not. (2) There is little ground for distinguishing between sibling sex play and incest at least on the basis of the age of the participants. Thus for purposes of this discussion and even as a general rule we favor the avoidance of these two value-laden terms.

#### SEXUAL ACTIVITY

Sexual activities among siblings tend to resemble the sexual activities of children in general (Table II). There is much petting and touching of genitals. At younger ages there is a large amount of mutual genital display. There is fairly little intercourse.

Activities appear to be somewhat age specific. The younger children are the ones to engage in most of the genital exhibition. The adolescents are the ones to engage in most of the intercourse and attempted intercourse. Although the amount of genital touching remains relatively constant across age groups, no doubt its meaning and motivation are different for adolescents than for young children. Young children are motivated by curiosity about differentness, about the forbidden, and perhaps even by some as yet unknown physiological stimuli. For adolescents, these motives are no doubt joined by a greater awareness of the place of genital stimulation in the adult sexual script, its status as a sexual achievement and its role in the social sequence leading to intercourse or orgasm. It is these interpretive elements rather than any difference in the gestures themselves

Table II. Type	of Sibling	Sexual	Activity	by	Age	of Respon-	
	dent at '	Time of	f Activity	r		_	

	Age range (%)					
Type of activity	0-8 $(N = 45)$	9-12 ( $N = 50$ )	13+ (N = 17)			
Exhibiting genitals	40	24	<u></u>			
Fondling and touching genitals	53	60	64			
Intercourse and attempted intercourse	5	15	18			
Other	_	2	13			

that would lead adults to call the one "heavy petting" and the other "playing doctor."

These activities lasted varying lengths of time. Some of the experiences were fleeting and some went on for an extended period throughout childhood. Almost exactly a third of them happened once and never reoccurred. On the other hand, 27% continued with varying frequency for over a year. Two respondents told about experiences that continued for as long as 10 years.

## **EXPLOITATIVE EXPERIENCES**

A key question posed by those concerned about sexual abuse is how often sibling sex involves the exploitation of one partner by another. Exploitation could be defined in many ways, but two obvious indicators were available in the survey: whether there was force used and whether there was a large age difference between the siblings.

Some kind of force was reported in 25% of the experiences. Force could include physical force or a threat of force or both; the questionnaire unfortunately did not distinguish. Moreover, the presence of force or threat was judged by the respondent, not by the investigator. These coercive experiences were a minority, but an important minority. Many of the experiences involving force had a truly frightening character to them, as in the case of one man we interviewed, who said that, when he was 4, his brother and some friends had held him down and performed anal intercourse on him.

Evidence of such exploitation among siblings should not be surprising. Violence among siblings is the most common form of family violence, being reported in 82% of all families in a given year (Straus *et al.*, 1980). Such violence is largely unobserved, ignored, and discounted by both parents and social researchers. But seen in this context it is completely plausible that an important portion of sex among siblings should reflect these hostile motives, too.

Sibling sexual experiences can also be exploitative because of a large age disparity between partners, whether or not force is present. Actually they both tend to occur together. But much older siblings can and do exploit younger siblings without force by misusing their authority and sophistication, by misrepresenting moral standards, and by manipulating incentives for a younger child. Twenty-three percent of the sibling experiences took place between siblings who were 5 or more years apart in age.

Thus there is some cause for concern. At least a quarter of sibling sexual experiences have an exploitative quality to them. However, this is

only one type of sibling sex, perhaps one end of a spectrum of experiences. As will become clear, the spectrum appears to extend as far in the nonexploitative as it does in the exploitative direction.

#### REACTIONS TO THE EXPERIENCES

Although we suspect that a majority of parents would take a dim view of sex among their children, the children in this sample show no such equivalent consensus. Reactions by participants to the experiences were almost perfectly divided. Thirty percent said their experiences had been positive, 30% said they had been negative, and the rest did not feel strongly either way.

Obviously this is a testimony of some importance. Almost a third of the participants in sibling sex said it had been positive. It is important to understand the source of these appraisals: why some kinds of sibling sex tended to be experienced as negative (and perhaps by cautious extension as harmful) and others as positive (and perhaps even helpful).

For one thing, coercive experiences, as one might expect, tended to be much more negative. Sixty-four percent of the children who had been forced or threatened rated their experience negatively, as did 54% of those whose partners were much older. Experiences with force were almost four times as likely to be negative as those without force.

Females tended to report the experiences as more unpleasant than did the males (35% to 22%). This is largely because the females were much more frequently on the short end of exploitative relationships than were males. Females were the victims in 82% of the coercive experiences. When partners were of greatly different ages, 70% of the time it was the female who was the junior partner. Thus sibling sexual experiences conformed to the pattern of sexual relationships in the culture as a whole, insofar as males were more often the aggressors and older partners, and females were more often the younger partners and the ones vulnerable to victimization.

To discover which characteristics of the experience contributed independently to a positive or negative reaction, we did a regression analysis on all the data we collected about the experience. The results are shown in Table III. Beta weights show the relative contributions of the three factors which were significant.

The most important factor was how much of an age difference existed between siblings. The larger the age difference, the more likely the experience was to be negative. The presence of force operated similarly. If force was used, the experience was more likely to be negative. The nature of the sex act itself was a third factor relating to how *positively* the experience was perceived. If the sexual activity had consisted primarily of genital

Feature of the experience	Relative contribution to negative reaction (β)
Force or threat of force Age difference in years Exhibition only	$0.176^{a} \ 0.361^{b} \ -0.277^{b}$
Amount of total variation in negative reaction explained by above features $R^2 \times 100$	32%

Table III. Regression of Features of the Experience on Respondents' Reactions to the Experience

exhibition, then the experience was more likely to be remembered positively.

This regression analysis, however, is more interesting for the factors it excludes than for those it includes. Several characteristics of sibling sex that one might think would be important appear to have had little effect at all on how it was appraised.

Age, for example, made no difference. Many people would think that older siblings who engage in sex are meddling with much more danger than younger ones, but apparently this was not true in this sample. Experiences at older ages were no more likely to be negative than ones at younger ages.

Homosexuality, also, made no difference. It would be plausible to think that the greater stigma of homosexuality would make homosexual sibling sex more problematic. But this was not the case.

Engaging in sexual intercourse also did not increase the negative outcome. Presumably, those most worried about sibling incest would think that sexual intercourse between siblings is more fraught with perils. This logic was not supported. A similar finding holds for the duration of the experience.

Finally, even a factor mentioned previously as having some importance, the sex of the respondent, turned out ultimately to be of negligible causal significance. If girls' experiences were more negative, apparently it was not because they were girls, but because they encountered more coercion and more experiences with much older partners.

In summary, then, reactions to the experience ranged across a spectrum and were fairly evenly divided among positive and negative. Some aspects of the experience, whether force was involved or a large age difference or a sexual encounter limited to genital exhibition, had some predictable relationship to how positive or negative it was viewed. But many other aspects made no difference.

ap < 0.05.

 $b_p < 0.01$ .

## REVEALING THE EXPERIENCE

Whatever the personal reaction, however, participants in general seemed to abide by one cardinal principle: they did not discuss this experience with others. Whether positive or negative, they appeared to realize that the experience would not be understood by parents, friends, or other siblings. Thus only 12% of any of the participants in sibling sexual experiences told someone about them. For many respondents, the questionnaire was the first time in their lives they had mentioned it.

Curiously, it was those with the more exploitative experiences who were most silent. Not a single child who had been involved in sex with a much older sibling confided it to anyone. The fear of being blamed themselves or of not being believed or of suffering retaliation may have made it hard for these children. For those with exploitative experiences, the pain of secrecy was added to whatever unpleasantness the experience itself involved.

## EFFECTS ON ADULT SEXUALITY

In contemporary social science, sexual ethics are approached on very utilitarian grounds. In debates about such things as masturbation, premarital sex, and early sex education, the crucial question has always been "What are its effects?," "Are they harmful?," "Are they beneficial?" This is not the only grounds on which one can decide ethical issues. As I have argued elsewhere (Finkelhor, 1979b), for example, the most important objection to sex between adults and children may not be that it harms the children (although it may) but that the conditions for a consensual participation are lacking. Such nonutilitarian principles may be important in the question of sibling sex as well, but they are not likely to allay a strong preoccupation with "Did it harm?" Unfortunately this is not a question we are well equipped to answer here.

The measurement of outcomes is of interest as a scientific as well as a policy issue. One of the least well-understood questions in child development is how family and childhood experiences contribute to later sexual behavior. For both these reasons, readers should no doubt be amply curious about how a sibling sexual experience affects its participants.

How might sibling sexual experiences be expected to affect development? There are several negative possibilities. One is that by engaging in a form of sexual behavior around which there is strong taboo, children would develop guilt feelings or view themselves as deviants in a way that would hamper their sexual development.

Another concern is with what Freudians would call the lack of oedipal resolution. In psychoanalytic theory (Flugel, 1921) sexual attraction to siblings is a stage of psychosexual development which a child needs to go beyond in order to develop normal love attachments to others outside the family. When that attraction is allowed consummation in spite of the taboo, psychoanalysts argue that it results in arrested development, fixation, or unmanageable guilt feelings (e.g., see the case of "Wolf Man," Freud, 1963).

Still another concern is how sibling sex affects family relationships. Does it set up volatile rivalries, secrets, or powerful emotions that disturb the normal course of a person's relationship with his or her family?

Some people scoff at these concerns. They doubt that the effect of sibling sexual experiences would be any different from that of any other kind of childhood sex. They argue that, like other things, good sibling experiences would have positive effects and bad experiences negative ones. In fact, some of those who feel that the problem with childhood is that children don't get enough sexual experience would expect sibling sex to make a positive contribution to this learning.

A final point of view, and the one I find congenial, is that sexual experiences with siblings may have very little effect on adult sexuality at all. Despite several generations of the Freudian belief in the formative influence of childhood sexual events, there has been little scientific evidence yet marshalled to confirm this idea. Childhood sexual experiences, and other kinds of childhood sexual learning, have just not proven to be influential in explaining levels of sexual activity (Spanier, 1973) or sexual self-esteem (Estep et al., 1977), nor has childhood sexual trauma been shown to have much effect on marital satisfaction or orgasmic capability (Fisher, 1973; Terman, 1938). There is little reason to think that sibling sexual experiences should be any more influential.

Although it is an interesting and important debate, this study is not well equipped to grapple with this question of outcome. To truly resolve questions about the effects of sibling sex experiences, we would need questions about sex satisfaction, sex guilt, love relationships, family relationships, general psychological health, and so forth. Unfortunately, we have only three limited indicators of adult behavior: (1) the frequency of current heterosexual activity, (2) the frequency of current homosexual activity, and (3) a scale designed to evaluate the level of respondents' sexual self-esteem. An analysis was made of what effect, if any, a sibling sexual experience had on each of these three indicators.

For purposes of the analysis these distinctions were made among sibling sexual experiences: (1) positive vs. negative experiences, (2)

peer vs. nonpeer experiences, and (3) early childhood vs. later experiences.<sup>3</sup>

# **Sexual Activity**

Most of the students in the sample were in their late teens and early 20s, a time when they were establishing their patterns of adult sexual activity. Although 73% of the sample were sexually experienced, only half seemed to be engaged in sex on a regular basis. Would sexual experience with a sibling be likely to make for a more or less sexually active adult?

Table IV shows the percentage of women engaged in regular sexual intercourse, defined as at least once in the last month or more often. Those who had had sibling sexual experiences were *more* likely to be sexually active than those who had not had such an experience. The findings held only for women. Interestingly, both those with positive and with negative, with peer and with nonpeer experiences all had higher activity. The exact nature of the experience did not appear to make a difference: all were more sexually active.

Is this higher level of sexual activity a result of sibling sex or rather almost any kind of childhood sexual experience? It is plausible to think that almost any experience that involves a person in sexual activity early will tend to stimulate their maturation. However, Table IV compares those with sibling sexual experiences to those who had some other kind of childhood sexual experience, but not sibling sex. Those with sibling sex were more currently active, suggesting that it was something specifically about the sibling relationship that made a difference.

How does age at the time of experience affect this relationship? One might expect from the previous research cited that earlier experiences would have less of an impact on adult relationships than later ones. In fact, this was generally true. But Table V shows the situation to be a bit more complicated. The overall effect of early experiences was not so great as that of later ones, but the effect of early positive and peer experiences was as great. This says that the quality of the experience made little difference in its effects on adolescents but some difference in its effects on younger children.

<sup>&</sup>lt;sup>3</sup>Positive and negative experiences were classified by a combination of the respondents' and the investigator's criteria. Negative experiences were those that were so rated by the respondent or that, if neutrally rated, involved force or a large age difference. Positive experiences were the remainder. Peer experiences were defined by a sliding scale of age differences. For children 8 and under, peers were partners not more than 2 years older. For children 9-12, they were partners not more than 3 years older. For those above 12, they were partners not more than 5 years older. Nonpeers were partners outside this range. Determination was made from the vantage of the younger child in the relationship. Finally, childhood experiences were ones that occurred at age 8 or before.

Type of experience	Regular intercourse (%)	N
No sibling sexual experiences		
a. No prepubertal sexual experiences	49	(160)
b. Some prepubertal sexual experiences	53	(244)
Sibling sexual experiences		
With peer partner	73 <i>a</i> ,b	(43)
With nonpeer partner	69 a,b	(29)
Positive experience	71 <i>a,b</i>	(33)
Negative experience	72a,b	(40)

Table IV. Regular Current Intercourse Among Women With and Without Sibling Sexual Experiences

During the greater time lapse between early childhood and adulthood, the impact of negative experiences may have washed out, perhaps because they were forgotten, repressed, or superseded by other experiences.

There is a possible spurious connection here that needs to be investigated. Current sexual activity is highly dependent on age. Older women, as a result of marriages, steady relationships, and comfort about sex, tend to be more sexually active. It is also true that older women reported somewhat more sibling experiences, possibly because of greater candor or because these are women who are returning to school later in life and are different sociologically and psychologically from a typical undergraduate. Could the connection between sibling sex and higher sex activity have been due to the fact that older women are reporting more of the sibling experiences?

Table V. Regular Current Intercourse Among Women With and Without Sibling Sexual Experiences by Age of Woman at Time of Experience

	Re	gular inte	ercourse	(%)
Type of experience		rience e age 9	at a	rience ge 9 after
No sibling sexual experiences Sibling sexual experiences		50 (40	(2)	
With peer partner With nonpeer partner Positive experience Negative experience	77 <i>a</i> 58 77 <i>a</i> 62	(26) (12) (22) (16)	74a 78a 74a 79a	(27) (19) (19) (29)

<sup>&</sup>lt;sup>a</sup> Significantly different from "no sibling sexual experiences" group at 0.05 level (t test).

<sup>&</sup>lt;sup>a</sup>Significantly different at 0.05 level from group a above (t test).

bSignificantly different at 0.05 level from group b above (t test).

Tabl	e VI.	Regular	Interco	urse	Among	Younger
and	Older	Women	With	and	Withou	t Sibling
		Sexu	al Expe	rienc	es	

	% engaging in regular intercourse					
Experience	Age	18-23	Age	e 24+		
No sibling sex Sibling sex	44 72 <i>a</i>	(330) (58)	77 77	(65) (17)		

 $a_t$  test: p < 0.001.

Table VI divides the women into two groups: a typical college-age group and a group of older women. From the table we can see that it was not the older women whose sexual activity had been affected by the sibling sex, only the younger women. In this younger group, those with sibling sex had a dramatically higher rate of current sexual activity. The connection between sibling sex and current sex was clearly not a spurious effect of age. But what this table suggests is that the sibling sex experience had its primary impact on a woman's early years of sexual activity. It may spur her toward more sexual activity earlier in adulthood. As adulthood wears on, others without sibling sex experiences catch up, and the difference disappears.

Does sibling sex affect the incidence of homosexual activity, too? Table VII shows that only 8% of the no-experience respondents had had any homosexual sexual contacts during the previous year. Of those with sibling sex in general, 10% reported such contacts, not a significantly greater amount of adult homosexual activity. However, let us look specifically at respondents who had had a homosexual sibling experience. This is admittedly a very small group (too small to analyze separately by sex), but such people do seem to have a higher rate of adult homosexual activity. This suggests there is some carryover from a childhood homosexual experience to adulthood homosexuality.

Table VII. Current Homosexual Activity Among Respondents With and Without Sibling Sexual Experiences

	Homosexual experience within last year			
Experience	%	N		
No sibling sexual experience Sibling sexual experience: all types Sibling sexual experience: homosexual	8 10 23 <i>a</i>	(585) (99) (26)		

 $a_t$  test: p < 0.05.

However, the finding does not necessarily imply that early homosexual activity *causes* adult homosexual activity. It is also consistent with the explanation that homosexuality is an orientation acquired very early or programmed into a person's biology. Such a person would seek out homosexual contacts from the start, and thus both the sibling and adult homosexual experiences would have the same root, although one might not cause the other.

So sibling sex does appear to have continuity with, if not in fact some carryover into, adult sexual activity, particularly for women. Both positive and negative, peer and nonpeer, early and later sibling experiences are associated with more adult sex. Only early negative and nonpeer encounters escape from this overall effect. Adult homosexual activity, too, is increased for both men and women.

These findings tell us something about the quantitative carryover effects but little about the qualitative effects. We should not presume that more sex means better sex or healthier sexual adjustment. These respondents could be carrying on compulsive or anxious sexual behavior in large quantities. Or alternatively they could be people whose degree of sexual comfort may have been genuinely enhanced.

#### Sexual Self-Esteem

We constructed an index aimed at tapping some of this more qualitative aspect of sexual adjustment called the Sexual Self-Esteem Index. The index (modified from Estep et al., 1977) tries to capture some of the dimensions of a healthy sexual orientation: comfort in thinking about sex, satisfaction with one's body, ability to act assertively about sex, satisfaction with one's sexual experiences and level of sexual activity.<sup>4</sup>

The index was intended to be applicable equally to the self-esteem of men and women. But it must be standardized to the norms of each sex. For example, although the confidence to act assertively about sexual interest is a

<sup>4</sup>The scale was composed of six items:

- a. I find I spend too much time thinking about sex.
- b. I often find myself in awkward sexual situations.
- c. I really like my body.
- d. If I'm sexually interested in someone, I usually take the initiative to do something about it.
- e. After sexual experiences, I often feel dissatisfied.
- f. Someone my age should be having more sex than I am.

The direction of items c and d was reversed for scoring.

sign of self-esteem, women score lower on this question not because they have lower self-esteem but because norms on this behavior differ for men and women. Thus to create the scale each question was normalized by sex, then summed, then the whole scale was normalized by sex and transformed to a percentage scale (Straus, 1979). Thus the mean for men and women was each 50 and the standard deviation for each 20. The scale reliability, tested by Cronbach's  $\alpha$ , was 0.48 for men and 0.54 for women, not a high reliability but high enough for use in an exploratory study (Nunnally, 1967, p. 226).

The effects of sibling sexual experiences on the sexual self-esteem of women are shown in Table VIII. The results are interesting. Positive and peer sibling sexual experiences are associated with a significantly *higher* level of sexual self-esteem. In particular, such women are more apt to have high scores on questions a, c, and f, indicating that they like their bodies and are comfortable about how much they think about sex and how much they do it.

It would appear then that sibling sexual experiences were vehicles of positive sexual development for some women. Perhaps it provided a model of a positive sexual experience with a trusted person. Perhaps it gave them some confidence about their sexual desirability. Perhaps it piqued their curiosity about sex and encouraged further exploration. In some way, a positive sibling experience had a lasting, apparently healthy effect on their sexual outlook.

Note, however, this was only the effect of those sexual experiences which were positive and peer oriented. For those who had negative and nonpeer sibling experiences, sexual self-esteem was either at the same level

Table VIII.	Sexual	Self-Esteem	Scores	of	Women	With	and	Without
		Sibling Sex	ual Exp	eric	ences			

Type of Experience	Sexual self-esteem score	N
No sibling sexual experience		-
a. No prepubertal sexual experiences	54	(170)
b. Some prepubertal sexual experiences	46	(248)
Sibling sexual experiences		
With peer partner	59a+b,b	(44)
With nonpeer partner	46 <i>a</i>	(29)
Positive experience	57 <i>a</i> +b,b	(34)
Negative experience	52	(40)

a+bSignificantly different from groups a and b combined at 0.05 level (t test).

a Significantly different from group a at 0.05 level (t test).

b Significantly different from group b at 0.05 level (t test).

Type of experience	Sexual self-esteem score	N
Prepubertal sexual experience		
a. Positive	46	(46)
b. Negative	46	(76)
Sibling sexual experiences		` ,
c. Positive	57 <i>a</i>	(34)
d. Negative	52	(40)

**Table IX.** Sexual Self-Esteem Scores of Women with Positive and Negative Sibling and Nonsibling Prepubertal Sexual Experiences

or below that of those without sibling experiences at all. The specifically nonpeer group, in fact, was significantly lower than those who had had no child sex experience at all, indicating a possible impairment of self-esteem as a result of exploitative-type sibling sex.

It is important to note, too, that other kinds of childhood sexual experiences had no similar effect to that of sibling sex. Women who had sibling sexual experiences have markedly higher sexual self-esteem than women who had other kinds of childhood sexual experiences. Nor does it make any difference if a distinction is made between positive and negative childhood experiences (Table IX). Positive sibling experiences had an impact that other positive childhood experiences did not. Something about the fact of having a positive experience with a sibling rather than some other partner seemed to be important for affecting adult self-esteem.

A key question posed by this finding is why a childhood sexual experience with a sibling would tend to produce a more long-term and more positive effect than any other childhood sexual experience. The answer may have to do with the possible mixture of intimacy with sexuality in a sibling relationship.

One of the crucial developmental tasks in adolescence and early adulthood is learning to combine friendship and sex. Early sexual experimentation among adolescents is usually carried on outside the context of friendship. That is, male-female relations during this period are conducted according to scripts that are dictated by their same-sex peer group, part of whose function is to limit the level of real intimacy that develops in the couple. The limiting of the level of emotional commitment is partly a way of coping with some of the embarrassment and awkwardness of early sexual encounters, but at the same time it contributes to a context of distrust where embarrassment and awkwardness are more likely. As

a Significantly different from groups a and b at 0.05 level (t test).

adolescents mature and have male-female relationships of greater trust and greater sharing, the quality of sexual relationships and comfort about them tends to improve.

Females who have had positive sexual relationships with siblings may have a head start in this process. They have had an experience of integrating sex into an ongoing relationship of some emotional significance already. This should not be overromanticized. Many of these experiences were very short-termed. Many were at an early age. Moreover, few siblings have the kind of intimate relationship that we usually associate with teenage romance. Nonetheless, it may be that females who have had sex with a sibling to whom they have a long-term connection have an easier time finding relationships that combine sex and intimacy as young adults. Having such relationships, they are likely both to be more sexually active and to have a higher level of sexual self-esteem, two traits they did evidence in this study.

Did it matter whether the sibling experience occurred earlier in childhood or later? It did (Table X). Positive and peer experiences had more of an impact on self-esteem if they occurred later. Exploitative experiences had more of an impact if they occurred earlier. Thus those who had early childhood experiences with nonpeers (i.e., much older siblings) had a very low mean score of 35, indicating that they may have been badly affected. Similar nonpeer experiences that occurred at a later age did not have this effect.

The implication here is important: young children may be more vulnerable to trauma from sibling sex. If for young children exploitative experiences are more likely to have a lasting effect than peer ones, then the risks clearly outweigh any possible benefits. Young children are at greater risk. Among older children, the negative and exploitative experiences seem to be better handled, and the impact is minimal.

Table X. Sexual Self-Esteem Scores of Women With and Without Sibling
Sexual Experiences by Age at the Time of Experience

Type of experience  No sibling sexual experiences Sibling sexual experiences	Sexual self-esteem score			
	Experience before age 9		Experience at age 9 and after	
	50 (418)			
With peer partner	56	(25)	60 <i>a</i>	(27)
With nonpeer partner Positive experience	35 <i>a</i> 56	(12) (21)	49 59 <i>a</i>	(19) (19)
Negative experience	41	(16)	52	(29)

 $<sup>^</sup>a$ Significantly different from "no sibling sexual experiences" group at 0.05 level (t test).

It is interesting to compare the earlier findings on sexual activity with these findings on self-esteem. The two indicators appear to be affected in markedly different ways by sibling sexual experiences. Almost any kind of sibling sex at any age seemed to increase intercourse activity among young women. The effect was fairly indiscriminate. However, the effect of sibling sex on self-esteem seemed to depend much more on what happened and when.

What this means is that the experience may have increased intercourse activity without increasing self-esteem. For example, older females who had negative and nonpeer sibling sex became more sexually active, but their self-esteem did not go up. Similarly, if the experience occurred at a younger age and was positive, it affected rates of adult intercourse but not self-esteem.

This pattern of findings is not consistent with one of the common anxieties about childhood sexual trauma—that it will result in compulsive promiscuity. Some people fear that an experience like sibling sex can lead to a fruitless and neurotic search for other sexual experiences, either from a need for repetition or for self-punishment. However, the effects of such a case should show up as a high level of sexual activity coupled with low level of self-esteem, a combination that does not occur. The one group that does show some lowered self-esteem, those with early exploitative sibling experiences, shows only an average level of sexual activity.

Thus, if sibling sexual experiences, both positive and negative, appear to increase adult sexual activity, we suspect the reasons are not associated with psychopathology. The increase probably results from the increased salience that sex takes on in the child's life in the wake of the experience. The child's curiosity about and familiarity with sexual matters may be greater. An increase in self-esteem, however, is not a necessary accompaniment to this process. Only among those whose experiences were positive is the increased exploration joined by a higher sense of self-worth.

# **Reverse Causality?**

This idea that sibling sex can lead to greater adult sex activity and self-esteem in women is not easily digested. It runs very much counter to some prevailing values and to expectations on this subject. Consequently, a great deal of caution needs to be exercised in interpreting the finding.

One caution concerns the causal interpretation we have been giving the finding. A high sexual self-esteem score may be associated with a sibling sexual experience, but not necessarily because such an experience leads to higher sexual self-esteem. It could conceivably be the reverse: that a

higher sense of sexual self-esteem leads to higher reports of sibling sex experiences.

Suppose, for example, that people with higher sexual self-esteem were more open about sex and thus more likely to confide such an experience on the questionnaire. Or suppose that they were more likely even to remember their sexual experience. Both instances would mean that sibling sexual experiences would be statistically associated to the people with high self-esteem, but it would not mean that those experiences promoted it. The findings presented here could be interpreted in this alternative way.

The main problem with this interpretation is that according to it people with high self-esteem should also report other possibly stigmatizing experiences besides sibling sex more often. But they did not. Respondents with high self-esteem did not report higher levels of sexual victimization or other forms of incest. So the alternative interpretation seems weak.

Still, it illustrates one of the pitfalls of cross-sectional data of the sort gathered in such a one-time survey. We cannot tell for sure whether the experience in the past caused the situation in the present, or if the situation in the present allowed for the reporting of the past. As long as these alternative interpretations exist, we must take such findings as interesting and indicative of something potentially important, but certainly not conclusive.

# Men's Experiences

In contrast to the case with women, the analysis of men's experiences produced very few statistically significant relationships. This was in part attributable to the smaller number of men in the sample and the smaller number of sibling sex experiences that they reported (only 26). However, what decipherable tendencies did appear in the data about the men stood in stark contrast to the findings about the women. There was no evidence that sibling sexual experiences for men were associated with higher levels of current intercourse, as was the case for women. Moreover, concerning self-esteem, the effect may have been reversed. For men, sibling sexual experiences may be associated with *lower* self-esteem. Table XI shows men with peer and positive sibling sex experiences to have a lower level of self-esteem than those with no childhood sex experience.

Why might men's experiences be associated with lower self-esteem? The crucial difference could lie in the fact that men are the initiators of the sexual involvement much more often. Thus, in those cases where sibling sex is an outgrowth of sexual maladjustment and conflict, this pathology is more likely to reside in the male than the female partner. The females are more often the recipients of overtures; they are more likely to be a chance group of sisters. The males are probably already conflicted about sex, and the

Type of experience	Sexual self-esteem score	N
No sibling sexual experience		•
a. No prepubertal sexual experiences	56	(66)
b. Some prepubertal sexual experiences	49	(135)
Sibling sexual experiences		
With peer partner	410	(18)
With nonpeer partner	47	(8)
Positive experience	43 <i>a</i>	(16)
Negative experience	44	(7)

Table XI. Sexual Self-Esteem Scores of Men With and Without Sibling Sexual Experiences

lower self-esteem as adults does not reflect an impact that the sibling sex had on them so much as the fact that they were more conflicted to start with.

However, this conclusion is highly speculative, and based, as mentioned earlier, on weak statistical evidence.

#### CONCLUSION

Sibling sexual experiences have been neglected in sex research, and in this article we have drawn back the curtain a little bit, only perhaps to reveal more new questions than answers. But the important things this research has established about sibling sexual experiences include the following:

- 1. They are a rather common experience.
- 2. They cut across all ages and are not easily categorized as incest or sex play.
- 3. Some are exploitative, involve force, and have a negative impact, while others are reported by their participants to be positive.
- 4. Females are much more vulnerable to exploitative sibling sex than are males.
- 5. Females participants in sibling sex become more sexually active as young adults.
- 6. Females who have positive sibling sex experiences give evidence in adulthood of higher sexual self-esteem.

On the whole, the evidence weighs against an extremely alarmist view of sibling sex. The majority of these experiences do not appear to be devastating. Some are positive and appear to have long-term beneficial effects. On the other hand, a quarter of such experiences appear to be abusive and painful, and may have some long-term negative effects. Even

<sup>&</sup>lt;sup>a</sup>Significantly different from group a at 0.05 level (t test).

just as negative experiences, they deserve attention and intervention for their own sake. Moreover, some of their negative consequences, if any, may be in areas which we were unable to measure.

The most serious shortcoming of this research is not its limited outcome measures but rather the limitations of its subject matter. Sex research continues to focus on the unusual at the expense of the ordinary. We know more about homosexual development than we do about heterosexual development. We know more about rape than we do about rapture. Similarly, this study has focused on sibling sexual experiences apart from other childhood sex. Little is known about the nature and consequences of any kind of childhood sexual experience. That findings about sibling sex should be surprising and controversial is partly a reflection of this ignorance. Thus real judgments about the importance, value, or risks of such experiences must await a time when the outlines of typical as well as atypical sexual development are better understood.

# A Final Cautionary Note on Interpreting These Findings

Because these findings touch on a highly controversial question, it is appropriate to warn readers against their possible misuse and misinterpretation, admittedly an unusual procedure in a scientific article.

Some will find in this research the grounds for sensational conclusions: "Incest is Good for You," "No Harm Found to Sibling Sex," and so forth. Such inferences are not warranted. I want to mention briefly some of the reasons for using great caution in interpreting what has been presented here.

The value issues related to sibling sex still remain to be addressed. Much more research needs to be done before any judgment can be made. The value implications to be drawn from this research are mixed. Participants were evenly divided in their reactions to the experiences. A significant number sounded coercive and exploitative. Another significant number sounded positive and may have had long-term beneficial effects. There are no obvious grounds here for either condemnation or vindication of sibling sex.

The findings most likely to be misinterpreted are the ones concerning the effects of sibling sex on current intercourse rates and on sexual self-esteem. As in most social science research, these are statistical tendencies, not deterministic rules. Even if the findings were true and universal, it does not mean that any given instance of sibling sex would lead to higher sexual self-esteem.

Moreover, there are many reasons why such findings may be in error. They may be a statistical fluke. Or the items that are being used to measure

what we are calling sexual activity and sexual self-esteem may not really be measuring what we think they are measuring at all. These are reasons why findings of this sort cannot be taken as fact until they have been replicated, that is, confirmed in other samples with other measures, preferably by other investigators.

A final caution concerns the generalizability of these findings. This sample was not randomly chosen and does not represent any definable population. It is conceivable that the findings here are a peculiarity of this group, and have no bearing on any other. We tend to think that this is not the case, but in strict scientific terms we have no way of knowing.

Even if these findings have some generalizability to some college groups, or college students in general, it is important to make clear how specialized a group this is. Since college attendance selects for people who are psychologically healthy, it is possible there was a great underrepresentation of people whose sibling sexual experiences led to a truly negative outcome. There may also have been an overrepresentation of people who, because they were resilient and had high self-esteem to start with, were likely to be positively affected by such an experience. In short, such findings as ours should probably be termed "the outcome of sibling sex on a group of healthy, advantaged, and upwardly mobile children." We have no way of knowing whether sibling sexual experiences have different effects on other groups. Anyone attempting to extrapolate from these findings should keep this caution clearly in mind.

## **ACKNOWLEDGMENTS**

Dennis Redfield's assistance has been invaluable on this research. Comments from Murray Straus, Larry Constantine, Karen Meiselman, and members of the Family Violence Research Seminar were extremely helpful in transforming an earlier draft of this article into its present version.

# REFERENCES

Burgess, A. W., Groth, A. N., Holmstrom, L. L., and Sgroi, S. M. (1978). Sexual Assault of Children and Adolescents, Lexington Books, Lexington, Mass.

Constantine, L. (1977). The sexual rights of children. Paper presented to the International Conference on Love and Attraction, Swansea, Wales.

Estep, R., Burt, M. R., and Mulligan, H. J. (1977). Socialization of sexual identity. *J. Marriage Family* 39: 99-112.

Finkelhor, D. (1979a). Sexually Victimized Children, Free Press, New York.

Finkelhor, D. (1979b). What's wrong with sex between adults and children? Am. J. Orthopsychiat. 49: 692-697.

Fisher, S. (1973). The Female Orgasm, Basic Books, New York.

Flugel, J. C. (1921). Psychoanalytic Study of the Family, London.

Freud, S. (1963). Three Cases, Collier Books, New York.

Hunt, M. (1974). Sexual Behavior in the 1970s, Playboy Press, Chicago.

Masters, R. E. L. (1963). Patterns of Incest, Julian Press, New York.

Nobile, P. (1978). Incest: The last taboo. Penthouse, January, p. 117.

Nunnally, J. C. (1967). Psychometric Theory, McGraw-Hill, New York.

Readers discuss family sex (1977). Forum, July, pp. 89-94.

Spainer, G. (1973). Sexual socialization and premarital sexual behavior. Doctoral dissertation, Northwestern University. *Diss. Abstr. Int.*, 1979, University Microfilms No. 73-30, 729.

Straus, M. (1979). Indexing and scaling for the social sciences with SPSS. Unpublished manuscript. University of New Hampshire, Durham, N.H.

Straus, M., Gelles, R., and Steinmetz, S. (1980). Behind Closed Doors: Violence in the American Family, Doubleday, New York.

Terman, L. M. (1938). Psychological Factors in Marital Happiness, McGraw-Hill, New York.