

Changes in Adolescents' Sexuality Between 1970 and 1990 in West-Germany

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Based on two studies (using semistructured interviews) of 16- and 17-year-old West German urban adolescents, the first in 1970 (N = 602) and the second in 1990 (N = 415), this paper traces the changes in young people's sexual behavior and attitudes during the past two decades: (i) The marked trend in the 1960s towards having coitus and petting at an ever earlier age does not seem to have continued; the changes noted in the incidence of heterosexual experiences since 1970 are minimal. (ii) Boys feel themselves less at the mercy of their sexual urges than they used to and tend to link sexuality with love and a steady relationship more than they did 20 years ago; there was a similar though less pronounced change among girls. (iii) Girls now get less pleasure and satisfaction out of sexual encounters, and in heterosexual situations take the initiative and control more than they used to. (iv) There is no evidence that the problem HIV/AIDS had a marked influence on the changes described. Results of the comparative studies are discussed in the context of current developments in man/woman relationships and the debate on gender issues.

KEY WORDS: adolescents' sexuality; sex differences in sexual behavior; sexual behavior and HIV/AIDS; social history of sexual behavior.

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INTRODUCTION

Twenty years ago we published a report in this journal on the changes we had observed in young people's sexual behavior in West Germany during the 1960s (Schmidt and Sigusch, 1972). One source of information then was a series of interviews we carried out with 16- and 17-year-old urban teenagers. In 1990 we repeated parts of this teenage study when researching the effects the threat of HIV/AIDS has on adolescents' sexual development (see Klusmann *et al.*, 1993; Knopf and Lange, 1992; Schmidt *et al.*, 1992a).⁴ This essay is a follow-up of our social historical study of the 1960s and describes the changes that young people's sex lives and their partnerships with one another have undergone since then.

For a sex researcher the incentive for looking into the sex lives of adolescents lies in the fact that the young people make up a section of the population in which any changes in sexual attitudes very soon become apparent; new social developments are less blocked by traditional structures and influences. The study we made in 1970, for instance, revealed a marked trend towards heterosexual petting and coitus at an ever earlier age. Sexual liberalization of the late 1960s was almost immediately reflected in the young people's sex lives, or putting it more precisely, they contributed a great deal to breaking down taboos. In the mean time the high hopes associated with these changes have been largely disappointed and we are now faced with a sobering discussion of the misunderstandings, strifes, frustrations, and threats apparently inherent in all sexual encounters; in particular we are witnesses to and participants in the current struggle between the sexes and the many forms of sexual exploitation and abuse that have come to light. Having shaken off certain taboos over the past 20 years, our sex lives are being subjected to scrutiny from new angles. Are there any signs of this process in the sexual behavior of teenagers?

The changes over time in the sexual behavior of adolescents and young adults have rarely been the subject of research. Most large-scale investigations into young people's sexual behavior, such as Schofield's (1965) in England, Hertoft's (1968) in Denmark, Israel *et al.*'s (1970) in Sweden, or Sorensen's (1972) in the USA, were not repeated at a later date. Some information is available from comparing generations in surveys drawing on samples covering several age groups in which the subjects were asked to describe their behavior as adolescents retrospectively (e.g., Kinsey *et al.*, 1948, 1953; Gebhard and Johnson, 1979; Hofferth *et al.*, 1987; Klassen *et*

⁴The study also covered interviews with 272 East German adolescents from Leipzig, who are not included here. The East German side of this project was run by Starke (see Starke and Weller, 1992, 1993; Schmidt *et al.*, 1993).

al., 1989), from post hoc comparisons of more recent investigations with the Kinsey data (e.g., Simon *et al.*, 1972; Wyatt *et al.*, 1988a, 1988b), or from comparative studies of (mostly relatively small and selected) samples which are limited to a few basic data on sexuality (e.g., Christensen and Gregg, 1970; Barrett, 1980; Bell and Coughy, 1980; Robinson and Jedlicka, 1982; Alzate, 1984, 1989; Sonnenstein *et al.*, 1991; Turner *et al.*, 1988). Apart from our own research presented here we know of only three replication studies using large samples and covering a wide range of variables: the research by Zelnik and Kantner (1980; Zelnik *et al.*, 1981; Zelnik and Shah, 1983) on 15- to 19-year old girls in the USA (data collected in 1971, 1976, and 1979); the study by Clement *et al.* (1984) on West German college students (data collected 1966 and 1981); and the study carried out by the former "Zentralinstitut für Jugendforschung" into East German young people (data collected 1970, 1980, 1990), which has, however, not yet been published as a whole (see Weller and Starke, 1993). As a result our knowledge of the recent history of adolescent sexuality in Western societies can only be described as fragmentary.

METHOD

The 1990 Project

In summer and fall of 1990 we interviewed 415 (201 boys and 214 girls) 16- to 17-year-olds living in Hamburg and Frankfurt and attending all different types of schools (see Schmidt, 1993).⁵ In each city we selected six or seven schools and picked out those classes where the 16- and 17-year-olds are normally found. Two interviewers, a man and a woman, explained our project to the whole class, describing it as an investigation into "love, partnership, sex and AIDS"; all the 16- and 17-year-olds were asked whether they would join in. An interview was arranged with all those who volunteered to be interviewed. At the same time they were given a letter to their parents informing them about the project and asking for their written permission for their daughter or son to take part. The interviews took place outside school hours and were carried out in the Department of Sex Research in Hamburg University and the Department of Sex Research in Frankfurt University.

⁵In Germany school attendance is compulsory up to 18 years of age. Young people learning a trade or profession have to attend so-called "Berufsschulen" (training schools) at least 1 day a week.

The guidelines for the semistructured interview which included many open questions contained the following topics: background information (48 questions or sets of questions); close relationships (63); sexual experience (including masturbation and homosexual encounters) (38); first coitus or abstinence (29); most recent sexual experience (40); fear of pregnancy, feelings about menarche and menstruation (for the girls) (22); sexual harassment and violence (10); questions on AIDS (29); alcohol and drugs (14); attitudes toward sex and prospects on living together and starting a family (27). On average the interviews lasted about $1\frac{1}{2}$ hr, the girls taking rather longer than the boys (100 vs. 90 min). Four fifths of the interviews took between 70 and 130 min. Each interviewee was given DM 20 for participating. Five men and four women (all either students of psychology and medicine or psychologists from our department) carried out the interviews, the women interviewing girls, the men boys. Each interviewer saw between 11 and 73 teenagers.

The participation rate (the number of 16- and 17-year-olds approached who took part in an interview) was 51%. No doubt the way we set up the interviews—outside school hours and bounds in a “strange” place—had a considerable influence on the refusal rate. The following detail proves this point: Since we did not have enough apprentices in our Hamburg sample we approached another training school in December 1990 and arranged to hold interviews during school hours in the school building. The participation rate was appreciably higher at 84%. Having to obtain their parents’ permission probably also affected the adolescents’ preparedness to join in: 20% more agreed to come for an interview than actually turned up. It seems likely that at least some of them had been refused parental permission or did not like to ask for it. From what the young people reported during the interviews we could conclude that, in general, their parents were remarkably open-minded about our project and left it to their sons and daughters to choose whether or not they wanted to be interviewed on such a delicate topic.

The participation rate is within the expected range for sociological investigations. There is much evidence that the adolescents’ motives for not joining in our project are extremely varied and very often external; there is probably no correlation between these motives and the data about sexual behavior in which we were interested. The fact that only about 50% of the approached teenagers took part probably has little effect on the results obtained.

The 1970 Project

The methods used are described in detail in Sigusch and Schmidt (1973). Below is a brief summary to enable the reader to appreciate the difficulties involved in our comparative study.

In Spring and Summer of 1970, 602 young people (302 boys, 300 girls) living in five cities in West German (Hamburg, Frankfurt/Main, Cologne, Stuttgart/Tübingen, and Munich) were interviewed. The subjects were selected according to a quota system: the sample consisted of 16- and 17-year-olds, selected according to city (20% from each city), sex, and type of schooling. It proved impossible in those days, in contrast to 1990, to get the school authorities to cooperate, so the interviewers had to choose their subjects themselves using the above criteria. Usually they approached the young people after and outside school and asked them to take part in an interview on "leisure time, marriage and family."

The guidelines for the structured interview which included few open questions covered the following topics: background information (28 questions or sets of questions); heterosexual experience (8); first coitus or abstinence (19); petting or intercourse during the past 12 months (29); close friendships (22); attitudes toward sex and prospects on living together and starting a family (35); masturbation, homosexual behavior (13); use of drugs (4). Most of the interviews lasted $1\frac{1}{2}$ to 2 hr. As payment the subjects received DM 8.

The fieldwork was organized and supervised by an institute for market research, and in each city 10 to 15 interviewers were employed, almost all of them psychology and sociology students. The boys were interviewed by men, the girls by women. Using the type of sampling described makes it virtually impossible to establish the participation or refusal rate, since separate individuals and not members of a previously established group were asked to participate. It is not recorded how many of those approached refused to join in.

Restrictions on Comparing the Two Studies

The 1970 and 1990 studies are only comparable with one another within limits, since different kinds of sampling were used and the interview techniques and methods employed also varied.

Sampling

In 1970, the sample was selected according to preconceived criteria (quota). In 1990, we tried to contact all the 16- and 17-years-olds in one or two schools of each kind in each city, hoping that by choosing "typical" schools we could find something approaching a representative cross-section. It is impossible to gauge to what extent and in what direction the different sampling techniques used in the two studies distort the comparison between

them. We cannot, for instance, exclude the possibility that the interviewers in 1970, using the face-to-face approach, picked out the pupils who seemed to them to be more mature, friendly, and open-minded with the result that the adolescents' sexual experience was overestimated. Despite the predictable difficulties in comparing the two studies, we decided to use a different kind of sampling for the 1990 survey where (i) the weak points were more easily calculated (e.g., by establishing the participation rate) and (ii) organization was easier. This last point was important since this time we wanted to organize and carry out the fieldwork ourselves without the help of market researchers.

In the 1970 study we had discovered that young people from different large cities tended to behave in approximately the same way in sexual matters. This allowed us to restrict ourselves to three cities in the 1990 study, making organization much easier. In Munich, however, we failed to obtain permission to carry out our interviews because the Bavarian Ministry of Culture, revealing exactly the same attitude as in 1970, refused to let us approach the youngsters at school. This led to considerable differences as far as the children's hometown was concerned. While in 1990, all those interviewed lived in Hamburg or Frankfurt/Main, in 1970 only 40% came from these two cities. Since, however, we need not assume that the influence of the location is any larger in 1990 than it was in 1970, we regard this difference of minor importance when comparing the two samples.

The fact that none of the adolescents in the 1990 survey came from cities in southern Germany did, however, result in a marked shortage of Catholics among those interviewed (Table I). Since our research in 1970 had shown that there was little correlation between being a member of the Catholic or Protestant church and sexual behavior (in line with the findings from other empirical studies, see Giese and Schmidt, 1968; Clement, 1986) this difference between the samples does not invalidate any comparison between them. Other differences associated with church membership between the 1970 and 1990 samples (Table I) are not a result of the sampling but show changes that have taken place in the meantime: Far more young people do not belong to any church than was the case in 1970; there is a considerably minority who are neither Catholic or Protestant but belong to other religious communities. This reflects the marked increase in the number of foreign adolescents. The 1990 sample includes 68 foreigners (16%), whereas in 1970 there were only a few scattered foreigners among those interviewed. A comparison between German and foreign young people (Zeitzschel, in preparation) nevertheless reveals only very small differences between them—slightly more traditional ways of behaving among foreign boys and girls, and slightly more stress on traditional gender-specific

Table I. Background Data (in Percentages)

| | Boys | | Girls | |
|--------------------|-------------------|-------------------|-------------------|-------------------|
| | 1970 (n = 302) | 1990 (n = 201) | 1970 (n = 300) | 1990 (n = 214) |
| Age | | | | |
| 15 | 0 | 3 | 0 | 4 |
| 16 | 48 | 51 | 57 | 56 |
| 17 | 52 | 39 | 43 | 39 |
| 18 | 0 | 6 | 0 | 1 |
| Level of education | | | | |
| Low | 64 | 48 | 64 | 38 |
| High | 36 | 52 | 36 | 62 |
| Employment | 30 | 28 | 26 | 15 |
| Religion | | | | |
| Protestant | 47 | 49 | 53 | 53 |
| Catholic | 43 | 13 | 42 | 11 |
| None | 8 | 25 | 3 | 24 |
| Other | 1 | 13 | 2 | 12 |

behavior—which however does not markedly affect the comparison between 1970 and 1990.

The prescribed quotas for the type of school visited in 1970 and the fact that in the past 20 years the standard of education has risen means that in our 1990 sample there are more pupils who want to pass their *Abitur* (High School Certificate which qualifies the pupil to go on to university) (Table I). As a result there are fewer youngsters already in training for a trade or profession, especially among the girls. We checked the effects to these differences on our comparison by analyzing changes 1970–1990 by social class and discovered that the changes described below apply equally to adolescents of all levels of education (for details cf. Schmidt *et al.*, 1992a).

Techniques and Tools Used to Gain Data

In 1970, 10 to 15 interviewers were employed in each city, making a total of 70 to 80. All were experienced in interviewing and were instructed by the persons in charge of the survey how to use the guidelines for the interview. In 1990 there were only 9 interviewers involved, of whom 7 out of 9 were colleagues or trainees in our Department of Sex Research and all were accustomed to guiding conversations on sexual matters in the course of

their work as psychologists specializing in sexual problems. The 1990 team was also better prepared than the interviewers in 1970 in talking about the delicate matter of sex. Whether and how the differences in the interviewers' qualifications have affected our comparison is impossible to gauge.

For the 1990 survey we developed a new guideline for the interviews. Only about 40% of the questions or sets of questions from the old questionnaire were used again, and some of these were repositioned elsewhere in the interview. A sociological instrument is in itself a historical document, reflecting the state of knowledge, focus of interest, and preoccupations of the period when it was designed. Today's youngsters would presumably have been amused or surprised if we had confronted them with the 1970 guideline. Many questions have simply become out-of-date, because public opinion has changed (e.g., questions on the importance of being a virgin or detailed questions about under what circumstances so-called "premarital" sex is acceptable). Other questions were simply nonexistent in 1970 (all questions concerning AIDS), or were overlooked by the investigators, over- or underestimated, or at least seen in a different light (e.g., sexual harassment and assault). Nowadays we are more interested than we were in 1970 in exactly how adolescents shape and live their partnerships and in context variables outside the range of simple demographic data (leisure activities, social contacts, relationship with parents, how the family lives). The remaining 70 items and sets of items (used 1970 and 1990) do however provide us with a sufficiently detailed picture of the main characteristics of young people's sex lives.

It is hard to estimate the effect the different sampling techniques used in 1970 and 1990 have when we compare the two studies. The differences in the instruments used restrict, above all, the number of variables and that means a reduction in scope and fewer details. Differences in the composition of samples have a minor influence on sexual behavior (location, Catholic adolescents underrepresented) while the effect of other differences (schooling) on our comparison can be statistically controlled. *We infer that the results obtained from comparing the 1970 study with the 1990 one can be regarded as empirically backed evidence on our target population—urban adolescences in 1970 and 1990.* The following remarks focus mainly on the differences we discovered between the generations of teenagers.

RESULTS

Sexual Experience

As far as heterosexual behavior—petting and coitus—is concerned, there is very little discernible difference between the teenagers of 1970 and

1990 (Table II). This means that the tendency we and others saw in the 1960s among heterosexual adolescents towards having sex earlier or more often has not continued during the past 20 years. The significant changes in the incidence of adolescent sex behavior in West Germans took place in the late 1960s. This differs from reports on adolescent sexual behavior in the USA which find a steady reduction of age at first intercourse, especially in girls, continuing to the 1980s (cf. Gagnon *et al.*, 1989; Hofferth *et al.*, 1987).

In 1990 fewer girls but also slightly fewer boys report having masturbated than in 1970 (Table II). This finding is, at least as far as the girls are concerned, unexpected in view of the positive tone adopted over the past decade describing masturbation as an important factor aiding a woman's sexual development and autonomy.

Among the boys there is in addition a marked reduction in the number of homosexual encounters. Whereas in 1970, 18% of the boys reported having had homosexual contacts, in 1990 the figure was only 2% (Table II). The differences are so pronounced that they cannot be ascribed only to the above-mentioned methodological issues, but probably reflect a real tendency. This is supported by the observation that there is no equivalent

Table II. Percentage Having Sexual Experience Prior to Date of Interview^a

| | Boys | | Girls | |
|---------------------------------------|-------------------|--------------------------------|-------------------|--------------------------------|
| | 1970 (n = 302) | 1990 ^b (n = 181) | 1970 (n = 300) | 1990 ^b (n = 202) |
| 1. Petting (genital) | 58 | 57 | 63 | 67 |
| | | ns | | ns |
| 2. Intercourse | 37 | 40 | 31 | 34 |
| | | ns | | ns |
| 3. Masturbation | 94 | 87 | 53 | 41 |
| | | .006 | | .006 |
| 4. Homosexual contacts | 18 | 2 | 6 | 6 |
| | | .001 | | ns |
| 5. Homosexual contacts with orgasm | 10 | <1 | <1 | <1 |
| | | .001 | | ns |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | | | | |
|------|------|----|-------|-------|-------|
| | 1 | 2 | 3 | 4 | 5 |
| 1970 | ns | ns | 0.001 | 0.001 | 0.001 |
| 1990 | 0.04 | ns | 0.001 | 0.08 | ns |

^bThe sample 1990 includes 32 adolescents who are under 16 or over 17 years of age. They have not been included in this table.

change among the girls; just as in 1970 every 20th girl interviewed reported having had sexual contact with a girl or a woman.

Quite obviously transient homosexual contact among boys in adolescence—which has always been described as a common experience of a considerable minority, especially middle-class teenagers (see Kinsey *et al.*, 1948; Giese and Schmidt, 1968; Clement, 1986)—is a form of sexual behavior that is on the wane. Perhaps society's more open-minded attitude towards sex between adolescent boys and girls has had an effect; in 1970 the young people, both boys and girls, had to face the opposition of adults, including their parents and teachers. Above all, however, it is worth keeping the following in mind: Since homosexuality has become more acceptable and markedly more visible, and homosexuality is a widely discussed social phenomenon, it is quite likely that when boys do have sexual contact with other boys they can no longer just regard it as a matter of masturbating together but find themselves labeled at once as "gay" and feel uneasy. Paradoxically, the more enlightened and broad-minded attitudes towards homosexuality (which are fairly limited and usually stop short when one's own sex life is concerned) put a taboo on homosexual behavior in those boys who do not regard themselves as gay. Furthermore, we cannot exclude the possibility that this tendency is increased by the connotation "homosexual" that is linked with "risk of AIDS." Taking both phenomena together—less masturbation and fewer homosexual contacts between boys—perhaps suggests that nowadays adolescent boys do not feel at the mercy of their sexual urges as much as used to be the case.

Sexual Desire, Sexual Activity

The data on how the boys actually behave confirm this impression: Boys are less sexually active in 1990 than they were in 1970. A larger number of them reported having been abstinent during the year, the 4 weeks preceding the interview (no petting, no intercourse, no masturbation), having had no heterosexual contacts, and (even the experienced ones) no intercourse (Table III). The differences among the girls were much smaller or negligible. Accordingly, the boys and the girls (1990) had fewer partners than in 1970 (Table IV). The data in Table V show that these findings really may be connected with the fact that the nowadays fewer boys and girls describe or experience overwhelming or powerful sexual feelings. They do not report as often that "a tremendous urge" was the reason for having intercourse for the first time (statistically significant only for the boys) and fewer want to have intercourse again or (among the inexperienced) to have more sexual experience.

Table III. Sexual Activity/Abstinence^a

| | Boys | | Girls | |
|--|-----------------|-----------------|-----------------|-----------------|
| | 1970 | 1990 | 1970 | 1990 |
| 1. No heterosexual contacts in past 12 months (%) ^b | (n = 302) 37 | (n = 181) 48 | (n = 300) 35 | (n = 201) 35 |
| | .02 | | ns | |
| 2. Abstinence in past 12 months (%) ^c | (n = 302) 4 | (n = 181) 14 | (n = 300) 28 | (n = 201) 28 |
| | .001 | | ns | |
| 3. No intercourse in past 4 weeks (experienced groups) (%) | (n = 112) 41 | (n = 86) 63 | (n = 93) 27 | (n = 71) 42 |
| | .002 | | .04 | |
| 4. No masturbation in past 4 weeks (experienced groups) (%) | (n = 284) 23 | (n = 173) 28 | (n = 161) 67 | (n = 85) 69 |
| | ns | | ns | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | 1 | 2 | 3 | 4 |
|------|------|-------|------|-------|
| 1970 | ns | 0.001 | 0.04 | 0.001 |
| 1990 | 0.01 | 0.001 | 0.01 | 0.001 |

^bNo petting and no intercourse, only 16- and 17-year-olds (see note Table II).

^cNo petting, no intercourse, and no masturbation, only 16- and 17-year-olds (see note Table II).

Reactions to Sex

Today's girls describe petting, intercourse, including the first time, and masturbation as less pleasurable and satisfying than their counterparts did 20 years ago (Table VI). The same tendencies are discernible for intercourse, though not masturbation, among the boys; they are however not nearly as marked as with the girls.

One of our most striking findings is that in 1990 the girls are much more reserved when asked to describe their own sexual reactions. In 1970, between 20 and 30% more girls than in 1990 described petting, intercourse, including the first time, and masturbation in positive terms such as "it was really satisfying sexually" or "it was fun." Are girls today reluctant to be enthusiastic about their sexual experiences? Do they hold back their feelings in the situation? Or are their sexual activities, especially with boys, just not that satisfying? We return to these questions later.

There were no differences between 1970 and 1990 as far as the number of negative reactions were concerned ("I had a guilty conscience," "it was an unpleasant feeling," "I regretted it"). This applies to petting, inter-

Table IV. Number of Partners: Intercourse (in %)^a

| | Boys | | Girls | |
|--|---------------------------|--------------------------|--------------------------|--------------------------|
| | 1970 (<i>n</i> = 109) | 1990 (<i>n</i> = 86) | 1970 (<i>n</i> = 93) | 1990 (<i>n</i> = 71) |
| 2. No. of partners since first intercourse | | | | |
| 1 | 23 | 50 | 59 | 65 |
| 2-3 | 41 | 23 | 22 | 32 |
| 4+ | 37 | 27 | 20 | 3 |
| | .001 | | .003 | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities: 1970, *p* = 0.001; 1990, *p* = .007.

course, the first coitus, and masturbation. As in 1970 only a minority (e.g., less than 10% for the most recent intercourse) agreed with these statements.

Taking the Initiative, Remaining Independent

Both boys and girls report that the initiative in sexual matters today lies more often in the hands of the girls than it used to, and less often in

Table V. Sexual Demand Sexual Desire^a

| | Boys | | Girls | |
|---|---------------------------|--------------------------|--------------------------|--------------------------|
| | 1970 (<i>n</i> = 112) | 1990 (<i>n</i> = 85) | 1970 (<i>n</i> = 92) | 1990 (<i>n</i> = 71) |
| 1. Reason for first intercourse: "I had a tremendous urge to have sex" (%) | 80 | 59 | 40 | 31 |
| | .001 | | ns | |
| 2. Experience of first intercourse: "I wanted to do it again, very soon" (%) | 92 | 67 | 70 | 35 |
| | .001 | | .001 | |
| 3. No interest in more sexual activity (those who have never had intercourse) (%) | 17 | 32 | 42 | 67 |
| | .005 | | .001 | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | | |
|------|------|------|------|
| | 1 | 2 | 3 |
| 1970 | .001 | .001 | .001 |
| 1990 | .001 | .001 | .001 |

Table VI. Reactions to Sex^a

| | First intercourse | | Last intercourse | | Last petting ^b | | Last masturbation | |
|--|-------------------|----------------|------------------|----------------|---------------------------|----------------|-------------------|-----------------|
| | 1970 | 1990 | 1970 | 1990 | 1970 | 1990 | 1970 | 1990 |
| Girls | | | | | | | | |
| 1. "It was fun" (%) | 62 (n = 91) | 34 (n = 71) | 82 (n = 85) | 59 (n = 66) | 84 (n = 109) | 70 (n = 53) | 66 (n = 74) | 45 (n = 60) |
| | .001 | | .002 | | .03 | | .02 | |
| 2. "It was really satisfying sexually" (%) | 56 | 27 | 73 | 48 | 71 | 42 | 66 | 43 |
| | .001 | | .002 | | .001 | | .008 | |
| Boys | | | | | | | | |
| 1. "It was fun" (%) | 86 (n = 112) | 75 (n = 84) | 95 (n = 105) | 85 (n = 68) | — | — | 71 (n = 232) | 68 (n = 147) |
| | .06 | | .02 | | | | ns | |
| 2. "It was really satisfying sexually" (%) | 83 | 76 | 97 | 84 | — | — | 76 | 77 |
| | ns | | .002 | | | | ns | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | 1 | 2 |
|-------------------|------------|-------|
| First intercourse | 1970 0.001 | 0.001 |
| | 1990 0.001 | 0.001 |
| Last intercourse | 1970 0.004 | 0.001 |
| | 1990 0.001 | 0.001 |
| Last masturbation | 1970 ns | 0.10 |
| | 1990 0.002 | 0.001 |

^bOnly adolescents who have not had intercourse. By mistake we did not gather these data for boys in 1990.

the boys'. This was true for their most recent petting and intercourse as well as for the first time they had intercourse (Table VII). It looks as though compared with the past the girls now want to exert more social control over heterosexual situations and the boys less. This observation fits in with another finding that in 1970 a huge majority of the girls (85%) gave "he wanted it" as a reason for having intercourse the first time; in 1990 the figure was 28%. The girls nowadays tend to make their own decisions and are less prepared to fit in with the boys' wishes.

Girls in the 1990s are far less prepared to accept the traditional division of roles within the family than the girls in the 1970s were; a great majority of them demand the right to have a profession of their own and to share the household and child-care chores equally with their partners (Table VIII). There are similar tendencies among the boys but they are far less marked, making this a field where quarrels and frustration are bound to become more frequent.

Table VII. Sexual Initiative^a

| Source of initiative | Boys | | Girls | |
|--|-----------|----------|-----------|----------|
| | 1970 | 1990 | 1970 | 1990 |
| 1. First intercourse (%) | (n = 111) | (n = 80) | (n = 93) | (n = 70) |
| From boy | 32 | 19 | 40 | 49 |
| From girl | 14 | 26 | 2 | 16 |
| From both | 53 | 54 | 58 | 36 |
| | .04 | | .001 | |
| 2. Most recent intercourse (%) ^b | (n = 105) | (n = 59) | (n = 86) | (n = 61) |
| From boy | 43 | 17 | 40 | 2 |
| From girl | 1 | 12 | 3 | 26 |
| From both | 55 | 71 | 56 | 72 |
| | .001 | | .001 | |
| 3. Most recent petting (only those who have never had intercourse (%) ^b | (n = 86) | (n = 27) | (n = 110) | (n = 66) |
| From boy | 71 | 11 | 79 | 45 |
| From girl | 1 | 26 | 1 | 6 |
| From both | 28 | 63 | 21 | 48 |
| | .001 | | .001 | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | 1 | 2 | 3 |
|------|------|------|------|
| 1970 | .009 | ns | ns |
| 1990 | .002 | .004 | .002 |

^bFor calculating the statistical tests the categories "from boy" and "from both" were combined. Only those adolescents were included in the calculation who had had coitus or petting in the past 12 months.

Table VIII. Type of Partnership Preferred

| | Boys | | Girls | |
|---|---------------------------|---------------------------|---------------------------|---------------------------|
| | 1970 (<i>n</i> = 301) | 1990 (<i>n</i> = 174) | 1970 (<i>n</i> = 300) | 1990 (<i>n</i> = 189) |
| The man has his job and supports the family; the woman looks after household and children. (%) | 34 | 27 | 20 | 5 |
| The man has his job and supports the family; the woman looks after household and children and has a part-time job. (%) | 22 | 17 | 23 | 20 |
| Both man and woman have jobs and are equally responsible for household and children, so that each of them works for the same number of hours. (%) | 44 | 55 | 57 | 75 |
| | | .07 | | .001 |

^bSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities: $p = 0.001$ for both 1970 and 1990.

Romanticizing Sex

Boys today link sex with love more than they did in 1970 (Table IX). Girls continue to make a strong link between love and sex, more than boys do, just as they did in 1970. The difference between the sexes on this point has, however, become much smaller.

Both boys and girls put much more stress on a steady and loving relationship than they used to, and behave accordingly. They fall in love earlier and more often than in 1970, tend more than before to describe their feelings for their boy- or girlfriend as "love," admit this to one another more often, and (only the boys) see "love" more often as a reason for having intercourse for the first time (Table X). Compared with 1970, most of the changes are considerable (up to 30%).

Today's adolescents are more committed to a faithful and sexually exclusive relationship than the adolescents in 1970 were and tend to actually be faithful to one another (Tables XI, XII). These changes are slightly larger for boys, so that the divergence in the sexes' attitudes to fidelity has become smaller. Among all our findings this is one of the most striking: Most teenagers have a pervasive desire for a close and lasting relationship;

Table IX. Love and Sex^a

| | Boys | | Girls | |
|---|-------------------|-------------------|-------------------|-------------------|
| | 1970 (n = 302) | 1990 (n = 181) | 1970 (n = 300) | 1990 (n = 193) |
| 1. Love and sex (%) | | | | |
| a. "I want to wait until I am married before having intercourse" | 3 | 4 | 5 | 9 |
| b. "I only want to have intercourse with boys/girls who I really love" | 46 | 71 | 80 | 81 |
| c. "I mostly want to have intercourse with boys/girls who I really love; but if the opportunity arises, I would also sleep with boys/girls who I do not love" | 34 | 23 | 11 | 9 |
| d. "I want to sleep with a boy/girl who attracts me and is willing, whether I love him/her or not" | 17 | 2 | 3 | 1 |
| | | .001 | | ns |
| 2. Rejecting sex without love (%) | | | | |
| The statements 1c or 1d reflect the adolescent's attitude "least" | 40 | 67 | 72 | 82 |
| | | .001 | | .01 |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | |
|------|-------|-------|
| | 1 | 2 |
| 1970 | 0.001 | 0.001 |
| 1990 | 0.001 | 0.002 |

faithful and loving behavior is highly prized and many of them live according to these principles. To put this finding in proper perspective, it is worth remembering that already in 1970 many of the boys and a large majority of the girls regarded a faithful and loving relationship as very important; now still more adolescents share this opinion.

Sex and the Family

In 1990 far more mothers and fathers know whether their sons or daughters have had intercourse than was the case in 1970 (Table XIII).

Table X. Falling in Love and Love in Steady Partnerships/Sexual Affairs^a

| | Boys | | Girls | |
|---|-----------------|-----------------|-----------------|-----------------|
| | 1970 | 1990 | 1970 | 1990 |
| 1. Falling in love prior to date of interview (%) ^b | (n = 302) 71 | (n = 181) 88 | (n = 300) 85 | (n = 202) 95 |
| | .001 | | .001 | |
| 2. Falling in love before 16th birthday (%) | (n = 302) 48 | (n = 201) 76 | (n = 300) 65 | (n = 214) 88 |
| | .001 | | .001 | |
| 3. Feelings for steady girl/boyfriend: love (%) ^c | (n = 158) 40 | (n = 55) 71 | (n = 190) 47 | (n = 96) 78 |
| | .001 | | .001 | |
| 4. Has told girl/boyfriend that he/she loves her/him (%) ^c | 54 | 89 | 53 | 83 |
| | .001 | | .001 | |
| 5. Girl/boyfriend has said she/he loves him/her (%) ^c | 66 | 93 | 70 | 89 |
| | .001 | | .001 | |
| 6. Love as reason for first intercourse (%) | (n = 112) 44 | (n = 85) 64 | (n = 92) 76 | (n = 71) 72 |
| | .006 | | ns | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | | | | | |
|------|-------|-------|----|----|----|-------|
| | 1 | 2 | 3 | 4 | 5 | 6 |
| 1970 | 0.001 | 0.001 | ns | ns | ns | 0.001 |
| 1990 | 0.02 | 0.001 | ns | ns | ns | ns |

^bOnly 16- and 17-year-olds (see note Table II).

^cCurrent (at date of interview) steady girl/boyfriend.

Young people do not conceal their love lives from their parents as often as they used to, at least as far as heterosexual contacts are concerned. Other data from the 1990 study confirm this phenomenon, though we do not have any comparative figures from the 1970 study. Nowadays four fifths of the boys and three fifths of the girls report that a girl- or boyfriend has already spent the night with them in their room at home or that their parents would certainly permit this (a third have already done so); approximately four fifths of the boys and girls who have had intercourse say that they could come together sexually with their steady partner as often as they want. It is our guess that these figures were much lower in 1970, and there are mixed feelings about this (presumed) development: On the one hand it shows that today's parents accept their childrens' sex lives more than their predecessors did; on the other hand the young people's sexuality,

Table XI. Attitude Towards Fidelity^a

| | Boys | | Girls | |
|---|-------------------|-------------------|-------------------|-------------------|
| | 1970 (n = 302) | 1990 (n = 181) | 1970 (n = 300) | 1990 (n = 193) |
| "One promises to be faithful and really is faithful" (%) | 56 | 89 | 73 | 95 |
| "One promises to be faithful, but each occasionally sleeps with someone else" (%) | 13 | 5 | 6 | 3 |
| "One agrees that each can sleep with other people if he or she wants to" (%) | 30 | 6 | 21 | 2 |
| | .001 | | .001 | |

^bSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities: 1970, $p = 0.001$; 1990, $p = 0.10$.

Table XII. Infidelity During Current Steady Relationship^a

| | Boys | | Girls | |
|--|-----------------|----------------|-----------------|----------------|
| | 1970 | 1990 | 1970 | 1990 |
| 1. Have kissed another girl/boy (%) ^b | (n = 157) 54 | (n = 55) 25 | (n = 190) 41 | (n = 96) 20 |
| | .001 | | .001 | |
| 2. Have petted with another girl/boy (only those who have experience of petting) (%) | (n = 130) 31 | (n = 41) 0 | (n = 152) 9 | (n = 83) 5 |
| | .001 | | ns | |
| 3. Have slept with another girl/boy (only those who have had intercourse) (%) | (n = 78) 23 | (n = 40) 18 | (n = 74) 5 | (n = 54) 6 |
| | ns | | ns | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | | |
|------|------|-------|-------|
| | 1 | 2 | 3 |
| 1970 | 0.01 | 0.001 | 0.002 |
| 1990 | ns | ns | 0.06 |

^bIn 1970 the adolescents were asked whether there had been any kissing/petting/intercourse with other partners. In 1990 we asked them whether they had been unfaithful and, if they said yes, what had they done. Since "kissing" in the view of some adolescents probably does not rate as "unfaithful," the differences between 1970 and 1990 as shown in the table are presumably exaggerated.

Table XIII. Parents Know About Their Son's/Daughter's Sex Life^a

| | Boys | | Girls | |
|---|-----------------|----------------|----------------|----------------|
| | 1970 | 1990 | 1970 | 1990 |
| 1. Mother in the know about son's/daughter's sex life: "yes, certainly" (%) | (n = 110) 31 | (n = 80) 58 | (n = 92) 32 | (n = 68) 69 |
| | .001 | | .001 | |
| 2. Father in the know about son's/daughter's sex life: "yes, certainly" (%) | (n = 99) 28 | (n = 75) 48 | (n = 86) 16 | (n = 61) 51 |
| | .008 | | .001 | |

^aSignificance of gender differences according to chi-square test or Fisher Test of exact probabilities:

| | | |
|------|----|------|
| | 1 | 2 |
| 1970 | ns | 0.06 |
| 1990 | ns | ns |

which used to be a powerful motivator encouraging them to leave home, become independent, and extricate themselves from close family ties has been absorbed into family life, so that an important developmental step towards adulthood has been turned into something like a "family matter," and quite literally "domesticated."

What Role has HIV/AIDS Played in the Changes Described?

We have chosen to look at adolescent sexuality somewhat removed from the problem of AIDS. The data obtained in the 1990 interviews relating to AIDS (for a more detailed discussion of our results, see Klusmann *et al.*, 1993) has only been taken into account where they helped us to understand the changes described. For those readers who work in the field in the USA, failing to give the threat of AIDS absolute priority when investigating the sexual behavior of teenagers in the 1990s may seem quite unrealistic or just a foolhardy attempt to shut our eyes to the facts. So it seems helpful to remind the reader that AIDS in West Germany (the old Federal Republic) is far less widespread than in the USA (Table XIV).

One might be tempted to interpret some of the tendencies we have mentioned as the result of an effort to reduce the danger of contracting HIV: more abstinence, fewer sexual partners, more stress on love and fidelity, fewer homosexual contacts for boys. Here, too, we should mention the increase in the number of condom users: In 1990, 55% of all the ado-

Table XIV. Some Epidemiological Data on AIDS, Germany and USA

| Annual rate of AIDS cases per 1 million population ^a | | | |
|---|------------|------------|------------|
| West Germany | 16.3 | | |
| East Germany | 0.9 | | |
| Frankfurt/Main | 72.8 | | |
| Hamburg | 53.3 | | |
| Leipzig | 0 | | |
| USA | 184.0 | | |
| New York City | 813.0 | | |
| Accumulative number of AIDS-cases ^b | | | |
| | Ages 13-19 | Ages 20-24 | Ages 13-24 |
| All exposure categories | | | |
| West Germany | 62 | 291 | 353 |
| USA | 872 | 8911 | 9783 |
| Exposure category "heterosexual contact" | | | |
| West Germany | 1 | 20 | 21 |
| USA | 124 | 1005 | 1129 |

^aJuly 1, 1991-June 30, 1992. Sources: Bundesgesundheitsamt, Berlin, July 1992; CDC-HIV/AIDS Surveillance, July 1992.

^bUntil May 31, 1992 (Germany) and, June 30, 1992 (USA). Sources as above. Note that the population of the USA is approximately 4.1 times as big as that of West Germany. If one takes this into account, the accumulative incidence (13-24 years) in the USA is 6 to 7 (all exposures) or more than 10 times (heterosexual contact) higher than in West Germany.

lescents (taking boys and girls together) used a condom when they had intercourse for the first time, whereas in 1970 the figure was only 25%.

Yet despite these dramatic changes in contraceptive behavior, worries about catching HIV seem to be slight and only of secondary importance: Less than 10% of all the young people interviewed who had used a condom when having intercourse (first coitus as well as most recent intercourse) would have *not* done so "if AIDS didn't exist." Condoms are used more often because young people's contraceptive behavior has improved and they are more realistic about the risks of a pregnancy (see Knopf and Lange, 1992). This is backed by the observation that while more boys use condoms more girls are on the "pill": 34% of the 1990 girls used this method when having intercourse for the first time, compared with 21% in 1970. It is however very likely that the official campaigns to promote the use of condoms in the battle against HIV/AIDS have made them much more acceptable to young people and have encouraged them to use them. As a result of the public health campaigns, buying, possessing, and using a condom has come to seem mature, competent, and a sensible way of dealing with sexual

matters, even if the condom is not explicitly used to protect the user from catching HIV.

Our data from the AIDS-related part of the interviews (Klusmann *et al.*, 1993) also suggest that it is rare for boys or girls to worry about HIV or to refuse a sexual encounter for fear of contracting it.⁶ The reasons behind the rare (5% of the total group) tests for HIV antibodies they had undergone were almost all (90%) connected with stays in hospital, donating blood, and traveling abroad, and had nothing to do with the risks associated with intercourse. Even if some changes between 1970 and 1990 look as if they were preventive strategies actually being put into practice, this is not the case. What from an objective standpoint is adequate behavior to prevent infection has its main roots in the way the young people organize their sex lives anyway and is therefore more effective than if it were just the result of health education schemes.

Our study reveals that the threat of AIDS has little influence on the sexual behavior of urban West German adolescents, but these findings apply only to the "mainstream" teenagers who we interviewed and certainly not to the boys and girls who belong to any of the minority groups particularly at risk.

DISCUSSION: AN HYPOTHESIS

Focusing on the *changes* in adolescent sexuality over the past two decades tempts one to underestimate the other side, the *continuity*. In fact, however, the similarities between the two generations we investigated are almost more striking than the differences. In the 1970 study Sigusch and Schmidt (1973) described the underlying pattern for adolescent sexual behavior as open-minded, in favor of sex, focusing on loving relationships, i.e., creating a junction between love and sexuality, and promoting the same moral attitudes for boys and girls, i.e., equalitarian sexual standards. This description still applies—with the changes of emphasis we mentioned—to both boys and girls. What has markedly altered is the extent to which adults, and in particular parents, approve of this liberal form of sexuality. Few of the young people have to keep their ideas about sex or their own

⁶About 8% of the boys and girls have been in a sexual situation in which he or she feared getting infected. From their perspective at the time of the interview most of the adolescents were convinced that their former fear was based on insufficient information (e.g., having been afraid after kissing or manual petting). 8% of boys and 5% of girls stated that they had at least once refused a sexual contact for fear of catching HIV; however in almost two fifths of these cases HIV was only one reason in a complex decision.

love lives secret any longer or to defend their attitudes against the adult world. This impressive development is well illustrated in the phenomenon of "familiarization" described above. The adults, it seems, have more or less handed over all responsibility for how to behave in sexual matters to their children, without any sign that "morals" have suffered in the least.

Looking at the various, apparently disconnected changes in teenage sex habits since 1970, can we detect anything like a common factor, an explanation that makes sense of all the information we accumulated? According to Miller and Simon (1980, p. 392) "undoubtedly, gender role expectations represent the most powerful factors shaping adolescent sexual behavior." Most probably these expectations have changed over the past 20 years. Due to the feminist movement and widespread public discussion, awareness of society's discrimination against women has certainly increased dramatically in West German. It is very likely the adolescents in 1990 were more sensitive to these problems that were their counterparts in 1970.

Having this in mind, it looks as if the boys often cope with confrontation with the gender issue by retreating or becoming defensive: They do not regard themselves as driven by dangerous or powerful lusts, preferring to "tame" their sexual needs within the bounds of a close and loving relationship. This development, which is detectable among boys of all educational levels (Schmidt *et al.*, 1992a), is exemplified in the reasons they give for having intercourse for the first time: Nowadays fewer describe having "a tremendous sexual urge" and more that they want it because they were "in love." To some extent boys have shrugged off old concepts about "maleness" and adopted certain "female" ideals, without catching up with the girls.

The girls—again of all educational levels (Schmidt *et al.*, 1992a)—tackle the problems presented by the gender issue on the one hand by taking charge, demanding that they have a greater say in how the partnership and their sex lives are run; on the other hand they report experiencing less pleasure and satisfaction. They are obviously less enthusiastic and more skeptical about any likely gains, especially where sex with men is concerned, and have the self-confidence to admit it if a sexual encounter is not as exciting as they, their partner, or social convention think it should be. Furthermore, to them heterosexual encounters seem to be—and in view of the male aggression many of them have experienced⁷ are in fact—fraught with risks.

⁷The interview included six open questions on sexual harassment, force, and violence. The data were rated independently by four experts (two women and two men; cf. Lange, 1993). According to their figures, 62% of the girls stated that they had been subjected to sexual harassment at least once; 8% reported sexual assault and massive coercion; almost all the

There seem to be two sides to the social phenomenon "gender debate." One is *manifest* and obvious to everyone, a tendency to point out and oppose any signs of discrimination or injustice, to detect any attempts by men to override or dominate women, and to attack any efforts the men make to deny or discount such behavior. The other side is *latent*, less easily discernible: The debate has altered the way men and women approach one another. Women and (some) men have become highly sensitized to the aggressive and intimidating sides of sex; women and (some) men have become more aware of the potential repression and injury behind it; and women and (some) men have become more skeptical about whether equal partnerships are conceivable under current circumstances. As a result new rituals and labels are being created for what is considered proper behavior. A new code of sexual conduct for men and women is emerging. This code aims to make sexual encounters more friendly, more communicative, more predictable, more rational, the outcome of an amicable conversation. Of course, there are all kinds of contradictions associated with such a shift in emphasis. Socially, we seem to be faced with a paradox: while on the one hand male sexuality is being "pacified," on the other hand there are continuing—perhaps even increasing—sexual exploitation and violence directed against women.

Our assumption is that while real changes in gender relations and the public debate linked to these changes may explain many of our findings, they do not explain all. We should not overlook the fact that young people also have to face the instability of relationships in their families. In 1970, only one in ten 16- to 17-year-olds lived with only one parent, i.e., in an incomplete family, nowadays it is about one in four. A fifth of today's adolescents has lived through their parents' separation while still children (under 11), and one in four reports that one parent has a new partner (no comparative figures for 1970); even more, one can conclude, must have witnessed the marriages of their friends' parents coming apart or seen life in a single-parent family. The understandable tendency, especially among the boys, to find a "steady" early on may well be linked to this development. Nevertheless our most striking findings from this comparative study can be summed up as follows: If the teenagers in the early 1970s were fired by the idea of sexual emancipation, "getting free," today's young people are deeply affected by the struggle going on between the sexes. It is not the threat of AIDS that has altered mainstream young people's sexual behavior in West Germany but the gender issue.

perpetrators were men. The figures for the boys are 24 and 1%, respectively; more than four fifths of the perpetrators were men. No comparative data from the 1970 survey is available.

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