

Extramarital Sex: Prevalence and Correlates in a National Survey

Michael W. Wiederman, Ph.D.

Department of Psychological Science, Ball State University

In the current study, data from a nationally representative sample of 884 men and 1,288 women (1994 General Social Survey, Davis & Smith, 1994) who have ever been married were analyzed with regard to incidence, prevalence, and correlates of extramarital sex (EMS). Men were more likely than women to report ever engaging in EMS (22.7% vs. 11.6%, $p < .00001$), yet, after correcting the probability value for multiple tests, the apparent gender difference regarding the proportion of respondents who had EMS during the past year was not statistically significant (4.1% vs. 1.7%, $p < .008$). Interestingly, there was no gender difference in lifetime incidence among respondents younger than 40 years of age. Except for the oldest cohort, lifetime incidence of EMS increased with age for men, whereas for women there was an apparently curvilinear relationship such that lifetime incidence of EMS was greatest among those 30-50 years of age. Those who have ever been divorced, and those with greater attitudinal acceptance of EMS, had higher incidence of EMS compared to those who have not been divorced and those reporting greater disapproval of EMS. With regard to possible gender differences, men and women who denied ever engaging in EMS did not differ in their attitudes about EMS, just as men and women who reported having experienced EMS did not differ in their attitudes. The results are discussed in relation to previous research and unanswered questions left for further investigation.

In their ground-breaking research, Kinsey and his colleagues found that approximately one third of men and one fifth of women had had extramarital sexual intercourse (see Kinsey, Pomeroy, & Martin, 1948, p. 282; Kinsey, Pomeroy, Martin, & Gebhard, 1953, p. 417). In the three decades following the Kinsey reports, numerous sex surveys were conducted with convenience samples. In general, the results of these subsequent surveys were either congruent with the Kinsey group's findings or revealed a greater incidence of extramarital sex (see Allgeier & Allgeier, 1995; Goettsch, 1994; and Thompson, 1983, for reviews). In his review, Thompson (1983) concluded, "Population parameters for extramarital coitus seem to be at least 50% for married men, and the figure for married women is rapidly approaching the same level" (p. 18).

The convenience samples upon which this conclusion was based were surveyed during the 1970s and early 1980s. How do those earlier rates of extramarital sex (EMS) compare to more recent findings? Several large-scale sexual surveys recently have been conducted using nationally representative samples. Although EMS was not the focus of these surveys, they do contain relevant data. For ex-

ample, Smith (1991) reported results based on the 1989 General Social Survey (GSS), a survey conducted annually with a representative sample of American adults. Although the survey did not contain a specific question about EMS, Smith ascertained the proportion of married respondents who reported more than 1 sexual partner during the previous 12 months. He found that only 1.5% of married Americans (0.8% of women and 2.1% of men) apparently had had EMS in the past year. These results prompted some to question whether having multiple sex partners may be a "disappearing practice" among married Americans (e.g., see Allgeier & Allgeier, 1995, p. 430).

Billy, Tanfer, Grady, and Klepinger (1993) reported results based on a national sample of men aged 20-39 surveyed during 1991. They found that 4% of currently married men reported more than 1 vaginal intercourse partner during the past year. Forste and Tanfer (1996) reported results based on a national sample of women aged 20-37 surveyed during 1991. They found that 4% of currently married women reported having had EMS at some point.

Leigh, Temple, and Trocki (1993) reported results based on a national

sample of adults surveyed in 1990 with regard to number of vaginal and/or anal intercourse partners during the past 30 days, 12 months, and 5 years. Among those respondents who were married during each time period investigated, 1.2% reported more than 1 intercourse partner during the past 30 days, 3.6% more than 1 partner during the past 12 months, and 6.4% multiple partners during the past 5 years. Regardless of the time span, about twice as many men as women reported EMS. Similarly, Choi, Catania, and Dolcini (1994) reported results based on a national sample of adults surveyed in 1990-91. Among currently married respondents, 2.2% reported having more than 1 vaginal and/or anal intercourse partner during the preceding 12 months, with men about twice as likely as women to have had more than 1 partner.

I express appreciation to Stephen Johnson, Ph.D., for assistance in accessing the 1994 GSS data set and to Carri Maynard and three anonymous reviewers for helpful comments and suggestions regarding earlier versions of this article. Address correspondence to Michael Wiederman, Ph.D., Department of Psychological Science, Ball State University, Muncie, IN 47306-0520. Telephone: 317-285-1690. Fax: 317-285-8980. E-mail: 00MWWIEDERMA@BSU.EDU.

Laumann, Gagnon, Michael, and Michaels (1994) reported results of their national survey and, although not presented by gender, 3.8% of the currently married respondents reported more than 1 sex partner during the past year (see p. 217). These authors also asked about lifetime experience of EMS and found that 24.5% of ever-married men and 15.0% of ever-married women reported having experienced EMS at some point (see p. 216). A problematic issue in the Laumann et al. study, however, was possible contamination of the EMS items, because 21% of respondents were interviewed with a child, spouse, or some other person in the room (see p. 568). Years earlier, Johnson (1970) found that men and women who completed questionnaires about sexual experience in the same room as their spouse were less likely to report EMS experience relative to married men and women who completed the same questionnaire in separate rooms of the house. In the Laumann et al. study, women were more likely than men to have had another person in the room during participation in the interview, and having a mate in the room during the interview may have inhibited reports of multiple sex partners; 5% of respondents interviewed with a spouse or sex partner in the room reported having had more than 1 sex partner in the last year compared to 17% of those interviewed without a partner present (see Laumann et al., 1994, p. 568).

Most recently, in February 1994, *Parade Magazine* conducted a telephone survey of 1,049 adults between the ages of 18 and 65 selected to represent the demographic characteristics of the United States adult population (Clements, 1994). Of the married respondents, 19% of the men and 15% of the women indicated that they had had EMS. The prevalence of EMS was greatest within the oldest cohort (23% among those ages 55-65).

In general, the results of these relatively recent surveys suggest that between 15-25% of ever-married Americans report having had EMS,

but EMS occurs infrequently during any year (1.5-4.0% incidence during the preceding 12 months). Also, it appears that men are at least somewhat more likely than women to report EMS. Despite these general findings, we currently have few answers to some rather rudimentary questions about EMS. For example, how are basic demographic factors such as age, ethnicity, size of the community in which one resides, and history of divorce related, if at all, to EMS? Within their sample of White males, Kinsey et al. (1948) found that lifetime prevalence of EMS remained remarkably stable across age groups but may have declined slightly with age (see p. 282), whereas among their female sample, Kinsey et al. (1953) found that the incidence of EMS rose with age, peaking by about age 40 (see p. 417). Laumann et al. (1994) found that lifetime prevalence of EMS increased steadily with age for men but showed a curvilinear relationship for women, such that likelihood of EMS was highest among those ages 40-50 (see p. 216). In the *Parade Magazine* survey, lifetime prevalence of EMS was highest among the older cohort (ages 55-65), but no distinction was made based on gender (Clements, 1994).

Even less is known about EMS as related to ethnicity, size of community of residence, history of divorce, and EMS attitudes. Choi et al. (1994) found that Black men and women had higher rates of EMS during the preceding year relative to White men and women. Similarly, in their sample of young adult women, Forste and Tanfer (1996) found that Black women and Hispanic women had higher rates of EMS relative to White women. With regard to size of city, Kinsey et al. (1948) found that lifetime prevalence of EMS was higher among men in urban environments compared to rural areas (see p. 456). Also, in a national sample, Weis and Jurich (1985) found that attitudes about EMS were uniquely related to size of community of residence, even after controlling for ethnicity and

premarital sexual permissiveness; greater acceptance of EMS was demonstrated among those residing in urban areas.

With regard to potential links between EMS attitudes and experience, Thompson (1983) concluded, "There is little evidence to suggest that [attitude about EMS] predicts behavior" (p. 17). Yet Kinsey and his colleagues (1953) noted an apparent relationship between EMS experience and attitudinal acceptance of the behavior (see p. 416). The relationships between likelihood of EMS and age, ethnicity, size of city of residence, divorce history, and EMS attitudes are not clear. Also, it is important to consider patterns of nonresponse to EMS survey items in that notably higher rates of nonresponse by particular subsamples may bias conclusions (see Biggar & Melbye, 1992; Laumann et al., 1994, pp. 556-560; Wiederman, 1993a).

The focus of the current study was investigation of potential relationships between EMS and the several factors discussed previously. Specifically, I sought to investigate: (a) the lifetime prevalence of EMS among men and women in the United States as well as the incidence of EMS during the past year; (b) potential relationships between EMS and age, ethnicity, size of the community in which one resides, history of divorce, and EMS attitudes; (c) the degree of overlap between having ever engaged in EMS and having done so during the past year; and (d) the extent to which nonresponse to EMS questions might threaten the accuracy of EMS-prevalence estimates. In the current study, aforementioned questions and issues were investigated using data from a national sample—the 1994 GSS.

Method

Participants

The GSS is conducted annually by the National Opinion Research Center (NORC) and consists of face-to-face interviews with adults selected to represent the civilian household popu-

lation of the continental United States (see Davis & Smith, 1994). The sample is limited to those who speak English and are at least 18 years of age. Respondents in the current study were 884 men and 1,288 women who participated in the 1994 GSS and indicated that they had ever been married. Of these, 663 (75%) of the men were currently married, whereas 760 (59%) of the women were currently married. The large majority of men (85.7%) and women (85.8%) were White; 10.3% of men and 10.7% of women were Black, and the remaining 4.0% of men and 3.5% of women were self-identified as belonging to another ethnic group.

Measures

Demographics. In recruiting the sample for the GSS, ethnic minorities are not oversampled, leaving relatively small groups of non-White respondents. As such, ethnicity was coded as either *White*, *Black*, or *Other* in the 1994 GSS data set. Survey research center belt code referred to the size and type of community in which the respondent resided and was coded from 1 (*Central city of 1 of the 12 largest standard metropolitan areas*) to 6 (*Rural—counties having no towns with 10,000 or more people*). Current marital status was coded according to *Never Married*, *Married*, *Separated*, *Divorced*, or *Widowed*. Additionally, ever-married respondents were asked, "Have you ever been divorced or legally separated?" For more information on coding of GSS variables, see Davis and Smith (1994).

Sexual experience. Immediately after the face-to-face interview, participants were given a brief, self-administered questionnaire regarding their sexual experience, which they sealed in an envelope before returning it to the interviewer. The questionnaire items used in the current study included the open-ended question "How many sex partners have you had in the last twelve months?" as well as "Was one of the partners your husband or wife or regular sex part-

ner?" and "Have you ever had sex with someone other than your husband or wife while you were married?"

Among the currently married respondents, I determined the occurrence of EMS during the past year using the following schema. I categorized those respondents who either reported no sexual partners during the past year (i.e., responded with a 0 to the question "How many sex partners have you had in the last twelve months?") or reported having had one partner, including their mate (i.e., responded with a 1 to the question "How many sex partners have you had in the last twelve months?" and responded "yes" to the question "Was one of the partners your husband or wife or regular sex partner?") as having been maritally monogamous. I categorized those respondents who reported having more than one sexual partner (i.e., responded with >1 to the question "How many sex partners have you had in the last twelve months?" or having had one partner who was not their mate (i.e., responded with a 1 to the question "How many sex partners have you had in the last twelve months?" and responded "no" to the question "Was one of the partners your husband or wife or regular sex partner?") as having experienced EMS during the past year.

This coding process is less than perfect, as it is possible that a respondent may have had only one sex partner, but not his or her spouse, and considered that EMS partner as a "regular sex partner" in the response to the question, thereby appearing maritally monogamous according to the answers. Still, the items used here to determine rates of EMS during the preceding year represent an improvement over past studies (e.g., Billy et al., 1993; Choi et al., 1994; Leigh et al., 1993) that determined the incidence of EMS through the total number of sex partners without discerning whether the respondent's spouse was included among them.

Another potential problem with the sexual experience items used in

the GSS has to do with interpretation of the terms *sex partner* and *had sex*. It is possible for some respondents to interpret these terms in idiosyncratic ways (e.g., see Wellings, Field, Johnson, & Wadsworth, 1994, pp. 18-19). Also, self-reports of sexual activity are prone to distortion because of faulty recall (Catania, Gibson, Chitwood, & Coates, 1990; Jaccard & Wan, 1995). This was considered less of a problem in the current study, as the exact number of sex partners was not a variable of interest but rather whether married respondents had more than one partner during the past year or had ever had EMS. Given the cultural disapproval regarding EMS (see Table 4 as well as Laumann et al., 1994, p. 599), EMS experience is probably a very salient event for most Americans and hence a variable less susceptible to recall bias.

EMS attitudes. Attitude toward acceptability of EMS was measured with the item, "What is your opinion about a married person having sexual relations with someone other than the marriage partner—is it always wrong, almost always wrong, wrong only sometimes, or not wrong at all?" Accordingly, scores ranged from 1 to 4, with higher scores indicating more permissive attitudes.

Results

I performed 19 statistical tests. To maintain an experimentwise error rate of .05, the individual probability value used to determine statistical significance was corrected using the standard Bonferroni procedure (Rosenthal & Rubin, 1984). Accordingly, the results of each test were deemed statistically significant if $p < .003$ (i.e., $.05 / 19 = .003$).

The lifetime prevalence of EMS, as well as the incidence of EMS during the past year, is presented in Table 1 by gender, ethnicity, and history of divorce. Overall, men were more likely than women to report ever having had EMS. However, with regard to EMS during the preceding 12 months, the apparent gender difference was not

Table 1

Incidence of Extramarital Sex (EMS) By Gender, Ethnicity, and Divorce Experience

	Men			Women		
	<i>n</i>	% Yes	% Nonresponse	<i>n</i>	% Yes	% Nonresponse
<i>Ever Have EMS?</i>						
Total sample	884	22.7 ^A	2.9	1,288	11.6 ^A	2.5
Whites	758	21.4 ^B	2.6	1,105	11.1 ^C	2.0
Blacks	91	33.0 ^B	5.5	138	15.9 ^C	6.5
Other ethnicity	35	25.7	2.9	45	11.1	2.2
Ever divorced	304	37.5 ^D	2.6	411	20.2 ^E	2.4
Never divorced	579	15.0 ^D	3.1	876	7.6 ^E	2.5
<i>EMS During the Past Year?</i>						
Total sample	663	4.1 ^F	1.4	760	1.7 ^F	1.3
Whites	571	2.9 ^G	1.0	675	1.2 ^H	1.2
Blacks	55	12.1 ^G	5.2	58	6.9 ^H	3.4
Other ethnicity	28	10.7	0.0	27	3.7	0.0
Ever divorced	167	6.6 ^I	1.8	166	3.0 ^J	1.8
Never divorced	495	3.2 ^I	1.2	593	1.3 ^J	1.2

^AMen vs. women, $X^2(1, N = 2,114) = 48.55, p < .00001$

^BWhite men vs. Black men, $X^2(1, N = 829) = 7.21, p < .008$

^CWhite women vs. Black women, $X^2(1, N = 1,212) = 3.55, p < .06$

^DEver-divorced men vs. never-divorced men, $X^2(1, N = 857) = 57.12, p < .00001$

^EEver-divorced women vs. never-divorced women, $X^2(1, N = 1,255) = 42.83, p < .00001$

^FMen vs. women, $X^2(1, N = 1,404) = 7.24, p < .008$

^GWhite men vs. Black men, $X^2(1, N = 626) = 12.94, p < .0004$

^HWhite women vs. Black women, $X^2(1, N = 723) = 11.18, p < .0009$

^IEver-divorced men vs. never-divorced men, $X^2(1, N = 653) = 3.66, p < .06$

^JEver-divorced women vs. never-divorced women, $X^2(1, N = 749) = 2.17, p < .15$

Table 2

Incidence of Extramarital Sex (EMS) By Gender and Age

	Men			Women		
	<i>n</i>	% Yes	% Nonresponse	<i>n</i>	% Yes	% Nonresponse
<i>Ever Have EMS?</i>						
20-29	67	14.9	0.0	129	10.9	2.3
30-39	224	14.3	2.7	323	14.2	0.9
40-49	232	29.3	2.6	286	19.3	0.3
50-59	150	28.7	2.7	202	10.9	4.0
60-69	97	34.0	4.1	158	7.6	3.8
70 and older	114	13.2	5.3	188	0.5	5.3
<i>Had EMS in the Past Year?</i>						
20-29	61	3.3	0.0	97	3.1	2.1
30-39	181	7.2	2.8	226	2.7	0.4
40-49	176	3.4	0.6	173	1.7	1.2
50-59	98	3.1	0.0	116	0.9	1.7
60-69	70	1.4	1.4	88	0.0	1.1
70 and older	77	2.6	2.6	59	0.0	3.4

statistically significant after correcting the probability value, as noted previously. Because of the small number of respondents who were not White or Black, only these two groups were compared. After I corrected the probability value, there were no differences between White and Black men, or White and Black women, with

regard to lifetime incidence of EMS. However, Black men were more likely than White men to report having engaged in EMS during the past year, and the same ethnic difference was found for women.

Lifetime rates of EMS were twice as high among those who had been divorced or legally separated, compared

to respondents who had never divorced or separated, and this difference was statistically significant for both men and women. Similarly, rates of EMS during the past year were about twice as high among those who had been divorced or legally separated, compared to respondents who had never divorced/separated, but this difference was not statistically significant for men or women. Additionally, I investigated potential relationships between EMS experience and size of community in which the respondent resided. For both men and women, size of community was unrelated to having experienced EMS during the past year ($r = .03, p > .05$, and $r = .04, p > .05$, respectively) or during one's lifetime ($r = -.01, p > .05$, and $r = .03, p > .05$, respectively).

The incidence of EMS is presented in Table 2 by gender and age. With the exception of men aged 70 and older, lifetime prevalence of EMS appeared to increase with age among men. The point-biserial correlation between age and ever having had EMS was statistically significant ($r = .17, p < .001$). However, after partialing out the linear component of the relationship between age and lifetime EMS experience, the curvilinear component was also statistically significant (partial $r = -.12, p < .001$). So, for men, the lifetime incidence of EMS increased with age up to the oldest age group at which point the incidence decreased. There was no relationship between age and incidence of EMS during the past year.

For women, there was an apparently curvilinear relationship between age and lifetime incidence of EMS. The point-biserial correlation between age and ever having had EMS was statistically significant ($r = -.13, p < .001$). However, after partialing out the linear component of the relationship between age and lifetime EMS experience, the curvilinear component was also statistically significant (partial $r = -.10, p < .005$). The apparent relationship between age and EMS for women was as follows: Women in their twenties demonstrated

the same likelihood of lifetime EMS as did women in their fifties, and the highest incidence occurred among women in their forties. Women aged 60 and older were least likely to report ever having engaged in EMS, and this was particularly true for women aged 70 and older (only 1 of these 188 respondents reported lifetime EMS experience). Considering men and women under the age of 40, there was no gender difference in likelihood of reporting lifetime experience with EMS (14.4% vs. 13.3%, respectively), $X^2(1, N = 743) = .24, p < .63$. With regard to incidence of EMS during the past 12 months, the incidence steadily decreased with age for women ($r = -.08, p < .05$).

How do reports of ever having engaged in EMS compare to reports of having experienced EMS during the preceding 12 months? The results of cross-tabulating responses to these two items are presented in Table 3 for men and women who were currently married. The large majority of currently married men (78%) and women (88%) consistently denied EMS both during the past year and during their lifetime. Of those who reported ever engaging in EMS, only 16.2% of the men and 12.3% of the women had apparently done so during the past 12 months. For the most part, those who failed to respond to one of the indices of EMS denied EMS involvement on the other index. Curiously, nine men and five women denied ever engaging in EMS yet appeared not to be maritally monogamous during the past year. Unfortunately, the limited nature of the GSS data did not allow for explanation of the inconsistent responses. Still, the relatively small number of men and women who were inconsistent in their responses do not appear to pose a threat to the overall prevalence estimates.

How did attitudinal acceptance of EMS compare with actual experience? The attitudinal item regarding EMS was administered to a randomly selected majority subsample of the larger GSS sample (see Davis & Smith, 1994), resulting in responses on both

Table 3

Number of Currently Married Men (n = 663) and Women (n = 760) Who Reported Ever Having Engaged in Extramarital Sex (EMS) and Having Engaged in EMS During the Past Year

Had EMS During the Past Year?	Men						Women					
	Yes		No		No Response		Yes		No		No Response	
	n	%	n	%	n	%	n	%	n	%	n	%
Ever had EMS?												
Yes	18	2.7	93	14.0	0	0	8	1.1	57	7.5	0	0
No	9	1.4	517	78.0	8	1.2	5	0.7	669	88.0	10	1.3
No response	0	0	17	2.6	1	0.2	0	0	11	1.4	0	0

Table 4

Attitudes About the Acceptability of Extramarital Sex (EMS) as a Function of Gender and EMS Experience

Ever Had EMS?	Men				Women			
	Yes		No		Yes		No	
	n	%	n	%	n	%	n	%
Acceptability of EMS								
Always wrong	76	57.1 ^{A,C}	373	83.8 ^{A,D}	58	56.3 ^{B,C}	625	86.9 ^{B,D}
Almost always wrong	29	21.8	49	11.0	24	23.3	55	7.6
Wrong only sometimes	19	14.3	19	4.3	16	15.5	33	4.6
Not wrong at all	9	6.8	4	0.9	5	4.9	6	0.8
Totals	133	100	445	100	103	100	719	100

^AMen with EMS experience vs. men without EMS experience, $X^2(3, N = 578) = 49.52, p < .00001$

^BWomen with EMS experience vs. women without EMS experience, $X^2(3, N = 822) = 62.11, p < .00001$

^CMen with EMS experience vs. women with EMS experience, $X^2(3, N = 236) = .48, p < .93$

^DMen without EMS experience vs. women without EMS experience, $X^2(3, N = 1,164) = 3.86, p < .28$

the attitudinal item and lifetime experience item by 578 men and 822 women. The distribution of responses to the attitudinal item is presented in Table 4 by gender and lifetime EMS experience. Men and women who had engaged in EMS were less likely to disapprove of EMS than were their peers without EMS experience. With regard to possible gender differences, men and women who denied ever engaging in EMS did not differ in their attitudes about EMS, just as men and women who reported having experienced EMS did not differ in their attitudes.

Discussion

Laumann et al. (1994) found that 24.5% of men and 15.0% of women in their sample reported ever having experienced EMS. In the current study the respective percentages are consistent, although slightly lower, at 22.7% and 11.6%. Similarly, in the current

study the incidence of EMS during the preceding year was 4.1% of currently married men and 1.7% of the currently married women. These rates are twice as high as those reported by Smith (1991) but are remarkably similar to the results found in other recent samples (Billy et al., 1993; Choi et al., 1994; Laumann et al., 1994; Leigh et al., 1993).

Interestingly, when we consider the entire sample, the results of the current study are congruent with past research in demonstrating a substantial gender difference in lifetime incidence of EMS. However, when we consider respondents less than 40 years of age, the gender difference disappears. Either the previous "double standard" with regard to involvement in EMS does not exist among those from the younger generations, or there is a response bias such that older women are least likely to admit EMS experience they have had. Indeed, the great-

est rates of nonresponse to the EMS items occurred among the oldest respondents (male and female), which is consistent with rates of nonresponse to sexual experience items in general (Wiederman, 1993a). It is difficult to ascertain, however, whether these nonresponders were motivated by a desire to "hide something" through omission or simply left the items blank because they deemed them not applicable.

Further research on the meaning of nonresponse to sexual experience items is warranted (Wiederman, 1993a), yet in the current study, rates of nonresponse to the EMS were relatively low. The potential effects of distortion and deceit on reported EMS experience are more difficult to ascertain. Because a large majority of respondents strongly disapproved of EMS (see Table 4), the incidence figures reported here should be considered lower bound estimates for American adults.

For men, lifetime rates of EMS appeared to increase with age (with the exception of the oldest cohort), whereas for women, there appeared to be a curvilinear relationship such that the greatest lifetime incidence of EMS occurred among women between the ages of 30 and 50. Yet incidence of EMS during the past year declined steadily with age for women and was rather consistent across age groups for men. Based on these data alone, any explanation for these gender differences is merely speculation. However, response bias notwithstanding, it may be that there is a cohort effect for women, such that those respondents born in the latter half of the 20th century were more likely than women born before that time to find EMS possible and/or acceptable. During the last several decades, increasing numbers of women worked outside of the home, and many sexual attitudes underwent significant change (Smith, 1990). Also, the finding that younger married women were less likely to have had EMS relative to middle aged married women is consistent with earlier observations that women seek extra-

marital involvement later in their marriages than do men (e.g., see Kinsey et al., 1953).

In contrast to the finding on the lifetime incidence of EMS, recent involvement in EMS by women was generally limited to the youngest women in the sample. It may be that older women, relative to older men, have a greater commitment to the marriage with the greater number of years invested. This trend may also be related to a double standard of aging, in that women's attractiveness to men is heavily dependent on physical features related to relative youth, whereas this is not the case regarding men's attractiveness to women (Buss, 1994). Hence older women are commonly judged less attractive compared to younger women (Deutsch, Zalenski, & Clark, 1986; Heness, 1991; Mathes, Brennan, Haugen, & Rice, 1985). This perception results in men desiring female sexual partners who are progressively younger than themselves as the men age (Clements, 1996; Wiederman, 1993b). Also, there are many more unattached older women than there are unattached older men (U.S. Bureau of the Census, 1993). For these reasons, older married women probably have fewer opportunities for EMS than do their male peers or relatively younger women (and may be more committed to the marriage as a result). This double standard of aging would also explain why, for men in the current sample, lifetime rates of EMS increased with age (a cumulative effect) and rates of EMS during the past year remained relatively stable across age groups (opportunity for men remains the same, or actually increases because of imbalanced gender ratios, with advancing age).

In contrast to attitudes about EMS (Weis & Jurich, 1985) as well as Kinsey et al.'s (1948) data, EMS experience was unrelated to size of community in which the respondent resided. Likelihood of EMS was related, however, to ethnicity, with Black men and women being somewhat more likely than White men and women to have en-

gaged in EMS during the past year. This finding is consistent with research on ethnic differences in general sexual experience (e.g., Rushton & Bogaert, 1987, 1988; Seidman & Rieder, 1994), as well as EMS (Choi et al., 1994; Forste & Tanfer, 1996), and may be due at least partly to ethnic differences in the gender ratio. That is, there is a relative shortage of available unmarried men in the Black community (Tucker & Taylor, 1989); thus, married Black men may have greater opportunities for sexual relations with single Black women.

In contrast to the conclusion by Thompson (1983), attitudinal acceptance of EMS was related to EMS experience in the current national sample. A slight majority of men and women who had had EMS still indicated that it was "always wrong," yet about 20% of those with EMS experience compared to about 5% of those without EMS experience indicated that EMS was wrong "only sometimes" or "not at all." The direction of the relationship between EMS attitudes and experiences is unknown based on these cross-sectional data. That is, we do not know if more accepting attitudes are responsible for an increased likelihood of engaging in EMS, or if EMS experience results in greater attitudinal acceptance for some participants. Also, we do not know what to make of those respondents who evidenced a distinct attitude-behavior discrepancy. Because EMS attitudes were measured with a single item, appropriate caution should be exercised in interpreting the results for EMS attitudes, as the measure might have been relatively unreliable.

To speculate, it could be that those who had EMS experience and strongly disapproved of EMS are participants for whom EMS involvement "went bad" and exacted some toll on their marriage or social standing. Although this is a plausible sequence of events, in one study of divorced adults, EMS was generally seen by the respondents to be a result, rather than a cause, of marital discord (Spanier & Margolis,

1983). In the current study, likelihood of EMS was greater among respondents who had been divorced or legally separated, compared to respondents who had never experienced separation or divorce. Unfortunately, given the limited information in the GSS, it is impossible to ascertain the role of EMS in divorce for these respondents. It may be that EMS involvement increased the probability of divorce, EMS was a result of a disintegrating marriage (and may have occurred after separation from the spouse), or a third factor, such as decreased commitment to the institution of marriage, resulted in an apparent relationship ("spurious correlation") between the experiences of EMS and divorce. Support for a direct relationship between having EMS and being divorced by one's spouse includes strong disapproval of EMS in this culture (see Table 4) and the previous finding that, across cultures, sexual infidelity is the most commonly stated reason for divorce (Betzig, 1989).

Across studies, many of which employed college students, men generally exhibit less disapproval of EMS than do women (Oliver & Hyde, 1993). In the current study, when considered separately according to whether the respondent had experienced EMS, men and women did *not* differ in their EMS attitudes. It may be that when one considers married adults apart from single adults, there is simply less discrepancy between men and women in their views on EMS. Also, perhaps past studies on gender differences in EMS attitudes were confounded by gender differences in rates of EMS experience. As EMS experience is related to greater acceptance of EMS (see Table 4), samples in which men are significantly more likely than women to have such experience may be likely to exhibit corresponding gender differences in attitudes.

Although the rates of EMS in the current study are lower than in past studies using convenience samples, a significant minority of Americans have experienced EMS and continue to do so. In many ways, the results of

the current study raise at least as many questions as provide answers. As suggested in earlier writings (e.g., Bell, Turner, & Rosen, 1975; Thompson, 1983, 1984), further research is needed to understand individual differences in the experience of EMS, the conditions under which EMS occurs, and the roles EMS plays in people's lives.

References

- Allgeier, A. R., & Allgeier, E. R. (1995). *Sexual interactions* (4th ed.). Lexington, MA: D. C. Heath.
- Bell, R. R., Turner, S., & Rosen, L. (1975). A multivariate analysis of female extramarital coitus. *Journal of Marriage and the Family*, 37, 375-384.
- Betzig, L. (1989). Causes of conjugal dissolution: A cross-cultural study. *Current Anthropology*, 30, 654-676.
- Biggar, R. J., & Melbye, M. (1992). Responses to anonymous questionnaires concerning sexual behavior: A method to examine potential bias. *American Journal of Public Health*, 82, 1506-1512.
- Billy, J. O. G., Tanfer, K., Grady, W. R., & Klepinger, D. H. (1993). The sexual behavior of men in the United States. *Family Planning Perspectives*, 25, 52-60.
- Buss, D. M. (1994). *The evolution of desire: Strategies of human mating*. New York: Basic Books.
- Catania, J. A., Gibson, D. R., Chitwood, D. D., & Coates, T. J. (1990). Methodological problems in AIDS behavioral research: Influences on measurement error and participation bias in studies of sexual behavior. *Psychological Bulletin*, 108, 339-362.
- Choi, K. H., Catania, J. A., & Dolcini, M. M. (1994). Extramarital sex and HIV risk behavior among U.S. adults: Results from the national AIDS behavioral survey. *American Journal of Public Health*, 84, 2003-2007.
- Clements, M. (1994, August 7). Sex in America today: A new national survey reveals how our attitudes are changing. *Parade Magazine*, 4-6.
- Clements, M. (1996, March 17). Sex after 65. *Parade Magazine*, 4-7.
- Davis, J. A., & Smith, T. W. (1994). *General social surveys, 1972-1994: Cumulative codebook*. Chicago: National Opinion Research Center.
- Deutsch, F. M., Zalenski, C. M., & Clark, M. E. (1986). Is there a double standard of aging? *Journal of Applied Social Psychology*, 16, 771-785.
- Forste, R., & Tanfer, K. (1996). Sexual exclusivity among dating, cohabiting, and married women. *Journal of Marriage and the Family*, 58, 33-47.
- Goettsch, S. L. (1994). Extramarital sex. In V. L. Bullough & B. Bullough (Eds.), *Human sexuality: An encyclopedia* (pp. 194-199). New York: Garland.
- Henss, R. (1991). Perceiving age and attractiveness in facial photographs. *Journal of Applied Social Psychology*, 21, 933-946.
- Jaccard, J., & Wan, C. K. (1995). A paradigm for studying the accuracy of self-reports of risk behavior relevant to AIDS: Empirical perspectives on stability, recall bias, and transitory influences. *Journal of Applied Social Psychology*, 25, 1831-1858.
- Johnson, R. (1970). Extramarital sexual intercourse: A methodological note. *Journal of Marriage and the Family*, 32, 279-282.
- Kinsey, A. C., Pomeroy, W. B., & Martin, C. E. (1948). *Sexual behavior in the human male*. Philadelphia: W. B. Saunders.
- Kinsey, A. C., Pomeroy, W. B., Martin, C. E., & Gebhard, P. H. (1953). *Sexual behavior in the human female*. Philadelphia: W. B. Saunders.
- Laumann, E. O., Gagnon, J. H., Michael, R. T., & Michaels, S. (1994). *The social organization of sexuality: Sexual practices in the United States*. Chicago: University of Chicago Press.
- Leigh, B. C., Temple, M. T., & Trocki, K. F. (1993). The sexual behavior of U.S. adults: Results from a national survey. *American Journal of Public Health*, 83, 1400-1408.
- Mathes, E. W., Brennan, S. M., Haugen, P. M., & Rice, H. B. (1985). Ratings of physical attractiveness as a function of age. *Journal of Psychology*, 125, 157-168.
- Oliver, M. B., & Hyde, J. S. (1993). Gender differences in sexuality: A meta-analysis. *Psychological Bulletin*, 114, 29-51.
- Rosenthal, R., & Rubin, D. B. (1984). Multiple contrasts and ordered Bonferroni procedures. *Journal of Educational Psychology*, 76, 1028-1034.
- Rushton, J. P., & Bogaert, A. F. (1987). Race differences in sexual behavior: Testing an evolutionary hypothesis. *Journal of Research in Personality*, 21, 529-551.
- Rushton, J. P., & Bogaert, A. F. (1988). Race versus social class differences in sexual behavior: A follow-up test of the *r/K* dimension. *Journal of Research in Personality*, 22, 259-272.
- Seidman, S. N., & Rieder, R. O. (1994). A review of sexual behavior in the United States. *American Journal of Psychiatry*, 151, 330-341.
- Smith, T. W. (1990). The sexual revolution? *Public Opinion Quarterly*, 54, 415-435.
- Smith, T. W. (1991). Adult sexual behavior in 1989: Number of partners, frequency of intercourse and risk of AIDS. *Family Planning Perspectives*, 23, 102-107.
- Spanier, G. B., & Margolis, R. L. (1983). Marital separation and extramarital sexual behavior. *The Journal of Sex Research*, 19, 23-48.
- Thompson, A. P. (1983). Extramarital sex: A

- review of the research literature. *The Journal of Sex Research*, 19, 1-22.
- Thompson, A. P. (1984). Emotional and sexual components of extramarital relations. *Journal of Marriage and the Family*, 46, 35-42.
- Tucker, M. B., & Taylor, R. J. (1989). Demographic correlates of relationship status among Black Americans. *Journal of Marriage and the Family*, 51, 655-665.
- U.S. Bureau of the Census. (1993). *Statistical abstract of the United States, 1993* (113th ed.). Washington, DC: U.S. Government Printing Office.
- Weis, D. L., & Jurich, J. (1985). Size of community of residence as a predictor of attitudes toward extramarital sex. *Journal of Marriage and the Family*, 47, 173-178.
- Wellings, K., Field, J., Johnson, A. M., & Wadsworth, J. (1994). *Sexual behavior in Britain: The National Survey of Sexual Attitudes and Lifestyles*. New York: Penguin Books.
- Wiederman, M. W. (1993a). Demographic and sexual characteristics of nonresponders to sexual experience items in a national survey. *The Journal of Sex Research*, 30, 27-35.
- Wiederman, M. W. (1993b). Evolved gender differences in mate preferences: Evidence from personal advertisements. *Ethology and Sociobiology*, 14, 331-352.

Manuscript accepted August 5, 1996

CALL FOR PAPERS

Special Issue of *The Journal of Sex Research*

Methods of Inquiry About Sex: New Advances

Scholars in the health and social sciences and humanities are invited to submit articles to a special refereed issue of *The Journal of Sex Research* about the methodologies used to study human sexuality. We invite submissions of the following types of **original** manuscripts:

- **Empirical studies that explore the benefits of two or more different methodological approaches** are especially invited.
- **Reviews of a specific methodology**, including experiments (laboratory and field), qualitative methods, survey methods (face-to-face and telephone interviews, questionnaires), focus groups, observational methods, diaries, case studies, and archival and historical methods. Articles of this type should include an analysis of the strengths and weaknesses of the method, and of needed advances or improvements in the application of the method to the study of sexuality.
- **Analysis of a methodological issue**, such as the validity of self-reports of sexual activity (including safer sex practices) or the ethical issues involved in research on sexuality.
- **Articles describing innovative methods**, such as methods for studying electronic media or people's use of such media; methods that overcome problems with traditional methods.

To be considered for this special issue, **manuscripts must be received by August 1, 1997**. Manuscripts should be sent to *The Journal of Sex Research*, Department of Sociology, The University of Wisconsin, 2445 Social Science Building, 1180 Observatory Drive, Madison, WI 53706-1393. An accompanying letter should describe the ethical review process employed by authors, and should include a statement that the manuscript has not been published and is not currently under consideration elsewhere. Four paper copies of the manuscript must be submitted, prepared according to the *Publication Manual of the American Psychological Association* (4th ed.).

Because an anonymous review system is employed, identifying information should be removed from the title page and in the text in the copies to be sent to reviewers. Authors should include one separate page that provides the title of the manuscript, the names and affiliations of the authors, and the complete address, phone number, fax number, and e-mail address of the corresponding author.

Questions about submissions should be directed to the Special Issue Editor:

Joseph A. Catania, Ph.D.
 Center for AIDS Prevention Studies
 University of California, San Francisco
 74 New Montgomery Street, Suite 600
 San Francisco, CA 94105
 Telephone: 415/597-9161
 FAX: 415/597-9213