

**Concordance of Sexual and Contraceptive Behavior among Sex Partners
and Predictors of Discordant Reports**

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Abstract

This study examines discordance in self-reported sexual behavior and contraceptive use of married, cohabiting, and dating couples. It also examines factors associated with discordance. Relatively little research has been conducted on this topic, with little agreement in findings. We believe that this variance in prior results is due to prior work on this topic being limited to small convenience samples. The results presented here are based on a large national survey . We find only fair to moderate congruence in partners' reports compared to higher levels of agreement reported in studies using small convenience samples. Moreover, we also find relatively few factors that statistically predict discordance, and the ones we find that successfully predict discordance (women's education, race, and traditional sex role ideology) differ from previously published results. Importantly, despite significant discordance in reports, means of reported behaviors show little gender difference, suggesting that discordance in reports are random with respect to gender and that reports by either member of the couple are sufficient. Moreover, the lack of significant predictors of discordance suggests that valid models for identifying predictors of sexual or contraceptive behaviors can be obtained from the reports of either partner.

Introduction and Background

Although sexual behavior is typically shared by members of a couple, much of the research on sexual behavior is based on retrospective self-reports by only one member of a couple, usually the woman. Moreover, because sexual behavior is generally not observed by others outside of the couple, the validity of these measures cannot be determined. One approach to assessing the validity of reports on sexual behavior is to obtain information from both partners and to examine the degree of concordance or discordance in partners' reports of their shared sexual behaviors.

Prior research has generally shown that discordance in partners' reports of sexual behavior is non-trivial (Padian 1990; Sison et al. 2004; Harvey et al. 2004; Upchurch et al. 1991; Seal 1997; Ochs & Binik 1999; Van Duynhoven et al. 1999; Witte et al. 2007; Schopper et al. 1993). For instance, Witte et al. (2007) found that 24% of couples disagreed on whether the male received oral sex, 26% disagreed whether the female received oral sex, and 19% disagreed on whether the couple engaged in anal sex. Moreover, the amount of discordance varies by type of sexual behavior and how the behavior is measured. Concordance is typically higher for vaginal sex than oral sex, anal sex, or condom use, and concordance is higher for dichotomous measures than for frequency of activity measures (Levinger 1996; Sison et al. 2004). Results also vary substantially across studies. For instance, Sison et al. (2004) report correlations of .88 for frequency of vaginal sex, .76 for frequency of male receptive oral sex, and .72 for frequency of female receptive oral sex, while Witte et al. (2007) report comparable figures of .40, .43, and .43, respectively. Harvey et al. (2004) report figures that lie between those of Sison and Witte. Elish et al. (1996) also found considerably less concordance for vaginal sex and for condom use than most other studies.

There is also considerable variation in prior work concerning factors associated with concordance. For instance, some studies find that men report higher rates of sexual behavior

than women (Sison et al. 2004; Witte et al. 2007) while other studies find the reverse (Upchurch 1991; Schopper et al. 1993). Some researchers report that married couples have higher rates of agreement (Witte et al. 2007) while others report the opposite (Sison et al. 2004) and some report no association (Upchurch et al. 1991). Several prior studies report greater agreement among couples with relationships of longer duration (Hornsby & Wilcox 1989; Levinger 1996; Lagarrde et al. 1995), while others find the opposite (Witte et al. 2007).

One potential source of the variability in results is that prior research on this topic has been limited to small samples and unique populations. The large majority of prior studies are based on samples of about 200 or less. The samples are usually selected from STI clinics, UTI clinics, college students, HIV high-risk groups, and other highly selective groups. In this paper, we employ a large (N=1009) survey of married, cohabiting, and dating couples from diverse backgrounds and geographic areas. The only screening criteria employed were the female's age, pregnancy status, and the couple's sterility status. We use this unique data set to examine couples' concordance in reports about their sexual behavior. We also examine what individual-level and relationship-level characteristics are associated with concordant reports. As part of this latter analysis we assess whether models based on the reports of the female partner yield the same results as models based on the male's reports.

Data and Sample

The data are from the 2006 National Couples Survey (NCS). The NCS was specifically designed to examine couples' contraceptive decision making. Completed interviews were obtained from both partners of 413 married couples, 261 cohabiting couples and 335 dating non-cohabiting couples (2,018 individuals), where the female is age 20 to 35 years and the male is age 18 or older. Other eligibility criteria were that the female was not currently pregnant or trying to get pregnant and neither partner was sterile. The survey used computer-assisted self interviewing (CASI) to collect data from an area probability sample of household residents in

four cities and adjacent county subdivisions, including: Baltimore, MD; Durham, NC; St. Louis, MO; and Seattle, WA. These sites provide diverse populations with respect to race, ethnicity, economic status and other factors influencing sexual behavior and contraceptive decision making. Within the four sites, segments were stratified by percent black and segments with high minority concentrations were oversampled. Participants were recruited through door-to-door visits from female interviewers.

During the survey effort, 65% of households were successfully rostered for eligibles, with age eligible respondents located in 27% of rostered households. Only men age 18-45 were included in the roster since men in this age range were the most likely to have age-eligible female partners. If a female was selected for screening, there was no upper limit on her partner's age as a selection criterion.

Where more than one age-eligible couple and/or unattached adult was present, a couple or unattached adult was randomly selected and screened for eligibility. If the selected person was married or cohabiting, the female partner was screened for couple eligibility, with 83% completing the screening. Among daters, 79% of selected (focal) respondents were successfully screened and if the respondent met the eligibility criteria, the person was asked by the field interviewers to recruit his/her non-resident partner. Due to human subjects concerns, dating partners were *recruited indirectly* by the focal respondent and if the partner agreed to be contacted, the field interviewer administered an eligibility screener, which was completed with 77% of the non-resident partners. Overall, 72% of eligible married/cohabitating couples and 94% of eligible dating couples completed the survey.

The two partners were scheduled to take the survey contemporaneously, usually at their residence. Field interviewers took two laptop computers to the home and set up the partners in separate spaces to complete nearly identical questionnaires. The computer-assisted survey allowed the capture and resolution of many data inconsistencies during the interview process. Overall, the rostering, screening, and interview response rates are respectable, given the length

of the survey and the fact that respondents were asked to provide sensitive information about their relationship.

Analysis weights were separately constructed for each of the four study sites, with the sampling weights reflecting the probability of selection of each sampled address and of the couple sampled from that address and then adjusting these weights to account for non-response. The weights were then readjusted such that each site has an equal impact on the analysis.

Measures

Outcome Measures

We examine a number of sex behaviors, as reported by each partner in a couple. These include: couple had vaginal intercourse in the last four weeks; number of times had vaginal intercourse in the past four weeks; female received oral sex in the last four weeks; male received oral sex in the last four weeks; couple had anal sex in the last four weeks; couple used birth control the last four weeks among those who had sex in the last four weeks; and couple used condom in the last four weeks among couples who had sex in the last four weeks.

Female and Male Partner Demographic and Social Characteristics

Included in our analyses are a number of socio-demographic characteristics of the male and female partners that are often used to account for adult sexual behavior. These include: age (in years); race/ethnicity (measured as a series of dummies defining three categories: Hispanic, non-Hispanic black, and non-Hispanic other); completed education (in years); personal income during the last calendar year (in \$1000s); and frequency of religious attendance (number of times attended religious services in past year). See Table 1 for descriptive statistics on the measures employed in the analyses.

Relationship Characteristics

Relationship status is measured with two dichotomous variables identifying couples who are cohabiting (1 = yes, 0 = no) or dating (1 = yes, 0 = no). Married couples are the comparison group. About 42% of the sample is married, 29% cohabiting, and 29% dating. Duration of the relationship is measured as the number of months between the date when the partners began “seeing each other on a regular basis” and the date of the interview. Average duration is about 5 years.

Couple Communication

We anticipate that couples that communicate more regularly will be less likely to differ in their reports. Level of couple communication is captured with a variable based on a series of questions from which we compute an interval-level measure of the percent chance that the respondent will tell his or her partner “about what is going on” if they have a particularly bad day at work or in their daily activities. About 87% of females report telling their partner about their day, while about 11% fewer males reporting telling their partner about their day.

Commitment to Relationship

As with communication, we expect relationship commitment to be negatively related to discordance in reports because more committed couples are more likely to be attentive to their partners. A measure of commitment is derived via Principal Components Factor Analysis which was used to create a single factor (eigenvalue = 1.01) for each partner based on responses to two questions about commitment to their current relationship. They were asked (with response end points of 1 = “definitely me” and 9 = “definitely him/her”), “Compared to [partner name], who is more committed to making your [marriage/relationship] last?” and “Compared to [partner name], if it ever ended who’s more likely to end your [marriage/relationship]?” More positive

scores on this factor indicate that the person is less committed than his or her partner. To simplify interpretation, we recode the measure so that a higher score indicates greater commitment. Women were somewhat less committed than their partners.

Relationship Alternatives

In contrast to communication and commitment, we expect the availability of relationship alternatives to be positively related to discordance in reports because people with more alternatives will be less attentive to their partners. Relationship alternatives is measured as a factor (eigenvalue=1.80) based on responses to questions about the likelihood of finding an alternative partner if the “relationship broke up.” These questions (with responses ranging from 1 = “impossible” to 4 = “certain”) are: “If you broke up this month, how likely is it that during the next year you could get another [husband/wife/partner] better than [him/her]?” and “If you broke up this month, how likely is it that during the next year you could get another [husband/wife/partner] as good as [him/her]?” A more positive score indicates having greater relationship alternatives.

Traditional Gender Role Ideology

Discordance in reports may be more common if either partner has a more traditional gender role ideology because people with more traditional attitudes may be more likely to report what they think they should report rather than report what they actually did. That is, we expect people with more traditional attitudes to be more influenced by social norms about what they think are appropriate reports about sexual and contraceptive behavior. We measure gender role ideology using items from the King and King Sex Role Egalitarianism Scale (King & King, 1997). The eight items in this summative scale ask how strongly (1 = “very strongly disagree” to 5 = “very strongly agree”) respondents agree to statements about the roles of husbands and wives. These statements take the form: “A wife’s career is less important than her husband’s;” and “It is

best when wives initiate sexual activity as often as husbands.” Some items are reverse coded such that higher scores indicate greater traditionalism.

Results

Concordance/Discordance in Reporting of Sexual and Contraceptive Behaviors

Table 2 displays concordance rates for the dichotomous measures of sex and contraceptive behavior. Based on percentage agreeing, concordance appears to be high for reports of having had vaginal sex in the last four weeks, with about 86% of partners agreeing. An equal proportion (7%) of males and females said they had vaginal sex when their partners said they did not. The kappa statistic, on the other hand, suggests only fair agreement in partners’ reports. The kappa statistic is a widely used measure of reliability that corrects for chance agreement that is appropriate for dichotomous measures (Cohen 1960; Kraemer 1982; Kraemer et al. 1988; Kraemer et al. 2002). However, because the measure is very skewed toward both reporting having had vaginal intercourse, the kappa statistic may be biased (Cicchetti & Feinstein 1990).

For comparison, Table 3 presents concordance results for frequency of vaginal intercourse in the last four weeks. Women report having had vaginal intercourse 9.96 times during the last four weeks. The average for men is slightly lower (9.64), but the difference is not statistically significant. A comparison of the distributions of men’s and women’s reports shows relatively little difference. Men are slightly more likely to report very low frequency of intercourse (0,1) and somewhat greater frequency in the 10-30 range. Women, on the other hand, are more likely to report having intercourse in the 2-5 range and to have very high frequency of intercourse (31+). Overall, the figures in the first two columns of Table 3 show little gender difference in the reporting of frequency of intercourse. However, the correlation between men’s and women’s reports is low ($r = .31$).

As shown in the third column of Table 3, the mean absolute value in partner difference in reported frequency is fairly large (6.9 times during the last four weeks) and statistically different from zero. Consistent with the more frequent reports by women of higher frequency of intercourse, subtracting the male's report from his partner's report (not shown) yields a positive value (.33 times per month), but this figure is not statistically different from zero. Nearly 50% of partners' reports of sexual frequency differ by two or fewer acts in the last four weeks, and almost three-quarters of couples differ by five or fewer acts. However, about 15% differ by over ten acts of sexual intercourse. In short, while most couples have comparable reports of frequency of vaginal intercourse, there are substantial differences in reporting among a non-trivial portion of the sample.

Returning to Table 2, the second row indicates that 81.1% of couples agree that the male received oral sex ($\kappa = .503$). Slightly over half (53.1%) agree that the male received oral sex and about a quarter (28%) agree that the male did not receive oral sex. In about 11% of couples the male reported receiving oral intercourse, but the female reported that he did not. In nearly 8% of couples the female report that the male received oral sex and the male reported that he did not. However, this difference in partners' reports about the male receiving oral sex is not statistically significant at even the .10 level.

The results for the woman receiving oral sex shown in the third row are similar to those observed for the male receiving oral sex, although the agreement rates are somewhat higher for the female receiving oral sex (82.4%, $\kappa = .553$) than for the male receiving oral sex. Almost 55% of couples agree that the female received oral sex and 28.2% agree that the female did not receive oral sex. In an equal proportion (8.8%) of males and females reported that the woman received oral sex when their partner said that the woman did not receive oral sex.

We next explore how differing reports about oral sex affect the sharing of oral sex. Excluding missing responses, the results in Table 4 show that almost 70% of couples agree about who received oral sex in the last month. Almost 40% agree that both partners received

oral sex. Almost 17% agreed that neither received oral sex. About 6% agree that only the female received oral sex and about 7% agree that only the male received oral sex. Most of the disagreement occurs in three categories: both partners say the female received oral sex, but only the male says he received oral sex (5%); only the female says both partners received oral sex (4.5%); and, only the male says they both received oral sex (5.4%).

Returning again to Table 2, the fourth row shows that most couples are in agreement about anal sex. Overall, 87.2% agree ($\kappa = .481$), with 78.5% agreeing that they did not have anal sex in the last four weeks and 8.9% agreeing that they did. Slightly more men report anal sex when their partners disagree (6.8 %) than do women (5.8%), but the difference is not statistically significant. Again, the kappa values show that there is moderate agreement on engaging in anal sex.

The fifth and sixth rows of Table 2 display figures for contraceptive use in general, to examine pregnancy risk, and the use of condom, to examine the risk of STD. The results in these rows examine use in the last four weeks among the couples that agree they had vaginal sex in the last four weeks. The results in row 5 indicate that about 87% of partners agree about the use of contraception in the last four weeks, with somewhat more women saying they did when their partner disagreed than men said yes when their partner disagreed, but this difference is not statistically significant. Although the overall level of agreement on condom use is similar to that of contraceptive use in general, the proportion agreeing they used condom (32.3%) is substantially smaller than the percentage that agreed they used some form of contraception (77.9%). Here, in contrast to the use of contraception in general, men were more likely to report condom use when their partner disagreed (9.4%) than women reported condom use when their partner disagreed (7.6%), but this difference is not statistically significant.

Multivariate Models Identifying Factors Associated with Discordance in Reports

We next examine factors associated with discordance in partners' reports of their sexual and contraceptive behavior. These results are displayed in Table 5. The results in the first column of Table 5 indicate that the woman's education and the man's frequency of religious attendance are negatively associated with discordant responses about having had sex during the last four weeks. The woman's commitment to the relationship and the man's age are positively associated with couples disagreeing on whether they had sex during the last four weeks.

As shown in the second and third columns of Table 5, the woman's reports of talking with her partner are negatively associated with discordance about whether the woman received oral sex in the last four weeks, while discordance is more common if the male is more traditional. Married couples are also less likely to have reporting differences than cohabiting couples. In contrast, discordance about whether the man received oral sex in the last four weeks is more common among Blacks, couples where the man has more education, and in relationships of longer duration.

As shown in the fourth column of Table 5, disagreement about whether a couple had anal sex in the last four weeks is more common when the woman has more income or is more traditional. Discordance in reports about anal sex is also more frequent when the man attends religious services more frequently. Discordance is less likely when the woman has more education or the man reports talking more frequently with his partner.

We next examine two measures of the degree of agreement between partners in their responses about frequency of intercourse in the last month. First, we examine factors associated with the absolute value of the difference in the reported frequency of intercourse in the last month. This measure captures the size of differences in partners' reports. We employ a Tobit model to estimate this model because about 18% of couples are in complete agreement (difference is zero). The second measure is calculated by subtracting the male's report from the female's, and is used to assess how different factors affect the gender direction in reporting

difference. We use a regression model to estimate this model because values can be both positive (female reports higher frequency) and negative (male reports greater frequency).

As shown in the fifth column of Table 5, there is greater discordance (absolute value of differences in frequency) in reports about frequency of intercourse in the last four weeks among Blacks and if either the woman or the man is more traditional. Discordance is less common when the woman has more education, the man has more income, or in couples who have been together longer. In contrast to the absolute difference in couples' reports of frequency of intercourse in the last four weeks, as shown in the sixth column of Table 5, relatively few factors are significant predictors of whether the man or woman reports greater frequency. Men report greater frequency when the woman has greater income. Moreover, the constant term in the equation for the difference in the woman's and the man's reports (not shown) is negative, indicating that men report more frequent intercourse than women, but the term is also non-significant. Thus, controlling for other factors, men do not report significantly greater frequency of intercourse than their partners. The finding of no significant gender difference in partners' reports of frequency of intercourse in the last four weeks is the same as that observed in the univariate results, but the univariate results show that women report higher frequency than their partners, although the difference is not statistically significant.¹

Next we examine factors associated with discordant responses about contraceptive use. The seventh column of Table 5 shows that discordance about using any contraception in the last four weeks is more common among Blacks and less common when the man has more years of schooling. Discordance in reports about condom use in the last four weeks (column 8) is more common among Blacks or if the woman is more traditional. Discordance is less common

¹ We also estimated multinomial logit models to examine direction of disagreement for each of the binary outcome measures. We do not report these results because either the coefficients for only man reported behavior were nearly identical to those for only woman reported yes, compared to both agreed, indicating that the effect was on whether they agreed or not, or because no clear pattern in the results emerged.

when the woman has more education or is more committed to her relationship or if the man is Hispanic.

Overall, there are generally consistent findings that discordance is less common when the woman has more education, and more common among Blacks and when either partner is more traditional. Surprisingly, relationship type, duration of relationship, and talking with one's partner are not consistent predictors of discordance.² When examining the results in Table 5 it is important to keep in mind that a non-significant effect in the models of discordance implies that a factor would yield similar results in models of sexual and contraceptive behaviors whether the male's or the female's reports were used. That is, the results presented in Table 5 suggest that results from models of sexual and contraceptive behavior are relatively robust to whose reports are used.

Discussion

In contrast to many prior studies that find high agreement in partners' reports about sexual and contraceptive behavior, we find only fair to moderate concordance. Prior studies report 83%-99% agreement, kappa values of .62-.87, and a correlation in frequency of vaginal intercourse of .86. In our study, we find agreement rates of 81%-87%, kappa values of .24-.55, and a correlation in frequency of vaginal intercourse of .31. We also find different predictors of discordance than reported in prior work. In our study, we find that discordance is higher among Blacks and couples where either partner has a more traditional sex role ideology, and that the woman's education is negatively associated with discordance. In contrast, prior work frequently reports significant effects for ethnicity, relationship type and relationship duration. We also find a considerably smaller effect of gender than is typically reported in prior work. However, there is

² We also examined whether various measures of power in the relationship (differences in education, income, age, relationship alternatives, and relationship dependency) were significant predictors of discordance in reporting, but found no significant effects.

also a great deal of variation in reported levels of agreement and in the factors that predict disagreement in the prior literature.

We believe that the reason why our results differ from prior reports, and why there is so much divergence in prior reports, is that prior research on this topic is based on small convenience samples that come from unique populations (typically from HIV/STI clinics or college campuses). The results presented here are based on a large (1009 couples) household based sample that is representative of the populations in four large metropolitan areas. As such, the sample employed in this paper should provide more valid results than the small, unique convenience samples employed in prior work.

Despite the relatively large amount of disagreement in partners' reports, we find surprisingly little difference in reports by gender, or no gender direction to discordance. That is, averages for sexual and contraceptive behavior based on women's reports do not differ significantly from those based on men's reports. Men are no more likely to report than women that a sexual act occurred when their partner disagreed, and are no more likely than women to report greater/lesser frequency of intercourse, relative to their partner's report. These results suggest that reports by either partner will provide valid means for these behaviors, and that differences in partners' reports are essentially random. This finding is surprising because not all the sexual activities examined here are equally appealing to both men and women (Laumann et al. 1994; Kaestle 2009) and we might expect people to be less likely to report activities that they do not enjoy.

The lack of significant predictors of disagreement, especially for frequency of intercourse, implies that valid results concerning predictive factors associated with specific sexual and contraceptive behaviors can be obtained from reports of behaviors from either partner. That is, our results suggest that the estimated effects of predictive factors will be the same whether the male or female reports the behavior are used. This conclusion has also been

found for the contraceptive method that partners report using the last time they had sex (Grady et al. 2009).

From a clinical perspective, the results lead to two conclusions. First, there are non-trivial differences in partners' reports about their sexual and contraceptive behaviors, and clinicians should be cautious about inferring the couples' behavior based on the reports of only one partner. Second, since reports from either partner can be used for identifying factors associated with a particular behavior, clinicians can use reported findings on risk and predictive factors for specific behaviors even though the results are based on reports from only one of the partners.

Additional research is needed concerning factors associated with the direction of disagreement. Are there factors that predict whether the man or the woman is likely to be the only one who reports engaging a behavior, or that are associated with reporting more frequent engagement in a behavior? In our work, we found that only the woman's income was associated with whether the man or the woman reported more frequent vaginal intercourse. For the binary outcomes indicating whether the couple engaged in a behavior in the last four months, we found either that the coefficients for only the woman said yes and only the man said yes were quite similar, indicating that the real question was whether the couple agreed or not, or that the results yielded no clear pattern. Using another large scale survey that contains additional frequency measures may help identify factors associated with the direction of disagreement.

References

- Cicchetti, D.V., Feinstein, A.R. 1990. "High Agreement but Low Kappa: Resolving the Paradoxes", *Journal of Clinical Epidemiology* 43:551-558.
- Cohen, J.A. 1960. "Coefficient of Agreement for Nominal Scales", *Educational Psychology Measures* 20: 346.
- Grady, W.R., Klepinger, D.H., Billy, J.O.G., Cubbins, L.A. 2009. "The Role of Relationship Power in Couple Decisions about Contraception in the U.S." unpublished manuscript. Centers for Public Health Research and Evaluation (Seattle), Battelle memorial Institute.
- Harvey, S.M., Bird, S. T., Henderson, J.T., Beckman, L.J., Huszti, H.C. 2004. "He Said, She Said: Concordance Between Sexual Partners" *Sexually Transmitted Diseases* 31(3): 185-191.
- Hornsby, P. P., Wilcox, A.J., 1989. "Validity of Questionnaire Information on Frequency of Coitus", *American Journal of Epidemiology*, 130:94-99.
- Kaestle, C.E. 2009. "Sexual Insistence and Disliked Sexual Activities in Young Adulthood: Differences by gender and Relationship Characteristics" *Perspectives on Sexual and Reproductive Health* 41(1): 33-39.
- King L.A. & King D.W. 1997. "Sex Role Egalitarianism Scale." *Psychology of Women Quarterly*, 21, pp. 71-87.
- Kraemer, H.C. 1982. "Kappa Coefficient" in Kotz, S. Johnson, N.L. (eds.) *Encyclopedia of Statistical Sciences*. New York: Wiley.
- Kraemer, H.C., Bloch, D.A. 1988. "Kappa Coefficients in Epidemiology: An Appraisal of a Reappraisal" *Journal of Clinical Epidemiology* 41:959-968.
- Kraemer, H.C., Periyakoil, V.S., Noda, V.S. 2002. "Kappa Coefficients in Medical Research", *Statistical methods* 21:2109-2129.
- Lagarde E., Enel, C., Pison, G. 1995. "Reliability of Reports of Sexual behavior: A Study of Married Couples in Rural West Africa", *American Journal of Epidemiology* 141:194-200.
- Levinger, G., 1996. "Systematic Distortion in Spouses' Reports of Preferred and Actual Sexual behavior", *Sociometry* 29:291-299.
- 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.
- Ochs, E.P., Yitchak, M.B. 1999. "The Use of Couple Data to determine the Reliability of Self-Reported Sexual Behavior" *The Journal of Sex Research* 36(4): 374-384.
- Padian, N.S., 1990. "Sexual Histories of Heterosexual Couples with One Infected Partner", *American Journal of Public Health* 80:990-991.
- Seal, D.W. 1997. "Interpartner Concordance of Self-Reported Sexual behavior among College Dating Couples" *The Journal of Sex Research* 34(1): 39.

Sison, J.D., Gillespie, B., Foxman, B. 2004. "Consistency of Self-Reported Sexual Behavior and Condom Use among Current Sex Partners, 31(5): 278-282.

Shopper, D. Doussantouse, S., Orav, J. 1993. "Sexual Behaviors Relevant to HIV Transmission in a Rural African Population: How Much Can a KAP Survey Tell Us?" *Social Science and medicine* 37: 401-412.

Upchurch, D.M., Weisman, C.S., Shepherd, M., Brookmeyer, R. Fox, R., Celentano, D. D., Colletta, L., Hook, E.W. 1991. "Interpartner Reliability of Reporting recent Sexual Behaviors", *American Journal of Epidemiology* 134: 1159-1166.

Van Duynhoven, Y., Nagelkerke, N., van De Laar, M. 1999. "Reliability of Self-reported Sexual Histories: Test-Retest and Interpartner Comparison in a Sexually Transmitted Disease Clinics", *Sexually Transmitted Diseases* 26:33-42.

Witte, S.S., El-Bassel, N., Gilbert, L., Wu, E., Chang, M. 2007. "Predictors of Discordant Reports of Sexual and HIV/Sexually Transmitted Infection Risk behavior among Heterosexual Couples", *Sexually Transmitted Diseases*, 34(5): 302-308.

Table 1: Sample Characteristics^a

	Females	Males
Education (years)	14.0 (13.9)	13.8 (13.6)
White (%)	54.9 (47.4)	50.4 (44.3)
Black (%)	37.2 (43.5)	40.5 (45.7)
Hispanic (%)	7.9 (9.1)	9.1 (10.0)
Age (years)	27.9 (28.0)	30.1 (30.4)
Income (\$1,000)	20.8 (20.8)	30.3 (29.5)
Religious attendance (visits in past year)	13.9 (14.8)	11.4 (12.3)
Traditionalism (scale)	16.7 (17.1)	17.5 (18.0)
Commitment (factor score)	-.20 (.20)	.02 (-.00)
Alternatives (factor score)	2.0 (2.1)	2.0 (2.0)
Talks to partner (% chance)	87.0 (84.7)	75.6 (74.1)
Married (%)		42.1 (40.9)
Cohabiting (%)		29.2 (25.9)
Dating (%)		28.7 (33.2)
Relationship duration (months)		63.5 (62.7)

^a Figures in parentheses are based on unweighted data.

Table 2: Concordance/Discordance in Partners' Reports of Sex Behavior in Last Four Weeks (Percents)^a

	Both Said Yes	Both Said No	Percent Agree	Only Male Said Yes	Only Female Said Yes	Difference (M-F) in Who Said Yes	Kappa ^c
Had Vaginal Intercourse	82.8 (82.0)	3.2 (3.5)	86.0 (85.6)	7.0 (7.5)	7.0 (7.0)	0.0 (0.5)	.243
Man received Oral Sex	53.1 (51.8)	28.0 (26.3)	81.1 (78.1)	11.1 (12.9)	7.8 (9.0)	3.3 (3.9)	.503
Woman received Oral Sex	54.2 (53.2)	28.2 (27.4)	82.4 (80.6)	8.8 (10.0)	8.8 (9.4)	0.0 (0.6)	.553
Had Anal Sex	8.9 (10.8)	78.5 (75.0)	87.2 (85.8)	6.8 (7.0)	5.8 (6.3)	1.0 (1.6)	.481
Used Birth Control (Had Sex) ^b	77.9 (78.3)	9.1 (9.1)	86.9 (87.4)	6.3 (5.6)	6.8 (7.0)	-0.5 (-1.4)	.519
Used Condom (Had Sex) ^b	32.3 (30.7)	50.8 (49.8)	83.0 (80.5)	9.4 (10.6)	7.6 (8.9)	1.8 (1.7)	.595

^a Figures in parentheses are based on unweighted data.

^b Among couples where both partners agreed they had vaginal intercourse in the last four weeks.

^c The kappa statistic compares the amount of agreement to what might be expected by random chance.

Table 3: Reports of Frequency of Vaginal Intercourse in Past Month (percent)

	Female	Male	Partner Difference (absolute difference)
Mean	9.96	9.64	6.88**
Frequency			Percent Difference
0	5.0	5.6	18.3
1	5.2	6.5	16.4
2	9.2	8.8	12.2
3	9.4	8.8	11.1
4	10.3	9.8	6.4
5	8.5	7.2	6.4
6	7.2	7.3	4.4
7	3.7	3.4	2.0
8	6.2	6.2	2.8
9	1.6	1.6	1.6
10	8.5	9.3	3.3
11-15	9.3	9.6	5.0
16-20	6.4	7.0	2.3
21-30	4.2	4.9	2.3
31+	5.3	4.2	5.6

Table 4: Oral Sex of Both Partners as Reported by Both Partners (percent without missing)

	Female Received Oral Sex			
Male received oral sex	Both say yes	Only female says yes	Only Male says yes	Both say no
Both say yes	39.5	2.6	2.7	7.1
Only female says yes	2.9	4.5	0.2	1.4
Only Male says yes	5.0	0.1	5.4	2.4
Both say no	5.7	1.9	1.8	16.8

Table 5: Models of Concordance/Discordance in Partners' Reports of Sex Behavior in Last Four Weeks^a

	Vaginal Intercourse ^b	Woman received Oral Sex ^b	Man received Oral Sex ^b	Anal Sex	Frequency of Intercourse (Absolute Value) ^c	Frequency of Intercourse (F-M) ^d	Used Birth Control ^e	Used Condom ^e
Female								
Education	-.29***	.01	-.04	-.19***	-.42**	.38	-.08	-.09*
Black	-.67	.37	.45*	-.00	2.19*	-.84	.94***	.76*
Hispanic	1.18	.45	.22	.35	.07	2.70	.68	.71
Age	-.09	.02	-.00	-.03	.18	-.15	-.01	.02
Income	.01	-.00	-.01	.02**	-.02	-.04*	-.01	-.00
Religious attendance	.00	-.01	-.01	-.00	-.03	.02	.00	-.01
Traditionalism	.07	.04	.03	.11***	.43***	-.17	.04	.06*
Commitment	.55**	.03	-.04	.21	.16	.30	-.02	-.29*
Alternatives	-.19	.01	-.09	.03	.64	.17	-.03	-.25
Talks to partner	.01	-.01**	-.00	-.00	-.03	-.01	.00	-.00
Male								
Education	.10	-.00	.08*	-.04	.19	.05	-.12**	-.07
Hispanic	-.15	-.23	-.06	.50	.40	-2.50	.58	-1.22*
Age	.13**	-.01	.02	.05	-.01	.02	-.00	.02
Income	.00	.01	-.00	-.00	-.05**	-.01	-.01	.00
Religious attendance	-.03**	.00	.00	.01*	-.05	-.01	.00	.00
Traditionalism	-.01	.05**	.03	-.02	.30***	.08	.02	-.01
Commitment	.03	.12	.17	-.04	-.59	.64	-.06	-.02
Alternatives	.08	-.00	-.14	-.04	.63	.45	-.09	.04
Talks to partner	-.01	-.00	-.01	-.01***	-.02	-.01	-.00	.00
Relationship								
Dating	-.59	-.34	.09	.13	-.17	-.31	-.19	-.55
Married	-.07	-.67*	-.34	-.42	1.91	.59	-.04	.07
Relationship duration	-.01	.00	.01*	.00	-.03***	-.01	.00	.00

^a All results based on weighted data.

^b Results are from a logit model.

^c Absolute difference in partners reports. Results are from a Tobit model.

^d Difference is based on subtracting the male's report from the female's report. Results are from a regression model.

^e Among couples where both partners agreed they had vaginal intercourse in the last four weeks. Results are from a logit model.

* Significant at the .10 level.

** Significant at the .05 level.

*** Significant at the .01 level.

