The Range of Sexual Behavior of Young Couples

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ABSTRACT

Prior research tends to examine different sexual behaviors as separate, isolated choices made by couples but it may be that they choose among a set of behaviors they have defined as acceptable options. Using data from the 2006 National Couples Survey we extend prior research by assessing the range of behaviors in which young couples engage. The results suggest that there is a hierarchy of sexual behaviors among couples. Vaginal sex nearly always occurs among those who have sex over a one-month period. Also, oral and anal intercourse almost never occur as the only behavior during the month but occur together with vaginal intercourse. Further, in more than three-quarters of couples, anal sex only occurs during the month when the three other behaviors considered also occur. Relationship status and race are found to be jointly related to the range of a couple's sexual expression, with married Black couples and unmarried couples of other races engaging in the widest range of sexual behaviors. Other factors found to be important include Hispanic origin, education and income, the presence of a child in the household, sexual history, relationship commitment, and intimate partner violence. Taken together, these results offer evidence that when examining the sexual behavior of heterosexual couples it is useful to think about the set of behaviors in which they engage rather than only considering each specific type of sex one at a time and in isolation from one another.

Much of recent research examining sexual behavior is motivated by a need to develop an understanding of the correlates of risk factors for pregnancy and especially STDs and AIDS. However, sexual behavior is also important because it provides physical pleasure and "revelation to others of intimate aspects of the self" (Reiss, 1986: 235). Thus, it is a central element of most intimate, romantic relationships (Christopher & Sprecher, 2000).

Unfortunately, because of the continuing AIDS epidemic most of the research directed at extending our understanding of sexual behavior and its determinants is restricted to nonmarital populations, especially those who are deemed to be at highest risk of disease acquisition and transmission. Further, this body of research is largely based on the reports of only women or only men and thus the role of partner influences is still not well understood despite the fact that sexual behavior is inherently dyadic. Finally, the multiple sexual behaviors in which couples engage tend to be examined individually, providing few insights into how they might be linked.

In this paper we begin to address these gaps in our understanding. We examine the sexual behaviors of married, cohabiting and dating heterosexual couples using a unique dataset that includes parallel reports from both partners on their characteristics, attitudes, beliefs, and behaviors. We also consider four different sexual behaviors as a set, including vaginal intercourse, male receptive oral sex, female receptive oral sex, and anal intercourse. In this way we begin to develop an understanding of the determinants of the diversity of sexual expression within these relationships.

Background

As noted above, much of existing research on sexual behavior focuses on risk behaviors among unmarried heterosexuals (Amaro & Raj, 2000; Beadnell et al., 2005; Finer, Darroch & Singh, 1999; Halperin, 1999; Harvey et al., 2002; Noar, Zimmerman & Atwood 2004; Voller, 1991). Among the behaviors they examine are partner acquisition (Beadnell et al., 2005; Finer, Darroch & Singh, 1999; Ostobvich & Sabini, 2004); unprotected sex or condom use during

vaginal intercourse (Amaro & Raj 2000; Beadnell et al., 2005; Harvey et al. 2002); anal intercourse (Billy et al., In Press; Gross et al., 2000; Halperin, 1999; Silverman & Gross, 1997) and the adoption of risk-reduction strategies (Amaro & Raj 2000; Billy et al., In Press; Catania, Keageles & Coates 1992). Many of these analyses are further restricted to very specific populations (e.g. young adult females and males aged 13-24, minority-focused).

There is general consensus that there is a dearth of research on sexual behaviors within marriage (Christopher & Sprecher, 2000; Greenblat, 1983). The few studies examining sexual behavior among married couples tend to report on the incidence and prevalence of specific types of sexual behavior and examine how they are related to selected characteristics of individuals (Billy et al., 1993; Call, Sprecher & Schwartz, 1995; Laumann et al., 1994; Michael et al., 1994; Rao & DeMaris, 1995). There has also been considerable interest in extramarital sex (Billy et al., 1993; Lauman et al., 1994; Forste & Tanfer 1996: Weiderman, 1997) that is beyond the scope of this paper which focuses on the behaviors within relationships.

An important limitation of much of the existing research on sexual behavior among both unmarried and married couples is that relatively little of it is based on information obtained from both of the partners who comprise the relationships being examined. Thus, we have an incomplete understanding of the relative influence on sexual behaviors of the male and female partners and the nature of their relationship. Indeed, much of what we know about partner influences is based on research using proxy reports about the partner's characteristics, beliefs and attitudes obtained from the index respondent. These reports may be inaccurate and can lead to a distortion of the estimated effects of those factors (Miller 1994).

One reason for this individualistic research focus is a lack of data. The few studies that have had couples data tend to be based on small, purposive samples that focus mainly on white, middle-class, or college-aged couples (Blumstein & Schwartz, 1983; Christopher & Cate, 1985; Harvey et al., 2002; Ochs & Binik, 1999; Seal, 1997). Further, most of these studies using couples data are restricted to married couples and tend to focus not on sexual behavior,

but instead examine fertility behavior and intentions, and contraceptive use and STD acquisition (Beach et al., 1982; Beckman, 1984; Beckman et al., 1983; Clark & Swicegood, 1982; Green & Biddlecom, 2000; Miller & Pasta 1996; Miller, Shain & Pasta, 1991, 1993; Severy & Silver, 1993; Sobel & Arminger, 1992; Thomson 1989, 1990, 1997; Thomson & Williams 1982).

The National Longitudinal Study of Adolescent Health did add a "couples sample" to the Wave III survey. This sample included 1,500 Add Health respondents who recruited their married, cohabiting or dating romantic partners (Harris, 2005). Another exception is the 2006 National Couples Survey which, although not nationally representative, is a large scale, population-based survey offering extensive information about both partners and their relationship. This dataset, which is used in the analysis presented here, has previously supported analyses of risk behaviors among dating couples (Billy et al., In Press).

Even those studies using couples samples to examine a range of sexual behaviors do not consider them as a set of behaviors that are jointly determined. Rather, they tend to separately model each behavior, implicitly assuming that each is an independent choice made by the partners. An exception is the analysis by Halpern-Felsher, et al., 2005) who modeled vaginal and oral sex as competing behaviors among young couples. Here, we extend prior research to examine the range of behaviors that couples incorporate into their sex lives. In this way we begin to develop an understanding of the individual, partner and relationship determinants of the diversity of sexual expression among couples.

Method

Data and Sample

The 2006 National Couples Survey (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 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 nonresponse. The weights were then readjusted such that each site has an equal impact on the analysis.

Measures

The outcome measures used in this analysis are based on the reports of the female partner. Female reports are also used to define relationship duration and number and age of children in the household. However, we also investigated the impact on our results of using male reports of these behaviors. All other measures are based on separate reports from each partner.

Outcome Measures. Our primary outcome measure is number of different sexual behaviors in the last four weeks. This outcome, which we consider an indicator of diversity of sexual behavior, is based on respondent reports of whether each of four different sexual behaviors occurred in the month before the survey, but not necessarily during the same sexual episode. These behaviors include vaginal intercourse, male receptive oral sex, female receptive oral sex and anal intercourse. In our descriptive analysis we also consider each specific sexual behavior individually and examine how the likelihood of engaging in each in the last four weeks is related to the total number of behaviors in which they engage.

Couple 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. 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.

Male and Female Partner Social and Demographic Characteristics. We include in our analyses 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 religiosity (a dichotomy defined as not religious at all vs. somewhat or very religious). We also include a measure of sexual experience, the number of sex partners the female and male report having had in their lifetime. Whether the respondent and his/her partner have any children together, a factor that may affect opportunities for sexual behavior, is measured as a dichotomy (1 = no , 0 = yes).

Couple Communication. 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.

Relationship Power

We include multiple measures of power so as to capture its multidimensional nature in relationships ((Pulerwitz et al., 2000). Among these are measures of structural power based on differences in education and income. To capture differences in education we construct separate dichotomous variables indicating whether the difference between the female's education is: 1) more than her partner's education by one standard error of the average difference between partners; or 2) less than her partner's education by one standard error of the average difference between partners. Similar indicators are also constructed for differences in income. We use these dummy indicators because education and income variables cannot be entered into the model together with linear difference variables.

Another dimension on which power is based is relationship commitment. This measure 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, and thus has more power in the relationship. 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]?” We use the partner difference in these scales, with a more positive score on the resultant combined scale indicating more female power because of greater alternatives and a more negative score indicating more male power.

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.

Finally, we include a measure of the male partner's use of physical force within the relationship during the past year (1 = yes, 0 = no). Physical force includes such things as "pushing, shoving, biting, pulling hair, hitting, throwing, or using weapons."

The distribution of respondents on the outcome and predictor variables used in the analyses is shown in Table 1. Men report a slightly greater number of sexual behaviors in the last four weeks than their female partners (2.41 compared to 2.35). This is almost entirely due to their greater likelihood of reporting receptive male oral sex (0.64 acts per couple compared to 0.60). The other relationship variable on which they significantly differ is relationship duration, with men reporting somewhat longer durations (1.2 months on average).

Note too that men tend to be older than their female partners, are more likely to be black and have lower average educational attainments but higher average incomes. There is also a large sex difference in the lifetime number of sex partners (21.65 for men compared to 13.15 for women). Men report a percent chance of telling their partner about "a bad day" that is significantly lower than that reported by women (73.4% compared to 84.5%). Men also report a smaller difference in the relative commitment of the two partners in their relationships.

[Table 1 about here]

Data Analyses

Because the outcome variable (number of different types of sex in the last four weeks) is a count variable, we use a negative binomial regression approach to estimate our multivariate statistical model. To ease interpretation of the results, we report marginal effects coefficients that have an interpretation similar to those produced by linear regression, with coefficients indicating the change in the number of events (types of sex) associated with a unit change in the predictor variable. Indeed, we estimated linear regression models for comparison and the coefficients for the two types of models were very similar.

In fitting the models, we included all relationship variables (relationship type and duration) and all personal characteristics for both partners (age, race, ethnicity, education,

income, religiosity, no children, and lifetime number of sex partners) as a standard set of variables that were not subject to deletion from the final model. Variables indicating level of partner communication (percent chance of telling one's partner about a bad day) and relationship power (differences in education and income, relative commitment, relationship alternatives, gender role ideology, and use of force) were then added to the model in pairs with both the male and female counterparts of each indicator added together. We also tested for statistical interactions between each of the relationship and personal characteristics with each of the indicators of partner communication and power. If either of the pair of variables attained statistical significance or was found to be involved in a significant statistical interaction, both variables in the pair were retained in the model.

Although the level of missing data is small for all of the variables included in the analysis (only two of the variables considered have more than 5% missing data and none has more than 8%), when list-wise deletion of missing data is implemented in estimating the statistical model more than 16% of cases are omitted from the analysis. To overcome this limitation we chose to use a multiple imputation approach in our data analysis effort, operationalized as ICE and MICOMBINE in *Stata* (Carlin et al., 2003; Royston, 2004). The results presented in this paper are those based on this approach.

Results

Descriptive Analysis

The results in Table 2 show the distribution of couples by the number of different types of sex in which they engaged during the four weeks prior to the survey. It also presents information on how that distribution differs by type of relationship. Overall, only about 4% were not sexually active during the past four weeks. The modal category is having engaged in three different types of sex, with 39% of couples in that category. About 12% engaged in all four

types of sex considered in this analysis (vagina, male receptive oral sex, female receptive oral sex and anal sex).

[Table 2 about here]

The difference in sexual expression by relationship status is not large. Cohabiting couples are the least likely to have not had sex, with fewer than 2% in this category compared to about 5% of married and cohabiting couples. Daters, in contrast, are the most likely to have engaged in all four types of sex (18%) and the least likely to have engaged in only one type (15%), while married couples are the least likely to have had four types of sex (8%) and the most likely to have had only one type (28%). Three types of sex is the modal category for all three relationship status groups.

The results in Table 3 show how the number of different types of sex in which couples engaged varies by the types of sex in which they engaged. Those who had vaginal intercourse during the last four weeks have about the same distribution of number of types of sex as is found for all couples combined. The largest deviation from that distribution is found among those who had anal intercourse; about 78% of those who exhibited this behavior engaged in all four types of sex and in less than 1% of these couples was it their only sexual behavior during the last four weeks. Note too that those who engaged in the two different types of oral sex have about the same distribution on number of types of sex and, like anal sex, they are both highly unlikely (0.2%) to be the sole behavior in which couples engaged in the past four weeks.

[Table 3 about here]

Another way to examine the range of sexual behaviors in which couples engage is to determine the frequency with which combinations of behaviors tend to occur within the same month. The results in Table 4 show that 21% of couples had only vaginal sex during the month. This is similar to the proportion who had both vaginal sex and either male-receptive oral sex or female-receptive oral sex during the month (22.4%). The modal category includes three types of sex, including vaginal intercourse and both male-receptive oral sex and female-receptive oral

sex. As noted above, 12% of couples engaged in all four types of sex during the month and it was largely among these couples that anal sex was included as a behavior. Also, all other combinations of sexual behaviors were exhibited by fewer than 2% of couples.

[Table 4 about here]

Multivariate Analysis

The results of the regression analysis of number of different types of sex in the last four weeks are shown in Table 5. The coefficients shown are marginal effects coefficients indicating the amount of change in the number of different types of sex associated with a unit change in the predictor variable. As noted earlier, male and female characteristics were included in pairs. For example we include both partners' age, ethnicity, education, etc. If either variable in the pair attained statistical significance it was retained in the model. The exception is respondent and partner race which are so highly correlated that they could not be entered into the model together. The female partner's race indicator was found to have significantly better predictive power and was therefore chosen for inclusion in the model.

[Table 5 about here]

There is no significant relationship between relationship duration and number of sexual behaviors once relationship type and other factors are statistically controlled. Relationship type, comparing cohabiting and dating couples with those who are married, was found to condition or modify the association between the female partner's race and number of sexual behaviors. As shown in Figure 1, among couples where the female partner is Black it is those who are married who have the greatest diversity in their sexual behaviors and it is daters who have the least. This compares to couples where the female partner is of another race, among whom it is married couples who exhibit the least diversity in their sexual behavior. Cohabiting and dating couples in this group have similar levels of sexual diversity.

[Figure 1 about here]

The ages of the two partners have opposite effects on expressed sexual diversity, although these effects are significant only at the $p \leq .10$ level. These coefficients suggest that sexual diversity declines with the female partner's age but increases with her male partner's age. Further, in absolute terms, the size of the two coefficients are not statistically different and thus tend to be counterbalancing in their effects on the outcome considered here. The relationship between Hispanic origin and sexual diversity is complex. The female partner's ethnic origin is involved in a statistical interaction with her education. As shown in Figure 2, the model predictions illustrate that among couples in which the female partner is Hispanic education is positively related to sexual diversity. Among other couples the opposite relationship is found. The male partner's ethnic origin was also found to be involved in a statistical interaction, in this case with his yearly income. Among Hispanics the male's income is negatively related to the couple's sexual diversity but among non-Hispanics there is no significant relationship with income (see Figure 3). The male partner's educational attainment has no significant relationship with the number of sexual behaviors in which the couple engages.

(Figures 2 and 3 about here)

The absence of a child in the home was found to have a statistically significant effect. It is positively related to the number of types of sex in which the couple engages. The other personal characteristic with significant effects is lifetime number of sex partners. For both the female and male partners, this factor was found to be significantly positively related to diversity of sexual expression. Religiosity has no significant effect for either partner and is thus not in the model.

The partner communication variable is not significant and also does not enter the model. Among the factors associated with relationship power, when the woman reports that she is less committed to the relationship, the couple engages in fewer different types of sex. Interestingly, her partner's report of their relative levels of commitment is not significant, although the

coefficient is also negative. Finally, couples where the woman reports that her male partner sometimes uses physical force against her have significantly more sexual behaviors that other couples. The variables measuring partner differences in education and income did not attain statistical significance and were therefore not included in the final model. Gender role ideology also did not attain statistically significance.

Limitations

The results presented in this paper are based on the female partner's reports of the couple's sexual behavior. Importantly, we recalculated the tables presented in the descriptive analysis using men's reports instead of women's reports and found only very small differences that do not affect our interpretations. For the multivariate analysis we re-estimated the model presented in Table 5 using individual-level data with separate records for men and women, adding a variable indicating whether information on which the behavioral outcome was defined was based on the man's reports or the woman's reports, and correcting standard errors for clustering at the couple level. The coefficient for this gender variable was not statistically significant. In addition, we interacted this gender variable with all of the other variables in the model to determine whether their effects differ depending on whose reports are used (results not shown). These interaction terms were not statistically significant as a set (p = .84) and no individual terms were significant at the p = .05 level. Indeed, only one term achieved statistical significant at even the p = .10 level. That term provides some evidence that the estimated effects of a man's use of force on the couple's range of sexual behaviors may be somewhat attenuated when an analysis is based on the behavioral reports of men rather than women.

Another potential limitation of our analysis is that our dependent variable in the multivariate analysis is a simple count variable (number of different types of sex), but our descriptive analysis suggest that those who have only one type of sex tend to have vaginal sex, that the two types of oral sex tend to be added by those who engage in two or three types of

sex, and that anal sex tends to be exhibited only by those who have all four types. To the extent that types of sex are highly related to the number of kinds of sex, the determinants of moving from none to one type, from one to two or three types, and from three to four types may differ, being consistent with the likelihood of engaging in each of those kinds of sex. To test this relationship, we estimated a multinomial logit model where each level of "number of different types of sex" was a separate outcome (results not shown). The results of this analysis were highly consistent with the results of the simpler model of count data presented in this analysis. Thus, a simpler model was chosen because it is easier to interpret and sacrifices little if any substantive information.

Finally, it should be remembered that the sample used in this study is geographically and demographically diverse, but is not nationally representative. In addition, because of the nature of the study for which the data were collected, it does not include couples where the female partner is pregnant. These limitations on generalizability are offset by the fact that the reports are obtained in self administered questionnaires with the respondents knowing that their sex partner will be answering questions about the same behaviors for the same reporting period, factors that may increase reporting validity. The dataset also offers identical information about predictors for both partners.

Conclusions

The results of our descriptive analysis suggest that few couples in sexual relationships remain sexually abstinent during a one-month period. Further, the great majority of couples (75%) engage in more than one kind of sex during a one-month period. Another important relationship suggested by the results of this analysis is that there may be a hierarchy of sexual behaviors among couples. Vaginal sex appears to be nearly always included as a behavior among those who have sex over a one-month period. Oral and anal intercourse, in comparison, are almost never an unaccompanied behavior but are rather companion behaviors to vaginal

intercourse. Further, in 78% of couples, anal sex only occurs when all of the other behaviors also occur and in less than 1% of couples (results not shown) does it occur without vaginal intercourse also occurring that same month.

The results of the multivariate analysis also yield interesting findings. The results for age, which has opposite effects for men and women, suggests that there may be increasingly divergent sexual preferences between partners as they age. This difference is only statistically significant at the $p<.10$ level and thus should be interpreted with caution. However, the direction of these relationships is maintained even when they are entered individually into the model.

Education and income were included in the analysis because we believed that they are related to preferences for different types of sexual behavior (see, for example: Billy et al., 1993; Laumann et al., 1994). However, we also tested for inclusion dichotomous indicators of whether the partner differences on education and income were large (plus or minus one standard deviation of the average difference between all partners). These indicators, which indicate differences in decision-making power within the relationship, did not have significant effects on the diversity of sexual behavior and were also not involved in significant statistical interactions with other variables in the model. Thus, any effects that education and income have on power are not expressed in our analysis. Further, the significant statistical interactions found for education and income with Hispanic origin are also probably not interpretable in terms of relative power effects but rather in terms of preferences that are related to socioeconomic status.

The effects of women's reports of relationship commitment may have two sources. It may be that those who see themselves as more committed to their relationships than their partners are more willing to engage in diverse sexual behaviors as a strategy for balancing their power relationship with their partner. However, it may also be that they are simply engaging in multiple types of sexual behaviors as expressions of their high levels of commitment. Note, however, that their partner's assessment of their relative levels of commitment has no significant

impact. Thus, these factors may be endogenous and should be interpreted cautiously. However, it is important to note that their inclusion in the model does not significantly affect the estimated effects of the other variables in the model.

Like the woman's report of her relative commitment, her report of her partner's use of force has two likely interpretations. The most likely explanation for this positive relationship is that the man's violence is an assertion of dominance and his partner's response is again a strategy to address this power imbalance. However, it may be the case that forced sex tends to be exhibited by those men who use physical force, a hypothesis that receives some support in prior research (Lauman et al, 1994; DeMaris & Swinford, 1996).

Taken together, the results of this analysis offer evidence that when examining the sexual behavior of heterosexual couples it is useful to think about the set of behaviors in which they engage rather than consider each specific type of sex one at a time and in isolation from one another. During a period of four weeks, oral and anal sex seldom occur without vaginal sex occurring as well, and anal sex usually occurs with one or both types of oral sex also taking place during the month. This suggests that we need to reconsider how we examine decision-making about high risk behaviors such as anal intercourse and adopt a conceptual model that encompasses other sexual behaviors as well.

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Table 1. *Unweighted Means for Outcome and Predictor Variables by Gender of Respondent*.

Variable	Female		Male
Dependent Variables			
Number of Different Types of Sex in Last Four Weeks	2.35		2.41*
Vaginal Sex in Last Four Weeks	0.96		0.95
Male Receptive Oral Sex in Last Four Weeks	0.60		0.64**
Female Receptive Oral Sex in Last Four Weeks	0.62		0.63
Anal Sex in Last Four Weeks	0.18		0.19
Relationship Characteristics			
Relationship Duration	62.75		64.04*
Marital/Relationship Status			
Married		0.449	
Cohabiting		0.229	
Dating		0.332	
Personal Characteristics of the Partners			
Age	28.01		30.45***
Black	0.43		0.46***
Hispanic	0.09		0.10
Education (in years)	13.88		13.62***
Income (in $1,000s)	20.80		29.44***
No Children	0.59		0.59
Lifetime Number of Sex Partners	13.15		21.65***
Somewhat or Very Religious	0.19		0.16*
Communication			
Percent Chance Tell Partner about Bad Day	84.49		73.42***
Relationship Power			
Relative Commitment (factor: + = partner more committed)	0.20		0.03**
Female Partner Has Less Education Than Partner (by 1 S.D. of Avg. Difference)		0.122	
Female Partner Has More Education Than Partner(by 1 S.D. of Avg. Difference)		0.098	
Female Partner Has Less Income Than Partner(by 1 S.D. of Avg. Difference)		0.283	
Female Partner Has More Income Than Partner (by 1 S.D. of Avg. Difference)		0.025	
Relationship Alternatives (factor: + = better alternatives)	2.10		2.02
Male Partner's Use of Force (female report)	0.09		n.a.
Gender Role Ideology (scale: + = more traditional)	17.16		18.09***

* Gender difference significant at the $p \leq .10$ level

** Gender difference significant at the $p \leq .05$ level

*** Gender difference significant at the $p \leq .01$ level

Table 2. *Percentage of Couples Who Had a Specific Number of Different Types of Sex During the Last Four Weeks, by Relationship Status (Weighted)*

Number of Types of Sex	Relationship Status			
	Married	Cohabiting	Dating	All Relationship Types
0	4.6	1.5	5.2	3.8
1	28.0	18.9	14.9	21.6
2	25.4	21.9	24.1	24.0
3	34.0	46.3	37.7	38.7
4	8.1	11.4	18.1	11.9
All	100.0	100.0	100.0	100.0

Note: Distributions for married, cohabiting and dating couples significantly differ from one another at the $p \leq .01$ level

Table 3. *Percentage of Couples Who Had a Specific Number of Different Types of Sex in the Last Four Weeks, by Types of Sex in which They Engaged (Weighted)*

Number of Types of Sex	Type of Sex				Total
	Vaginal Intercourse [a]	Male Receptive Oral [b]	Female Receptive Oral [b]	Anal Intercourse [a]	
0	0.0	0.0	0.0	0.0	3.8
1	22.2	0.2	0.2	0.9	21.6
2	24.9	17.6	19.8	8.5	24.0
3	40.4	62.6	60.9	12.1	38.7
4	12.5	19.7	19.0	78.5	11.9
Total	100.0	100.0	100.0	100.0	100.0

[a] Distribution significantly differs from that found for each of the other three types of sex at $p \leq .01$ level.

[6] Distribution significantly differs from that found for vaginal intercourse and anal intercourse at $p \leq .01$ level, but the difference in distributions between the two types of oral sex is not statistically significant

Table 4. *Percentage of Couples Who Engaged in Different Types of Sexual Behavior During the Last Four Weeks (Weighted), and 95% confidence Interval*

Types of Sex in the Last Four Weeks	Percent	95% Confidence Interval
No Types of Sex		
No Sex	3.8	(0.024 - 0.062)
One Type of Sex		
Vaginal Only	21.2	(0.184 - 0.242)
Male Receptive Oral Only	0.1	(0.000 - 0.008)
Female Receptive Oral Only	0.2	(0.000 - 0.010)
Anal Only	0.1	(0.000 - 0.006)
Two Types of Sex		
Vaginal & Male Receptive Oral	10.3	(0.082 - 0.130)
Vaginal & Female Receptive Oral	12.1	(0.094 - 0.155)
Vaginal & Anal	1.3	(0.007 - 0.023)
Male Receptive Oral & Female Receptive Oral	0.3	(0.001 - 0.009)
Male Receptive Oral & Anal	0.0	
Female Receptive Oral & Anal	0.0	
Three Types of Sex		
Vaginal, Male Receptive Oral & Female Receptive Oral	36.9	(0.332 - 0.407)
Vaginal, Male Receptive Oral & Anal	0.7	(0.003 - 0.013)
Vaginal , Female Receptive Oral & Anal	0.9	(0.005 - 0.017)
Male Receptive Oral, Female Receptive Oral & Anal	0.3	(0.001 - 0.010)
Four Types of Sex		
Vaginal, Male Receptive Oral, Female Receptive Oral & Anal	11.9	(0.095 - 0.147)

Table 5. *Marginal Effects Coefficients from a Negative Binomial Regression Model of Number of Different Types of Sex in the Last Four Weeks (Weighted)*

Relationship and Personal Characteristics	Marginal Effect
Relationship Characteristics	
Relationship Duration (in months)	0.000
Cohabiting Relationship	0.286**
Dating Relationship	0.279
Personal Characteristics of the Partners	
Female Partner's Age	-0.022*
Male Partner's Age	0.014*
Female Partner Black	0.147
Female Partner Hispanic	-1.350***
Male Partner Hispanic	0.436**
Female Partner's Education (in years)	-0.038***
Male Partner's Education (in years)	-0.022
Male Partner's Income ($1,000s)	-0.001
Female Partner's Income ($1,000s)	0.000
No Children	0.223***
Female's Lifetime Number of Sex Partners	0.008**
Male's Lifetime Number of Sex Partners	0.003**
Relationship Power	
Female Partner's Relative Commitment (less committed than partner)	-0.139***
Male Partner's Relative Commitment (less committed than partner)	-0.026
Male Partner's Use of Force (Female Report)	0.433***
Statistical Interaction Terms	
Female Partner Black X Cohabiting Relationship	-0.508***
Female Partner Black X Dating Relationship	-0.397**
Female Partner's Education X Female Partner Hispanic	0.123***
Male Partner's Income X Male Partner Hispanic	-0.015***
Predicted Mean Number of Events (Different Types of Sex)	2.295

* $p \leq .10$ level ** $p \leq .05$ level *** $p \leq .01$ level

Figure 1. Predicted Number of Different Types of Sex in the Last Four Weeks by Female Partner's Race and Relationship Status

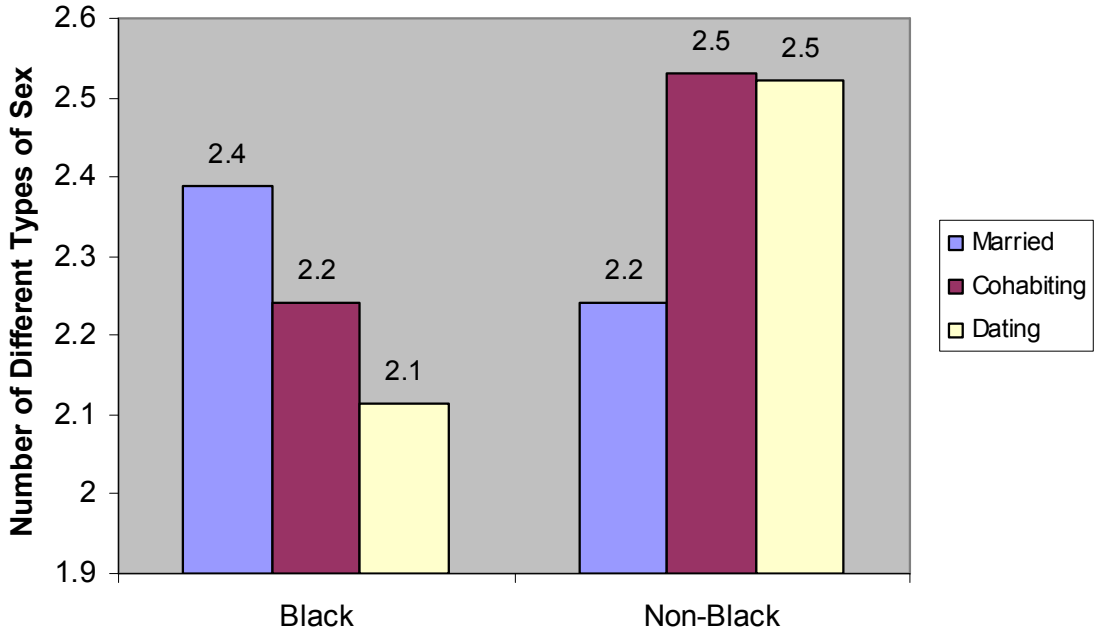

Figure 2. Predicted Number of Different Types of Sex in Last Four Weeks by Female's Hispanic Origin and Years of Education

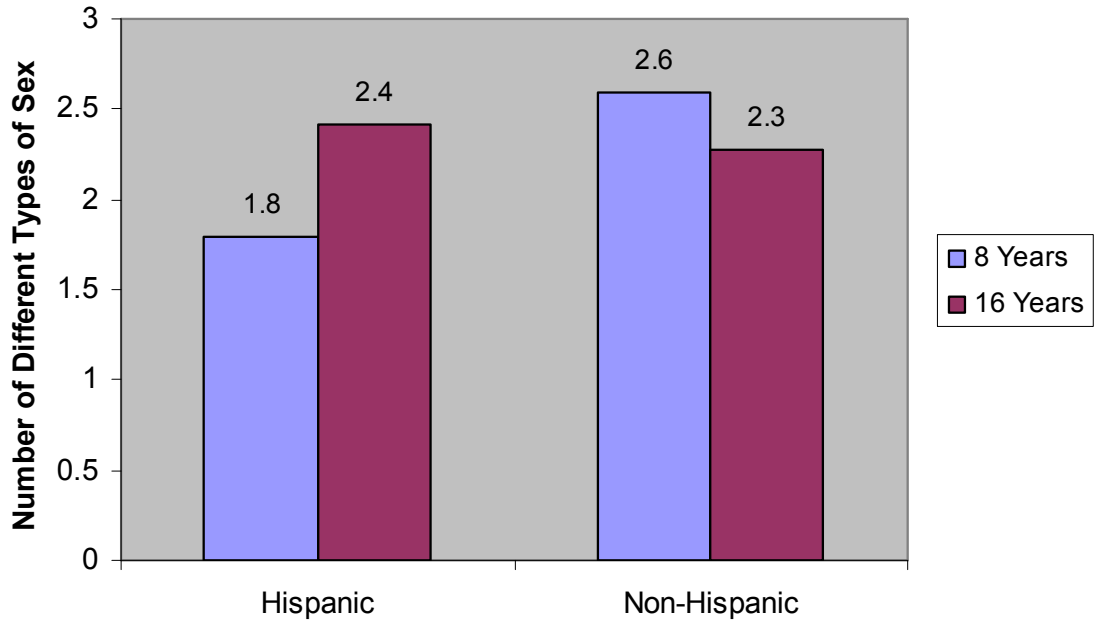

Figure 3. Predicted Number of Different Types of Sex in Last Four Weeks by Male's Hispanic Origin and Yearly Income