

Mood, Sexual Interest and Sexual Activity among Adolescent Women

Running Head: Adolescent Mood and Sexual Behavior

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Abstract

Objective: to examine day-to-day associations of coitus, sexual interest, partner emotional support, negative mood and positive mood among adolescent women.

Methods: Women (ages 14 – 17 at enrollment; N=146) enrolled from one of three adolescent primary care clinics completed up to five 84-day diaries over a 27-month period. The diaries assessed partner interactions, sexual activity, substance use and mood. Partner-specific measures assessed on each day included partner emotional support (4 items; $\alpha = 0.94$), argument with a partner (no/yes) and coitus (no/yes). Within-day measures assessed marijuana use (no/yes), Positive Mood (3-items; $\alpha = 0.86$); Negative Mood (3-items; $\alpha = 0.82$) and Sexual Interest (1-item). Lagged measures of mood and sexual activity were included in multivariate models to control for recent mood and sexual behavior effects on current day mood and coitus. Two main analyses

were conducted: coitus as a predictor of positive and negative mood; and the role of positive and negative mood as predictors of coitus. Analyses were conducted by multivariate mixed effect regression and mixed effect logistic regression models.

Results: Data represent 28,376 days from 146 participants. The average number of diary days was 194 days per participant. Sexual activity was reported on 8.3% of days, with condoms used for 27.0% of these coital events. Marijuana was used on 11% of days. Significant predictors of positive mood on a given day included partner support, marijuana use, and coitus. Negative mood was associated with having an argument with a partner and with prior day coitus. Predictors of coitus on a given day included age (Odds ratio = 1.22), increased coital frequency in previous week (OR = 1.49), coitus on the previous day (1.21), increased same-day sexual interest (OR = 2.8) and decreased same-day negative mood (OR = 0.92).

Conclusions: The data demonstrate complex associations of sexual interest, mood, partner interactions and sexual activity.

Introduction

Studies of temporal factors associated with coitus may be important because condom use (a mainstay of STI prevention) is conditional on the occurrence of coitus and thus may be affected by variable factors associated with coitus. Partner factors and substance are additional influences on both mood and sexual activity. The purpose of this paper is to evaluate partner factors,

substance use, mood and sexual interest as factors associated with day-to-day occurrence of coitus among adolescent women.

Both lay and professional discourse typically frames adolescent sexuality simply in terms of epidemiologic risk of adverse outcomes such as unintended pregnancy or sexually transmitted infection. Adverse outcomes of sexual activity are common and clearly detrimental to healthy adolescent development.

However, disproportionate emphasis on risk contributes to a perspective of adolescent women as sexual victims who are incapable of sexual agency other than refusal. (Fine 1988 112 /id) Several contemporary writers record the importance of sexual interest and desire in discussions of sexuality by adolescent women. These discussions – often interlaced with conflicting themes of romance, power, risk and danger – nonetheless emphasize the importance of sexual interest as a central component of sexual activity of adolescents. (Fine 1988 112 /id) (Thompson 1990 111 /id) (Tolman 2002 4051 /id)

However, sexual desire is only one dimension of the complex phenomenon of sex. Mood, characteristics of the interpersonal relationship with a partner, expectations for sex as part of an established pattern of behavior, opportunities for sex, and use of mood-altering substances are additional elements that, taken together, influence the occurrence of sexual activity on a given day. Understanding of these factors is important because adolescent sexual activity is thought to be typically “sporadic” and because prevention of adverse consequences such as sexually transmitted infections requires specific additional behaviors (e.g., condom use) in conjunction with sex.

Among these other phenomenological correlates of sexual activity, mood may be most obviously relevant to adolescents. Increased negative mood and increased mood variability are reasonably well documented aspects of adolescent development. Negative affective states, irritability and conflict (especially with parents) increase at the time of puberty.{Arnett 1999 2860 /id} Older adolescent girls (i.e., 9th graders) report significantly lower average daily happiness, cheerfulness, and friendliness compared to pre-teens and younger adolescents. Moreover, older girls show significantly greater day-to-day variation in mood.{Larson & Lampman-Petratis 1989 42 /id} A number of studies show that depressed mood peaks in mid-adolescence. (See {Petersen, Compas, et al. 1993 3923 /id} for a review). These developmental changes in affect temporally coincide with increased levels of adolescent sexual activity. Higher levels of depression are seen in sexually experienced adolescent women, compared to those without sexual experience.{Kowaleski-Jones & Mott 1998 4065 /id}{Ramrakha, Caspi, et al. 2000 4066 /id} Self-esteem may decrease following sexual initiation among adolescent women.{Spencer, Zimet, et al. 2002 3833 /id}

The studies discussed above evaluated global associations of negative affect and adolescent sexual activity rather than the day-to-day phenomena of mood and sex. Moreover, none of the studies appear to include assessments of positive mood. In common usage, the phrase “in the mood” connects positive mood and sexual interest with sexual activity. Strong relations are found between positive mood and sexual desire among adult women.{Warner & Bancroft 1988 3919 /id} Conversely, “not in the mood” suggests negative affect

and lack of sexual interest that may return if mood changes. Among older adult women, clinical depression is usually associated with decreased sexual interest, arousal and pleasure.{Kennedy, Dickens, et al. 1999 4048 /id} Among college-aged women, depressive symptoms (i.e., Beck Depression Inventory scores of 20 or greater) are associated with decreased sexual satisfaction and pleasure, although no differences in sexual desire or partnered sexual activity were noted.{Frolich & Meston 2002 4049 /id} This study noted, however, higher levels of interest in masturbation among the depressed women. This suggests that mood may not have consistent effects on all aspects of sexual expression. Recently, negative affective states common among adolescents (e.g., depression and anxiety) were linked to sexual behaviors associated with increased risk for sexually transmitted infections although these findings applied mainly to males.{Gold & Skinner 1992 3915 /id}{Shrier, Harris, et al. 2002 3917 /id}{Shrier, Harris, et al. 2001 3918 /id} Negative mood is aversive and may motivate sexual behavior that is believed to be ameliorate negative mood.{Thayer, Newman, et al. 1994 3995 /id}{Frolich & Meston 2002 4049 /id} However, a meta-analysis of 34 studies found no evidence of association between depressive symptoms and increased sexual risk behavior.{Crepaz & Marks 2001 3994 /id} Kalichman and Weinhardt pointed out in an accompanying editorial that such results were unsurprising given the paucity of event-level longitudinal studies.{Kalichman & Weinhardt 2001 3993 /id}

The possibility of reciprocal effects of sexual activity on mood has also received little research attention. Feelings of satisfaction, relaxation and intimacy

are well known psycho-physiologic correlates of coitus.{Heiman 1998 4069 /id}

In such circumstances, coitus might be expected to increase positive mood for some period of hours or one or more subsequent days. Some contextual aspects of a given coital event, however, could be associated with increased negative subsequent mood. The possibility of mood elevating properties of sexual activity is important since increased levels of depressed mood are associated with lower levels of condom use and increased self-report of STI among adolescents.{Shrier, Harris, et al. 2002 3917 /id}{Shrier, Harris, et al. 2001 3918 /id} On the other hand, unplanned or coerced coitus, or coitus subsequently interpreted as ill-advised (e.g., because of partner characteristics, non-use of condoms, lack of contraception) might contribute to lingering negative mood. Given the psychological and social complexities of adolescent sexual activity, it is possible to imagine effects of coitus on both positive and negative mood.

The characteristics of the interpersonal relationship with sex partners may also affect the likelihood of coitus on any given day. Sexual activity itself serves important functions in relationship building and maintenance, even though the structure of adolescent romantic relationships may differ from that of adults.{Quirk, Heiman, et al. 2002 4068 /id}{Graber, Britto, et al. 1999 4002 /id}

A majority of adolescent women characterize their sexual partners in terms of an ongoing affiliation such as friend, boyfriend or fiancé.{Graber, Britto, et al. 1999 4002 /id} These socially constructed relationships also provide important linkages to peers as well as families.{Brown 1999 3877 /id} Among older

adolescents, relationships characterized by affection and intimacy were associated with increased coital frequency. {Rostosky, Galliher, et al. 2000 3754 /id} Coital frequency may increase in frequency and regularity among adolescent women with more intense or more enduring close relationships. {Katz, Fortenberry, et al. 2000 3198 /id} In general, closeness within adolescence develops with age and is characterized by reciprocity, interdependence and frequency of interactions. {Adams, Laurensen, et al. 2001 3700 /id} Therefore, it is reasonable to hypothesize that coitus might be more or less likely on a given day within the context of specific interactions with a partner.

After an initial coital experience, most adolescents continue sexual activity, although not necessarily on a frequent basis. Median frequencies of about two coital events per month are reported but ranges are from a few annual coital events per to daily or almost daily coitus. {Seidman, Mosher, et al. 1994 629 /id} Up to one-third of adolescent women with any lifetime coital experience report no coitus within the previous 30 days and 10% - 15% report no coitus in the previous two months. {Aral & Cates 1989 813 /id} Although coitus is slightly more likely to occur on weekends than weekdays, sexual activity of adolescent women occurs throughout the week. {Fortenberry, Orr, et al. 1997 1837 /id} {Katz, Fortenberry, et al. 2000 3391 /id} This suggests that adolescent sexual activity is associated with other temporal phenomena and is not solely conditional on opportunities associated with decreased supervision. {Cohen, Farley, et al. 2002 4028 /id}

The most widely evaluated phenomenon associated with coitus is use of alcohol or drugs before coitus (see {Fortenberry 1995 281 /id} for a review). Intoxicating substances are assumed to impair judgment, leading to unplanned or unwanted sex and non-use of condoms and contraception. Almost none of the numerous studies of this issue assessed associated sexual interest, mood, usual behaviors and partner interactions.{Leigh & Stall 1993 80 /id} In a previous diary study of adolescent women (assessing condom use, partner change and coitus-associated substance use), we showed that fewer than 30% of adolescent women ever paired substance use and coitus, and (among those who did) only about 25% of coital events were substance-associated. Coitus-specific condom use was predicted by the prior level of condom use but not by event-specific substance use.{Fortenberry, Orr, et al. 1997 1537 /id} A recent meta-analysis showed that drinking was unrelated condom use in recent sexual encounters.{Leigh 2002 3960 /id} However, wide-spread use of substances among adolescents and continued interest in their role in unplanned or risky sexual activity warrants additional research.

A final relevant issue stems from the nature of the relationships of mood and sexual activity: coitus can serve a variety of purposes, leading to associations with either positive or negative mood, conceivably for the same person. Retrospective reports and single “critical event” studies cannot provide sufficiently detailed data to disentangle these complex effects.{Shiffman & Stone 1998 2177 /id} We chose daily, pre-printed diaries with weekly pickup because prior experience with adolescents suggested low levels of dropout, high levels of

daily completion and relatively low levels of item-level missing data, even for reports of sensitive behaviors.{Skiba, Fortenberry, et al. 1997 2059 /id}{Howard, Fortenberry, et al. 1999 2791 /id}{Fortenberry, Tu W., et al. 2002 3475 /id}{Morrison, Leigh, et al. 1999 2626 /id} Data from retrospective reports and aggregated diary records (for the same time period) show good concordance.{Fortenberry, Cecil, et al. 1997 1684 /id} Diary methods place substantial demand on participants but Gillmore et al. found no evidence of respondent fatigue among young adults completing daily self-reports of multiple health behaviors over a 56-day period.{Gillmore, Gaylord, et al. 2001 3602 /id} Thus, the diary methodology provides a useful tool to address the complex phenomenology of adolescent women's sexual activity.

Method

Study Design and Procedures

Data were collected as part of a larger longitudinal study of risk and protective factors (initiated in 1999) associated with sexually transmitted infections among girls in middle adolescence. Briefly, the larger study was comprised of five 84-day diary collection periods during a 27-month study period. Diary collection periods were followed by a rest period in which no diary information was collected. Each diary collection period was bracketed by clinic visits for collection of interview and physical examination data related to the larger project. These visits allowed research personnel to reinforce diary collection procedures and maintain current contact information. Informed consent was obtained from each participant and permission obtained from a

parent or legal guardian. This research was approved by the institutional review board of Indiana University/Purdue University at Indianapolis – Clarian.

The diary instrument consisted of a single bar-coded, scannable sheet containing probes and response options. Each diary sheet consisted of two sections: partner-specific behaviors occurring on the specified day and non-partner specific items related to marijuana use and mood. Partner-specific items were identified by up to five partner initials or first names, and assessed partner interactions as well as coital activity. Items assessing marijuana use and mood are described in detail below.

At the time of enrollment, participants received detailed instructions regarding diary completion as well as a packet of blank diary sheets. Participants were asked to complete a single diary sheet at the end of each day, before going to bed. If an entry was forgotten, participants were asked to complete the form as soon as it was remembered. An appointment time for diary pick-up was arranged for the subsequent week. At weekly intervals, trained field personnel visited each participant (typically at their homes) to collect completed diaries and leave blank diary forms. Field personnel reviewed diaries for ambiguous or missing diaries but did not retrospectively complete missing diaries. Participants received \$2.00 for each completed diary as well as a bonus for completion of 80% of scheduled diaries.

Participants

Participants were English-speaking adolescent women receiving health care in one of three primary health clinics in Indianapolis. These clinics serve

primarily lower- and middle-income residents of areas with high rates of teen pregnancy and sexually transmitted diseases. Most participants (87%) reported race as African-American. Two percent reported ethnicity as Hispanic.

Clinic patients were eligible if they were between 14 and 17 years at enrollment, spoke English, and were not pregnant at the time of enrollment. However, participants who became pregnant were continued in the study. Prior sexual experience was not a requirement for participation.

Measures

Three types of measures were used in analyses reported here: demographic measures; partner-specific daily reports; and, daily reports of mood. The included demographic measure was *Age* at most recent birthday plus the fraction of a year between the previous birthday and the beginning of a diary period. Thus, this measure does not confound, for example, 14.95 year olds with 14.00 year olds. Race was not included in analyses because of the relative racial homogeneity of the sample.

Partner-specific measures assessed on each diary day included *partner emotional support* (4 items; $\alpha = 0.94$), *partner argument* (no/yes), and *coitus* (no/yes). Multiple coital events on the same day were not recorded due to space limitations of the diary. Our prior experience suggests that only a small proportion of adolescent coital events (less than 5%) represent same-day events. No participant reported coitus with more than one partner on the same day.

Within-day measures included *marijuana use* (no/yes), *positive mood* (3 items; $\alpha = 0.84$), *negative mood* (3 items; $\alpha = 0.81$) and *sexual interest* (1

item). For the mood and sexual interest items, participants were asked to indicate the proportion (Not at all, Some, About Half, Most, All) of the day they felt the following: happy, friendly, or cheerful [*Positive Mood*]; unhappy, angry, or irritable [*Negative Mood*]; and, sexual [*Sexual Interest*]. These items were modified from existing measures of daily positive and negative mood, and from our earlier research. {Larson & Lampman-Petratis 1989 42 /id}{Van Whitlock, Lubin, et al. 1995 2527 /id}{Van Whitlock, Lubin, et al. 1997 3911 /id}{Skiba, Fortenberry, et al. 1997 2059 /id}

In order to assess potential carry-over effects of recent coitus and mood, one-day lagged measures of coitus, positive mood and negative mood were included. In essence, these measures allow examination of the effects of yesterday's mood and behaviors on today's mood or behavior. To control for additional potential effects of coital frequency on mood and sexual activity, the number of coital events in the previous seven days was entered into the models.

Statistical Analysis

Analyses were conducted in two phases. First, a multivariate mixed effect model for repeated measures was used to depict the effects of various factors on daily mood. {Schwartz & Stone 1998 2176 /id}{Sammel, Lin, et al. 1999 4042 /id} Positive and negative mood measures were modeled simultaneously in a single analytic structure. In these types of models, the correlations among the repeated within-subject daily mood measures were accounted for by two subject-specific random intercepts (one for positive mood and one for negative mood), while the inter-dependency within each pair of daily positive and negative mood measures

was accommodated by allowing the intercepts share a common bivariate normal distribution. The models were implemented using the SAS procedure NLMIXED. Models were fitted in a stepwise fashion. Final models included all significant ($p < 0.05$) covariates.

Second, a univariate mixed effect logistic model for repeated measures was used to assess the effects of various predictors on coitus. A subject-specific random intercept was introduced into the multivariable logistic model to accommodate correlations among the repeated within-subject coital events. Models were fitted in a stepwise fashion using SAS procedure NLMIXED. First, a full model containing all the above factors was fitted. From the full model, we use a backward selection procedure to eliminate the insignificant ($\alpha > 0.05$) variables one at a time. Akaike's information criterion (AIC) was also used to verify the model selection process. Both model selection criteria produced the same final model.

Results

Results are presented in three sections. First, data describing the participants and their behaviors are presented. Second, a model assessing multivariable predictors of negative and positive mood is presented. Third, a model assessing multivariable predictors of coitus is presented.

Descriptive Analyses

Univariate descriptive statistics are summarized in Table 1. The average age at study entry was 15.4 years. A total of 28,376 diary days were reported by 146 individual participants. The average number of diary days contributed by a

participant was 194.4 days, with a range of 14 to 420 days. Sexual activity was reported on 2,347 (8.3%) days. The average number of coital events per subject was 16.1, with a range of zero to 200. The average daily level of partner support was 1.9 (range 0 – 4) and an argument with a partner was reported on 10.7% of diary days. Average level of positive mood was substantially higher than levels of negative mood. Average daily sexual interest was low but not absent. Marijuana use was not uncommon, being reported for about 11% of days. Small or modest correlations were seen between positive mood/negative mood ($r=-0.32$), positive mood/sexual interest ($r=0.18$), and negative mood/sexual interest ($r=0.16$)[data not shown].

Table 2 compares days with and without coital activity in terms of recent sexual activity, current day mood, sexual interest, partner support and marijuana use. Days on which coitus occurred were associated with increased likelihood of coitus on the previous day as well as higher coital frequency in the previous week. Average positive mood, sexual interest, partner support, partner arguments and marijuana use were substantially higher on days with coitus, compared to days without coitus. Average negative mood was not remarkably different on days with and without coitus. These bivariate analyses – unadjusted for the repeated within-subject observations – demonstrate clear intrapersonal, interpersonal, and behavioral differences in days with and without coitus.

Multivariable Predictors of Positive and Negative Mood

The predictors of positive and negative mood on any given day are shown in Table 3. Age was independently associated with both increased positive mood

as well as increased negative mood. Coitus on any given day was associated with significantly higher positive mood and significantly lower negative mood. However, previous day coitus as well as number of coital events in the previous week were associated with significantly lower current day positive mood but were not associated with current day negative mood. This suggests that coitus is associated with improved overall mood but that this effect is reduced for more sexually active women on days when coitus does not occur.

The relationship of sexual interest with positive and negative mood deserves special comment. The level of sexual interest during a given day was positively related to positive mood, without significant association with negative mood. This association is independent of effects of coitus itself, prior day mood and partner interactions.

Net of other effects, current day mood – both positive and negative – are significantly affected by prior day positive and negative mood (Table 3). However, based on the markedly different magnitude of the parameter estimates, current day positive mood is more strongly related to prior day positive mood than to negative mood. Conversely, current day negative mood is more strongly related to prior day negative mood than to prior day positive mood. This suggests substantial within-person mood consistency, but indicates substantial within-person day-to-day variability as well.

Interpersonal relationships also affect mood. Higher levels of partner support were associated with increased positive mood and decreased negative mood. Likewise, having an argument with a partner was associated with

decreased positive mood and increased negative mood. Consistent with the findings of others, some conflict may be an important aspect of adolescent sexual/romantic relationships. {Rostosky, Galliher, et al. 2000 3754 /id}

Finally, marijuana use on a given day is associated with higher levels of positive mood but was not associated with level of negative mood. While this could represent direct effects of the drug on mood, it could also simply represent more generic mood-elevating circumstance such as unsupervised time.

Multivariable Predictors of Coitus

The factors associated with coitus on any given day as summarized in Table 4. Current day coitus was associated with increased age, prior day coitus, coital frequency in the previous week, and current day sexual interest. The association of increased sexual interest with increased probability of coitus suggests that adolescent women act to fulfill their sexual feelings. However, it is also consistent with the concept that sexual arousal and sex itself may serve as important elements of women's sexual interest. {Basson 2002 4029 /id} Diary data such as presented here cannot distinguish between these alternatives.

Positive mood on any given day was not associated with coitus on that day. However, higher levels of negative mood decreased the probability of coitus on a given day. Interestingly, increased level of prior day positive mood was associated with decreased likelihood of coitus on a given day, with no effect of prior day negative mood.

Interpersonal contexts also showed significant associations with the probability of coitus on any given day. Increased partner support and arguing

with a partner were associated with increased probability of coitus. Since the diary data cannot temporally order the argument and coitus, it is possible that coitus relieves interpersonal tension associated with an argument. Alternatively, coitus itself could be a source for argument. This latter argument seems less likely since the association of arguments and coitus is net of the effects of negative mood.

Finally, marijuana use is independently associated with increased likelihood of coitus on any given day. Marijuana intoxication could increase the likelihood of coitus by decreasing refusal skills for sex, leading to sexual coercion or rape. If this were true, we would expect higher levels of negative mood on days when sex occurred. This is opposite of the actual finding that lower levels of negative mood are associated with days on which coitus occurs. Perhaps the most likely explanation is that both marijuana use and coitus require periods when privacy and absence of supervision is assured. Such periods provide an opportunity for proscribed behaviors among those so inclined. The social interaction of shared marijuana use could be a quasi-ritual in some adolescent sexual dyads.

Discussion

In general, we find that days on which coitus occurs (compared to days when coitus does not occur) are associated with increased positive mood, and decreased negative mood among adolescent women. The net effect of these mood changes is one of improved mood. This effect is temporary since coitus on a prior day is associated with decreased positive mood and increased negative

mood. Although several interpretations are possible, we believe these findings are most consistent with the idea that coitus leads to improved mood which subsequently returns to usual levels. Partner support and marijuana use were also associated with improved mood, independent of coitus and prior day mood.

When occurrence of coitus was used as the outcome, negative mood significantly decreases the odds of coitus on any given day. Older age, usual coital frequency, coitus on the day before, marijuana use and emotionally positive partner interactions were also associated with increased coitus. The degree of same-day sexual interest was perhaps the strongest predictor of coitus.

The idea that sexual activity functions as an important regulator of mood among adults appears widely accepted although somewhat poorly documented. Most survey data focus on effects of mood on sexual interest and sexual activity. Experimental data focus on orgasm. None of these data support an interpretation that coitus is used by adolescents to improve mood. First, sex has many intra- and inter-personal motivations that include – but are not limited to – a desire to “feel better.” Second, mood elevation could be an incidental by-product of the complex neuro-endocrinology of sex. For example, oxytocin is associated with both sexual response and positive mood states. Positive mood peaks in the late follicular phase, declining through the entire luteal phase. {Sanders, Warner, et al. 1983 3991 /id} Some studies indicate increased negative mood associated with decreased sexual interest during premenstrual and menstrual days, {Pollack

1993 3914 /id} while others do not.{Van Goozen, Wiegant, et al. 1997 3913 /id}{Meuwissen & Over 1992 3916 /id}

There are several limitations that should be considered. First, diary records provide specificity to the level of a given day. Within-day causal relations, such as mood and coitus, cannot be disentangled. Other experience sampling methods – for example, using hand-held computers – could provide the multiple, within-day measures needed for addressing these issues.{Shiffman & Stone 1998 2177 /id} Second, efforts to keep the diary format as simple as possible did not allow detailed exploration of the type of sexual activity. This means, for example, that oral-genital contact could have been reported as the sexual activity of the day. However, we find almost no evidence for exclusive non-coital sexual activity among non-coitally active women. Distinction of specific types of sexual activity will be important to even more detailed understanding of linkages between mood, sexual activities and sexually transmitted infections. Third, the diary format does not allow for detailed assessment of potential external sources of positive or negative mood. For example, items (not described here) asked about failing a test (as a potential source for negative mood) but did not ask about receiving a better than expected grade or unexpected praise from a teacher. Moreover, such items are not relevant to all subjects. Fourth, menstrual cycle data were not included in the current models. Hormonal measures were not obtained and the substantial variation in hormonal contraceptive use (including oral contraceptives and injected medroxy-progesterone) means that self-reported vaginal bleeding

patterns (which were obtained) could not be interpreted to represent the young women's menstrual cycle. Finally, diary-based investigations – especially for a prolonged time period such as that reported here – place significant burdens on the participants. We collected diaries weekly, usually in the participant's home. This approach minimizes participant effort, builds rapport with the research team, and limits back-filling of diaries to intervals of no more than a few days.

These data offer substantial insight into the sexuality of adolescent women. Recent years have seen increased attention to social, political, clinical and public health efforts to encourage “abstinence”. An untoward outcome of these programs has been almost exclusive focus on the risks of adolescent sexual behavior, with little emphasis on the personal and interpersonal aspects of sexuality among young women. This relative lack of understanding of adolescent sexuality means that sexual health for adolescents can be construed only in terms of risk and danger. Such a perspective may be inappropriate for adolescent or subsequent adult health.

Table 1. Age, Sexual Behavior, Mood, Partner Interactions, and Marijuana Use¹

	Mean (SD)	Observed Data Range
Age at enrollment, years	15.4(0.9)	14 – 17
Diary Days per Participant	190.4 ()	14 - 420
Coital Events per Participant ²	16.1(24.8)	0 - 14
Daily Positive Mood	9.4 (3.9)	3 - 15
Daily Negative Mood	5.5 (3.0)	3 - 15
Daily Sexual Interest	1.6 (1.1)	1– 5
Daily Partner Support	1.9 (1.4)	0 - 4
Argument with Partner, days	3019 (10.7%)	No/Yes
Marijuana Use, days	3092 (10.9%)	No/Yes

1 N = 28,376 diary days based on 146 participants

2 Total Coital Events = 2,347 (8.3% of all diary days)

3 Total Condom Protected Coital Events = 642 (27% of all coital events)

Table 2. Recent Coital Activity, Mood, Sexual Interest, Partner Variables and Marijuana Use on Days with and without Coitus¹

	Days with Coitus Mean or Percentage (n=2347)	Days without Coitus Mean or Percentage (n=26029)
Prior Day Coitus	794 or 34.5%	1507 or 5.9%
Coital Events, Past Week	2.22 (SD=1.83)	0.43 (SD=0.96)
Positive Mood (3-15)	10.1 (SD=3.7)	9.4 (SD=3.9)
Negative Mood (3-15)	5.7 (SD=2.9)	5.5 (SD=3.0)
Sexual Interest (1-5)	3.0 (SD=1.4)	1.4 (SD=1.0)
Partner Support (0-4)	3.3 (SD=1.0)	1.8 (SD=1.4)
Argument with Partner	496 or 21.22%	2523 or 9.74%
Marijuana Use	585 or 25.04%	2507 or 9.67%

Table 3. Predictors of Positive and Negative Mood

	Positive Mood			Negative Mood		
	Estimate (SE)	t value	95% Confidence Interval	Estimate (SE)	t value	95% Confidence Interval
Age ^{*a}	0.23(0.01)	24.4	0.21 – 0.25	0.18(0.01)	24.4	0.17 – 0.19
Coitus ^{*a}	0.18 (0.07)	2.6	0.04 – 0.32	-0.55(0.07)	-8.1	-0.69 – -0.42
Sexual [*]	0.48(0.02)	25.3	0.44 – 0.51	-0.02(0.02)	-1.0	-0.05 – 0.02
Coitus – Previous Day [*]	-0.31(0.07)	-4.4	-0.45 – -0.17	0.07(0.07)	1.0	-0.07 – 0.21
Coital Events, Past Week [*]	-0.07(0.02)	-3.1	-0.10 – -0.02	0.02(0.02)	1.3	-0.01 – 0.06
Prior Day Positive Mood ^{*a}	0.42(0.01)	67.9	0.41 – 0.43	0.06(0.01)	9.3	0.04 – 0.07
Prior Day Negative Mood ^{*a}	0.06(0.01)	7.8	0.04 – 0.07	0.40(0.01)	56.3	0.39 – 0.42
Partner Support ^{*a}	0.18(0.01)	12.4	0.15 – 0.21	-0.10(0.01)	-7.0	-0.13 – -0.07
Argument with Partner ^{*a}	-0.77(0.05)	-14.1	-0.88 – -0.66	1.02(0.05)	18.7	0.91 – 1.12
Marijuana Use [*]	0.26(0.07)	3.7	0.12 – 0.40	-0.08(0.07)	-1.1	-0.22 – 0.06

Note: * -- significant predictor for positive mood at 0.05; ^a -- significant predictor for negative mood at 0.05.

Table 4. Predictors of Current Day Coitus

	Coitus		
	Estimate (SE)	Odds Ratio	95% Confidence Interval
Age *	0.13(0.06)	1.14	1.02, 1.27
Number of Coital Events in Past Week *	0.30(0.03)	1.35	1.29, 1.43
Prior Day Coitus *	0.17(0.09)	1.19	1.00, 1.41
Prior Day Positive Mood *	-0.05(0.01)	0.95	0.92, 0.98
Prior Day Negative Mood	-0.03(0.02)	0.97	0.94, 1.01
Positive Mood	-0.01(0.01)	0.98	0.95, 1.01
Negative Mood *	-0.07(0.02)	0.93	0.90, 0.96
Sexual Interest *	0.93(0.03)	2.54	2.39, 2.69
Partner Support *	0.96(0.04)	2.62	2.44, 2.81
Argument with Partner *	1.05(0.09)	2.86	2.38, 3.43
Marijuana Use *	0.39(0.11)	1.48	1.18, 1.86

* significant at 0.05 level.

