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## Illicit Drug Use and Marital Satisfaction

**Gregory G. Homish, Ph.D.,**

*Department of Health Behavior, School of Public Health and Health Profession, The State University of New York at Buffalo*

*Research Institute on Addictions, The State University of New York at Buffalo, 618 Kimball Tower, 3435 Main Street, Buffalo, NY 14214, Phone 716-829-6959, Fax 716-829-6040, Email: ghomish@buffalo.edu*

**Kenneth E. Leonard, Ph.D.,** and

*Research Institute on Addictions, The State University of New York at Buffalo*

*Department of Psychiatry, School of Medicine, The State University of New York at Buffalo, 1021 Main Street, Buffalo, NY 14203-1016*

**Jack R. Cornelius, M.D.M.P.H.**

*University of Pittsburgh School of Medicine, Western Psychiatric Institute and Clinic, 3811 O'Hara Street, Pittsburgh, PA 15213*

### Abstract

With the acquisition of adult social roles such as marriage, more deviant or socially disapproved behaviors such as drug use often decrease. The objective of this work was to examine patterns of illicit drug use in a community sample of adults during the transition and early years of marriage. Additionally, this work examined if couples who were discrepant in their drug use (i.e., one individual reported past year drug use and the partner reported no use) experience sharper declines in marital satisfaction compared to other couples. Multilevel regression models explored these issues over the first four years of marriage (N= 634 couples). Although rates of illicit drug use decline over the first four years of marriage, a significant number of husbands and wives continued to use illicit drugs (21% and 16%, respectively). At the transition to marriage, both husbands and wives who had discrepant drug use behaviors experienced lower levels of marital satisfaction compared to other couples. Over the first four years of marriage, couples in each group experienced significant declines in marital satisfaction.

### Keywords

illicit drug use; marriage; marital satisfaction

### 1.0 Introduction

The process of psychosocial maturation suggests that as individuals progress through early adulthood, more deviant behaviors such as illicit drug use should cease (Labouvie, 1996). Labouvie (1996) suggests that during this process individuals attempt to self-regulate their behaviors and thus correct behaviors that are not normative or socially acceptable. Further,

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Correspondence to: Gregory G. Homish.

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Role Incompatibly Theory (Thornton & Nardi, 1975) postulates that behaviors that are not congruent with a social role are more likely to be discontinued. For example, Miller-Tutzauer, Leonard, & Windle (1991) used data from a nationally representative sample of US adults and found that the first year of marriage was associated with a decline in the amount of heavy drinking. Additionally, they found that the decline in heavy drinking was actually evident in the year prior to marriage, suggesting that as these individuals were anticipating the transition into a new social role, heavy drinking declined. Similarly, Bachman, Wadsworth, O'Malley, Johnston, & Schulenberg (1997) found that marriage (and even the anticipation of marriage) was related to a reduction or cessation of both licit substances (i.e., alcohol use, tobacco use) as well as illicit substance use (i.e., marijuana and cocaine). Additionally, the relation between the transition to marriage and reductions in substance use held for both men and women.

Yamaguchi and Kandel (1985) investigated the relation between social roles (e.g., first marriage, becoming a parent) and the cessation of marijuana use. Among men, the year prior to marriage as well as the year in which they became a parent were associated with cessation of marijuana use. Among women, the year prior to marriage, as well as at the time of marriage and in the year prior to having a baby were all significantly associated with a cessation of marijuana use. Others have also found that the transition into family roles was related to reductions in illicit drug use (Chen & Kandel, 1998). Taken together, strong evidence exists to suggest that the acquisition of adult roles such as marriage is associated with a reduction in illicit drug use.

Although the transition into adult roles such as marriage (or the anticipation of a transition into adult roles) is often associated with a reduction in illicit drug use, not all individuals cease their drug involvement. For example, in a community sample of newly married couples, almost one-fifth of wives (19.7%) and about a quarter of husbands (25.5%) reported past year marijuana use (Leonard & Homish, 2005). Although the drug use declined through the second wedding anniversary, a significant number of wives (12.5%) and husbands (18.7%) continued to use marijuana. Using data from the US National Household Survey on Drug Use and Health, 6.8% of married women and 8.9% of married men reported any past year illicit drug (Substance Abuse and Mental Health Services Administration, 2003). When restricting this sample to married adults under the age of 30, 13.1% of women reported any past year illicit drug use and 19.3% of men reported any past year illicit drug use. In another large US survey (Monitoring the Future), 5.1% of 35 year old married women reported marijuana use in the past 30 days and 9.5% of 35 year old married men reported marijuana use in the past 30 days (Merline, O'Malley, Schulenberg, Bachman, & Johnston, 2004). Although rates of illicit drug use generally decrease with increasing age and the assumption of adult roles, it is clear that illicit drug use does not end for everyone.

In accord with role incompatibly theory, socially deviant behaviors such as illicit drug use are not compatible with traditional adult, social roles such as marriage or parenthood (Vargas-Carmona, Newcomb, & Galaif, 2002); therefore, these individuals may be more likely to experience difficulty within a variety of aspects of their lives. One such domain that may be impacted by the continuation of illicit drug use is within the marital relationship. This may be especially true if only one member of the couple is involved with illicit drug use. In a cross-sectional study of substance use behaviors among newly married adults, Mudar, Leonard, & Soltysinski (2001) found that couples who were discrepant in their heavy drinking and frequency of intoxication (i.e., one engaged in the behavior but the other did not) had significantly lower marital quality scores compared to couples in which both or neither used. In a longitudinal follow-up to this work, Homish & Leonard (2007) found that discrepancies in heavy drinking between husbands and wives were predictive of decreased marital satisfaction through the second wedding anniversary. Importantly, the finding was not dependent on whether the husband or wife was the heavy drinker. Roberts and Leonard (1998) use the term

“drinking partnership” to describe how couples integrate alcohol use into the relationship. The “drinking partnership” describes the match, or lack of match, between the amount and context of use for husbands and wives alcohol consumption. Within the examination of the drinking partnership construct, it was found that it was the discrepancy between the husbands and wives that related to relationship difficulty. Thus, it appears that how the alcohol use is integrated into the relationship relates to overall marital quality, not simply the alcohol use per se.

In addition to more global measures of marital satisfaction, discrepancies in substance use can also be related to more extreme relationship events. For example, Leadley, Clark, and Caetano (2000) found that discrepancy in amounts of alcohol use among adult intimate couples was related to an increased likelihood of relationship problems (threats to end relationship due to drinking and arguments based on alcohol) and interpersonal violence. For relationship problems, the nature of the discrepancy (i.e., whether the husband or the wife was the heavier drinker) was not related to the outcome—it was simply the presence of the discrepancy that increased the likelihood of relationship problems. Although the study was based on a nationally representative sample of US adults, the findings are based on a single time point, and therefore, the directional nature of the variables cannot be ascertained. Quigley and Leonard (2000) also found that discrepancy in alcohol use among couples was related to a greater likelihood of husband-to-wife aggression. Ostermann and colleagues (2005) used five waves of data to examine the relation between alcohol use and marital dissolution (separation or divorce). After adjusting for age, race/ethnicity, number of years married, number of times married, health, religion, and education, discrepant levels of alcohol use between husbands and wives was related to marital dissolution, while concordant heavy drinking was not predictive of marital dissolution.

From the alcohol literature it is clear that discrepancy in heavy alcohol use, not simply the presence of heavy alcohol use, was longitudinally related to changes in intimate relationship functioning. Far less work has considered the construct of discrepancy as it relates to illicit drug use. In a cross-sectional study of couples during the transition into marriage, couples who were discrepant in their use of illicit drugs (marijuana, cocaine, sedatives, stimulants, heroin, and hallucinogens), reported lower marital satisfaction compared to couples in which neither partner used or both partners used drugs (Mudar et al., 2001). In a treatment sample of drug using adults, Fals-Stewart and colleagues (1999) examined the relation between three groups of couples and marital functioning. The groups consisted of couples in which both members used drugs, only the wife used drugs and only the husband used drugs. Compared to the two discordant groups, couples in which both members used drugs had taken fewer steps toward ending their relationship and less frequently used maladaptive responses to a conflictual situation. The authors suggested that for some individuals, the drug use becomes positively associated with relationship satisfaction. In many ways, these results parallel the findings reported with alcohol use.

The integration of substance use into the relationship, rather than the substance use by itself, appears to be an important predictor of changes in relationship functioning over time. However, the research to date on discrepancy in substance use patterns among intimate couples has been quite limited and has tended to focus on alcohol use. It is not clear if similar results would be found for the relation between patterns of illicit drug use and marital satisfaction over time. The work that has considered illicit drug use has been limited by cross-sectional work or research utilizing treatment samples. It is not clear if similar findings would be evident among less severe populations, such as community samples. The objective of this work was to use a community sample of newly married couples to examine changes in marital satisfaction over time on the basis of illicit drug use. This work focuses on four waves (time of marriage, and first, second, and fourth wedding anniversaries) of an ongoing study of marital functioning and substance use. Using multilevel regression models, we examined if changes in marital

satisfaction over the early years of marriage differ for three couples: couples in which neither partner used illicit drugs in the previous year, couples in which both member used illicit drugs in the previous year, and couples in which only one member used illicit drugs in the previous year.

## 2.0 Methods

### 2.1 Participants

Participants for this report were involved in a longitudinal study of marriage and alcohol involvement. All participants were at least 18 years old, involved in their first marriage, were literate, and living in New York. Couples were ineligible for the study if they had been previously married. These analyses are based on 589 couples. At the initial assessment, the average age of the men [mean (SD)] was 28.7 (6.3) years and the average of the women was 26.8 (5.8) years. The majority of the men and women in the sample were European American (husbands: 59%; wives: 62%). About one-third of the sample was African American (husbands: 33%; wives: 31%). The sample also included small percentages (less than 5%) of Hispanic, Asian, and Native American participants. A large proportion of husbands and wives had at least some college education (husbands: 64%; wives: 69%) and most were employed at least part-time (husbands: 89%; wives 75%). Consistent with other studies of newly married couples (Chadiha, Veroff, & Leber, 1998; Crohan & Veroff, 1989; Orbach & Veroff, 2002; e.g., Tallman, Burke, & Gecas, 1998), many of the couples were parents at the time of marriage (38% of the husbands and 43% of the wives) and were living together prior to marriage (70%). The Institutional Review Board of the State University of New York at Buffalo approved the research protocol.

### 2.2 Procedures

After applying for a marriage license, couples were recruited for a 5-10 minute paid (\$10) interview. The interview covered demographic factors (e.g. race, education, age), family and relationship factors (e.g. number of children, length of engagement), and substance use questions (e.g. marijuana use, other illicit drug use, frequency of heavy drinking). Recruitment occurred over a 3-year period from 1996-1999. For interested individuals who did not have time to complete this interview, a telephone interview was conducted later that day or the next day (N = 62). Less than 8% of individuals approached declined to participate. We interviewed 970 eligible couples.

Complete details of the recruitment process can be found elsewhere (Homish & Leonard, 2006; Leonard & Mudar, 2000), but briefly, couples who agreed to participate were given identical questionnaires to complete at home and asked to return them in separate postage paid envelopes (Wave 1 Assessment). Participants were asked not to discuss their responses with their partners. Each spouse received \$40 for his or her participation. Only 7% of eligible couples refused to participate. Those who agreed to participate, compared to those who did not, were more likely to have lower incomes ( $p < .01$ ) and the women were more likely to have children ( $p < .01$ ). No other differences were identified. Of the 887 eligible couples who agreed to participate in the Wave 1 assessment (13 of the original 900 did not marry), data were collected from both spouses for 634 couples (71.4%). The 634 couples are the basis for this report. Couples who returned the questionnaires were more likely to be living together prior to marriage compared to couples who did not return the questionnaires (70% vs. 62%;  $p < .05$ ) and were more likely to be European American (husbands: 59% vs. 52%,  $p < .05$ ; wives: 62% vs. 53%,  $p < .05$ ). No other sociodemographic differences were observed between the couples who responded compared to those who did not. Average past year alcohol consumption did not differ between couples that returned the questionnaires and those who did not. Husbands

in non-respondent couples consumed 6 or more drinks or were intoxicated in the past year more often than husbands who completed the questionnaire; however, these differences were small.

At the couples' first, second and fourth wedding anniversaries (Waves 2, 3 and 4), they were mailed questionnaires similar to those they received at the first assessments. Waves 5 (seventh anniversary) and 6 (ninth anniversary) are currently being completed. As with the first assessment, they were asked to complete the questionnaires and return them in the postage paid envelopes. Each spouse received \$40 for his or her participation for the first 3 assessments and \$50 each for the fourth assessment. We maintained 91%, 85%, and 81% of wives and 86%, 79%, and 71% of husbands at Waves 2, 3, and 4, respectively. Husbands who participated in the fourth assessment compared to those who did not participate were not different from other husbands on the basis of Wave 1 overall illicit drug use grouping (no illicit drug use, marijuana only, marijuana plus other illicit drug use). However, in terms of individual illicit drug categories, husbands who did not complete the Wave 4 assessment were more likely to report past year hallucinogen use compared to completers (7.7% vs. 3.1%, respectively,  $p < .05$ ). Additionally, husbands who did not complete the Wave 4 assessment were more likely to report past year heroin use compared to husbands who completed the Wave 4 assessment (1.7% vs. 0%, respectively,  $p < .01$ ). There were no differences among the sociodemographic covariates. Wives who participated in the fourth assessment compared to those who did not participate were not different from other wives on the basis of Wave 1 overall illicit drug use grouping or on any individual illicit drug category. Wives who did not complete the fourth assessment did not differ on any other variables compared to wives who did complete the fourth assessment.

## 2.3 Measures

**2.3.1 Illicit Drug Use**—At each assessment, each spouse was asked to report how often he or she used illicit drugs in the past year or used prescription drugs in a manner other than prescribed by a physician. For convenience, both illicit drugs and using prescription drugs in a manner other than prescribed will be termed “illicit drug use.” Responses to past year drug use were recorded on 6-point scale (“not at all,” “once,” “a few times,” “about once a month,” “2-3 times per month,” and “once a week or more.”) Drug use categories (and examples provided to the participants) included frequency of using marijuana (e.g., pot, weed, reefer), hallucinogens (e.g., LSD, peyote, mushrooms), cocaine (e.g., powder, liquid, crack, ready rock), heroin or methadone, sedatives (e.g., downers, valium), and stimulants (e.g., uppers, speed). Husbands' and wives' illicit drug involvement at the time of marriage was characterized as “congruent non-use” (i.e., neither husband nor wife reported any past year illicit drug use, “congruent use” (i.e., both husband and wife reported past year illicit drug use) or “discrepant use” (i.e., only one member of the couple reported past year illicit drug use).

**2.3.2 Relationship Quality**—At each assessment, marital quality was assessed with the Marital Adjustment Test (MAT, Locke & Wallace, 1959). The MAT consists of 15 total items. This instrument measures overall relationship quality. Higher scores indicated greater relationship quality (range: 2-158). The MAT had an adequate reliability for men ( $\alpha = .70$ ) and women ( $\alpha = .70$ ). A score of less than 100 is usually considered to reflect clinically significant marital distress.

## 2.4 Analytic Approach

Descriptive statistics were used to characterize couples marital satisfaction and illicit drug involvement. To assess the longitudinal nature of marital satisfaction over time, we used multilevel modeling. Multilevel modeling is used to study nested data, such as students within schools, but it can also be applied to longitudinal studies (Homish, Leonard, & Kearns-Bodkin, 2006; Hox, 2002). In this report, the repeated assessment of the couples is considered nested within the couple over time. The application of multilevel modeling in longitudinal studies has

many advantages over traditional analyses. A complete discussion of these advantages is available elsewhere (Hox, 2002; Raudenbush & Bryk, 2002), but briefly, the use of multilevel modeling in longitudinal studies is particularly beneficial in terms of dealing with missing data. With many other methods, participants who did not provide data for each assessment would be considered missing; however, multilevel modeling allows participants with only information from one assessment to be included in the analyses (Raudenbush & Bryk, 2002). Past research on dyadic data has often been conducted by analyzing the data with two models, one for each spouse (For a discussion of this, see: Snijders & Kenny, 1999). This approach fails to capture potentially important cross-spouse influences. Multilevel modeling allows for the analysis of interrelated data (e.g. husbands and wives) within one model (Raudenbush, Brennan, & Barnett, 1995). Two approaches can be used, a 3 level model (where level 3 is the couple) or a multivariate 2 level model (Atkins, 2005). For this work, we will be following a model that is similar to that described by Raudenbush and colleagues (1995). This approach, a multivariate 2 level model, uses a series of indicator variables to identify wife and husband variables within one model. Multilevel analyses will allow us to analyze husbands' and wives' marital satisfaction in the same model to account for the interdependence that arises from the high correlation between husbands' and wives' marital satisfaction scores (Raudenbush, Brennan, & Barnett, 1995).

The level 1 models represented the repeated measures component of the marital satisfaction for the husbands and wives (the within couple variation) and the level 2 models represented variation among the couples. The multilevel analysis was conducted with HLM 6 (Raudenbush, Bryk, Cheong, & Congdon, 2004) using a two step procedure described in detail by Raudenbush and Bryk (2002) and utilized by Homish & Leonard (2005) to examine couples-level data. First, an unconditional model was used to describe overall changes in marital satisfaction over time. The second model, the conditional model, tested differences in marital satisfaction based on the groups over time. The conditional model also included both husbands' and wives' education level and income as covariates. As with the unconditional model, the conditional model includes both husband and wife outcome variables; however, the conditional model also includes a grouping variable (husband and wife drug use). Both the unconditional and conditional models produce an intercept value (i.e., the baseline level of marital satisfaction) as well as a slope factor (i.e., the amount of change per unit of time in marital satisfaction). Multivariate hypothesis testing was used to determine if the average curves for marital satisfaction were different for husbands and wives. Using multivariate hypotheses testing is more appropriate than using univariate tests to determine if average curves differ because the Type I error rate can be controlled (Raudenbush, Brennan, & Barnett, 1995). Upon significant multivariate findings, univariate hypothesis tests were conducted to determine the nature of the difference.

### 3.0 Results

Husbands' and wives' levels of marital satisfaction were similar at each assessment and both husbands and wives experienced declines in marital satisfaction over time (Table 1). At the Wave 1 assessment, 29.3% of husbands and 23.7% of wives reported any past year illicit drug use (Table 1). Among all husbands at the Wave 1 assessment, marijuana was the most commonly used illicit drug (28.5%), followed by cocaine (6.0%). Heroin was the least commonly used illicit drug by husbands (approximately 0.5%). Among husbands who reported using marijuana at Wave 1, the most commonly used other illicit drug was cocaine (16.7%) followed by hallucinogens (14.5%). Among all wives at the Wave 1 assessment, marijuana was the most commonly used illicit drug (22.8%), followed by sedatives (5.8%). As with husbands, heroin was the least commonly used illicit drug at about one-half of one percent of wives reporting past year use. Among wives who reported using marijuana at Wave 1, sedatives and stimulants were the most commonly used other illicit drug (16.0% for each). In terms of

patterns of illicit drug behaviors at the time of marriage, about one-fifth of the couples (19.9%, 117 couples) were discrepant drug users (i.e., only one member of the couple reported past year illicit drug use), 16.3% (96 couples) were concordant users in the past year, and the remainder (63.8%, 376 couples) were concordant non-users in the past year.

### 3.1 Unconditional Model

The goal of the unconditional models was to estimate changes in marital satisfaction over time for husbands and wives in the overall sample (regardless of illicit drug use). It is important to note that husbands and wives were estimated within the same model to account for the high correlation between husbands and wives marital satisfaction. The model estimates the Wave 1 level of marital satisfaction (i.e., the intercept) and well as a linear slope term to describe change over time. Among husbands, marital satisfaction at Wave 1 was 115.3 and a significant linear decline was found ( $B = -3.1$ ,  $p < .001$ ). This significant linear decline means that for each assessment, a decreased of 3.1 points on the MAT would be observed. Wives marital satisfaction at Wave 1 was 117.2. As with husbands, wives decline in marital satisfaction was also significant ( $B = -3.5$ ,  $p < .001$ ). Multivariate hypothesis testing was used to compare the overall patterns (i.e., intercept and slope terms) of marital satisfaction for husbands and wives. The multivariate test indicated that the overall pattern of husbands and wives marital satisfaction were different at trend level ( $\chi^2 = 5.3$ ,  $p = .07$ ), and that the nature of the difference was marital satisfaction levels at baseline (115.3 vs. 117.2;  $\chi^2 = 5.3$ ,  $p < .05$ ) and not rates of change over time ( $-3.1$  vs.  $-3.5$ ;  $\chi^2 = 1.6$ , NS).

### 3.2 Conditional Model

The conditional model was used to examine if the baseline levels of marital satisfaction and changes in marital satisfaction differed on the basis of illicit drug use. As described above, the three groups consisted of couples in which neither member used illicit drugs in the past year (congruent non-users), couples in which both members used illicit drugs in the past year (congruent users), and couples in which only one member used illicit drugs in the past year (discrepant users). Husbands and wives marital satisfaction, as well as the grouping variables, were estimated within one model; however, for clarity, the results are discussed separately below. As with the conditional model, multivariate hypothesis testing was used to examine if there were differences in the overall patterns of marital satisfaction between the groups. Upon significant multivariate findings, univariate hypothesis tests were conducted to determine the nature of the differences (i.e., differences between intercepts only, slopes only, or both). Three main comparisons were considered: differences between the congruent non-users and the congruent users, differences between the congruent non-users and the discrepant users, and differences between the congruent users and discrepant users. Husbands' and wives' education and income were included as covariates.

**3.2.1 Husbands Marital Satisfaction**—On the basis of multivariate hypothesis testing, there were significant differences between the overall patterns (i.e., intercepts and slopes) of marital satisfaction for the congruent non-users compared to the congruent users ( $\chi^2 = 7.95$ ,  $p < .01$ ) and between the congruent non-users and discrepant users ( $\chi^2 = 10.0$ ,  $p < .01$ ); however, there was not a significant difference between the congruent users and discordant users ( $\chi^2 = 0.4$ , NS). Univariate hypothesis tests were conducted to determine the nature of the differences between the congruent non-users and congruent users, as well as to examine the differences between the congruent non-users and discrepant users (i.e., are the differences between intercepts, slopes, or both). At the time of marriage, husbands

in the congruent non-users group had significantly higher levels of marital satisfaction compared to husbands in the congruent users group (115.7 vs. 104.2,  $p < .001$ ) and husbands in the congruent non-users group had significantly higher levels of marital satisfaction compared to husbands in the discrepant users group (115.7 vs. 102.2,  $p < .01$ ; Table 2). Husbands in each of the three groups experienced significant linear declines in marital satisfaction over time. Husbands in the congruent non-users groups had annual decreases in marital satisfaction of 2.8, those in the discrepant users group experienced declines of 3.7, and those in the congruent users group had declines of 5.3. The decline in marital satisfaction between the congruent non-users and congruent users was significantly different ( $p < .05$ ). All other group differences were not significant. Husbands' education was not significant in the model. Husbands' with higher levels of income were more likely to be in the congruent drug users group (regression coefficient= 1.73,  $p = .06$ , trend).

**3.2.2 Wives Marital Satisfaction**—Multivariate hypothesis testing revealed significant differences between only the congruent non-users group and the discrepant users group ( $\chi^2_1 = 12.0, p < .001$ ). Upon follow-up univariate testing, there was a significant difference between wives marital satisfaction in the congruent non-users group compared to wives in the discrepant users group (118.8 vs. 107.2,  $p < .01$ ; Table 2). Wives in the congruent non-users, congruent users, and discordant users group experienced significant linear declines in the level of marital satisfaction (per year declines of -3.9, -5.6, -4.0, respectively, all  $p$ 's  $< .001$ ). The differences between the rates of decline between the groups; however, were not statistically different. Wives' education was not significant. Wives with higher levels of income were significantly more likely to be in the congruent drug users group (regression coefficient= 2.10,  $p < .05$ ).

## 4.0 Discussion

Using a community sample of newly married couples, our goal was to examine patterns of illicit drug use and changes in marital satisfaction over the first four years of marriage on the basis of differential patterns of past year illicit drug use. The process of psychosocial maturation and the resultant acquisition of adult social roles (i.e., marriage, parenthood, first full time employment, etc.) suggests that more deviant or socially disapproved behaviors such as illicit drug use should decline. In a community sample of newly married couples, we found that past year illicit drug use did decline, however, at each assessment, a considerable number of both husbands and wives continued to use illicit substances. Husbands' past year illicit drug use was higher compared to wives at each assessment. Averaged across the assessments, we found that about a fifth of husbands (21.4%) reported past year illicit drug use and 15.2% of wives reported past year illicit drug use. This is similar to rates of illicit drug use for married individuals in the National Household Survey on Drug Use and Health (19.3% among husbands and 13.1 among wives) (SAMHSA, 2003). For both husbands and wives, marijuana was the most commonly reported illicit drug. This is consistent with other work that has found that marijuana is the most commonly reported illicit drug in the United States (Substance Abuse and Mental Health Services Administration, 2004), as well as in other developed nations (e.g., Coffey et al., 2002).

Overall, there was evidence that differences between relationship functioning between the groups in terms of their initial marital satisfaction. Among husbands, those in the discrepant illicit drug use group experienced significantly lower levels of marital satisfaction compared to husbands in the congruent non-use group. Similarly, husbands in the congruent both use group had lower initial levels of marital satisfaction compared to congruent non-users. Although the discrepant group had lower levels of initial marital satisfaction compared to the congruent users group, this differences was not statistically significant. Among wives, the



discrepant group had the lowest level of marital satisfaction followed by the congruent use group, and the congruent non-use group. Others have also found that discrepant drug use between marital partners, rather than simply illicit drug use, was associated with lower levels of marital satisfaction (Fals-Stewart et al., 1999). Unlike the current report, Fals-Stewart and colleagues work was among couples involved in treatment, presumably, couples with more severe drug use. Among treatment seekers, discrepancy in substance use is often a primary source of conflict in couples presenting for treatment (Halford & Osgarby, 1993). Among community samples, however, the relation between the discrepancy in illicit drug use at the transition to marriage and marital dissatisfaction may actually mean that the couples are dissimilar in other areas of their lives. Compatibility theories suggest that couples that are more similar report having more satisfying marriages (Levinger & Rands, 1985). Weisfeld and colleagues (1992) found that a greater number of domains of similarity between husbands and wives (e.g., health, education, attractiveness) was related to higher levels of marital satisfaction. Thus, discrepancies in drug use may actually represent one area of dissimilarity among the couples, which, in combination with these other factors may related to sharper declines in marital satisfaction.

Among husbands and wives, the concordant nonusers, concordant users, and discrepant users each experienced significant linear decreases in marital satisfaction over time. It is important to note that each group of husbands and wives, regardless of the pattern of drug use, experienced significant declines in marital satisfaction over the first four years of marriage. These sharp declines can place couples' relationship at risk. For example, husbands in the discordant use group had an initial marital satisfaction of 102 experienced a decline of more than 3 points per year. On average, after three years, these husbands would report a MAT Score of well under 100, the cutoff used to identify differences between maritally distressed and nondistressed couples (Freeston & Plechaty, 1997; Locke & Wallace, 1959). Although it may initially appear counter-intuitive to find evidence of significant declines in marital satisfaction early in the relationship, these declines are not uncommon. Using separate longitudinal cohorts, Glenn (1998) found that steep declines in marital satisfaction were evident over the first 10 years of marriage before a stabilization occurred. During the early years of marriage, there are many factors that may be related to declines in marital satisfaction. For example, McNulty and Karney (2004) used a community sample of newlyweds involved in their first marriage to examine factors related to marital satisfaction. Couples that had less positive expectations among their marriages experienced steeper declines in marital satisfaction over the first four years of marriage. The birth of a first child (Hackel & Ruble, 1992), the number and age of children in the household (Twenge, Campbell, & Foster, 2003), and the presence of depressive symptomatology are other factors that have been shown to be related to decreased marital satisfaction.

Although we found evidence that discrepancies in husbands' and wives' past year illicit drug use were associated with lower levels of marital satisfaction at the transition to marriage, there was no evidence that their rate of decline of marital satisfaction was more severe compared to other couples. It is important to note, however, that at the first assessment, there was evidence to suggest that discrepancy in past year illicit drug use was related to lower levels of marital stratification. Additionally, congruence rather than discrepancy was far more common in our sample. For instance, about 80% of the sample had similar illicit drug use behaviors with the majority (63.8%) reporting no post year illicit drug use. Therefore, detecting differences in marital satisfaction over time on the basis of discrepancy of illicit drug use is more difficult. The nature of the drug use may have also impacted the findings. The majority of the past year illicit drug use was focused on marijuana use. It is possible that discrepancy in other drug types or in the frequency of use would have experienced further declines in marital satisfaction over time. Rates of illicit drug use other than marijuana were limited in the current sample; therefore, this hypothesis could not be tested.

Several limitations of the sample must be considered. The sample for the current report was comprised of newly married couples involved in their first marriages. Therefore, our findings may not be generalizable to couples who have been married for a longer duration or to couples involved in second marriages. Additionally, other intimate relationships such as cohabiting, unmarried couples were not included. Rates of illicit drug use are often higher among cohabiters compared to their married counterparts. For instance, Kenney and McLanahan (2001) found that cohabiting couples reported more alcohol and drug problems among both the males and females in the sample compared to married couples. Data from the National Survey on Drug Use and Health shows similar findings; that is, rates of illicit drug use were greater for women who were “living with an unmarried partner” compared to those who were married, divorced/separated, or never married (SAMHSA, 2004). Although we have information about drug use in the year prior to marriage, we do not have information about the extent of drug use prior to this period.

Using a community sample of newly married couples, we found evidence that illicit drug use did not cease with the transition into marriage, and in fact, persisted through the fourth wedding anniversary. There was some evidence that how couples integrated the drug use into their relationship was related to marital satisfaction. That is, at the first assessment couples whose drug use was discrepant had lower levels of marital satisfaction compared to other couples. Significant declines in marital satisfaction were evidenced for each group. Future work will need to examine if discrepancy in the type or frequency of drug use relates to relationship functioning. Additionally, future work will need to include non-married, cohabiting couples, as well couples involved in marriages other than their first. A limited amount of research exists examining the relation between discrepant drug use and marital satisfaction; however, the relation between discrepant drug use and more severe relationship issues (e.g., violence) have yet to be considered. From the alcohol literature, it is clear that discrepancies in alcohol use between husbands and wives relates to not only greater declines in overall marital satisfaction (Homish & Leonard, 2007), but these discrepancies also relate to marital aggression. For example, in a sample of newlywed couples involved in their first marriage, the relation between patterns of alcohol use and marital physical aggression was examined (Quigley & Leonard, 2000). The highest level of physical aggression occurred in couples with discrepant drinking patterns. Therefore, it is possible that couples in which drug use is discrepant may also be at risk for verbal or physical aggression.

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**Table 1**  
 Marital Satisfaction (mean and standard deviation) and Frequency of Past Year Illicit Drug Use (percentage of total and N)

	Husband				Wife			
	Wave 1	Wave 2	Wave 3	Wave 4	Wave 1	Wave 2	Wave 3	Wave 4
Marital Satisfaction	117.9 (20.8)	108.6 (28.2)	105.6 (30.2)	105.9 (28.7)	120.5 (20.1)	109.1 (29.5)	105.1 (33.4)	105.5 (32.3)
Past Year Illicit Drug Use	29.3% (179)	23.5% (155)	19.7% (96)	21.1% (92)	23.7% (144)	17.0% (93)	13.0% (68)	15.6% (76)
Total N	610	561	487	435	606	548	522	486

**Table 2**  
Changes in Marital Satisfaction over Time and Illicit Drug Use

Fixed Effects	Unstandardized Regression Coefficient	Standard Error
<b>H: Intercept (Wave 1 Marital Satisfaction)</b>		
Congruent Non-users	115.74 <sup>A,B</sup>	2.24
Congruent Users	104.21 <sup>A</sup>	4.10
Discrepant Users	102.16 <sup>B</sup>	4.27
<b>H: Slope (Change per unit time)</b>		
Congruent Non-users	-2.75 <sup>C***</sup>	0.41
Congruent Users	-5.31 <sup>C***</sup>	1.02
Discrepant Users	-3.27 <sup>**</sup>	0.90
<b>W: Intercept (Wave 1 Marital Satisfaction)</b>		
Congruent Non-users	118.79 <sup>D</sup>	1.93
Congruent Users	114.51	3.27
Discrepant Users	107.20 <sup>D</sup>	4.00
<b>W: Slope (Change per unit time)</b>		
Congruent Non-users	-3.89 <sup>***</sup>	0.45
Congruent Users	-5.66 <sup>***</sup>	1.00
Discrepant Users	-4.01 <sup>***</sup>	0.79

Note: H: Husband; W: Wife

\*\*  
p < .01

\*\*\*  
p < .001

Husbands and wives results were obtained from one multivariate 2 level regression model; however, for ease of presentation, the results are presented separately by gender.

Variables with the same superscript are significantly different in multivariate and univariate hypothesis testing.

<sup>A</sup> Univariate hypothesis test results: p < .05.

<sup>B</sup> Univariate hypothesis test results: p < .01.

<sup>C</sup> Univariate hypothesis test results: p < .05.

<sup>D</sup> Univariate hypothesis test results: p < .01.

Wives and husbands education and income were included in model as covariates (see text for details).