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Serostatus Differences and Agreements about Sex with Outside Partners among Gay Male Couples

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Abstract

This paper describes agreements gay male couples make about sex outside the relationship and how the process of making those agreements, and their perceived quality, varies depending on couple serostatus. Data include 191 couples recruited in the San Francisco Bay Area from June to December, 2004. Monogamous agreements were reported by 56% of participants in concordant negative, 47% in concordant positive, and 36% in discordant relationships. The remaining participants reported agreements allowing sex with outside partners in some form. Agreement quality was lowest among men in discordant relationships. Overall, few (30%) reported breaking their agreements; only half of whom reported disclosing those breaks to their partners. Although differences in agreement type, quality, and satisfaction were found among the three couple serostatus groups, rates of breaks and their disclosure did not vary significantly by group. Future HIV prevention efforts aimed at couples must integrate both couple serostatus and relationship-based issues.

Keywords

gay male couples; HIV prevention; sexual agreements; relationship factors

Over the past two decades gay men in the U.S. have been decimated by the AIDS epidemic. New infections continue to occur among gay men in San Francisco and nationally (MMWR, 2008). For example, estimated HIV prevalence in San Francisco increased from 19.6% in 1997 to 26.8% in 2002 (Osmond, Pollack, Paul, & Catania, 2007) suggesting that current HIV prevention efforts fall one step behind the pace of the HIV epidemic. As the epidemic continues, the scope of prevention efforts needs to expand to address important interpersonal issues that may contribute to HIV risk among gay men. To address this gap, we investigated the types of agreements that gay male couples make about sex with each other, whether or not they allow sex with outside partners, and how these agreements vary by couple serostatus. We also examined the quality of these agreements, and whether or not they were broken. Understanding that many gay men make sexual decisions in the context of a relationship is necessary to inform future prevention efforts with gay men.

Throughout the epidemic, the majority of HIV prevention efforts targeting gay men have focused on the individual. These efforts have been guided by several theories of behavior change including: the health belief model (Becker, 1974; Janz & Becker, 1984), the AIDS Risk Reduction Model (Catania, Kegeles, & Coates, 1990), Stages of Change (Prochaska, Redding,

Harlow, Rossi, & Velicer, 1994), and the Theory of Reasoned Action (Fishbein & Ajzen, 1975). Prevention approaches guided by individual-focused theories of behavior change have successfully reduced HIV risk (Kalichman et al., 2001; Kelly & Kalichman, 2002; Stall, Hays, Waldo, Ekstrand, & McFarland, 2000).

However, while most prevention efforts were based on the individual's levels of change, the proportion of HIV infections attributed to primary partners rose from 15% in the mid-1980s to 67% in the late 1990s (Davidovich et al., 2001). Another study reported that 27% of a sample of people with HIV in the Midwest (the majority of whom were men who have sex with men) attributed their seroconversion to sex with their primary partner (Rosser et al., 1999). One possible explanation, as consistently reported by behavioral studies, may be that gay men in relationships engage in substantially higher rates of unprotected anal intercourse (UAI) with their primary partners than do single men with their casual partners (Cáceres & Rosasco, 1997; Ekstrand, Stall, Paul, Osmond, & Coates, 1999; Elford, Bolding, Maguire, & Sherr, 1999; Fitzpatrick, McLean, Dawson, Boulton, & Hart, 1990; Hays, Kegeles, & Coates, 1990, 1997; Hoff, Coates, Barrett, Collette, & Ekstrand, 1996; Hoff et al., 1997; Hope & MacArthur, 1998; Kippax, Crawford, Davis, Rodden, & Dowsett, 1993; Schmidt, Fouchard, Krasnik, & Zoffmann, 1992). Recent studies confirm high rates of unprotected sex among gay couples (Crawford et al., 2006; Davidovich et al., 2001; Stolte, Dukers, Geskus, Coutinho, & de Wit, 2004; Xiridou, Geskus, De Wit, Coutinho, & Kretzschmar, 2003). While UAI may not inherently present risk for HIV transmission (e.g., if the couple is concordant negative and monogamous), other factors, such as serostatus differences between partners, may increase the likelihood of HIV transmission. In addition to actual behavioral risk, relationship dynamics faced by all couples - including those where both partners are HIV-negative - may contribute to sexual risk behavior for HIV. For example, couples who have difficulty discussing issues relating to sexuality are more likely to report broken agreements and engage in UAI with outside partners (Prestage et al., 2006). Given the high rates of UAI occurring within gay relationships, it is crucial to examine other salient influences on sexual behavior, such as overall satisfaction with one's relationship.

Another aspect of gay couples that warrants further study are the agreements that couples make about sexual behavior with each other and whether or not they allow sex with outside partners. One example of an agreement that some gay couples have used is negotiated safety (Kippax et al., 1997). "Negotiated safety" posits that concordant negative couples mutually agree to either have no sex outside their relationship (i.e., to be monogamous) or to only have safe sex with outside partners. Such agreements facilitate those couples' desire to practice UAI together. Studies reporting on the effectiveness of negotiated safety as a prevention strategy have shown mixed results. On one hand, Kippax et al. (1997) reported that gay men with negotiated safety agreements were less likely to report having unprotected sex with outside partners than those without negotiated safety agreements. Likewise, Crawford (2001) confirmed that negotiated safety agreements were indeed successful in reducing UAI with outside partners. On the other hand, subsequent research by Kippax and colleagues (2003) reported that one of the most common reasons given for recent seroconversions among gay men who had a negotiated safety agreement with their main partner was the breakdown of that agreement. Furthermore, the two factors required for negotiated safety agreements to be effective - the knowledge that one's primary partner is HIV-negative and an agreement about whether to be monogamous or to only have safe sex with outside partners - are not always met (Davidovich, de Wit, & Stroebe, 2000), thereby undermining the strength of these agreements. Thus, although it appears that negotiated safety agreements provide some protection against HIV infection, the agreements themselves may be vulnerable to as yet unknown relationship dynamics that put couples at risk. Additional information is needed to understand the conditions under which broken agreements occur. We also need detailed descriptions of the types of agreements being made, as negotiated safety may not fully represent the diversity and reality of the majority of

agreements that gay couples make about sex outside the relationship. Finally, many of these studies did not include both partners' reports of their agreements and behavior.

Many unanswered questions remain about how couples navigate their agreements about sex with outside partners. Factors such as agreement type and quality, as well as relationship satisfaction, may contribute to the overall effectiveness of agreements as a prevention strategy. The present study contributes to our understanding of relationship influences on sexual behavior in gay male couples by providing descriptions of their agreements and the repercussions associated with the making and breaking of those agreements. We examine differences in agreement type and quality among gay men in concordant negative, concordant positive, and serodiscordant relationships. Additionally, we investigate the reasons why agreements were broken and the reported attitudes towards disclosing those breaks.

Methods

Recruitment

Gay male couples ($n = 200$) were recruited from the San Francisco Bay Area between June and December, 2004 using active and passive recruitment strategies in community venues. Nine couples were dropped from the sample because one or both partners identified as transgender. Potential participants were handed study advertisement cards by field staff and were also reached through flyers placed in venues and advertisements in gay-oriented publications, websites, and listservs. Venues included AIDS service organizations, gay-identified bars and clubs, and the internet (e.g., the study's website and Craigslist.org). Recruitment materials contained text describing the study as "...a study which examines important relationship dynamics associated with HIV." Recruitment strategies were designed to produce a diverse sample in terms of race or ethnicity as well as serostatus. Recruitment staff reached out specifically to community based agencies whose constituents were Asian American and Pacific Islander, Latino, and African-American men. The ethnic breakdown of the sample matches the best available estimates of the ethnic composition of gay men in San Francisco (Pollack, Osmond, Paul, & Catania, 2005). Field staff and recruitment materials invited interested potential participants to call a toll-free recruitment hotline for information. Also, couples who completed the survey were given three recruitment cards to give to friends who might be interested in participating. The majority of the participants (54%) learned about the study through the flyers. Further, 30% did so through the advertisement cards, 6% through community-based organizations, 5% through friends and co-workers, and 5% through web media (e.g., ads, e-mails, listservs).

Screening and Eligibility

Potential participants were screened over the telephone to determine eligibility. To be eligible participants had to: have been at least 18 years old, have been in their current relationship for at least 3-months, have knowledge of their own and their partner's HIV status, be fluent in English, and be residents of the San Francisco Bay Area. Couples were eligible to participate only after both partners were screened and found to meet the eligibility criteria. Couples who gave discrepant reports of HIV status were not eligible for participation nor were couples where one or both partners identified as transgender.

Eligible couples were given appointments to come to the study offices in downtown San Francisco. Upon arrival, consent was obtained from each partner individually. Both partners took the survey simultaneously, however, partners were seated in separate cubicles to provide privacy and encourage independent responses to the questions. Research assistants administered an audio computer-assisted self interview (A-CASI) to participants that required

an average of 70 minutes to complete. Upon completion, each partner received a \$40.00 incentive.

Measures

Demographic characteristics—These included age, race/ethnicity, level of education, current employment status, and income over the past 12 months at the time of the interview.

HIV status—HIV status was determined via self reports of the results from the participant's most recent HIV test. Respondents also reported their partner's HIV status.

Length of Relationship—During screening, respondents were asked how long they had been in their relationship. Responses were recorded in units of years and months and reconciled between partners.

Cohabitation—Respondents were asked if they were living with their partner and, if so, for how long.

Relationship Status—Respondents were asked to select all applicable categories among the following five: married, registered as domestic partners, had a commitment ceremony, considered themselves boyfriends or lovers, other.

Relationship Satisfaction—Satisfaction with current relationship was measured using the Dyadic Adjustment Scale, adapted from Spanier (1976). Questions asked about the frequency with which respondents agreed or disagreed with their partners in topical areas such as “handling finances” and “sex relations.” Responses were recorded on a 7-point scale, ranging from “Always agree” to “Always disagree.” Cronbach's alpha for this sample was 0.86. The intra-class correlation within couples for this sample was 0.47.

Agreement Type—Agreements about whether or not to have sex outside the relationship were categorized into three broad groups. The participants were asked: “Which one the following scenarios best describes the current agreement that you and your primary partner have? (1) Both of us cannot have any sex with an outside partner, (2) We can have sex with outside partners but with some restrictions, or (3) We can have sex with outside partners without any restrictions.”

Length of Agreement—All participants who reported that they had an agreement with their primary partner were asked how long they had had their current agreement. The intra-class correlation within couples for this sample was 0.95.

Agreement Explicitness—Respondents were asked if their current agreement was explicitly discussed. For those who answered yes, the level of explicitness was measured on a 4-item scale. Items included: “How explicitly or directly did you speak to your primary partner about your current agreement?” and “How clear are you about the rules of your agreement?” Responses were recorded on a 5-point Likert scale, where 0 was “Not at all,” and 4 was “Extremely.” Higher scores indicated greater explicitness. Factor analysis yielded a single factor and Cronbach's alpha of 0.86.

Agreement Quality—Agreement quality was measured by a composite of 25 items spanning 6 domains. Responses were recorded on a 5-point scale ranging from “Not at all” to “Extremely”. The domains were: agreement value (6 items; sample item: “How important is your current agreement to you?”), agreement commitment (4 items; sample item: “How committed are you to having your current agreement?”), agreement efficacy (3 items; sample

item: 'When you are feeling bad about yourself, how confident are you that you can honor your current agreement?'), agreement satisfaction (3 items; sample item: 'How satisfied are you with your current agreement?'), difficulty in agreement communication (3 items; sample item: 'How difficult is it to talk to your primary partner about your current agreement?'), and importance of agreement communication (6 items; sample item: 'How important is it to talk to your primary partner about your current agreement?'). Higher scores indicated greater agreement quality. Reliabilities for the subscales ranged from 0.71 to 0.92. Cronbach's alpha for the overall scale was 0.93. The intra-class correlation of the overall scale score within couples for this sample was 0.24.

Broken Agreements - Frequency and Disclosure—An agreement was defined as broken when a partner did not maintain or adhere to established ground rules regarding sex with outside partners. Respondents were asked, "How many times in the past 12 months have you broken your agreement?" A follow-up question then asked, "Of the times you broke your agreement in the past 12 months, how many times did you tell your primary partner?"

Reasons for Broken Agreements—For those who reported broken agreements, respondents were asked to indicate the extent to which they agreed with each of a set of different reasons for breaking their agreement. Items included: "I was horny," "I wasn't sexually satisfied," and "I was traveling without my partner." Responses were recorded on a 5-point Likert scale, where 0 was "Not at all," and 4 was "Extremely."

Attitudes towards Disclosure of Broken Agreements—A set of questions assessed attitudes towards disclosing broken agreements to the primary partner. Items included: "How important is it to tell your primary partner that you broke your agreement?" and "How difficult was it to discuss your broken agreement with your primary partner?" Responses were recorded on a 5-point Likert scale, where 0 was "Not at all," and 4 was "Extremely."

Analysis

We grouped participants by the couple's serostatus into a "concordant negative couples" group where both partners reported their HIV status as negative (−/−), a "concordant positive couples" group where both partners reported their HIV status as positive (+/+), and a "discordant couples" group where one partner was HIV-positive and the other partner was HIV-negative (−/+). General linear models estimated via restricted maximum likelihood (REML) were used to compare members of these three groups on continuous scale scores. These models employed correlated residuals via a compound symmetric correlation structure (Kenny, Kashy, & Cook, 2006) to take into account the fact that respondents were nested within dyads. The SAS procedure FREQ was used to generate cross-tabulations whereas the SAS procedures MIXED and GLIMMIX were used to compare means. All cross-tabulations are presented at the level of the individual participant. All models controlled for the length of relationship and the race of the couple (mixed-race/same-race). It was found that for variables such as length of the agreement and length of time lived together, the responses within couples, which should have ideally matched, did not always do so. Therefore, for these variables, 2.5% of the couples who gave the most discrepant answers were deemed outliers and omitted from the analyses. In all instances of multiple comparisons, adjusted *p*-values were obtained by applying the Bonferroni adjustment.

Results

Sample Demographics

Table 1 outlines the participants' demographic information. The overall sample was ethnically diverse, with the largest proportion of participants (64%) being Caucasian. The rest of the

sample was comprised of 14% African-American, 12% Latino, and 4% Asian and Pacific Islander men. Mixed race couples accounted for 41% of the sample. The majority of participants had some college education; had personal incomes less than \$60,000 per year; and were employed (see Table 1). While the participants in the concordant negative group were almost evenly distributed among the three income strata, over half of the participants in the discordant group, and over two-thirds of those in the concordant positive group were in the lowest income strata, earning less than \$30,000 per year. Men in concordant positive relationships were more likely to report being on disability (38%) than men in concordant negative relationships (3%).

Relationship Characteristics

Relationship characteristics are reported in the latter half of Table 1. While a substantial proportion of men reported they were married, registered as domestic partners, or had participated in a commitment ceremony, the majority identified themselves as boyfriends or lovers (65%). Overall, the average length of relationship was just over five years; however, when broken down by couple serostatus, the average length of relationship for discordant couples was about 7 years compared to about 4 1/2 years for concordant negative and concordant positive couples. Relationship satisfaction was significantly higher for men in concordant negative relationships compared with men in concordant positive ($p<.001$) and discordant relationships ($p=.003$). Further, the degree of correlation between relationship satisfaction and length of the relationship varied between same-race and mixed-race couples with it being stronger for same-race couples ($r=.24$, $p<.001$). For mixed race, this correlation, though still positive ($r=.13$), was not statistically significant.

Agreement Characteristics

Agreement characteristics are reported in Table 2. All but two couples reported having an agreement about whether or not to have sex outside their relationship. Overall, 48% of the sample reported having a monogamous agreement which did not allow sexual activity outside the relationship. When grouped by couple serostatus, 56% of men in concordant negative, 47% of men in concordant positive, and 36% of men in discordant relationships reported monogamous agreements. All others reported agreements allowing sex with outside partners, either with or without restrictions. Such restrictions, when present, fell into three major categories: i) safe-sex issues, (e.g., mandatory condom use or no anal intercourse with outside partners), ii) location of sex with outside partners (e.g., 'not in our home', 'only when out of town'), and iii) that they engage in sexual activities with outside partners together. Other less common restrictions included communication i.e., 'we have to disclose to each other if we have outside sex' and that they be 'respectful of one another and their relationship'. Overall, 81% of the men discussed their agreement explicitly (87% of those in concordant negative relationships, 77% of those in concordant positive relationships and 74% of those in discordant relationships; data not shown in tables). Mean scores on the Agreement Explicitness scale showed that men in concordant negative relationships discussed their agreements significantly more explicitly than those in concordant positive ($p=.03$) or discordant ($p=.035$) relationships.

Overall the average length of agreement was almost 4 years. However, discordant couples reported an average agreement length of almost 6 years compared to just over 3 years for concordant couples. Further, in modeling length of agreement, there was a significant interaction between the couple's serostatus and whether the partners were of the same race or not. Among men in same race relationships, those in discordant relationships reported having significantly longer lengths of agreements than those in concordant negative relationships ($p<.001$) as well as those in concordant positive relationships ($p=.003$). In contrast, the length of agreement did not vary significantly between couple serostatus groups for men in mixed-race relationships. Across all serostatus groups, there was a high positive correlation between

the length of the relationship and the length of the agreement ($r=.89$ for those in concordant negative relationships, $r=.85$ for those in concordant positive relationships, and $r=.86$ for those in discordant relationships; all $p<.0001$; data not shown in tables). Agreement quality scores were found to be lowest for men in discordant relationships and highest for men in concordant negative relationships. This difference was statistically significant ($p=.004$).

In each of the serostatus groups, two-thirds of men reported that they did not break their agreement in the previous 12 months. Of those who did break their agreement, approximately half disclosed the break to their primary partner. There were no significant differences in the number of times the agreement was broken or the number of times it was disclosed among the different serostatus groups. Also, there were no significant differences in the reported rates of breaks in agreements between those with monogamous and non-monogamous agreements (data not shown in tables).

Reasons for Breaking an Agreement

Table 3 lists possible reasons for breaking an agreement and the percentages of participants who cited each of them. Due to the low numbers of participants reporting broken agreements (approximately 30%), factor analysis of the reasons could not be performed. Overall, men in all three serostatus groups were more similar than different regarding their reasons for breaking agreements. Feeling sexually unsatisfied was one relationship dynamic cited by two-thirds of men across all three serostatus groups as a reason for breaking their agreement. Other common reasons for breaking agreements focused on impulse control issues more than relationship dynamics. For example, very few partners reported breaking their agreements because they were “not clear about what the agreement was” or because “my partner and I had a fight.” A large percentage of men instead reported breaking their agreements because “someone wanted to have sex with me,” “I was horny,” or “the guy was really hot.”

Attitudes toward Disclosing a Broken Agreement

Among participants who reported breaking their agreement, only half disclosed the break to their partner. Therefore, factor analysis of the attitudes towards disclosure was not possible due to inadequate sample size. Table 4 lists the various attitudes towards disclosing broken agreements and the percentages of participants who endorsed each of them. Most participants, irrespective of couple serostatus, felt it important to tell their partner when they broke their agreement. Relatively few reported disclosing a break in their agreement to their primary partner because they worried that “he would find out from someone else.” Most men in concordant negative relationships who broke their agreement discussed the “health consequences” with their partner. Further, three-fourths of the men in concordant negative relationships reported disclosing a break to their partner because of the “fear of putting their partner at risk for HIV or AIDS.” There was however, no significant difference between those with monogamous and non-monogamous agreements in reporting this as a reason for disclosing a break to their partner.

Discussion

We found that having an agreement about whether or not to allow sex with outside partners was an almost universal occurrence in our sample of gay male couples. The presence and type of these agreements did not differ by couple serostatus. Nonetheless, negotiating agreements about sex with outside partners is complex and can be difficult for many gay couples. The serostatus of the couple adds to the complexity of the negotiation process because partners may have different priorities and desires based on their own HIV status. Accordingly, we found that agreement quality, agreement length, and relationship satisfaction differed according to couple

serostatus. However, we did not find serostatus differences in occurrences of breaks, reasons for breaks, or the disclosure of breaks.

There were significant differences across all three serostatus groups regarding agreement quality and relationship satisfaction. While men in concordant negative relationships reported higher agreement quality and higher relationship quality, they broke their agreements as often as, and disclosed those breaks to their primary partners no more often than, men in concordant positive and discordant relationships. This suggests that higher regard for agreements and greater relationship satisfaction may not influence agreement breaks or their disclosure.

Men in discordant relationships reported longer relationships and agreements than men in concordant negative and concordant positive relationships, yet the quality of those agreements were rated the lowest. This may be a result of the added stress and complexity of navigating and negotiating sex with a discordant partner and its resulting impact on their physical and psychological health.

Overall, men in concordant positive relationships reported findings more closely resembling concordant negative couples in certain aspects and discordant couples in others. For example, with regard to relationship length and agreement length, concordant positive couples were lower than discordant couples and were therefore similar to concordant negative couples. In contrast, concordant positive couples reported lower relationship satisfaction than the concordant negative couples, thus resembling discordant couples.

Our findings demonstrate that HIV status differences among gay couples are an important factor with regard to agreement type and quality; yet they appear to be less of a factor with regard to the frequency of broken agreements and the reasons why men reported breaking their agreements. For example, reasons for breaking agreements tended to be situational or physiological reactions and were not necessarily driven by relationship dynamics such as “having an argument” or “feeling emotionally distant from partner.” This may help to explain the predominant reports of fear about disclosing a broken agreement to one’s primary partner. As such, many couples may find it particularly difficult to talk about having broken an agreement when all other relationship indicators suggest high satisfaction. This is highlighted by the finding that only half of those who reported broken agreements disclosed it to their partner, a trend that has been noted in other studies investigating negotiated safety agreements. Specifically, Kippax (2003) reported that many participants traced their HIV infection to an agreement they had with their partner which was broken and the break had not been disclosed prior to subsequent sexual encounters within the couple. Similarly, Prestage (2007) found that over one-quarter of men broke their agreements with their partner and one-third did not disclose that break. Clearly, broken agreements lead to increased HIV risk for gay men in relationships and further examination of barriers to disclosure is warranted, irrespective of couple serostatus.

Feeling sexually unsatisfied was one relationship dynamic cited by two-thirds of couples as a reason for breaking their agreement. Our data do not allow us to expand on which aspects of the sexual relationship were unsatisfying, nor do we know how or whether couples communicated sexual satisfaction (or the lack thereof). However, reports of feeling sexually unsatisfied were frequently cited across all couple serostatus groups and therefore requires further study in future prevention research.

This study describes the agreements couples make about whether or not to have sex outside the relationship and how the process and quality of those agreements varies depending on the serostatus of the couple. However, several important factors such as broken agreements and their disclosure were identified and may be associated with sexual behavior choices that partners make irrespective of the couple's serostatus. Thus, HIV prevention messages targeting

gay couples must tailor their programming to address the nuances of serostatus differences as well as more general relationship issues that may impact HIV risk.

There are several limitations to this study. While recruitment strategies yielded a diverse sample in terms of race or ethnicity and serostatus, the methods used to gather the sample produced a convenience sample; therefore generalizations made beyond the San Francisco Bay Area should be limited. The HIV status of both partners in each couple was self-reported, as actual HIV testing was not conducted. However, HIV status was verified by asking each respondent to report his own and his partner's HIV status at the time of screening (couples who gave discrepant reports of HIV status were not eligible for participation). Although there may be some error in actual versus self-reported HIV status (i.e., some participants may have incorrectly reported their HIV status), we are most interested in the participants' perceptions of their own and their partners' HIV status and believe that sexual safety or HIV risk is guided in large part by one's perception of risk.

Strategies to prevent HIV transmission among gay male couples are desperately needed, yet little is known about the most effective ways to intervene with this population. Data suggest that the agreements couples make about whether or not to have sex outside the relationship have important prevention implications. Couple serostatus and other relationship dynamics may complicate the process of negotiating and maintaining an agreement. Nonetheless, there may be untapped potential that when supported, agreements could play a key role in reducing HIV risk among partners in committed relationships; for example, by facilitating the process of agreement negotiation and the disclosure of breaks. Future prevention efforts therefore need to recognize the importance and complexity of agreements and evaluate strategies that assist the process of negotiating and maintaining healthy agreements.

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Table 1

Demographics

	Overall			By Couple Serostatus	
	(N = 382)	-/- (n = 176)	-/+ (n = 90)	+/+ (n = 116)	
Race					
White	64	70	68	53	
Black	14	6	9	28	
Hispanic/Latino	12	14	12	9	
Mixed Race / Other	6	6	4	8	
Asian / Pacific-Islander	4	4	7	3	
Education					
High School or G.E.D.	16	10	13	26	
Some College or A.A.	32	20	44	42	
Bachelor's	30	39	28	20	
Master's and higher	21	31	14	12	
Employment					
Full-time	43	56	39	28	
Part-time, Self-employed	22	23	24	17	
Unemployed (on Disability)	16	3	14	38	
Unemployed (Other)	19	18	22	16	
Income (past 12 mos.)					
Less than \$30,000	49	35	51	68	
\$30,000 – \$59,000	28	34	24	22	
\$60,000 and above	23	31	24	10	
Relationship Status §					
Married	13	14	9	16	
Domestic partners	19	19	23	16	
Had commitment ceremony	5	3	6	8	
Boyfriends / Lovers	65	73	60	57	
Other	7	4	8	10	
Age in years (mean)	39	35	43	41	
Length of Relationship (mean)	5yrs 2mos	4yrs 9mos	6yrs 10mos	4yrs 5mos	
Time Lived Together (mean)	5yrs 5mos	5yrs	6yrs 8mos	5yrs 2mos	

	By Couple Serostatus	
Relationship Satisfaction (mean score)	-/- (n = 176)	+/+ (n = 116)
Overall (N = 382)	39.6 ^{a b}	35.5 ^b
	37.7	36.8 ^a

Note: All entries in the table are column percentages for the specific demographic characteristic unless otherwise noted. They do not add to 100 due to rounding errors. The means displayed in the table are unadjusted means.

§ For Relationship status, participants selected all applicable categories.

^{a b} All models controlled for length of relationship and the couple's race (same-race / mixed-race). The superscripts denote a difference in the adjusted means between groups that was statistically significant (P<05).

Table 2

Agreement Characteristics

	Overall		By Couple Serostatus			
	(N = 382)	-/- (n = 176)	-/+ (n = 90)	+/+ (n = 116)		
Agreement type §						
Monogamous	48	56	36	47		
Open w/ Some Restrictions	42	42	44	40		
Open w/ No Restrictions	9	2	18	13		
Agreement factors						
Explicitness of Agreement (mean score)	12.5	13.0 ^{a b}	11.7 ^a	11.9 ^b		
Length of Agreement (mean) †						
3yrs 9mos		3yrs 3mos	5yrs 9mos	3yrs 1mo		
3yrs 10mos		2yrs 10mos ^a	6yrs 3mos ^{a b}	3yrs 6mos ^b		
Same-race relationships		3yrs 8mos	5yrs	2yrs 7mos		
Mixed-race relationships		83.1	78.6 ^a	81.6		
Agreement Quality (mean score)						
No. of times broke agreement (past 12mos.)						
Never	68	69	66	66		
Once	10	10	9	11		
Twice or more	19	18	20	22		
Don't Know	3	3	6	1		
No. of times disclosed a broken agreement (past 12mos.) [@]						
No. who broke agreement	(N = 115)	(n = 50)	(n = 27)	(n = 38)		
Never	50	55	48	45		
Once	26	21	26	34		
Twice or more	24	25	26	21		

Note: All entries in the table are column percentages for the specific agreement characteristic unless otherwise noted. They do not add to 100 due to rounding errors. The means displayed in the table are unadjusted means.

§ Two participants in the '-/+ ' group reported having no agreement.

^{a b} All models controlled for length of relationship and the couple's race (same-race / mixed-race). The superscripts denote a difference in the adjusted means between groups that was statistically significant (P<05).

[†] There was a significant interaction between the length of agreement and the couple's race. Only same-race couples showed significant differences in length of agreement between the couple-serostatus groups.

[@] Of those who broke their agreement in the past 12 months.

Table 3

Reasons for Breaking the Agreement

	Overall	By Couple Serostatus		
	(N = 115)	-/- (n = 50)	-/+ (n = 27)	+/+ (n = 38)
Under the influence of drugs and/or alcohol.	59	48	52	79
Traveling without partner.	41	34	41	50
Emotionally distant from partner.	66	60	74	68
Someone wanted to have sex with me.	89	92	85	87
Had a fight with partner.	37	26	37	50
Wasn't sexually satisfied.	66	66	70	63
Unclear what our agreement was.	30	18	41	37
Thought we were about to break up.	26	14	33	37
Not worried about transmitting HIV to my partner.	65	64	62	70
Didn't have to have safer sex with a casual sex partner.	37	22	41	55
Felt horny when it happened.	93	98	93	87
Felt weak.	74	84	52	76
The guy was really hot.	89	90	89	87
Couldn't control urges.	78	84	67	79

Note: Data in the table represent the sub-sample of participants who reported breaking their agreement. The entries are the percentage of men who cited the listed item as a reason for breaking their agreement (i.e., did not answer 'Not at all').

Table 4
Attitudes towards Discussing Broken Agreements

	Overall	By Couple Serostatus		
	(N = 59)	-/- (n = 24)	-/+ (n = 14)	+/+ (n = 21)
How important was it to tell your partner?	97	100	100	90
How much better did you feel when you told your partner?	80	92	57	81
How afraid were you to tell your partner?	90	100	71	90
How important was it to tell shortly after you broke?	93	100	86	90
How much have you discussed the health consequences?	73	92	43	71
How much have you clarified your agreement after it was broken?	83	92	57	90
How helpful was talking about your broken agreement?	90	100	64	95
How necessary was it to discuss your broken agreement?	95	100	79	100
Fear of putting your partner at risk for HIV or AIDS.	47	75	21	33
Worry that he would find out from someone else.	44	58	14	48

Note: Data in the table represent the sub-sample of participants who reported breaking their agreement and also disclosing it to their partner. The entries are the percentage of men who endorsed the listed item (i.e., did not answer 'Not at all').