

Communication and the Emotional, Cognitive, and Relational Consequences of First Sexual Encounters between Partners

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The initial sexual encounter between partners can be a salient relationship event that constitutes an important turning point in relationship development. The goal of this study was to examine the associations between communication and outcomes of initial coitus between partners. We hypothesized that communication would correspond with the emotional, cognitive, and relational outcomes of initial coitus, over and above the effects of individual and relational factors. Results supported the hypothesized associations between communication and sexual outcomes. The discussion highlights the implications of initial coitus as a turning point in relationship development and proposes future directions for research on sexual intimacy.

Keywords: Interpersonal Communication; Relationship Development; Sexual Intimacy

Sexual intercourse and interpersonal communication are two relationship phenomena that contribute to the escalation of intimacy between partners (cf., Christopher & Sprecher, 2000; Duck, 1995). Existing research on sexual behavior has explored the psychological forces affecting coitus, such as goals and motives (e.g., Buss, 1994; Hill & Preston, 1996) and sexual values and attitudes (e.g., Christopher & Roosa, 1991; Sprecher & Regan, 1996). In comparison, past research on sexual intimacy has largely neglected the role of communication in shaping sexual outcomes.

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This oversight is unfortunate, because communication can be an important part of choreographing mutually satisfying sexual encounters (Cupach & Comstock, 1990; Metts & Spitzberg, 1996). Our goal in this study, then, is to examine the association between communication and the emotional, cognitive, and relational outcomes of sexual experiences in dating relationships.

Although we expect that communication is relevant to sexual experiences in general, this study addresses the role of communication during the first sexual encounter between partners. Baxter and Bullis (1986) identified several salient turning points in the development of romantic relationships, including a passion turning point that encompasses the first kiss, the first expression of love, and sexual intercourse. Turning points are generally defined as events that in some way transform or alter the relationship (Baxter, 2001; Baxter & Bullis, 1986). The first sexual encounter between partners marks a redefinition of the relationship as a sexual one; therefore, it constitutes a crucial turning point in relationships. Although several studies have identified turning points that are common to the romantic relationship trajectory (e.g., Baxter & Bullis, 1986; Huston et al., 1981), less is known about the ways in which individuals communicate about these pivotal events. Prior research has examined scripts for initial coitus in the context of one-night stands (Edgar & Fitzpatrick, 1993); however, the role of communication for first sexual experiences in developing romantic relationships merits further attention.

To provide a foundation for this investigation, we first review research highlighting how various individual and relational factors shape sexual experiences. Then, we discuss the influence of communication within sexual episodes, and we review the potential emotional, cognitive, and relational outcomes of first sexual experiences. Finally, we derive hypotheses linking communication to these outcomes, and we report a study that tests our assumptions. Our hope is that a better understanding of the associations between communication and the outcomes of initial coitus will lay a foundation for more theory-driven research about communication and first sexual experiences.

Individual and Relational Factors Affecting Sexual Experience

Prior research has identified a variety of forces that influence sexual intimacy. In particular, prior research has linked sexual experiences to (a) an individual's sexual attitudes and values, (b) the degree of intimacy achieved in the relationship prior to coitus, (c) an individual's goals and motivations for the event, and (d) an individual's sex. In the following paragraphs, we examine each of these parameters in turn.

Sexual attitudes and values refer to an individual's stance on the appropriateness or morality of sexual experience. On one hand, conservative attitudes regarding sexuality are related to a more cautious and reserved approach to sexual intercourse. Sprecher and Regan (1996) surveyed college-aged virgins and found that their decision to remain abstinent was based, in part, on believing that love or marriage is a prerequisite to sexual contact. Likewise, Christopher and Roosa (1991) reported

that high levels of religiosity are related to more conservative attitudes toward sexual activity, reduced rates of premarital intercourse, and delayed onset of sexual activity. Notably, people who endorse conservative moral values experience more guilt about sex and, in turn, less sexual desire, sexual responsiveness, and passion (Kutner, 1971). On the other hand, more liberal sexual attitudes have been linked with casual sexual practices among college students. College students frequently engage in 'hook ups,' which refer to sexual encounters between strangers or brief acquaintances that last for only one night and do not imply a relationship beyond the sexual episode (e.g., Lambert et al., 2003; Paul et al., 2000). Empirical research has also documented sexual activity within the context of cross-sex platonic friendships among college-aged men and women (e.g., Afifi & Faulkner, 2000; O'Sullivan & Gaines, 1998). Thus, the extent to which a person's sexual attitudes and values are liberal or conservative is likely to influence decisions to engage in coitus and the meanings people attach to first sexual episodes.

The degree of relational intimacy achieved prior to sexual contact is another factor that influences the decision to engage in coitus. The college-aged virgins in Sprecher and Regan's (1996) study cited a lack of romantic love in the relationship as a factor influencing their decisions to remain abstinent. Conversely, Roche and Ramsbey (1993) suggested that individuals at more committed levels of dating demonstrate greater acceptance and approval of sexual intercourse prior to marriage. In fact, DeLamater and MacCorquodale (1979) observed that the strongest predictor of people's sexual activity was the emotional intimacy of their relationship. Similarly, Christopher and Cate (1984) found that loving, liking, and a statement of relationship meaning are highly influential in the decision to initiate sexual intercourse in a dating relationship. Taken together, these findings suggest that increased relational closeness predicts sexual activity.

Prior research has also delineated the motives and goals that individuals have for pursuing sexual intimacy with a partner. Hill and Preston (1996) identified eight motivating factors for sexual intimacy, including: (a) feeling valued by one's partner; (b) showing value for one's partner; (c) nurturing one's partner; (d) enhancing feelings of personal power; (e) experiencing the power of one's partner; (f) relieving stress; (g) experiencing pleasure; and (h) procreating. Evolutionary psychologists suggest that men and women are biologically predisposed to have different motives for engaging in sexual behavior (Buss, 1994). This assertion is consistent with a study by DeLamater (1991), which found that women are more motivated to participate in sexual behavior to the extent that it facilitates emotional warmth and closeness with their partners, whereas men report physical pleasure and fun as the driving force behind their sexual behavior. Although this work has tended to focus on identifying predictors of sexual motives, the various goals that individuals have for engaging in sexual encounters are likely to promote different emotional, cognitive, and relational outcomes.

Finally, previous research has highlighted several differences between males and females in terms of their sexual behaviors and their interpretations of sexuality in relationships. Baumeister et al. (2001) concluded from their extensive literature

review that males have a stronger sex drive than females. Males have been shown to have more frequent thoughts about sex (e.g., Eysenck, 1971; Laumann et al., 1994), entertain more frequent and varied sexual fantasies (e.g., Leitenberg & Henning, 1995), engage in more masturbation (e.g., Arafat & Cotton, 1974; Laumann et al., 1994), crave greater frequency of sexual contact (e.g., McCabe, 1987), and desire a higher number of sexual partners (e.g., Buss & Schmitt, 1993) than their female counterparts. As stated earlier, men and women typically bring different goals and motivations to their sexual interactions, with women seeking warmth and closeness from a partner and men seeking fun and pleasure (Buss, 1994; DeLamater, 1991). Compared to men, women have also been found to harbor less permissive attitudes toward sex and to be more critical of promiscuity, premarital sex, and extramarital sex (Laumann et al., 1994; Oliver & Hyde, 1993; Sprecher, 1989; Wilson, 1975). Moreover, whereas men tend to be more accepting of casual sexual encounters, women are more likely to perceive sexual activity as an expression of romantic love, emotional intimacy, and relational commitment (Sprecher, 1989; Sprecher & Regan, 1996). With regard to communication, both genders are rather indirect in communicating about their sexual encounters, but women in particular tend to employ passive communication strategies for communicating sexual interest and consent to sexual contact (McCormick, 1979; Moore, 1985; Perper & Weis, 1987). Taken as a set, these studies document important sex differences in experiences of sexual intimacy.

In conclusion, a sizable body of research has linked the experience of sexual intimacy to people's attitudes and values, the degree of relationship intimacy, participants' goals and motivations, and biological sex. Although understanding how these characteristics shape sexual episodes is important, this literature is limited in several respects. First, previous research has focused on sexual experiences in general, but has not shed light on initial coitus as a crucial turning point in relationships. Second, this body of research has emphasized individual traits or relationship states, rather than the processes by which those conditions affect sexual experiences. Finally, by privileging more static characteristics of the context for sexual intimacy, existing research has overlooked the influence of communication processes on sexual outcomes. Individual and relational factors undoubtedly affect the experience of coitus in relationships; however, exploring the role of communication during sexual intimacy is an equally important line of inquiry.

Communication and Sexual Intimacy

Although extant research has highlighted the impact of various individual and relational factors on the experience of sexual intimacy, we anticipate that communication exerts a unique effect on sexual outcomes, over and above the effects of these parameters. In this section, we examine the communication strategies that are typically employed during sexual encounters. Then, we discuss the negative implications that arise out of sexual experiences that are not marked by open communication. Finally, we explore the positive relational implications that result from directly communicating about sexual encounters.

Research on sexuality and communication has indicated that dating partners engage in very little communication prior to sexual intimacy (e.g., McCormick, 1979; Moore, 1985; Perper & Weis, 1987). What little communication does take place is indirect, utilizing mostly nonverbal cues and rather vague requests for and consent to acts of sexual intimacy (McCormick, 1979; Moore, 1985; Perper & Weis, 1987). A study by Hickman and Muehlenhard (1999) found that both men and women reported that they frequently communicated consent by simply not resisting sexual advances from a partner. In another study, subjects considered 'fondling male genitals' as more communicative of consent to sexual intercourse than a clear verbal statement of agreement (Byers, 1980). Taken together, these findings suggest that communication associated with sexual intimacy is most often passive and indirect.

Passive tactics for communicating sexual desire and consent are problematic due to their potential for negative sexual outcomes. Motley and Reeder (1995) reported that women indicated using ambiguous resistance messages because they feared that direct messages would evoke negative relational consequences. Although passive resistance strategies may preserve relationship harmony, indirect communication can lead to the unwanted escalation of sexual intimacy (Laumann et al., 1994; Marx et al., 1996). In the context of one-night stands, where sexual scripts do not incorporate dialogue about condom usage and safer sexual practices (Edgar & Fitzpatrick, 1993), indirect communication can place people at risk for sexually transmitted disease or unwanted pregnancy.

In stark contrast to the negative repercussions of passive sexual interactions, direct communication about coitus can contribute to positive relational outcomes. Baxter (2001) suggested that the ability to communicate about turning points, like the first sexual experience, provides opportunities for couples to develop intersubjectivity in their relationships by facilitating an awareness of the similarities that they share in their view of relationship events. Relatedly, sexual self-disclosure familiarizes individuals with their partners' sexual needs and desires, which improves coital interactions and leads to greater sexual and relational satisfaction (Byers & Demmons, 1999). Sexual self-disclosure is also necessary for the negotiation of sexual scripts, which assist in the expression, negotiation, and interpretation of sexual contact (Metts & Spitzberg, 1996; Simon & Gagnon, 1986) and facilitate relational intimacy (Cupach & Comstock, 1990). As a whole, this body of work underscores the importance of direct communication for achieving sexual and relational satisfaction.

In summary, existing research has indicated that individuals engage in little or no communication prior to engaging in sexual intercourse, and what little communication does take place is typically passive or indirect in nature. This tendency toward indirect communication strategies for negotiating sexual intimacy can lead to negative sexual outcomes, such as unwanted sexual contact or risky sexual encounters. Sexual encounters characterized by direct communication, on the other hand, result in greater sexual satisfaction and more positive relational repercussions. Although previous research has demonstrated the positive effects of sexual communication on relationships, we have encountered no research that has explored the role of communication in shaping the emotional, cognitive, and relational outcomes of initial

coitus. In the following section, we discuss the potential emotional, cognitive, and relational ramifications of first sexual encounters in relationships, and we advance hypotheses regarding their associations with communication.

Emotions, Cognitions, and Relational Consequences

Sexual intimacy is a multifaceted construct that encompasses emotional, cognitive, and physiological reactions to sexual arousal (Aron & Aron, 1991; Metts et al., 1998). The outcomes of sexual intimacy can be characterized in terms of emotional reactions, cognitive sense-making, and relationship consequences, which are each likely to be affected by the directness of communication about the sexual encounter. Although prior research has examined sexual satisfaction following coitus (e.g., Cupach & Comstock, 1990), we know of no research that explores the emotions, cognitions, and perceptions of relationship impact that may contribute to feelings of satisfaction. In this section, we advance predictions that link the directness of communication about initial coitus with the emotional, cognitive, and relational outcomes of that event.

Emotion is a salient component of sexual experience, because it can serve as an antecedent of sexual contact, a component of sexual expression, or an outcome of sexual experience (DeLamater, 1991). Some scholars consider emotions to be an inherent and evolved response to sexual intercourse (Haselton & Buss, 2001). In fact, sexual intimacy can serve as a catalyst for a wide range of emotional experiences, including happiness, sadness, anger, fear, surprise, and guilt (e.g., DeLamater, 1991; Haselton & Buss, 2001; Kutner, 1971). Direct communication about coitus is influential in generating shared expectations for intercourse and results in more positive sexual outcomes (Christopher & Cate, 1984; Roche & Ramsby, 1993). Thus, a sexual encounter that takes place in the context of clearly negotiated expectations for behavior should result in more positive emotions and fewer negative emotions following coitus. The research we reviewed previously suggests that values, relational intimacy, goals for the encounter, and biological sex are likely to shape the emotional experience of initial coitus. We propose that communication, as the process through which sexual behavior is negotiated, is another unique predictor of the emotional, cognitive, and relational outcomes of sexual experience. Hence, we propose the following hypothesis:

- H1: The explicitness of communication about the first sexual experience between partners is directly associated with positive emotional outcomes and inversely associated with negative emotional outcomes, over and above the effects of values, goals, relationship status, or biological sex.

Another potential outcome of initial coitus in relationships is cognitive sense-making. Sense-making efforts can help individuals understand the meaning of the encounter and reconcile potential internal conflicts resulting from sexual experiences. Although we know of no research that has examined sense-making focused on initial coitus, research on other relationship phenomena (e.g., conflict and forgiveness) has

indicated that individuals engage in some degree of reflective thought in an effort to make sense of, or understand, relationship experiences (Cloven & Roloff, 1991, 1993; McCullough et al., 1998). Like these other pivotal relationship events, we expect that people seek to make sense of initial sexual encounters. Furthermore, just as characteristics of a conflict episode affect cognitive responses (Cloven & Roloff, 1991, 1993), we anticipate that characteristics of the first sexual experience influence the valence of internal dialogues following coitus. Because communicatively negotiated sexual encounters result in positive sexual and relational outcomes (Cupach & Comstock, 1990), we expect that the directness of communication corresponds with the valence of cognitive responses following initial coitus. As in our first hypothesis, we predict that direct communication about the first sexual experience is uniquely associated with cognitive outcomes of sexual intimacy. Formally stated:

- H2: The explicitness of communication about the first sexual experience between partners is directly associated with positive thoughts following the event and inversely associated with negative thoughts following the event, over and above the effects of values, goals, relationship status, or biological sex.

Other important outcomes of sexual behavior are the individuals' perceptions of the relationship consequences. Salient and significant turning points in relationships can produce marked and irreversible changes for the status and trajectory of the relationship (Baxter, 2001; Baxter & Bullis, 1986). Sexual intercourse could serve as an expression of commitment or devotion to the relationship (Metts et al., 1998) that escalates relationship development. Conversely, the onset of sexual intercourse might be a negative experience that marks the end of a casual or non intimate relationship. Explicit communication about sexual intimacy creates an opportunity for partners to establish an intersubjective understanding of the event (cf. Baxter, 2001), thereby increasing the potential for positive and important relational outcomes. Again, we propose that communication has a unique effect on relational outcomes:

- H3: The explicitness of communication about the first sexual experience between partners is directly associated with perceptions of positive and significant relational consequences and inversely associated with perceptions of negative relational consequences, over and above the effects of values, goals, relationship status, or biological sex.

Method

Given the sensitive nature of the phenomenon we sought to explore, our methodological options were constrained. Although recollections of first sexual episodes might be conceived of as retrospective imagined interactions (e.g., Honeycutt, 2003), prior research has suggested that significant turning points in relationship development (e.g., the first sexual experience, the first big fight, etc.) constitute salient benchmarks by which individuals define their relationship trajectory (e.g., Baxter & Bullis, 1986; Huston et al., 1981). Thus, we elected to ask participants in this study to complete questionnaires about their first sexual experience with their most recent sexual

partner; sexual experiences were defined for respondents as heterosexual penile/vaginal intercourse or homosexual oral/anal sex.¹ Despite the limitations inherent in retrospective self report data on this experience (e.g., a tendency toward social desirability, memory biases, and the influence of intervening events on memories of the encounter), our methodological options were constrained by the sensitive nature of the phenomenon we sought to explore. To address the potential for recall bias in these accounts, the questionnaire also included measures of social desirability, the amount of time that had elapsed since the event, and current relationship status. In the following sections, we describe the sample, procedures, and measures used in this study.

Sample

Respondents in this study were 437 undergraduates (96 male, 341 female) from a large Midwestern university. Students were recruited from a variety of communication courses and received a small amount of extra course credit for participating in the study. Participants ranged in age from 18 to 50 years old, with a mean age of 20.57. The sample included 397 white subjects, 21 Asian, 6 Black, 2 Hispanic, and the remainder indicated other or provided no response.

Of the participants involved in the study, 324 (70 male, 254 female) reported that they had engaged in heterosexual penile/vaginal intercourse or homosexual oral/anal sex. Of these participants, 313 (66 male, 247 female) indicated that their most recent sexual encounter was heterosexual in nature and 11 (4 male, 7 female) participants indicated that it was homosexual in nature. Seven (3 male, 4 female) individuals reported that they were currently involved in more than one sexual relationship. For 108 subjects (19 male, 89 female), the encounter they were describing in this study was their very first sexual experience. Finally, 197 (38 male, 159 female) of the sexually active respondents were currently involved in a romantic relationship with their sexual partner.

Participants also provided information about their most recent sexual partner. There were 251 male partners and 73 female partners. The mean age of partners was 21.39, ranging from 16 to 50 years old. When asked to characterize their relationship at the time of intercourse, 20 respondents indicated that they were strangers or acquaintances, 90 indicated that they were friends, 205 reported that they were dating, and 1 individual was engaged to be married at the time of the sexual encounter (8 provided no response). Finally, when asked to characterize the current nature of their relationship with this sexual partner, 35 indicated that they no longer kept in contact, 16 were acquaintances, 89 were friends, 160 were dating, 9 were engaged, and 7 were married (8 provided no response).

Procedures

Questionnaires were distributed to people who were interested in participating in the study. Participants were instructed to take the surveys home with them and to complete them privately at their convenience. When they were finished, participants

returned their questionnaires anonymously to a predetermined location in the Center for Communication Research. Respondents returned consent forms separate from the questionnaires to ensure anonymity.

The first section of the questionnaire gathered demographic information and measured sexual attitudes and values. Then, individuals who had been sexually active were asked to continue with the questionnaire, while those who had abstained from sexual behavior were instructed to return the questionnaire at that time. Participants who continued on to the second section were asked to reflect upon the first time that they had engaged in intercourse with their most recent sexual partner. They then answered a series of questions characterizing this experience in terms of their goals for the encounter, communication about the event, emotions following the experience, cognitive sense-making activity following intercourse, and the relational impact of the episode.

Measures

We used a variety of closed-ended scales to assess the variables in the study. For all items, participants rated their agreement with statements on a five-point Likert scale (1 = *strongly disagree*, 2 = *disagree*, 3 = *neither agree nor disagree*, 4 = *agree*, 5 = *strongly agree*). Confirmatory factor analyses assessed the unidimensionality of each of the scales. For the groups of variables assessing attitudes and values, goals for the sexual encounter, directness of communication, emotion, cognition, and relational impact, we also conducted second order principle axis factor analyses to determine the viability of second order factors; these analyses indicated that the communication variables formed a second-order factor. The resulting measures are described in the following sections (see the Appendix for items).

Attitudes and values

A scale composed of three measures assessed respondents' beliefs and attitudes about sexual conduct. Three items reflected the individual's belief that love should come before sexual intercourse (CFI = .99, RMSEA = .04; $M = 2.62$, $SD = 0.95$, $\alpha = .72$). Four items indexed respondents' endorsement of sexual monogamy (CFI = 1.00, RMSEA = .00; $M = 4.05$, $SD = 0.78$, $\alpha = .79$). Three items measured participants' acceptance of sexual behavior in general (CFI = .97, RMSEA = .09; $M = 3.07$, $SD = 0.61$, $\alpha = .51$).

Goals for the sexual encounter

Based on Hill and Preston's (1996) research identifying eight motivations for sexual intimacy, items were included to measure the goals respondents had for the sexual encounter.² Four items measured the goal of experiencing physical pleasure (CFI = .99, RMSEA = .03; $M = 3.59$, $SD = 0.71$, $\alpha = .71$). Three items measured the goal of physically pleasing one's partner (CFI = .99, RMSEA = .08; $M = 4.40$, $SD = 0.53$, $\alpha = .81$). The goal to relieve stress was measured by three items (CFI = .98, RMSEA = .09; $M = 2.35$, $SD = 0.84$, $\alpha = .74$). Wanting to nurture one's partner was

measured by three items (CFI = .99, RMSEA = .05; $M = 4.26$, $SD = 0.62$, $\alpha = .64$). In addition, the goal of wanting to feel cared for was measured by three items (CFI = .99, RMSEA = .06; $M = 3.66$, $SD = 0.73$, $\alpha = .64$). Finally, the desire to experience dominance was measured by four items (CFI = .99, RMSEA = .08; $M = 1.96$, $SD = 0.59$, $\alpha = .72$).

Communication

Four factors were developed to assess the explicitness of communication that occurred in conjunction with the sexual encounter. Four items measured how explicitly the partners discussed the potential risks associated with their sexual activity (CFI = .99, RMSEA = .07; $M = 3.06$, $SD = 1.24$, $\alpha = .94$). Three items assessed how clearly individuals communicated their consent to engage in sexual behavior (CFI = .99, RMSEA = .08; $M = 3.83$, $SD = 1.02$, $\alpha = .86$). Three items focused on the extent to which partners communicated about how the event would make them feel (CFI = .99, RMSEA = .08; $M = 3.15$, $SD = 1.10$, $\alpha = .87$). Five items addressed explicit communication about the impact that the encounter would have on the relationship (CFI = .99, RMSEA = .00; $M = 3.07$, $SD = 1.12$, $\alpha = .93$). As noted previously, a second-order principle axis factor analysis with varimax rotation revealed that the four communication variables loaded on a single factor. Confirmatory factor analysis indicated the unidimensionality of the four communication variables, thereby supporting the decision to collapse these four variables into one measure of direct communication. Thus, we formed a composite measure of communication by averaging all items (CFI = .99, RMSEA = .07; $M = 3.28$, $SD = .97$, $\alpha = .89$).

Emotion

We followed Dillard and Peck's (2001) recommended factor structure to assess various emotions resulting from the sexual experience. Seven affective responses were measured, including surprise, anger, fear, sadness, guilt, happiness, and contentment. Subjects were asked to indicate on a five-point scale the degree to which they experienced each emotion after their initial sexual experience. Three items comprised each of the following factors: fear (CFI = 1.00, RMSEA = .00; $M = 2.09$, $SD = 1.07$, $\alpha = .89$), happiness (CFI = 1.00, RMSEA = .03; $M = 3.80$, $SD = 0.82$, $\alpha = .86$), calm (CFI = .99, RMSEA = .07; $M = 3.47$, $SD = 0.82$, $\alpha = .74$), angry/annoyed (CFI = 1.00, RMSEA = .08; $M = 1.60$, $SD = 0.83$, $\alpha = .87$), and sad ($M = 1.71$, $SD = 0.76$, $\alpha = .81$). An additional factor measuring surprise consisted of two items (CFI = .98, RMSEA = .10; $M = 2.81$, $SD = 1.04$, $\alpha = .66$), and guilt was measured by a single item ($M = 2.26$, $SD = 1.28$).

Cognition

A series of scales was developed to measure the reminiscing and ruminating respondents engaged in following the sexual encounter. Specifically, participants rated their agreement with statements describing their thoughts following the event. Two items

measured the degree of positive thoughts following coitus ($M=3.16$, $SD=1.04$, $\alpha=.87$), and three items measured the degree of negative thoughts following the event ($CFI=.99$, $RMSEA=.09$; $M=1.62$, $SD=0.73$, $\alpha=.77$).

Relational impact

A scale consisting of three factors measured the impact of initial coitus on the relationship and perceptions of the sexual encounter as a positive or negative relational event. Three items assessed whether the sexual encounter was a significant relational event ($CFI=.99$, $RMSEA=.07$; $M=4.05$, $SD=0.77$, $\alpha=.82$). Two items measured the positivity of the relational impact ($M=3.57$, $SD=0.91$, $\alpha=.84$). Finally, two items measured the degree to which the sexual episode was a negative relational event ($M=4.08$, $SD=0.98$, $\alpha=.81$).

Social desirability

Given the private nature of sexuality and the potential for feelings of embarrassment or threat when people report on sexual behavior, socially desirable responding on self-report measures is a concern for sexuality researchers (Meston & Heiman, 1998). To evaluate bias in the data based on socially desirable responses, a subset of items from the Marlowe-Crowne Social Desirability Scale (MCSDS) was included in the questionnaire (Crowne & Marlowe, 1960). The 33 items on the MCSDS use a true/false format to assess individual behaviors, traits, and personal attitudes that are preferred socially, but are unlikely to occur. For example, "I have never deliberately said something that hurt someone's feelings," "I like to gossip at times," and "I'm always willing to admit it when I make a mistake." Socially desirable responses are summed, with high scores indicating a greater tendency toward social desirability. Because, the length of the MCSDS makes it a rather undesirable measure to implement in an already lengthy questionnaire, an abbreviated version consisting of 10 items was used in this study. Fischer and Fick (1993) performed confirmatory factor analyses on the wide variety of short forms of the MCSDS that have emerged since its conception. Their results indicated that the Form X1, developed by Strahan and Gerbasi (1972), provided the best measure of social desirability, as it had high internal consistency and was highly correlated with the original version of the MCSDS. Interestingly, the 10 items on Form X1 of the SCSDS are all related to interpersonal communication behaviors, which makes it uniquely applicable to the current study. Responses to the 10 items were summed ($M=3.72$, $SD=1.88$).

Time

Because sexual encounters that are more distant might be subject to more retrospective biases, we also measured the amount of time that had elapsed since initial coitus. We asked respondents to indicate the number of weeks, months, and years since the first sexual encounter occurred. Responses were recorded so that time since the event was measured in months for all participants. The amount of time that had passed since the

first sexual encounter ranged from only a few days to 24 months, with a mean of 5.10 months and a median of 4.08 months. The standard deviation was 4.70 months.

Results

Preliminary Analyses

As a starting point, we assessed the bivariate correlations between all of the variables and respondents' composite score on the Marlowe-Crowne Social Desirability scale. Social desirability was positively associated with valuing love before sex and negatively associated with the goal to dominate one's partner. Social desirability was negatively associated with the emotions of fear, anger, sadness, and guilt, and positively associated with happiness and calmness. In addition, social desirability was inversely associated with negative rumination following coitus and positively associated with direct communication. Because several of the variables were associated with social desirability, we included it as a covariate and evaluated it as a moderator in the regression analyses.

We also examined the bivariate correlations between all of the variables and time that had elapsed since the event. Time was positively associated with the emotions of fear and anger, and negatively associated with calmness and communication. In light of these significant correlations, we also evaluated the role of time since the event as a covariate and moderator in the regression analyses.

The bivariate correlations between all of the dependent variables and current relationship status were also assessed.³ Results indicated that current relationship status was positively associated with happiness, calmness, positive cognition, perceptions of the event as significant and positive for the relationship, and communication. Current relationship status was negatively correlated with anger, sadness, guilt, negative cognition, and perceptions of the event as negative for the relationship. Given that the current relationship status was associated with several of the variables, we included it as a covariate and evaluated it as a moderator in the regression analyses.

Finally, we conducted independent sample t-tests on all of the independent variables, dependent variables, and covariates to evaluate sex differences. With regard to individuals' sexual attitudes and values, females were significantly more likely to exhibit attitudes supporting love before sexual involvement, monogamy, and sex as a natural phenomenon. Consistent with prior research (e.g., Buss, 1994; DeLamater, 1991), males were significantly more likely than females to indicate that their goals for engaging in sexual intercourse were to experience pleasure and alleviate stress. Females were more likely than males to report goals of nurturing their partner and feeling cared for. Women also reported significantly more fear following coitus and more perceptions of the episode as a significant relational event.

Regression Analyses

Our hypotheses specified that communication would be associated with emotions, cognitions, and relational consequences, over and above the effects of sexual

attitudes, goals for sexual involvement, respondents' sex, and relationship status at the time of intercourse. Because a notable number of our respondents were reporting on their very first sexual encounter, we also examined sexual experience as an independent variable. In addition, we covaried three measures to address sources of bias in retrospective accounts: current relationship status, social desirability, and time since the event. On step one of separate analyses, we regressed each dependent variable onto the covariates and the independent variables, including the composite measure of communication.⁴ On a subsequent step, we evaluated interactions between communication and each of the covariates. Results indicated that none of the interactions between communication and social desirability or time elapsed since the event were significant. In addition, the interaction between current relationship status and communication was only significant for the emotion of surprise and perceptions of intercourse as a significant relational event. Because the number of significant interactions is well below that which we would expect due to sampling error, we focused on the main effects revealed on the first step of the model. Likewise, time elapsed since the event and social desirability had a negligible impact on results for other variables in the model; therefore we report a more parsimonious model that excludes these covariates. To clarify the impact of measurement error on our findings, our report of the results for each analysis also includes an estimate of the variance explained that is corrected for measurement error.

Results for the regression of the emotion variables onto the individual and relational factors, current relationship status, and communication are reported in Table 1. Each of the regression models produced a significant R^2 , with the exception of the analysis with surprise as the dependent variable. Only two of the individual and relational factors yielded consistently significant effects across most of the emotion variables. In particular, endorsing love before sex was positively associated with fear, anger, surprise, sadness, and guilt and negatively associated with happiness and calmness. Moreover, the goal of feeling cared for was positively associated with fear, anger, and sadness. In addition, current relationship status was directly associated with happiness and inversely associated with anger and guilt. With respect to H1, results indicated that the explicitness of communication was associated with all of the emotions except surprise. Specifically, communicative explicitness was negatively associated with feelings of fear, anger, sadness, and guilt following coitus, and positively associated with happiness and calmness.

Results for the regression of positive and negative thoughts onto the individual and relational factors, current relationship status, and communication are presented in Table 2; in both cases the R^2 for the model was significant. Reports of negative cognitions following coitus were positively associated with endorsing love before sex and the goal of feeling cared for, and negatively associated with current relationship status. Positive reminiscing after the first sexual experience was positively associated with the goals of experiencing pleasure and nurturing the partner. In support of H2, results indicated that communication was positively associated with positive reminiscing and inversely associated with negative rumination.

Table 1 The Regression of Emotion on Individual and Relational Factors and Communication

	Afraid	Happy	Angry	Calm	Surprised	Sad	Guilty
R ²	.14**	.20***	.16***	.17***	.06	.19***	.17***
Corrected R ²	.17**	.24***	.19***	.22***	.08	.23***	.19***
Love before sex	.21**	-.23***	.12	-.18*	.14	.24***	.27***
Monogamy	-.07	.13*	-.12	.13*	-.05	-.12	-.05
Sex is natural	-.02	-.01	.01	.01	.00	.01	.01
Experience pleasure	-.06	.14*	-.11	.09	.05	-.12	.07
Dominate	-.02	-.02	.08	-.02	-.06	.12*	.06
Relieve stress	-.00	.06	.07	.07	.08	.11	-.00
Nurture partner	-.12	.13	-.10	.18*	.04	-.06	.04
Please partner	.04	.04	.05	-.02	-.09	-.00	-.06
Feel cared for	.17**	-.11	.15*	-.05	.11	.14*	.02
Relationship status then	.03	.04	-.07	.03	-.12	-.14*	-.13
Relationship status now	-.11	.14*	-.17*	-.08	.03	-.10	-.18**
First experience	.17**	-.04	.04	-.09	.06	.07	.04
Sex	.07	.05	.08	-.08	.03	.03	.13*
Communication	-.15*	.26***	-.18**	.29***	-.01	-.14**	-.15*

Note. $N = 323$. Cell entries for variables are β 's. The values for corrected R² represent an estimate of variance explained by the model corrected for measurement error.

* $p < .05$; ** $p < .01$; *** $p < .001$.

Table 3 reports the results for the regression of the relational impact variables onto the individual and relational factors, current relationship status, and communication. For all analyses, the overall R^2 for the regression model was significant. The goal of nurturing one's partner was positively associated with perceptions of the event as significant and positive, and inversely associated with perceptions of the event as negative. In addition, the goal of feeling cared for was positively associated with perceptions of initial coitus as significant and negative. Furthermore, relationship status at the time of intercourse was positively associated with perceptions of the event as both significant and positive. Finally, current relationship status was positively associated with perceptions of initial coitus as significant and positive for the relationship and negatively associated with perceptions of the event as negative for the relationship. As per H3, the explicitness of communication was positively associated with perceptions of the event as significant and positive for the relationship, and it was inversely associated with perceiving that the encounter was a negative relationship event.

Discussion

The goal of this study was to highlight the links between the directness of communication about sexual intimacy and the emotional, cognitive, and relational outcomes

Table 2 The Regression of Cognition on Individual and Relational Factors and Communication

	Negative	Positive
R ²	.24***	.13***
Corrected R ²	.30***	.16***
Love before sex	.23***	-.06
Monogamy	-.03	.10
Sex is natural	.10	-.01
Experience pleasure	.02	.17**
Dominate	.10	.03
Relieve stress	.04	.06
Nurture partner	-.07	.17*
Please partner	.06	.07
Feel cared for	.20**	.02
Relationship status then	-.13	-.08
Relationship status now	-.17**	.11
First Experience	.01	-.01
Sex	-.05	.07
Communication	-.20***	.15*

Note. $N = 323$. Cell entries for variables are β 's. The values for corrected R² represent an estimate of variance explained by the model corrected for measurement error.

* $p < .05$; ** $p < .01$; *** $p < .001$.

of the first sexual experience in a relationship. Although the results of this study support previous findings that individuals' sexual attitudes and values (Christopher & Roosa, 1991), relational intimacy achieved prior to intercourse (Roche & Ramsbey, 1993), and goals and motivations for the event (Hill & Preston, 1996) influence the outcomes of coitus, it also provides evidence that communication is interwoven with the emotional, cognitive, and relational outcomes of sexual intimacy. After briefly reviewing our results, we discuss how communication and first sexual experiences combine to influence relationship development. Then, we discuss limitations of this study, and we suggest directions for future research.

The Emotional, Cognitive, and Relational Outcomes of First Sexual Experiences

Hypothesis 1, which suggested that the explicitness of communication prior to coitus would be directly associated with positive emotions and inversely associated with negative emotions, was clearly supported. Results of the regression analyses revealed that explicit communication was associated with more positive and fewer negative emotions following initial coitus, above and beyond the effects of other psychological factors, such as sexual attitudes, goals for the encounter, relational intimacy, or biological sex. Hypothesis 2 predicted that communicating directly about the first sexual

Table 3 The Regression of Relational Impact on Individual and Relational Factors and Communication

	Significant	Positive	Negative
R ²	.39***	.33***	.28***
Corrected R ²	.48***	.40***	.35***
Love before sex	-.08	-.13*	.15
Monogamy	.04	-.02	-.06
Sex is natural	.04	-.02	.01
Experience pleasure	-.02	.06	-.03
Dominate	-.09	-.05	.08
Relieve stress	-.01	-.02	.12*
Nurture partner	.19**	.21**	-.19*
Please partner	.03	-.07	.08
Feel cared for	.17**	-.05	.19***
Relationship status then	.20***	.13*	-.09
Relationship status now	.21***	.38***	-.26***
First Experience	-.04	-.00	.04
Sex	.03	.04	.04
Communication	.14**	.15**	-.18**

Note. $N = 323$. Cell entries for variables are β s. The values for corrected R² represent an estimate of variance explained by the model corrected for measurement error.

* $p < .05$; ** $p < .01$; *** $p < .001$.

experience results in reports of more positive and less negative cognition following coitus. Regression analyses revealed that the directness of communication was positively associated with reported positive thoughts and negatively associated with reported negative thoughts, and that these associations were robust to the influences of the individual and relational factors. A final hypothesis for this study stated that explicit communication prior to initial coitus would be directly associated with perceptions of the event as both significant and positive for the relationship and inversely associated with perceptions of the event as negative for the relationship. Again, this hypothesis was supported by the regression analyses. These findings underscore the positive influence of direct communication on the emotional, cognitive, and relational outcomes of first sexual experiences.

Among the set of individual and relational factors, goals for the encounter exerted the most robust effects; moreover, the impact of different goals varied in ways that have important implications for sexual and relational intimacy. The goal of experiencing pleasure was positively associated with happiness and positive cognition following coitus. Motivations to relieve stress were positively associated with perceptions of the event as negative for the relationship. Individuals who sought to nurture their partners experienced more calmness and positive cognition following coitus, and they perceived initial coitus as more significant and positive for the

relationship and less negative for the relationship. Finally, the goal of feeling cared for was positively associated with fear, anger, sadness, negative cognition, and with perceptions of the event as significant and negative for the relationship. Although speculative, these results suggest that goals for the interaction that are largely under the control of the individual, such as the goal of experiencing pleasure and nurturing the sex partner, may result in more positive emotional and cognitive outcomes. Conversely, goals that require input from the partner to be achieved, such as feeling cared for during sex, appear to correspond with more negative consequences. Perhaps expecting initial sexual encounters to be supportive, fulfilling, and relationally significant leads to disappointment when those expectations are unmet. Coupled with prior research indicating that males and females have different goals for sexual involvement (e.g., Buss, 1994; DeLamater, 1991), the findings of this study shed light on the reasons sexual outcomes for males and females might diverge. To the extent that women are more likely than men to participate in sexual intercourse to achieve other-centered and abstract outcomes, such as warmth and closeness with their partners (DeLamater, 1991), women may be more likely to be disappointed by sexual episodes. Conversely, the self-centered goals for coitus more typically reported by men (e.g., experiencing physical pleasure and having fun; DeLamater, 1991) are more easily controlled and assessed (i.e., did the individual reach orgasm); therefore, they should correspond with more positive sexual outcomes. Although the focus of this study emphasized the influence of communication on emotional, cognitive, and relational outcomes of sexual intimacy, our findings suggest that people's goals also play an important role in reactions to initial coitus.

The Implications of Communication and Initial Coitus for Relationship Development

Evidence that the directness of communication influences sexual outcomes above and beyond various individual and relational factors marks an important contribution to our understanding of sexual intimacy in relationships. In the context of initial sexual encounters, the associations between communicative directness and positive or negative outcomes takes on heightened importance. In particular, the experience of initial coitus as a relational turning point can shape the course of future relationship development. In this section, we consider how communication and first sexual experiences might work in tandem to shape subsequent relationship development. Specifically, we highlight how direct communication and positive sexual episodes can promote intersubjectivity, self-efficacy, and relational certainty in ways that influence the future course of relationships.

As a starting point, direct communication about the first sexual experience in a relationship provides an opportunity to develop a sexual script in order to facilitate future sexual encounters between partners. In particular, Byers and Demmons (1999) found that sexual self-disclosure improves coitus and corresponds with increased sexual and relational satisfaction. Moreover, sexual scripts facilitate the expression, negotiation, and interpretation of sexual episodes (Metts & Spitzberg, 1996; Simon

& Gagnon, 1986). In addition, Cupach and Comstock (1990) found that relational intimacy is enhanced by a well-developed script for sexual behaviors. Consistent with prior research, the findings of this study indicate that direct communication about sexual intimacy corresponds with an array of positive sexual outcomes. Thus, direct communication is a process in the negotiation of sexual intimacy that has implications for producing satisfying sexual experiences, as well as facilitating intimate romantic relationships. Although communication alone is certainly instrumental in shaping sexual and relational development, it also works in tandem with a variety of other mechanisms to influence intimate associations.

Intersubjectivity involves romantic partners' shared perceptions of relationship events and mutual understanding of the meaning those experiences have for the relationship. Baxter (2001) noted that the ability of partners to communicate about relationship events facilitates an awareness of the similarities in their perceptions of shared experiences. Our study indicated that direct communication about the first sexual experience in a relationship contributes to positive sexual outcomes. Although speculative, we consider it likely that direct communication also promotes a shared understanding of the first sexual encounter, thereby contributing to intersubjectivity in the relationship. In other words, when partners communicate about relational turning points like initial coitus, they create a shared memory of the event, and establish symbolic interdependence.⁵ Direct communication about the first sexual encounter, then, promotes both positive sexual experiences and intersubjectivity about the event, thereby contributing to the development of intimacy in romantic relationships.

Since direct communication about initial coitus generally corresponds with positive sexual outcomes, individuals who communicate more directly should also experience an enhanced sense of self-efficacy with respect to sexual intimacy with their partner. Bandura (1977) suggested that self-efficacy is an individual's set of beliefs regarding his or her ability to competently formulate and achieve a particular task-related course of action. As a turning point in relationship development, negotiating initial coitus creates an opportunity for partners to work through a potentially challenging relationship event. The ability to successfully negotiate a satisfying first sexual encounter provides partners with a sense of confidence that they can work through difficult events together. First sexual encounters that are perceived as unsatisfying, however, might raise doubts about the ability of partners to negotiate relationship experiences. Thus, we nominate self-efficacy as another outcome of communicatively negotiated and positive sexual episodes that has implications for the future of the relationship.

Explicit communication also functions to reduce uncertainty, which is another mechanism that has implications beyond the first sexual episode. Knobloch and Solomon (2002) have argued that it is the process of uncertainty reduction, rather than the elimination of relational uncertainty, that contributes to satisfaction and togetherness in a relationship. By this logic, we speculate that explicit communication about the first sexual encounter provides partners with the opportunity to engage in the uncertainty reduction process together. The process of reducing uncertainty is a

satisfying communicative act, because it clarifies partners' commitment to the relationship and creates a shared understanding of relationship events. Thus, explicit communication contributes to positive sexual outcomes and manages uncertainty about the event, which together function to increase intimacy in the developing relationship.

In discussing the relevance of communication and first sexual experiences in developing relationships, we have emphasized how the successful negotiation of this turning point can produce benefits for the relationship in general. In particular, we suggest that surviving one relational turning point strengthens the bond between partners and prepares them for significant relationship events in the future. Prior research has suggested that surmounting challenges is essential to courtship. For example, resolving the first big fight between partners is a crucial turning point in relationship development (Siegert & Stamp, 1994). In addition, trajectories for relationship development include a stage in which partners must overcome adversity (Honeycutt et al., 1989). Furthermore, the relational turbulence model implies that transcending the challenges that characterize transitions to serious relationship commitment is important for establishing a mutual bond (Solomon & Knobloch, 2004). In like manner, we suggest that direct communication can contribute to positive sexual experiences in ways that are important to subsequent relationship development.

Limitations of this Study and Directions for Future Research

Despite evidence supporting the importance of communication for first sexual experiences, the conclusions drawn in this study are limited in a variety of ways. Although the results of this study generally supported the hypotheses, we caution against the generalization that communication is always good for individuals and their relationships following initial coitus. The findings of this study point specifically to the benefits of the particular kinds of communication that were measured, namely consent, risk communication, and discourse about the potential emotional and relational outcomes of the event. Recognizing the limitations inherent in analyzing the effects of communication about various topics, perhaps the next important inquiry is to identify the communication strategies that are most effective for generating positive outcomes of initial coitus. Exploring strategies for communicating sexual satisfaction to one's partner and for developing sexual scripts might be useful for identifying communication methods that promote positive initial sexual encounters.

Another limitation of this research is the use of retrospective data. Time to reflect on the experience may trivialize or romanticize the event in the minds of respondents, thereby causing individuals to recall the event as more negative or more positive than was actually the case. Recall that the current relationship status of partners was positively associated with happiness and perceptions of the event as significant and positive for the relationship, and inversely associated with anger, guilt, negative cognition, and perceptions of the event as negative for the relationship. Thus, individuals in relationships that continued to develop following initial coitus have

a tendency to remember the episode more positively than individuals whose relationships have terminated since the first sexual experience. Despite the limitations inherent in retrospective recall of relational episodes, the sensitive nature of sexual intimacy makes it difficult to measure outcomes in a more proximal way.

Related to concerns about the influence of time on respondents' perceptions of their first sexual encounters, participants' responses may have been influenced by social perceptions of what reactions to sexual intimacy should be like. Although regression analyses indicated that neither time lapsed since the event nor social desirability moderated the associations between communication and sexual outcomes, we recognize that biases may be introduced by retrospective methodologies. These biases, coupled with the similarity of the measures of communication and sexual outcomes, may have also contributed to exaggerated correlations due to common method variance. Given the limitations of retrospective data, future research should attempt to capture emotional, cognitive, and relational outcomes of first sexual experiences more closely following the event. Retrospective methodologies are difficult to avoid given the subject matter; however, there may be utility in diary methods to capture reactions more immediately following initial coitus.

Our decision to focus specifically on sexual intercourse, as opposed to other forms of orgasm oriented involvement, presents another limitation of this study. Casual sexual encounters and "hook ups" are becoming more prevalent among college students, and the behaviors that occur during these episodes do not always involve coitus. In a study by Paul et al. (2000), 47.9 percent of respondents engaged in a "hook up" that did not involve sexual intercourse, compared to 30.5 percent who did engage in coitus during their "hook ups." Although other forms of sexual contact (i.e., oral sex or manual stimulation) are prominent, especially among the college population, we considered a number of reasons to exclude these forms of sexual behavior from this study. One consideration involved our interest in the emotional, cognitive, and relational ramifications of first sexual experiences between partners. Because other forms of sexual contact are perceived to present less risk for pregnancy or sexually transmitted infections, they are often preferred in non intimate relationships and casual sexual encounters; hence, we chose to focus on intercourse because it represents a more significant relational turning point with implications for relationship development. In addition, given that we were relying on retrospective recall of the first sexual encounter, we wanted to define sexual experience in a way that would be most salient to respondents. Cognitive scripts for relationship development highlight a number of relational encounters that typically occur prior to sexual onset, so the first experience with sexual intercourse marks the culmination of days or weeks (or hours in some cases) of anticipation, and is likely to be more memorable than previous, less intimate encounters. Although we chose a more narrow definition of sexual involvement, we recognize the value in exploring other forms of orgasm oriented sexual experience and encourage scholars to take up these issues in future research.

Additional shortcomings of this study are the predominantly female sample and the focus on one individual's experiences, rather than interpretations of the event from

both partners. Although the predominantly female sample in this study presents limitations for conclusions that may be drawn from the results, the focus on female sexual experiences is not without merit. Women are typically more prone to passive communication about sex (McCormick, 1979; Moore, 1985; Perper & Weis, 1987). Moreover, women have been found to place higher value on sexual intimacy as an expression of love and relational commitment (Sprecher, 1989; Sprecher & Regan, 1996). Thus, recognizing and understanding women's approaches to communication about initial coitus and the emotional, cognitive, and relational outcomes they experience may be particularly important. In addition, we recognize that sexual intimacy research focusing on the perceptions and experiences of only one member of a dyad lacks the depth of perspective that can be obtained when the reactions of both partners are explored. To address the discrepancy between males and females in this study and the one-sided perspective on an inherently dyadic event, future research should collect data on both partners rather than individuals. In addition to balancing the composition of the sample with respect to gender, explorations of a dyadic relational phenomenon like sexual intimacy are enhanced by information from both partners.

Finally, results from this study fall short of identifying the ways in which communication directly impacts the development and trajectory of romantic relationships following initial coitus. This study provides evidence for the valence of the emotional and cognitive outcomes of sexual intimacy, and measures perceptions of relational outcomes, but has no basis for causal claims about the direct impact of communication on those outcomes. Assuming initial coitus is a pivotal relationship event, positive or negative outcomes of the event are likely to affect relationship development in important ways. Given previous research indicating that sexual satisfaction is closely linked to relational satisfaction (Byers & Demmons, 1999; Christopher & Sprecher, 2000; Cupach & Comstock, 1990), exploring the trajectory of relationships following positive versus negative first sexual encounters is an important insight for understanding patterns of relationship development.

Conclusion

The results of this study indicated that the explicitness of communication about the first sexual encounter is associated with positive emotions and cognitions, as well as perceptions of the event as significant and positive for the relationship. Although other variables have been found to influence outcomes of sexual intimacy, such as sexual attitudes, goals, biological sex, and relational intimacy, the associations between communication and sexual outcomes make an important contribution to our understanding of initial coitus as a relationship phenomenon. The fact that so few individuals are capable of communicating openly about their sexual preferences, often resorting to passive and indirect messages of consent (e.g., Byers, 1980; Hickman & Muehlenhard, 1999), is evidence that sexual communication is a challenging task. Thus, future research should consider the dynamics of effective sexual

communication and explore ways that partners can approach interactions about sexual intimacy to obtain beneficial emotional, cognitive, and relational outcomes.

Notes

- [1] We defined sexual experiences as heterosexual penile/vaginal intercourse and homosexual oral/anal sex because we wanted to focus on episodes that clearly constituted sexual intercourse without alienating homosexual respondents. Heterosexual oral sex and other forms of heavy petting and “hooking up” that are prevalent on college campuses were excluded, because some students do not consider these activities to constitute “sex.”
- [2] Hill & Preston (1996) advocate for eight motivating factors, but only six were used in this study. Given our focus on initial sexual encounters involving college students, we expected that the goal to procreate would be irrelevant to most, though perhaps not all, of our respondents. Furthermore, the CFA indicated that the two goals of feeling powerful and allowing one’s partner to experience feelings of power should be collapsed into one scale we labeled dominance.
- [3] To simplify presentation, analyses treat this measure as interval, rather than ordinal. Although these data may not meet the criteria of equal intervals, results are not likely to be dramatically compromised (Binder, 1984; Labovitz, 1970).
- [4] Because communication is represented by a single variable, this analysis is equivalent with one in which the individual and relational factors are entered on a step prior to the communication variable. The two alternatives produce identical betas for communication, which indicate the association between communication and the dependent variable with all of the other variables covaried.
- [5] Although symbolic interdependence is similar to the widely embraced concept of cognitive interdependence, they should not be interpreted synonymously. Cognitive interdependence refers to conceptions of the self as part of a collective unit, which contributes to a couple oriented identity. Symbolic interdependence refers more generally to the shared interpretation of mutually experienced relational episodes. As such, relational episodes become symbols or benchmarks around which the relationship develops and is cooperatively remembered. Symbolic interdependence, then, is grounded in assumptions of symbolic interactionism, which suggests that ongoing interactions contribute to a shared construction of reality that bonds and unites relationship partners (e.g., Stephen & Markman, 1983).

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Appendix

Scale Items

Attitudes and values

Premarital Sexual Intercourse is Wrong

- (a) Sexual intercourse should only be practiced within the bonds of marriage
- (b) Individuals should feel love for a person if they are going to have sex with them
- (c) Engaging in sex prior to marriage is wrong

Endorsing Sexual Monogamy

- (a) People should only have one sexual relationship at a time
- (b) Sex with someone other than one's partner is wrong under any circumstances
- (c) It is acceptable to have more than one sexual relationship at a time (Reversed)
- (d) It is not natural to limit sexual activity to one partner (Reversed)

Acceptance of Sexual Behavior

- (a) Consenting adults should feel free to engage in sexual activity
- (b) Sex is a natural and healthy phenomenon
- (c) If two people like each other there is nothing wrong with having sexual relations

Goals

Experiencing Pleasure

- (a) I wanted to have sex with my partner to experience physical pleasure
- (b) I wanted to have sex with my partner in order to feel physically satisfied
- (c) Physical pleasure was my main goal for engaging in intercourse
- (d) I did not care if I was physically satisfied by my partner (Reversed)

Physically Pleasing the Partner

- (a) I wanted my partner to experience pleasure
- (b) I wanted my partner to feel sexually satisfied
- (c) My partner's physical satisfaction was of no importance to me (Reversed)

Relieve Stress

- (a) I wanted to have sex with my partner to relieve stress
- (b) I wanted to have sex with my partner so that I could relax
- (c) I was not trying to relieve stress when I had sex with my partner (Reversed)

Nurture the Partner

- (a) By having sex, I wanted to show my partner that I cared for him/her
- (b) My partner's well-being was of no concern to me during sex (Reversed)
- (c) During sex I did not want to care for my partner (Reversed)

Feel Cared For

- (a) I wanted my partner to demonstrate affection for me
- (b) I wanted to feel like I was important to my partner
- (c) I wanted to have sex in order to know my partner cared for me

Experience Dominance

- (a) I did not want to be controlling of my partner in this sexual encounter (Reversed)
- (b) I wanted to dominate my partner in this sexual encounter
- (c) I wanted to let my partner know that I was in control
- (d) I wanted to have sex in order to feel powerful

Explicitness of Communication

Risks

- (a) We explicitly discussed the risks (Sexually Transmitted Disease–STD, pregnancy, etc.) associated with sexual activity
- (b) We clearly addressed the risks that could result from our sexual behavior
- (c) We had an open discussion about potentially undesirable outcomes of having sex
- (d) We did not directly talk about risks associated with sexual activity (Reversed)

Consent

- (a) We had a direct conversation in which we both agreed we wanted to have sex
- (b) We talked clearly about whether or not we both wanted to have sex
- (c) We did not discuss at all whether we both wanted to engage in sex or not (Reversed)

Emotional Outcomes

- (a) We did not discuss how our sexual encounter would make us feel (Reversed)
- (b) We talked openly about our feelings in relation to the sexual experience
- (c) We freely discussed how the sexual encounter would make us feel

Relational Impact

- (a) We explicitly discussed the impact that sex would have on our relationship
- (b) We openly communicated about the relational meaning of the event
- (c) We talked directly about what this sexual experience would mean for the relationship
- (d) We were open about the anticipated effect of the sexual encounter on our relationship
- (e) We did not talk about the impact of sexual intercourse on our relationship (Reversed)

Emotion

Afraid

- (a) Scared
- (b) Fearful
- (c) Afraid

Happy

- (a) Happy
- (b) Cheerful
- (c) Joyful

Angry

- (a) Angry
- (b) Aggravated
- (c) Irritated

Calm

- (a) Contented
- (b) Peaceful
- (c) Tranquil

Surprised

- (a) Astonished
- (b) Surprised

Sad

- (a) Dreary
- (b) Sad
- (c) Dismal

Guilty

- (a) Guilty

Cognition

Positive Thoughts

- (a) I would frequently fantasize about the event
- (b) I would often daydream about the sexual encounter

Negative Thoughts

- (a) I was constantly disturbed by thoughts of the interaction
- (b) I was haunted by vivid memories of our sexual encounter
- (c) I was overcome with unpleasant memories of the event

Relational Impact

Significant Relational Event

- (a) I thought the sexual intercourse was a very important relationship event
- (b) I thought the sexual intimacy was a significant relationship event
- (c) I thought the sexual experience was an unimportant relationship event
(Reversed)

Positive Relational Event

- (a) I thought the sexual encounter was good for the relationship
- (b) I thought the sexual experience made the relationship better

Negative Relational Event

- (a) I thought the sexual experience threatened the relationship
- (b) I thought this sexual experience made us more distant

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