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Compatibility or Restraint? The Effects of Sexual Timing on Marriage Relationships

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Very little is known about the influence of sexual timing on relationship outcomes. Is it better to test sexual compatibility as early as possible or show sexual restraint so that other areas of the relationship can develop? In this study, we explore this question with a sample of 2035 married individuals by examining how soon they became sexually involved as a couple and how this timing is related to their current sexual quality, relationship communication, and relationship satisfaction and perceived stability. Both structural equation and group comparison analyses demonstrated that sexual restraint was associated with better relationship outcomes, even when controlling for education, the number of sexual partners, religiosity, and relationship length.

Keywords: sexual timing, sexual quality, couple relationships, communication

Premarital sex has become a normative part of couple formation in the United States and other modern societies (Laumann, Gagnon, Michaels, & Michaels, 1994). Several researchers have reported that approximately 85% of Americans approve of sexual relations prior to marriage and equal numbers of both men and women report that they have had premarital sex (Christopher & Sprecher, 2000; Kaestle & Halpern, 2007). Although sexual relations are a part of the contemporary dating script for the majority of couples, there is evidence that couples differ in the pace and timing with which they initiate sex in their relationships. Analyses using data from the National Longitudinal Study of Adolescent Health (Add Health) study show that approximately 50% of premarital young adult couples become sexually involved within the first month of dating, while 25% initiate sex one to three months after beginning to date and a small proportion of couples wait until marriage before initiating sexual relations (Sassler & Kamp Dush, 2009). Despite evidence that couples vary in sexual timing trajectories, very little research has examined how the timing of sexual relations in a couple's formation history influences the development of other aspects of the relationship, as well as couple outcomes. In particular, little is known about how sexual timing patterns may influence the relationships of couples who stay together and eventually transition to marriage. The purpose of this article is to explore the understudied link

between sexual timing patterns in coupling and later marital outcomes.

Literature Review

Several family scholars studied the impact of premarital sexual behavior on later marital outcomes, and found that premarital sexuality was often a risk factor for later marital instability (Kahn & London, 1991; Larson & Holman, 1994; Teachman, 2003). These authors found that, while the very fact of having sex before marriage was not usually linked to lower subsequent marital satisfaction, certain characteristics of premarital sexual activity, such as age at onset of sexual debut and the number of partners, was negatively related to the quality of marriage.

Sexuality during young adulthood has been studied more as an individual status or condition rather than a sequenced process in relationship development. One exception to this was an early study published by Peplau, Rubin, and Hill (1977). These scholars were the first to note that "research on premarital sex has typically focused on attitudes and experiences of individuals, rather than on sexual interaction in couples" (p. 87). Utilizing what they called a "dyadic approach" to studying premarital sex, these scholars conducted a study with 231 college-aged dating couples to examine links between the patterning of sexual behavior and the development of love and commitment in dating relationships. Peplau and colleagues (1977) used survey and interview data to identify and compare three couple patterns of sexual timing and commitment in dating relationships. They labeled these groups "*early sex*" couples (couples who had sexual intercourse within 1 month of their first date); "*later sex*" couples (couples who had sex 1 month or later in their dating); and "*abstaining*" couples (couples who were abstaining from sexual intercourse until they were married). These scholars noted that these three groups were consistent

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with the three sexual ethics groups presented by Reiss (1960, 1967).

In later studies, other scholars began to look for ways to conceptualize the affective and behavioral events, transitions, or “turning points,” that people use as the interpretative signals of change in the commitment, intensity, definition, or stage of development in their romantic relationships (e.g., Baxter & Bullis, 1986; Bullis, Clark, & Sline, 1993; Huston, Surra, Fitzgerald, & Cate, 1981). Building upon the early work of Bolton (1961); Baxter and Bullis (1986) initiated their systemic investigations of relevant “turning points” in relationship development. According to Baxter and Bullis (1986), a turning point is “any event or occurrence that is associated with change in the relationship” (p. 470). In particular, these scholars identified the “passion turning point” or markers of initial sexual involvement as highly salient in dating couples’ relationships.

Utilizing the turning points perspective, Metts (2004) hypothesized that the relative sequencing of commitment and sexual involvement was a critical factor in couple formation. Specifically, Metts noted that while sexual involvement can and does occur with no prior expressions of commitment, the passion turning point will be qualitatively different for a couple when sexual involvement follows after commitment rather than before. In a study of the “passion turning point” in the dating relationships of 286 college students, Metts (2004) analyzed the relative sequencing of expressions of love and commitment and the timing of “first sex” in relationships. With regard to the timing of sexual intimacy, Metts found that the length of time dating prior to first sexual involvement was a negative predictor of commitment in men, but not in women. However, Metts found that for both men and women, the explicit expression of love and commitment prior to sexual involvement in a dating relationship influenced the personal and relational meaning of the event. Specifically, Metts (2004) found that when higher levels of commitment were present, sexual involvement was more likely to be perceived as a positive turning point in the relationship, increasing understanding, commitment, trust, and a sense of security. However, when emotional expression and commitment did not precede sexual involvement, the experience was significantly more likely to be perceived as a negative turning point, evoking regret, uncertainty, discomfort, and prompting apologies. Consequently, we propose that the timing of sexual involvement will influence both the sexual quality of the relationship and the development of communication (understanding) within that relationship.

Focus of the Study

Although there are only a few studies that have empirically examined sexual timing patterns in couple relationships, these studies, along with several theoretical ideas presented in other published work, can be used to organize an empirical and theoretical approach to the topic. Existing perspectives of sexuality in relationship development offer two differing paradigms on the impact of sexuality on

relationship formation—a sexual compatibility perspective and a sexual restraint perspective.

Sexual compatibility vs. sexual restraint. The first theoretical perspective of couple sexuality could be referred to as the *sexual compatibility model*, which holds that sexual interaction is essential during the couple formation process as it allows partners to assess their compatibility with one another in this important domain of relationship functioning. This line of reasoning is predominant in popular thinking about romantic relationship formation as the topic of “sexual chemistry” is frequently emphasized as an important relationship characteristic for young people to both test and seek out in romantic relationships, particularly in a relationship that may lead to marriage (Cassell, 2008). Among scholars and clinicians, sexual chemistry has been defined as a “mysterious, physical, emotional, and sexual state” that when present in a relationship creates something “unique and explosive” (Leiblum & Breznsnyak, 2006, p. 55).

When the concepts of sexual chemistry and compatibility are applied to premarital relationships, the generally accepted notion is that sexual involvement fosters emotional closeness in the early months of dating, as well as providing opportunities for self-discovery that may lead to greater feelings of self-worth. From this perspective, individuals and couples who do not test their sexual chemistry prior to the commitments of exclusivity and later marriage are seen as being at risk for entering into a relationship that will not satisfy them in the future – thus increasing their risk of marital distress and failure (Cassell, 2008).

Despite the acceptance and practice of testing sexual compatibility for many people, there are several areas of theoretical development that suggest that early sexual initiation may be detrimental to couple formation processes and later marital outcomes. Contrary to perspectives of sexual compatibility, a *sexual restraint model* holds that sexual involvement during couple formation processes, particularly in the early stages, may be detrimental to overall relationship development. In particular, the relative sequencing of sexual behavior, relationship commitment (i.e., sex precedes commitment vs. commitment precedes sex), and attachment has been hypothesized to be a critical factor in determining how sexual initiation may impact overall couple development (Metts, 2004). A conceptual model of sexual restraint suggests that couples who delay or abstain from sexual intimacy during early couple formation allow communication and other social processes to become the foundation of their attraction to each other, a developmental difference that may become critical as couples move past an initial period of sexual attraction and excitement into a relationship more characterized by companionship and partnership. Early sex may increase the risk for asymmetrical commitment levels, less developed communication patterns, more constraint to leaving the relationship, less sexual satisfaction later in the relationship, and less ability to manage adversity and conflict (Stanley, Rhodes, & Markman, 2006).

Although there is theoretical literature on both perspectives, there is little empirical examination of either. The

focus of the current study was to examine whether data evaluating the timing and influence of sexuality supports one or the other perspective.

Research Questions

How is sexual timing related to couple processes and outcomes? Based on the literature and theory previously reviewed, we developed a structural model illustrated in Figure 1 that describes how sexual timing might influence relationship outcomes. As seen in the model, we propose that sexual timing will influence both the sexual quality of a relationship and the communication expressed in the relationship and that all of these variables will influence relationship satisfaction and perceived stability. Both sexual quality and communication have been linked together and to relationship satisfaction in previous research (Christopher & Sprecher, 2001) and the link between sexual timing and different levels of sexual quality and communication has been suggested by Metts (2004). We include relationship length, religiosity, the number of sexual partners, race, education, income, and parents' divorce as control variables in this study. Existing research demonstrates that satisfaction changes over time in relationships, religiosity has been linked to decisions of when to express sexuality in relationships, while race, education, and income have been linked to different sexual attitudes and behaviors (Bradbury & Karney, 2004; Christopher & Sprecher, 2001; Sprecher & McKinney, 1991). By using these variables as controls, we will be able to discuss the influence of sexual timing over and above the influence of the control variables. Finally, gender is likely to influence many of the variables in the model so we evaluated whether the path coefficients were significantly different for males and females (Kaestle & Halpern, 2007).

If the sexual compatibility idea is valid we would expect that delayed sexual timing would be negatively related to sexual quality and communication as well as relationship satisfaction and perceived stability. This means that the longer a person waited to be sexual in the relationship the

worse would be their sexual quality, communication, satisfaction, and perceived stability in marriage. At the least, we would expect the relationship between sexual timing and the other variables to be insignificant. On the other hand, if the sexual restraint idea is valid we would expect that the longer a person waited to become sexual in their relationship, the better the outcomes.

Methods

Sample and Procedures

The sample from this study was drawn from the entire population of participants who completed the Relationship Evaluation Questionnaire (RELATE: Busby, Holman, & Taniguchi, 2001) between 2006 and 2009. All participants completed an appropriate consent form prior to the completion of the RELATE instrument and all data collection procedures were approved by the institutional review board at the authors' university. Individuals completed RELATE online after being exposed to the instrument through a variety of sources. Twenty-nine percent of the sample were referred to the online site by their instructor in a class, 25% were directed to the site by a relationship educator or therapist, 8% were sent to the site by clergy, 18% were referred to the site by a friend or family member, 7% were referred by an ad they saw online or in a print, and the remaining 13% of the participants found the instrument by searching for it on the web.

The RELATE sample included many individuals in a variety of relationship types from early acquaintances who were just starting to date to seasoned marriages. Because of the sexual timing and other relationship variables that were analyzed in this study, the only individuals retained in the sample were participants in a heterosexual relationship that was their first marriage. This resulted in a sample of 2,035 individuals.

Seventy-seven percent of the sample was Caucasian, 7% African American, 6% Latino, 6% Asian, and 4% listed "Other." In terms of education, 8% completed a high school

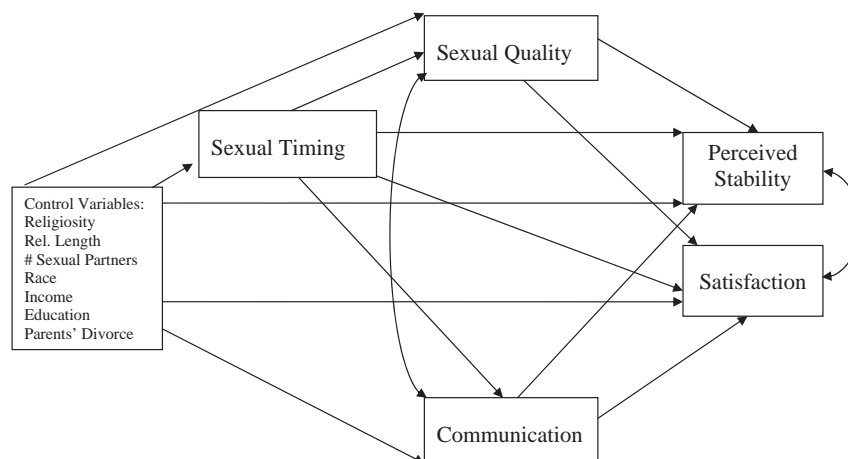


Figure 1. Initial model of the hypothesized association of sexual timing on relationship outcomes.

diploma or less as their highest degree of education, 32% completed some college, 24% completed a bachelor's degree, 10% completed some graduate schooling, and 26% completed a graduate degree. The mean age of the respondents was 36.1 with a standard deviation of 10.2 and a range from 19 to 71. The measure of relationship length indicated that 9% of the couples had been married for six months or less, 11% between 6 and 12 months, 21% for 1–2 years, 19% for 3–5 years, 15% for 6–10 years, 14% for 11–20 years, and 11% for more than 20 years.

In terms of religious affiliation, 21% of the respondents were Catholic, 39% were Protestant, 6% were Latter-Day Saints (Mormon), 17% were members of "another religion," and 17% were not affiliated with any religion. These religious affiliations indicated that there were differences between the sample in this study and national norms (U.S. Religious Landscape Survey, 2007). There were fewer Protestants and Catholics (11% fewer Protestants, 3% fewer Catholics), and more people in the Mormon (4% more), another religion (12% more, largely because we had fewer available categories to choose from), and unaffiliated groups (1% more).

Measures

The RELATE is an approximately 300-item online questionnaire designed to evaluate the relationship of individuals in a dating, engaged, or married relationship. The questions examine several different contexts—individual, cultural, family (of origin), and couple—in order to provide a comprehensive evaluation of challenges and strengths in their relationships.

Previous research has documented RELATE's reliability and validity, including test-retest and internal consistency reliability; and content, construct, and concurrent validity (Busby et al., 2001). We refer the reader specifically to Busby et al.'s (2001) discussion of the RELATE for detailed information regarding the theory underlying the instrument and its psychometric properties. The scores for participants on all the scales in this study were mean scores when more than one question was combined. Except for the questions on the frequency of sexual behavior, and the control variables, questions were answered using 5-point Likert response choices.

Sexual timing variable. This variable was one item that asked individuals how soon they had sexual relations with their current partner. Although the term "sexual relations" is more general and less precise than sexual intercourse, this term was selected because couples are known to engage in a variety of sexually intimate behaviors other than sexual intercourse, such as oral sex, and the research to date does not indicate one type of sexual behavior has a different influence on relationships than other types (Christopher & Sprecher, 2001; Regnerus, 2007). Also the existing research indicates that most individuals consider all of these types of behaviors as "sex" (Regnerus, 2007). The frequencies on this variable are presented in Table 1.

Sexual quality variable. The Sexual Quality scale consisted of three questions about the sexual relationship; how

Table 1
Number of Participants (N = 2097) Who Initiated Sexual Timing at Specific Times in Their Relationship

Timing of sexual involvement with current partner	Number of Participants
1. We had sexual relations before we started dating	126
2. We had sexual relations on our first date	172
3. We had sexual relations a few weeks after we started dating	478
4. We had sexual relations from 1 to 2 months after we started dating	389
5. We had sexual relations from 3 to 5 months after we started dating	248
6. We had sexual relations from 6 to 12 months after we started dating	170
7. We had sexual relations from 1 to 2 years after we started dating	71
8. We had sexual relations more than 2 years after we started dating	45
9. We had sexual relations only after we married	336

satisfied participants were with their sexual intimacy, how often sex was a problem in their relationship and how frequently they had sex with their partners. All variables were coded in such a way that higher values were equivalent to higher sexual quality. The internal consistency reliability coefficient for the Sexual Quality scale was .79.

Communication variable. The Communication scale consisted of 14 items evaluating how well participants were able to express empathy and understanding to their partners, how well they were able to send clear messages to their partner, how often they were prone to be critical, and how often they were prone to defensive communication. All items were coded so that a higher value was equivalent to better communication. The internal consistency reliability coefficient for the Communication scale was .86. In terms of test-retest and validity information on this scale, the communication items have been shown to have test-retest values between .70 and .83 and were appropriately correlated with a version of a commonly used Relationship Quality measure as predicted (Busby et al., 2001). Also these scales have been shown in longitudinal research to be predictive of couple outcomes and are amenable to change in couple intervention studies that focus on communication (Busby, Ivey, Harris, & Ates, 2007).

Relationship satisfaction variable. This scale consisted of questions about how satisfied participants were with five different areas including the time they spent together, the love they experienced, the way conflict was resolved, the amount of relationship equality they experienced, and satisfaction with their overall relationship. The internal consistency reliability coefficient for the Relationship Satisfaction scale was .89. Additional test-retest reliability estimates in past research were between .76 and .78 (Busby et al., 2001). Validity data have also shown the strength of this scale indicating that it is highly correlated with the existing relationship quality and satisfaction measures both in cross-sectional and longitudinal research (Busby et al., 2001, 2007).

Perceived relationship stability variable. This scale consisted of three questions that asked respondents how often they thought their relationship was in trouble, how often they thought of ending the relationship, and how often they had broken up and gotten back together, with higher scores indicating greater relationship stability. These items were adapted from earlier work by Booth, Johnson, & Edwards (1983). The internal consistency reliability coefficient with this sample for the Perceived Stability scale was .77. Previous studies have shown this scale to have test-retest reliability values between .78 and .86, to be appropriately correlated with other relationship quality measures, and to be valid for use in cross-sectional and longitudinal research (Busby et al., 2001, 2007; Busby, Holman, & Neihuis, 2009).

Control variables. Since we knew from the demographic variable frequencies that all but seventeen percent of the sample was affiliated with a religious organization, and we suspected that religiosity was substantially related to whether respondents delayed their sexual involvement in their relationship, we controlled for religiosity in our analyses. The Religiosity scale consisted of three questions that evaluated how often respondents attended church, how often they prayed, and how often spirituality was an important part of their life. The internal consistency reliability coefficient for the Religiosity scale was .89. Additional research has shown this scale to have test-retest reliability scores of .86 to .88 (Busby et al., 2001).

Relationship Length was also used as a continuous control variable in this study. Individuals were asked to indicate how long they had been in a relationship with their partners. Responses ranged from 6 months or less to more than 30 years. However, it may be that there are certain cohort and survival effects in the sample such that those who were married for longer periods of time were those more likely to have had sex later in their relationship and to stay together. To explore this possibility we divided the sample into two groups comparing those in shorter term marriages (less than 10 years) to those in longer-term marriages. When we split the sample in this way and reran our analyses we did not find these two groups to be significantly different on the sexual timing variable. We also did not find the multivariate analysis of covariance (MANCOVA) and the structural equation model (SEM) results to be substantial different for those we report in the forthcoming results section, consequently we used Relationship Length as a continuous variable in our analyses.

Income, education, and race were also used as control variables and were single item demographic variables. Race was dummy-coded with Caucasian's as the reference group. We also used a dichotomous yes/no variable of parents' divorce, and the number of sexual partners reported by the participants as control variables.

We suspected that many of the control variables were not significantly related to the relationship outcomes (sexual quality, communication, relationship satisfaction, or perceived relationship stability) in this study so we conducted preliminary multiple regression analyses to explore which

control variables should be retained in the analysis of the model in Figure 1. The only control variables that had a significant influence on at least one of these couple outcomes were religiosity, relationship length, the number of sexual partners, and education. These variables were retained and included in the SEM analysis and the group comparisons reported in the results section.

Results

The evaluation of the model in Figure 1 was conducted with AMOS version 7.0 (Arbuckle, 2006). Although error terms were included for each of the endogenous variables listed in the Figure, they were not drawn into the SEM models to simplify the figures.

We report several fit measures to assist in the evaluation of how well our hypothesized model replicates the sample data. We follow the recommendations of McDonald and Ho (2002) and Kline (2005) to report both absolute fit indexes and incremental fit indexes.

The analysis of the model presented in Figure 1 for the whole sample indicated that the model was an excellent fit to the data. The sample size for the SEM analysis was 2035. The chi-square with 9 degrees of freedom was 15.68 and was not significant ($p = .074$), the Tucker Lewis Index (TLI) was .99, the Comparative Fit Index (CFI) was .99, while the Root Mean Square Error of Approximation (RMSEA) was .02.

Comparing Males and Females

The chi-square difference value for the constrained and unconstrained models comparing female and male participants with 14 degrees of freedom was 102.96 and was significant ($p < .001$), indicating that the structural model was not equivalent for the two groups. However upon exploring the specific coefficients that were significantly different for males and females the only ones were the control variables of the number of sexual partners, education, and religion on sexual timing and sexual quality. In each instance the coefficients were larger for males than they were for females. Even these differences were small to moderate in the range of .07 to .15 larger for males than for females. None of the coefficients listed in Figure 2 were significantly different for males and females.

Figure 2 shows the standardized path coefficients for the variables in the model for females and males excluding the specific coefficients for the control variables. The influence of the control variables on the major couple outcomes was weak with none of the control variables having a direct influence on relationship satisfaction and only education and the number of sexual partners having an effect of .05 and .07 on perceived relationship stability. Religiosity and relationship length had a significant effect on sexual quality of .05 and $-.17$ respectively. Education, religiosity, and relationship length had an effect of .10, .10, and .08 on communication. The strongest effects of the control variables were on sexual timing with religiosity having an effect

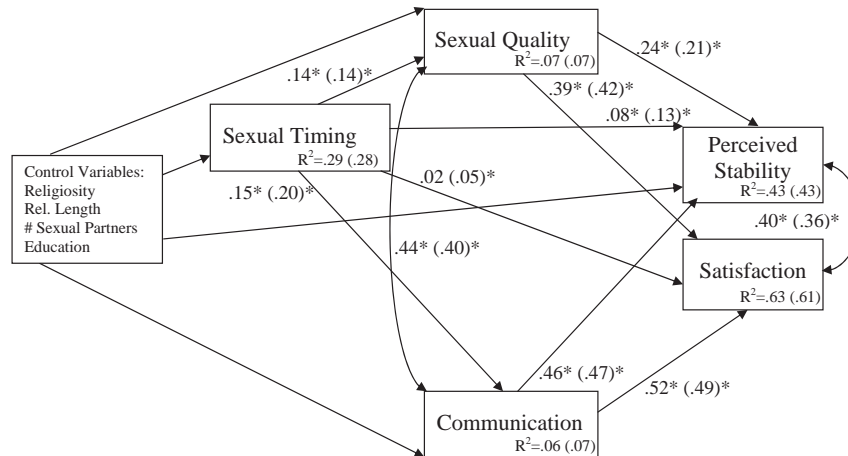


Figure 2. The final model showing the influence of sexual timing on relationship outcomes for females and males (in parenthesis).

of .33 and the number of sexual partners having an effect of $-.36$.

The squared multiple correlations for the endogenous variables in the model demonstrated that the variables explained large percentages of variance for Sexual Timing, Perceived Stability, and Satisfaction.

The total effects of each variable in the model on Relationship Satisfaction and Perceived Stability are presented in Table 2. These effects showed that the variables with the strongest association with Satisfaction were Communication and Sexual Quality for both females and males. The variables with the strongest total effects on Perceived Stability were Communication and Sexual Timing.

Group Comparisons

The significant paths in the model lead us to conduct group comparisons to explore how people who displayed varied periods of sexual timing in their relationship might have unique patterns of Communication, Sexual Quality, Satisfaction, and Perceived Stability. Based on the theory we presented in the introductory section and building on the work of Peplau and colleagues (1977) we divided the sam-

ple into three groups, those who were sexual with their married partner from before they started dating to less than one month after they started dating (labeled as “Early Sex” by Peplau et al., 1977), those who were sexual with their partners between 1 month and 2 years after they started dating (labeled as “Later Sex” by Peplau et al., 1977), and those who were only sexual with their partners after marriage (labeled as “Abstaining” by Peplau et al, 1977).

To compare these three groups we conducted a Multivariate Analysis of Covariance; an analysis particularly appropriate for comparing groups of participants on correlated dependent variables with several control variables. The independent variables were the Sexual Timing Group and Gender, with the dependent variables being Communication, Sexual Quality, Satisfaction, and Perceived Stability. The control variables were Religiosity, Relationship Length, Education, and the Number of Sexual Partners.

The results from the MANCOVA indicated that Sexual Timing Group and Gender had a significant effect on the dependent variables while holding the control variables constant. The multivariate F -test for Sexual Timing Group was significant, Wilks’s $\Lambda = .96$, $F(8, 3812) = 11.01$, $p < .001$. The multivariate F -test for Gender was significant, Wilks’s $\Lambda = .99$, $F(4, 1906) = 5.17$, $p < .001$. The covariates were significantly related to the outcome measures at $p < .001$. The multivariate F -test for the interaction between Sexual Timing Group and Gender was not significant, Wilks’s $\Lambda = .99$, $F(8, 3812) = 0.72$, $p = .676$.

Since the multivariate tests were significant for the two independent variables, it was appropriate to consider the univariate results. To evaluate the effect sizes of the independent variables on the dependent variables the partial eta squared statistic (η^2) was used. The univariate F -test associated with Sexual Timing Group was significant for the dependent variable Communication, $F(2, 1919) = 21.80$, $p < .001$, partial $\eta^2 = .02$; for the dependent variable Sexual Quality $F(2, 1919) = 12.10$, $p < .001$, partial $\eta^2 = .01$; for the dependent variable Relationship Satisfaction $F(2, 1919) = 20.94$, $p < .001$, partial $\eta^2 = .02$; and for the

Table 2
Standardized Total Effects of the Variables in the Model on Perceived Relationship Stability and Relationship Satisfaction for Females and Males

Variable	Relationship satisfaction		Perceived stability	
	Females	Males	Females	Males
Religiosity	.16	.16	.16	.18
Relationship length	-.11	-.09	-.11	-.04
Education	.02	.02	.05	.04
Number of sexual partners	-.05	-.04	-.12	-.12
Sexual timing	.15	.21	.22	.28
Communication	.52	.49	.47	.48
Sexual quality	.40	.38	.23	.16

dependent variable Perceived Relationship Stability $F(2, 1919) = 40.05, p < .001, \text{partial } \eta^2 = .04$.

The univariate F -test associated with Gender was significant for the dependent variable Communication, $F(1, 1919) = 5.03, p < .05, \text{partial } \eta^2 = .003$; for the dependent variable Relationship Satisfaction $F(1, 1919) = 9.33, p < .01, \text{partial } \eta^2 = .005$; and for the dependent variable Perceived Relationship Stability $F(1, 1919) = 12.32, p < .001, \text{partial } \eta^2 = .006$. The univariate F -test associated with Gender was not significant for the dependent variable Sexual Quality $F(1, 1919) = .03, p = .877, \text{partial } \eta^2 = .000$.

With significant multivariate and univariate F -tests the next step was to explore the specific differences between each sexual timing group on the dependent variables through step-down F -Tests, using the Bonferroni method to control for multiple comparisons. The means and standard deviations for the three sexual timing groups and gender on the four dependent variables are presented in Table 3. The means in Table 3 demonstrate that the Sexual Timing Group that participants belonged to had the strongest association with Perceived Relationship Stability and Satisfaction as all three groups were significantly different from each other. In other words, the longer participants waited to be sexual, the more stable and satisfying their relationships were once they were married. Gender had a relatively small influence on the dependent variables. For the other dependent variables, the participants who waited to be sexual until after marriage had significantly higher levels of communication and sexual quality compared to the other two sexual timing groups.

Discussion

For many individuals, sexual involvement in the early stages of dating is seen as an important part of testing relationship compatibility and determining if the relationship should proceed toward deeper levels of commitment. The conventional wisdom in the current dating culture is that couples should test their "sexual chemistry" before moving to deeper stages of commitment. The prevailing perspective is that romantic involvement during emerging adulthood provides an opportunity for individuals to explore their sexuality in the context of their feelings of love for and perceptions of being loved by their partner. If this theory is correct, sexual restraint during couple formation should be

negatively correlated with later relationship outcomes for couples who decide to marry. The results of this study do not support this theory. With the sample in this study it is clear that the longer a couple waited to become sexually involved the better their sexual quality, relationship communication, relationship satisfaction, and perceived relationship stability was in marriage, even when controlling for a variety of other variables such as the number of sexual partners, education, religiosity, and relationship length.

One explanation for these results is the sexual restraint theory presented in the introduction section. It is likely that two mechanisms are at work, underdeveloped relationships and inertia. In regard to underdeveloped relationships, it is possible that early sexual involvement focuses the relationship more on physical and sexual aspects of both the partner and the relationship and less on issues of communication and commitment. The results that show that delayed sexual timing is associated with increased quality of the communication and the sexual areas of the relationship, as well as perceived relationship stability are consistent with this theory. It is interesting that sexual timing is more strongly related to communication than it is to sexual quality and more strongly related to perceived relationship stability than it is to relationship satisfaction. It may be that relationships that are founded more on sexual rewards and pleasures early on end up resulting in more fragile relationships in the long-term. These findings are consistent with the research and theory presented by Stanley and associates (Stanley & Markman, 1992; Stanley et al., 2006) on their commitment model of couple relationships. In general, commitment theory makes a distinction between forces that motivate connection, called dedication, versus forces that increase the costs of leaving, called constraint.

Using these constructs, Stanley and Markman (1992) propose a concept of couple formation that they call "*relationship inertia*." The central idea of inertia is that some couples who otherwise would not have married end up married partly because they become "prematurely entangled" (Glenn, 2002) in a relationship prior to making the decision to be committed to one another. Inertia suggests that it becomes harder for some couples to veer from the path they are on, even when doing so would be wise (see Stanley et al., 2006 for a full discussion of this theory and related issues). Although research on cohabitation led to

Table 3
Means (Standard Deviations) for Females and Males in the Three Sexual Timing Groups on Communication, Sexual Quality, Relationship Satisfaction, and Perceived Relationship Stability

Dependent variable	1. Early sex		2. Later sex		3. Married sex	
	Females ($N = 413$)	Males ($N = 333$)	Females ($N = 524$)	Males ($N = 371$)	Females ($N = 179$)	Males ($N = 150$)
Communication	3.3 (.57)	3.4 (.54)	3.5 ^a (.58)	3.5 (.54)	3.7 ^a (.63)	3.8 ^a (.55)
Sexual quality	3.5 (1.1)	3.4 (1.1)	3.5 (1.0)	3.5 (1.1)	4.0 ^a (.98)	3.9 ^a (.97)
Satisfaction	3.0* (1.1)	3.2 (.95)	3.2 ^a (1.0)	3.3 ^a (.94)	3.7 ^{a*} (1.1)	3.8 ^a (.87)
Perceived stability	3.6 (.97)	3.7 (.90)	3.8 ^{a*} (.91)	3.9 ^a (.84)	4.3 ^a (.79)	4.4 ^a (.62)

^a Significantly different than all other sexual timing groups of the same gender.

* Significantly different than the males in the same group.

Stanley and Markman's (1992) development of the concept of relationship inertia, they proposed that similar consequences are possible when couples "slide" into couple transitions, such as sexual involvement, without deliberate choice and commitment.

The primary focus here is that when people slide through major relationship transitions the decreased level of deliberation may lower the odds of pro-relational behaviors. Furthermore, sexual involvement without clear commitment can represent an ambiguous state of commitment for many partners. The ambiguity of early sexual initiation may undermine the ability of some couples to develop a clear and mutual understanding about the nature of their relationships. In contrast, commitment-based sexuality is more likely to create a sense of security and clarity between partners and within their social networks about exclusivity and a future. The results from this study support these propositions.

Nevertheless, it is important to consider the limitations of this study and the moderate effects in the model before concluding that sexual compatibility is not supported. The sample in this study is clearly not representative and consists of a more educated, white population than a random sample would have produced. Also the distribution of participants into different religious denominations is not representative of national norms. It is possible that the associations between sexual timing and relationship outcomes are different with segments of the population that were underrepresented in this study. A longitudinal sample where couples were asked about the meaning of their first sexual involvement, regardless of the timing, would have resulted in a clearer test of these theories than the sample we evaluated. It may be that some couples were not sliding into sexual involvement, no matter how early or late it occurred in their relationship. Longitudinal analyses would also provide a clearer test of the association between sexual timing with actual relationship stability instead of the perceived stability that we measured.

The strength of the associations of sexual timing with the other variables in this study are moderate, and in the group analysis are often small. Consequently to state that the results indicate that people who engage in early sexual relations are at great risk for relationship problems would be an error. Clearly there are many other aspects of relationship functioning that are not measured in our study. It may be that other variables such as attachment and personality are better explanations for the patterns in this study that should be included in the future studies. However, the findings of this study also suggest that to state that couples who delay or abstain from sexual involvement prior to marriage are disadvantaged or at greater risk for sexual and relationship problems is also an error.

Nevertheless, authors studying sexuality have often attributed the different patterns of sexual timing in relationships to be primarily about religious values and culture (Laumann, Gagnon, Michael, & Michaels, 1994; Regnerus 2007). Because we have controlled for religiosity, we have been able to demonstrate that sexual timing has a unique effect beyond religious involvement. If the effect of sexual timing is not just about religiosity, it may be more related to

concepts of poor mate selection, lower levels of commitment to marriage, comparing partners with alternatives, and normalizing breakups as discussed by several authors (Kaestle & Halpern, 2007; Stanley et al, 2006; Teachman, 2003). Since in our study sexual timing had its strongest relationship to communication, we speculate that the rewards of sexual involvement early on may undermine other aspects of relationship development and evaluation such that individuals may not put as much energy into crucial couple processes such as communication and may stay with partners who are not as skilled in these processes, thereby resulting in a marriage that is more brittle. The significant relationship between sexual timing and perceived relationship stability in our results further supports these speculations.

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