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A Longitudinal Investigation of Commitment Dynamics in Cohabiting Relationships

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Abstract

This longitudinal study followed 120 cohabiting couples over 8 months to test hypotheses derived from commitment theory about how two types of commitment (dedication and constraints) operate during cohabitation. In nearly half the couples, there were large differences between partners in terms of dedication. These differences were associated with lower relationship adjustment, even controlling for overall level of dedication. Further, among couples who believed in the institution of marriage, cohabiting women were, on average, more dedicated than their partners. Additionally, there was evidence that constraints (e.g., signing a lease, having a joint bank account) may make it less likely that couples will break-up, regardless of relationship dedication. This finding was strongest for women and for those with higher income levels.

Cohabitation represents a relatively new stage in relationships in the United States. Before 1970, living together outside of marriage was uncommon, but by the late 1990s at least 50% or 60% of couples lived together premaritally (Bumpass & Lu, 2000; Stanley, Whitton, & Markman, 2004). This rise in cohabitation is important because research shows that this stage in relationships is associated with low relationship quality relative to marriage (Skinner, Bahr, Crane, & Call, 2002) and greater psychological distress (Brown, 2000a). Further, links have been established between premarital cohabitation and later marital distress and divorce (e.g., Cohan & Kleinbaum, 2002; Kamp Dush, Cohan, & Amato, 2003; Kline et al., 2004; Stanley et al., 2004; Woods & Emery, 2002). A better understanding of cohabitation may increase researchers' and practitioners' knowledge about predicting and maintaining family stability.

The underlying mechanism for the association between premarital cohabitation and risk for marital dissolution is not well understood. The most often cited explanations are selection and experience. That is, it is either due to the types of people who cohabit (e.g., less religious) or due to something about the experience of cohabitation itself (see Brown & Booth, 1996; Cohan & Kleinbaum, 2002; Smock, 2000; Woods & Emery, 2002). After years of debate in the literature, however, the reasons for the association remain opaque.

Commitment is a construct that has received relatively little attention in the cohabitation literature, although it has strong potential for helping elucidate why cohabitation appears to be an unstable relationship stage. When it has been examined in light of cohabitation, commitment has often been defined in very basic terms, such as whether or not a couple has plans to marry (e.g., Brown & Booth, 1996). In the current study, Stanley and Markman's (1992) commitment theory was used as a framework for developing hypotheses about how two types of commitment (dedication and constraint) would be associated with relationship adjustment and perceived likelihood of relationship dissolution during cohabitation.

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Theories about commitment were initially developed to explain why some relationships that are unsatisfying persist (Rusbult, Coolsen, Kirchner, & Clark, 2006). Theories about commitment in romantic relationships were often based on broader theories from sociology and psychology, such as social exchange and opponent-process theories. Although there are some differences across the major theories of commitment, most distinguish factors that make it difficult to terminate relationship from an intrinsic motivation to maintain one's relationship (e.g., Adams & Jones, 1997; Johnson, Caughlin, & Huston, 1999; Rusbult & Buunk, 1993). Among the models that make this distinction, we focus on Stanley and Markman's (1992) model because we used their measure of commitment in the current study. As they note, most models that are related to commitment include similar constructs that can be organized based on the specific research questions in mind. One model can be translated into another.

In a manner highly consistent with views of commitment put forth by Levinger (1965) and Johnson et al. (1999), Stanley and Markman's (1992) perspective on commitment contrasts forces related with the desire to persist in a relationship and forces that make it costly or difficult to leave regardless of that desire. They refer to factors that make terminating a relationship more difficult as *constraints*. Constraints can be moral obligations to stay together, structural or financial investments in the relationship, the perception of other partners or situations as less appealing than one's current relationship, and concern for the welfare of one's partner. On the other hand, *dedication* refers to a personal desire to be in a relationship with one's partner and to maintain it in the future. This construct is similar to Johnson et al.'s (1999) personal commitment. People who are highly dedicated tend to make sacrifices for their partners and relationships and to think in terms of "we" and "us" (Stanley & Markman, 1992). Dedication and constraint commitment are sometimes associated, as one may choose to become more constrained because he or she feels dedicated and behaviors undertaken because of dedication today may lead to increased constraints in the future. Thus, constraints do not always *feel* constraining and they therefore do not uniformly represent a negative or positive aspect of commitment. However, we focus on financial and structural investments (e.g., we pay rent together, we have a joint cell phone account) here, which happen to be kinds of constraints that are least related to dedication, with correlations ranging from $-.07$ to $.13$ in previous research (Owen, Rhoades, Stanley, & Markman, in press).

Several hypotheses tested in the present paper rely on a concept closely related to Stanley and Markman's (1992) commitment theory called inertia. Inertia theory has been used to explain why premarital cohabitation is associated with a increased risk for divorce (e.g., Kline et al., 2004). It suggests constraints will typically increase when a couple moves in together and also throughout cohabitation. In turn, these constraints are posited to make it more difficult to terminate the relationship (Stanley, Rhoades, & Markman, 2006). In this model, it is suggested that while cohabitation likely increases constraints and the costs of leaving a relationship, there is nothing about the experience of cohabitation that would increase dedication at the same time. Thus, some cohabiting couples may wind up staying together longer than they would otherwise, or even marrying due to constraints, even if they are not dedicated enough to make the marriage satisfying and stable. Essentially, the broad hypothesis behind the inertia theory is that the experience of cohabitation leads some people at lower levels of relationship satisfaction and dedication to remain with and end up marrying someone they would not have married if they had never cohabited (Stanley et al., 2004; Stanley et al., 2006).

Accordingly, those who entered cohabitation with mutual plans for marriage should not be subject to the process of inertia nor to constraints in the same way those without plans marriage are because they have already clarified their marital intentions. Thus, according to

inertia theory, those who begin cohabitation without plans should have the highest risk for marital problems (Stanley et al., 2006). Support for this prediction comes from research showing that married couples who lived together before they were engaged more marital distress and higher risk for divorce than couples who lived together only after engagement or not at all before marriage (Kline et al., 2004; Goodwin, Mosher, & Chandra, 2010; Rhoades, Stanley, & Markman, 2009b; Stanley, Rhoades, Amato, Markman, Johnson, in press). To our knowledge, no study has examined the broader aspects of inertia during cohabitation; the studies mentioned above have been conducted with married samples and are retrospective in nature. Examining constraints during cohabitation has the potential to provide more direct evidence regarding the inertia theory. Thus, the present study tested hypotheses about constraints that were based on inertia theory in a longitudinal study of cohabiting couples.

In addition to examining constraints, the current study examined dedication dynamics in cohabiting relationships. Inertia theory suggests that couples who live begin cohabitation without mutual plans for marriage are likely to have more asymmetrical levels of dedication than those who have plans before they begin cohabiting (Stanley et al., 2006). After all, those who have plans for marriage before cohabiting have already clarified a mutual and relatively high level of dedication and should therefore experience fewer asymmetries in dedication. However, no research, to our knowledge, has examined what we test here: whether it is the case that cohabiting partners who entered cohabitation without plans for marriage are more likely to have discrepant levels of dedication than those without plans. After marriage, there is evidence that men who lived with their spouses premaritally report lower dedication than men who did not live with their spouses (Stanley et al., 2004) and, more directly related to inertia theory, married men who lived with their partners before engagement have reported lower levels of dedication than their wives (Rhoades, Stanley, & Markman, 2006). The present study tested for these within-couple gender differences in dedication levels during cohabitation.

Taking the issue of asymmetrical commitment a step further, we also examined possible longitudinal implications of differences between partners in dedication levels. Previous research based on interdependence theory indicates that perceived mutuality of commitment is associated with relationship satisfaction (Drigotas, Rusbult, & Verette, 1999). That is, individuals who see themselves and their partners as equally committed tend to have higher levels of relationship satisfaction. Based on this research, the current study examined whether differences in dedication between partners predicted lower levels of later relationship adjustment.

Hypotheses

The present study tested hypotheses based on inertia theory in a three-wave longitudinal study of 120 couples in opposite-sex cohabiting relationships. Our first hypothesis concerned constraints. We predicted that during cohabitation, increasing structural and financial constraints (e.g., sharing a lease or mortgage, sharing debt, adopting a pet, listing one another as beneficiary) would be associated with lower perceived likelihood of relationship dissolution and higher perceived likelihood of marriage, controlling for dedication. Although the perception of the likelihood of having a future overlaps some with the construct of dedication, dedication is based in the desire to maintain the relationship into the future whereas questions regarding likelihood are predictions that could be based on dedication, constraint, and other factors. Based on prior research regarding gender and economic standing in cohabitation (Avellar & Smock, 2005), we also tested whether gender and income moderated the associations between constraints and perceived likelihood of dissolution or marriage, but we made no predictions about moderation.

Our second and third hypotheses were related to Stanley and Markman's (1992) other broad category of commitment: dedication. Our second hypothesis was: among couples who did not have mutual plans to marry before they began cohabiting, men will be less dedicated than their female partners. The third hypothesis was: discrepancies between partners in dedication at the initial assessment will be associated with lower relationship adjustment over time. Given that we believe it is the difference between partners' dedication levels that matters most for relationship adjustment and because a difference between partners could be associated related to partners' absolute levels of dedication, we control for partners' levels of dedication in the analyses for hypotheses 2 and 3.

Method

Participants

Participants were 120 couples ($N = 240$) in opposite-sex cohabiting relationships. Women, on average, were 27.74 years old ($SD = 5.69$ years), had completed 16.46 ($SD = 2.19$) years of education, and made \$20,000–29,000 annually, while men were 29.93 years old ($SD = 6.93$ years), had completed 16.13 ($SD = 2.66$) years of education, and made \$30,000–39,000 annually. The race/ethnicity breakdown for was 82.5% White, 4.2% Asian, 4.2% Hispanic, .8% Black, and 4.1% other; 4.2% did not report their ethnicity. The men in the sample were 89.2% White, .8 Asian, 5.0% Hispanic, .8% Black, and 1.7% other; 2.5% did not report their ethnicity. At the first assessment, couples had been in their relationships for 173.08 weeks (slightly more than three years; $SD = 112.06$ weeks) and the median length of cohabitation was just less than a year and a half ($Mdn = 75.14$ weeks, $M = 100.47$ weeks, $SD = 104.08$ weeks). Most women (89.2%) and men (87.4%) had never been married and few couples (9.16%) reported that they had children living with them.

Procedure

The sample and the procedure used for the present study has been described in detail in another paper that was focused on a different subset of variables (Rhoades, Stanley, & Markman, 2009a). Briefly, recruitment announcements for this study were sent to national listservs and online announcement boards and individuals interested in participating emailed a project manager. Those who qualified (by being unmarried and living with a romantic partner of the opposite sex) were mailed two sets of forms, one for each partner. Of the 252 packets mailed for the first assessment (T1), 120 couples returned both packets and qualified for participation. Following T1, two additional assessments were mailed out, three months apart. For T2, 88 men and 101 women returned their forms. The average time between T1 and T2 was 3.89 months ($SD = 1.23$, $Mdn = 3.58$, $Range = 2.27 - 9.70$ months). For T3, 75 men and 96 women returned their forms. The average time between T1 and T3 was 7.67 months ($SD = 1.47$, $Mdn = 7.50$, $Range = 5.23 - 11.47$ months). Two couples broke up between T1 and T2, therefore they were not mailed T3 forms and their T2 data were not included in the present analyses. Additionally, five couples broke-up between T2 and T3; their T3 data were excluded. Participants were entered into a lottery for \$50 each time they returned forms.

Measures

Dedication—The 14-item dedication subscale from the Commitment Inventory (Stanley & Markman, 1992) was used to assess dedication at every time point. The dedication scale has demonstrated high levels of internal consistency across a range of samples and has demonstrated validity through theoretically consistent relationships with a range of variables (e.g., Adams & Jones, 1997; Owen et al., in press; Stanley & Markman, 1992). The scale measures the construct of dedication broadly and includes items that tap making the relationship a priority ("My relationship with my partner is more important to me than

almost anything else in my life”), couple identity (e.g., “I like to think of my partner and me more in terms of ‘us’ and ‘we’ than ‘me’ and ‘him/her’”), meta-commitment (e.g., “I don’t make commitments unless I believe I will keep them”), sacrifice for the relationship (e.g., “It makes me feel good to sacrifice for my partner”), and desiring a long-term relationship (e.g., “I want this relationship to stay strong no matter what rough times we encounter”). The response scale ranged from 1 (strongly disagree) to 7 (strongly agree). The dedication scale was internally consistent; for men, Cronbach’s alpha (α) = .86, for women α = .87. Scores reflect the mean of the items and could range from 1 to 7. In this sample, actual scores ranged from 2.14 to 7 (M = 5.64, SD = .84).

Constraints—The Joint Activities Checklist was developed for this study. It includes 25 external factors that may serve to reinforce individuals staying together, such as owning a house together, paying for each other’s credit cards, having a pet, having paid for future vacation plans, making home improvements together, signing a lease, or having a joint-bank account. It was designed as an objective measure of constraints, meaning it asks respondents about specific behaviors as opposed to perceptions of constraining forces. It was scored using a simple sum of the items checked. Pearson correlations were then calculated to determine within-couple agreement on the number of items checked. The measure demonstrated high reliability reflected by high within-couple agreement, $r(120)$ = .82 (indicating that an individual’s report is likely a reliable reflection of the couple’s constraints), and also acceptable internal consistency (for men, α = .78, for women α = .79). To measure construct validity, we included the four-item structural investments subscale of Stanley and Markman’s (1992) Commitment Inventory at T1. This subscale taps perceived structural investments in the relationship (e.g., “I have put a number of tangible, valuable resources into this relationship”) on a 1 (strongly disagree) to 7 (strongly agree) response scale. The structural investments subscale demonstrated rather low internal consistency in this sample (α = .59 for men, .65 for women), but it was nevertheless significantly correlated with scores on the Joint Activities Checklist, as was expected (for men, $r(118)$ = .32, p < .05; for women, $r(118)$ = .29, p < .05). In addition, we wished to establish that this scale was measuring a separate construct from dedication. Dedication and Joint Activities Scale scores were not significantly correlated (r = .15 for men, .18 for women, ps > .05), indicating that these scales measure different aspects of the broad construct of commitment. Total scores on the Joint Activities Checklist could range from 0 to 25. In this sample, actual scores ranged from 0 to 25 (M = 8.51, SD = 4.47).

Perceived likelihood of dissolution—The relationship instability item from the National Survey of Families and Households was used to measure participants’ predictions about future relationship dissolution at every time point. The item asked respondents to assess the probability that the relationship would dissolve on a 5-point Likert scale (i.e., “How likely is it that your current relationship will dissolve?”). This item has been shown to be valid in other research (e.g., Brown, 2000a, 2000b). Internal consistency could not be calculated for this single item measure, but test-retest reliability was .69 for T1 to T2 (n = 188), .50 for T1 to T3 (n = 148), and .48 for T2 to T3 (n = 138). Scores could range from 1 to 5. In this sample, actual scores ranged from 1 to 5 (M = 1.58, SD = .80).

Perceived likelihood of marriage—A continuous item, “How likely is it that you and your partner will get married?” was used to assess perceived likelihood of marriage at every time point. Participants indicated their responses on a 5-point Likert scale. This format of this item is based on the dissolution item used in the National Survey of Families and Households (described above) and the wording is based on another item within the National Survey of Families and Households that has been shown to be valid (see Ciabattari, 2004). Internal consistency could not be calculated for this single item measure, but test retest

reliability was .77 for T1 to T2 ($n = 178$), .72 for T1 to T3 ($n = 135$), and .71 for T2 to T3 ($n = 110$). Scores could range from 1 to 5. In this sample, actual scores ranged from 1 to 5 ($M = 3.95$, $SD = 1.30$). This measure was moderately negatively correlated with perceived likelihood of dissolution, averaging across time points, $r = .42$.

Relationship adjustment—The brief, 7-item Dyadic Adjustment Scale, a widely used measure with high reliability and validity (see Hunsley, Best, Lefebvre, & Vito, 2001; Spanier, 1976), was used to assess relationship adjustment at every time point. The items assess general happiness in the relationship, frequency of disagreements, and frequency of positive activities. Here, α was .74 for men and .71 for women. Scores could range from 7 to 43. In this sample, actual scores ranged from 17 to 40 ($M = 32.41$, $SD = 3.78$).

Beliefs about the institution of marriage—For some analyses, it was necessary to exclude participants who did not believe in the institution of marriage (see Results). On a form that was otherwise not included in the present paper's analyses, all participants responded to the following item at T1, "I don't believe in the institution of marriage." The response scale ranged from 1 (strongly disagree) to 7 (strongly agree). Participants who marked a five or higher were excluded in some analyses (for reasons explained in the Results).

Income—As part of the T1 demographics form, participants were asked to report their personal annual income. They marked boxes ranging from "under \$4,999" to "over \$70,000." Because this scale cannot be assumed to be interval, we divided the sample into two income groups based on the median: those making less than \$30,000 (70 women and 51 men) and those making more than \$30,000 (50 women and 67 men). Two men were missing data.

Mutual plans to marry before cohabitation—For some hypotheses, we wished to examine differences between cohabitations that began only after a couple had made a commitment to marry versus those which began without plans for marriage. Coding of whether the couple had mutual plans to marry before they began cohabiting was based on the question, "Had the two of you already made a specific commitment to marry when you first began sharing an address?" The response options were: *Yes, we were/are engaged*, *Yes, we are/were planning marriage but we were/are not yet engaged*, or *No*. Couples in which both partners answered, "Yes, we were engaged" or "Yes, we were planning marriage, but were not yet engaged" to this question were coded as having plans to marry prior to cohabitation ($n = 17$ couples; "marriage plans before cohabitation"). Couples who disagreed ($n = 14$ couples) about whether they had made plans for marriage before beginning cohabitation or who agreed that they did not have plans ($n = 86$ couples) were coded as not having mutual plans. Three individuals were missing data on this variable, so they and their partners could not be categorized. Thus, for analyses involving the variable about plans for marry, only 117 couples could be included.

Results

Data Analytic Plan

The central hypotheses were tested using multilevel modeling and the HLM 6.02 software (Raudenbush, Bryk, & Congdon, 2004). We chose this type of analysis because it handles data from multiple time points exceptionally well, even when time points are not equal in number across cases or equally spaced (Raudenbush & Bryk, 2002). Additionally, it models within-couple variation and allowed us to track trajectories over time. We followed Atkins' (2005) suggestion that a three-level model be used for data from couples in which Level 1

reflects time-variant individual characteristics, Level 2 reflects time-invariant individual characteristics, and Level 3 reflects time-invariant couple characteristics.

Hypothesis Tests

Hypothesis 1: constraints—We first tested whether constraints increased over time during cohabitation using the following model.

$$\begin{aligned}
 \text{Level 1: } Y_{tij} &= \pi_{0ij} + \pi_{1ij}(\text{Time})_{tij} + \varepsilon_{tij} \\
 \text{Level 2: } \pi_{0ij} &= \beta_{00j} + r_{0ij} \\
 &\quad \pi_{1ij} = \beta_{10j} \\
 \text{Level 3: } \beta_{00j} &= \gamma_{000} + u_{00j} \\
 &\quad \beta_{10j} = \gamma_{100} + u_{10j}
 \end{aligned} \tag{1}$$

In this model, the outcome variable (Y) reflected is constraints (Joint Activities Checklist score); t indexed time (in months) since T1, i indexed partners within a couple, and j indexed couples. There were four separate error terms, all of which were assumed to be normally distributed: ε_{tij} was the residual error term; r_{0ij} was a random intercept term at the individual level; and u_{00j} was a random intercept term at the couple level and u_{10j} was a random slope term at the couple level. *Time* was uncentered, so that the intercept term could be interpreted as the mean score at T1. As expected, there was a significant increase in constraints over time. At the initial time point, participants reported an average of 7.86 constraints; over time (γ_{100}), this number increased at a rate of .17 constraints per month ($SE = .035$, $t(116) = 4.68$, $p < .001$).

Next, to test the hypothesis that during cohabitation more constraints would be associated with lower perceived likelihood of relationship dissolution and higher perceived likelihood of marriage, controlling for dedication, we used the following Level 1 equation; no fixed effects were entered at Levels 2 or 3, therefore these are equations are not shown. *Time*, *Constraints*, and *Dedication* were grand-mean centered, so that their coefficients represent average scores across all available time points.

$$\text{Level 1: } Y_{tij} = \pi_{0ij} + \pi_{1ij}(\text{Time})_{tij} + \pi_{2ij}(\text{Dedication})_{tij} + \pi_{3ij}(\text{Constraints})_{tij} + \varepsilon_{tij} \tag{2}$$

Separate analyses were conducted with likelihood of dissolution and likelihood of marriage as outcome variables. In the initial models, there were five error terms, all of which were assumed to be normally distributed: ε_{tij} was the residual error term; r_{0ij} and r_{1ij} were random intercept and slope (for *Time*) terms at the individual level (Level 2); u_{00j} and u_{10j} were a random intercept and slope (for *Time*) terms at the couple level (Level 3). The initial model indicated that there was not significant variation between partners (r_{1ij}) or between couples (u_{10j}) in the slopes for either perceived likelihood of dissolution or likelihood of marriage, so these two random effects were removed from the final models presented in Table 1.

The results of these analyses indicated a small significant negative association between constraints across all time points and the perceived likelihood of relationship dissolution when controlling for dedication (Table 1). However, there was a not significant association between constraints and the perceived likelihood of marriage when controlling for dedication.¹ Thus, our first hypothesis was only partially supported.

We next examined moderators of the association between constraints and likelihood of dissolution and marriage, controlling for dedication. To test for moderation, we added Gender or Income as fixed effects to the Level 2 equations for π_{0-3ij} in separate models.

These moderators were uncentered. These analyses indicated that both gender and income significantly moderated the association between constraints and likelihood of dissolution, controlling for dedication. With regard to gender, women experienced a stronger negative association between constraints and likelihood of dissolution (controlling for dedication) than men ($B = .04$, $SE = .01$, $t(535) = 2.66$, $p < .01$). Regarding income level, those making less than \$30,000 annually experienced a weaker negative association between constraints and likelihood of dissolution controlling for dedication than those making more than \$30,000 annually ($B = .04$, $SE = .02$, $t(535) = 2.22$, $p < .05$).² There were no significant moderation effects for perceived likelihood of marriage.

Partial correlations are useful in demonstrating how income and gender moderate the relationship between constraints and the likelihood of dissolution, controlling for dedication. Averaging across time, the partial correlation for likelihood of dissolution and constraints (controlling for dedication) for those making less than \$30,000 annually was $r = -.04$ whereas $r = -.18$ for those making more than \$30,000 annually. With regard to gender, the partial correlation for likelihood of dissolution and constraints (controlling for dedication) for men was .03 whereas $r = -.27$ for women, averaging across time.

Hypothesis 2 and 3: dedication discrepancies—Before testing the hypotheses related to within-couple discrepancies in dedication, some basic descriptive information may be helpful. At the first assessment, 29% of couples were ones in which the woman had a dedication score one standard deviation or more above her partner's score and 17% of couples were couples in which the man had a dedication score one standard deviation or more above his partner's score. Thus, in almost of half of the couples in this sample, there was what can be considered a large discrepancy in partners' dedication levels.

To test the second hypothesis, that men would be less dedicated than their female partners in cohabiters who did not have mutual plans for marriage before cohabitation, but not among cohabiters with plans, we used the following model.

$$\begin{aligned} \text{Level 1: } Y_{ij} &= \pi_{0ij} + \pi_{1ij}(\text{Time})_{ij} + \varepsilon_{ij} \\ \text{Level 2: } \pi_{0ij} &= \beta_{00j} + \beta_{01j}(\text{Gender}) + r_{0ij} \\ &\quad \pi_{1ij} = \beta_{10j} + \beta_{11j}(\text{Gender}) \\ \text{Level 3: } \beta_{00j} &= \gamma_{000} + \gamma_{001}(\text{Marriage Plans Before Cohabitation}) + u_{00j} \\ &\quad \beta_{01j} = \gamma_{010} + \gamma_{011}(\text{Marriage Plans Before Cohabitation}) \\ &\quad \beta_{10j} = \gamma_{100} + \gamma_{101}(\text{Marriage Plans Before Cohabitation}) \\ &\quad \beta_{11j} = \gamma_{110} + \gamma_{111}(\text{Marriage Plans Before Cohabitation}) \end{aligned}$$

Plans Before Cohabitation was a dummy-coded variable (0 = did not have mutual plans to marry before cohabitation, 1 = did have mutual plans before cohabitation), as was *Gender* (0 = female, 1 = male). The *Time* variable was grand-mean centered, so that the intercept term could be interpreted as the average dedication score across all available assessment points. The results are presented in Table 2. They did not support our hypothesis, as there was not a significant Plans Before Cohabitation X Gender interaction. There was not a main effect of

¹Given that individuals who don't believe in the institution of marriage may have rated their likelihood of marriage differently from those who do believe in marriage, we also ran these analyses on constraints and likelihood of marriage just among the subsample of couples in which both partners believe in marriage as an institution. Even among this subsample, there was not a significant association between constraints and likelihood of marriage when controlling for dedication, nor was this association significantly moderated by gender or income.

²In a separate analysis, we found that those with income levels higher than \$30,000 reported significantly more constraints than those with income levels less than \$30,000.

gender, but there was a main effect of *Marriage Plans Before Cohabitation*, indicating that both men and women who had mutual plans to marry before cohabiting reported higher levels of dedication, averaging across time, than those who did not have mutual plans before beginning to cohabit.

Because Rhoades et al.'s (2006) finding of gender asymmetry in dedication levels was in married couples, the most direct test for replication of this finding would be to run the above model while constraining the sample to include only couples in which both partners reported that they believe institution of marriage ($n = 88$ couples; Table 2). When the current hypothesis was retested with this subsample, we found a significant main effect of gender which indicated that women reported significantly higher dedication scores (averaging across time, $M = 5.81$, $SD = .75$) than their partners (averaging across time, $M = 5.60$, $SD = .83$). The results of this analysis were otherwise similar to the analysis with the full sample. As in the previous analysis, there was not a significant *Marriage Plans Before Cohabitation X Gender* interaction and there was a main effect of *Marriage Plans Before Cohabitation*. Thus, among those who believe in marriage, those who had developed plans for marriage before cohabitation were more dedicated during cohabitation than those who had not and, in partial support of our hypothesis, women were, on average, more dedicated than their partners (regardless of whether the couple had made plans to marry or not).

The third hypothesis was that discrepancies between partners in dedication at T1 would predict lower relationship adjustment, regardless of which partner, male or female, scored lower. To test this hypothesis, we used the following model.

$$\begin{aligned} \text{Level 1: } Y_{ij} &= \pi_{0ij} + \pi_{1ij}(\text{Time})_{ij} + \varepsilon_{ij} \\ \text{Level 2: } \pi_{0ij} &= \beta_{00j} + \beta_{01j}(\text{Initial Dedication}) + r_{0ij} \\ \pi_{1ij} &= \beta_{10j} + \beta_{11j}(\text{Initial Dedication}) + r_{1ij} \\ \text{Level 3: } \beta_{00j} &= \gamma_{000} + \gamma_{001}(\text{Initial Dedication Difference}) + u_{00j} \\ \beta_{01j} &= \gamma_{010} \\ \beta_{10j} &= \gamma_{100} + \gamma_{101}(\text{Initial Dedication Difference}) \\ \beta_{11j} &= \gamma_{110} \end{aligned}$$

Here, the outcome (Y) was relationship quality (measured by the Dyadic Adjustment Scale). Individuals' T1 dedication scores were entered at Level 2 so that they were controlled for. *Time* was grand-mean centered. *Initial Dedication Difference* was the absolute value of the difference in partners' scores within couples at the initial assessment; this variable was entered at Level 3 because it is a couple-level variable.

The results of this analysis (Table 3) indicated that differences between partners in dedication at the first assessment were, as hypothesized, significantly predictive of relationship adjustment, controlling for level of dedication. Additionally, initial dedication was predictive of relationship adjustment, controlling for discrepancies in dedication levels between partners. There was not significant linear change in relationship adjustment over time, though there was a trend toward significant for the Time X Dedication Difference interaction, indicating that a larger difference is associated with more decline in relationship adjustment over time.

Discussion

Broadly, we predicted that the process of living together would result in increases in constraints, regardless of dedication to the relationship. Further, we predicted that

differences in partners' levels of dedication would be associated with lower quality relationships. These predictions stemmed from prior research on the association between premarital cohabitation and marital distress and divorce, and from Stanley et al.'s (2006) inertia theory. These hypotheses were generally supported in the present study.

Increasing Constraints

As noted earlier, commitment theories suggest that constraints such as financial investments and values about divorce can serve to keep couples together regardless of the desire to remain together (Johnson, 1999; Rusbult & Buunk, 1993; Stanley & Markman, 1992). Here, we examined structural and financial constraints such as holding a lease together, sharing credit card debt, owning a pet together, or naming one another as a beneficiary. These constraints increased over the eight months of this study. That is, the longer couples lived together, the more constraints they acquired. This finding is consistent with inertia theory. Stanley et al. (2006) suggest that cohabitation may increase constraints (but not dedication), encouraging some couples to stay together and perhaps even marry when they would not have stayed together if they had not cohabited. The findings here support the first part of this concept that cohabiting couples experience more and more constraints over time.

Findings related to the first hypothesis are also in line with Stanley et al.'s theory, for they suggest that cohabiting partners may find it harder to terminate their relationships if they make various kinds of investments together. The association between constraints and perceived difficulty of terminating the relationship was strongest for women and for those with income levels above \$30,000. The association was independent of dedication, meaning that regardless of one's intrinsic desire to be with one's partner in the future, constraints could make it harder to break-up.

There are several possible reasons for why the association was stronger for women than men. It may be that women are aware of the gender disparity in the economic consequences of terminating a cohabitation (see Avellar & Smock, 2005) or that they worry about what their lifestyles would be like more than their male partners. They likely have more to lose financially than their partners. It is also possible that, even when controlling for dedication, women are more likely to perceive the development of some constraints as a type of nest building (more so than men), thereby affecting their assessments of dissolution likelihood.

One might have expected that the association between constraints and likelihood of dissolution would be stronger for those with lower income levels than those with higher income, for it seems as though it would be harder for individuals with lower income levels to terminate their relationships after constraints increase because they have fewer financial resources to live on their own than those with higher income levels. The results indicated just the opposite. Part of the reason for this finding might be that those with higher income levels had developed more constraints than those with lower income levels. Additionally, this sample did not include many individuals living in poverty, and it may be that in a sample of individuals with much lower income levels than included here, there would be a stronger association between constraints and perceived likelihood of dissolution. The findings here demonstrate the importance of continuing to examine the influence income level might have on cohabitation experiences.

If replicated, the findings from this study could have important implications for people considering cohabitation. Most young adults believe that cohabitation is a good way to test a relationship before marriage (Glenn, 2005) and it may be true that partners learn important information about each other during cohabitation. However, individuals may also find it harder to break off the relationship because of constraints, even if the partner or relationship fails the test. Further, because premarital cohabitation is linked with risk for marital distress

and divorce (Cohan & Kleinbaum, 2002; Kamp Dush et al., 2003), it seems as though cohabitation may be a risky way to test compatibility. Furthermore, those who explicitly cohabit to “test” the relationship, tend to have lower relationship quality (Rhoades et al., 2009a). The combination of these new findings and previous research suggests that it may be important to help individuals realize that constraints will likely build over time and that constraints during cohabitation, regardless of dedication, may make it seem less likely that the relationship will end.

Importantly, we did not find support for the prediction that constraints would be associated with perceived likelihood of marriage when accounting for dedication to the relationship. It may be that constraints are less important when one is considering an active transition like marriage, rather than a more passive act, like remaining in the relationship (as the measure of likelihood of dissolution encompasses to some degree). We also recognize that an eight-month time period may not be enough time capture variability in perceived likelihood of marriage. Further, the use of scales rather than single-items (used in the current study) might provide more valid indices of perceptions of the likelihood of both dissolution and marriage, and actual marriage and dissolution data would be especially valuable in future research. Longer term follow up with more frequent measurement would also allow tests of whether increases in constraints over time are associated with increases in likelihood of marriage or decreases in likelihood of dissolution. In fact, the strongest tests of research questions regarding constraints would come from a study that measured couples before they started cohabiting and followed them throughout the cohabitation experience.

Differences in Dedication

Based on research showing that married men who live with their partners before engagement may be less dedicated than their wives (Rhoades et al., 2006), we predicted that men in couples who did not have mutual plans to marry when they started cohabiting would be less dedicated than their partners. In actuality, we found that men were less dedicated than their girlfriends regardless of plans to marry, though this pattern was only observed for the subgroup of couples who believed in the institution of marriage. The vast majority of individuals in the United States marry, therefore our finding that, for couples who believe in marriage, cohabiting men are less dedicated than their partners seems quite relevant. Waller's (1938) principle of least interest (see Sprecher, Schmeeckle, & Felmlee, 2006) would suggest that in these relationships, women may be at a disadvantage in terms of relational power because they are the ones who are more committed. Particularly if they are unaware of the difference in commitment, women may wind up making more sacrifices for their relationships than their partners, and these unrequited sacrifices could be detrimental if the relationship ends.

Within-couple discrepancies in dedication were common in this sample. There existed a meaningful (one standard deviation) difference between partners in 46% of the couples and the magnitude of the difference predicted lower relationship adjustment in later months, even when controlling for initial dedication levels. These findings are consistent with Drigotas et al.'s (1999) study in which perceived mutuality in partner commitment levels was linked with higher relationship adjustment. They extend the work of Drigotas et al. by demonstrating that *actual* differences in mutuality of commitment are predictive of relationship adjustment. These findings are important because they suggest there is something salient about the difference in dedication, aside from the level of dedication. Future research might explore whether partners are aware of differences in dedication and if they experience specific conflict around commitment issues. Higher conflict in general or about commitment specifically could help explain lower relationship adjustment later on and could be a specific target for relationship education or intervention efforts.

Limitations and Future Directions

There were several limitations to the present study. First, as mentioned above, our single item measures of likelihood of dissolution and marriage could be improved upon in future work. Moreover, objective data on actual break-up and marriage, rather than perceived likelihood of these events, would be especially useful, though it would require longer term designs. Our measure of dedication was moderately correlated with perceived likelihood of break-up and marriage. These associations between dedication and perceived likelihood of break-up and marriage suggest that the significant findings regarding constraints predicting perceived likelihood of break-up controlling for dedication are likely more conservative than they would be if we had actual break-up and marriage data. Second, the size of subsample of participants with plans to marry before starting to cohabit was small, and it may have limited statistical power to detect differences between relationship status groups in the fourth hypothesis. A larger sample of couples with mutual plans to marry before cohabitation could provide a better test of the prediction that couples in this group would be less likely to experience discrepancies in dedication than those without prior mutual plans for marriage. Third, the sample in the present study was a convenience sample and generalizability across other ethnicities, age groups, and income levels is therefore limited. Snowball sampling, in which participants suggest participation to other people they know, may have increased homogeneity of the sample with regard to race and ethnicity, as well as economic status and education level. As described earlier, it seems particularly important that future research examine generalizability to lower income levels. A random sample of cohabiting of individuals or a sample stratified to match the ethnicities and income levels of the United States population would provide important data about the broader experience of cohabitation. Lastly, retention was difficult in this study, likely because participants were unpaid and because unmarried young adults tend to be particularly mobile, making it difficult to track them.

With these limitations in mind, the present findings extend a growing body of research focused on illuminating the possible mechanisms behind the links between premarital cohabitation and marital distress and divorce. More generally, the findings contribute to understanding of commitment dynamics during cohabitation and how constraints and dedication are linked with relationship outcomes. Cohabitation before or instead of marriage is becoming increasingly common and building a knowledge base of the dynamics and pathways of risk associated with cohabitation is especially important in order to inform future relationship education efforts.

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Associations between Constraints and Perceived Likelihood of Dissolution and Marriage, Controlling for Dedication

Table 1

Fixed Effect	Outcome: Likelihood of Dissolution				Outcome: Likelihood of Marriage			
	B	SE	t	df	B	SE	t	df
Intercept	1.63***	0.04	38.90	117	3.94	0.10	40.73***	117
Time	-0.00	0.01	-0.24	542	-0.00	0.01	-0.03	542
Constraints	-0.02*	0.01	-1.99	542	-0.01	0.01	-0.56	542
Control variable: Dedication	-0.48***	0.04	-13.40	542	-0.39	0.05	7.60	542
Random Effect	Variance Component				Variance Component			
		SD	χ^2	df		SD	χ^2	df
τ_{0ij}	0.04	0.21	160.41**	115	0.08	0.29	175.94***	115
u_{00j}	0.13	0.36	312.78***	117	0.97	0.98	1019.74***	117
e_{1ij}	0.24	0.49			0.37	0.61		

Notes. B = unstandardized regression coefficient; SE = standard error of regression coefficient; t = t-statistic; df = approximated degrees of freedom.

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

Table 2
Tests of Gender Differences in Dedication for Full Sample and for the Subsample of those who Believe in Marriage

Fixed Effect	Full Sample				Believe-in-Marriage Subsample			
	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>
Intercept	5.57***	0.08	71.19	116	5.73***	0.09	67.97	84
Gender	-0.07	0.10	-0.77	232	-0.24*	0.11	-2.31	167
Marriage Plans	0.52*	0.21	2.53	116	0.34 ⁺	0.20	1.68	84
Gender X Marriage Plans	-0.07	0.25	-0.29	232	0.26	0.25	1.02	167
Time	0.01	0.01	0.77	540	0.01	0.01	0.89	385
Time X Gender	0.00	0.01	-0.24	540	-0.00	0.02	-0.32	385
Time X Marriage Plans	0.06*	0.02	-2.59	540	-0.07**	0.03	-2.69	385
Time X Marriage Plans X Gender	0.03	0.03	0.91	540	0.03	0.04	0.82	385

Notes. *B* = unstandardized regression coefficient; *SE* = standard error of regression coefficient; *t* = t-statistic; *df* = approximated degrees of freedom.

⁺ $p < .10$,

* $p < .05$,

** $p < .01$,

*** $p < .001$.

Table 3

Within-Couple Differences in Dedication Predicting Relationship Adjustment

Fixed Effect	<i>B</i>	<i>SE</i>	<i>t</i>	<i>df</i>
Intercept	24.77***	1.46	16.95	115
Dedication Difference	−0.96*	0.40	−2.40	115
Initial Dedication Level	1.47***	0.23	6.33	230
Time	0.03	0.22	0.13	531
Time X Dedication Difference	−0.09 ⁺	0.05	−1.80	531
Time X Initial Dedication Level	−0.00	0.04	−0.04	531
Random Effect	Variance Component	<i>SD</i>	χ^2	<i>df</i>
τ_{0ij}	2.92***	1.71	283.13	112
u_{00j}	5.21***	2.28	359.61	115
e_{tij}	4.24	2.06		

Notes. *B* = unstandardized regression coefficient; *SE* = standard error of regression coefficient; *t* = t-statistic; *df* = approximated degrees of freedom.

⁺ $p < .10$,

* $p < .05$,

** $p < .01$,

*** $p < .001$.