



# Before “I Do”

What Do Premarital Experiences Have to Do with Marital Quality Among Today’s Young Adults?

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## INTRODUCTION

If you happened to be hanging out in the magazine aisle this spring, you know that the hot news in Hollywood gossip was Angelina Jolie and Brad Pitt’s wedding plans. After almost ten years and six children together, the couple would be taking a step toward tying the knot, according to reports.

Brangelina’s experience is increasingly representative of contemporary American family life. Pitt and Jolie were two highly successful people keen on being together and having children, but not necessarily interested in getting married right away, if at all. In this, they are a lot like other Hollywood couples who had kids before tying the knot: Ben Affleck and Jennifer Garner, Guy Ritchie and Madonna, Tom Cruise and Katie Holmes, and, in the news lately, Ashton Kutcher and his pregnant fiancée Mila Kunis.

These are not just Hollywood love stories. They represent broader cultural trends. More and more, the major milestones of a relationship are occurring prior to marriage rather than after.

Every serious relationship marks certain big milestones, from the first kiss to the DTR (“defining the relationship”) talk. The order of those milestones could be called the relationship sequence. Today, the typical relationship sequence is radically different than it was for much of American history. In the past, especially for women, the relationship sequence that most aimed to follow went like this: courtship led to marriage, which led to sex, cohabitation, and children. Today, marriage comes near the end of the line. About ninety percent of couples have sex before marriage, according to one study (Finer, 2007), and about four in ten babies are born to unmarried parents (Martin et al., 2013). Most couples live together before getting married (Copen, Daniels, & Mosher, 2013). Couples, in other words, build a lot of history, both together and with prior partners, before deciding to spend their lives together. Jolie was divorced twice and Pitt once before the two of them got together.

This relationship sequence—with sex, cohabitation, and sometimes children preceding marriage—has become the norm in our society. But it raises some interesting questions. Do our premarital experiences, both with others and our future spouse, affect our marital happiness and stability down the line? Do our prior romantic entanglements harm our chances of marital bliss? And once we find “the one,” do the choices we make and experiences we have together as a couple before and on the big day influence our ability to have a successful marriage? These questions are important, of course, because about 80 percent of today’s young adults report that marriage is an important part of their life plans (Hymowitz et al., 2013).

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To answer these questions, we analyzed new data from the Relationship Development Study. Between 2007 and 2008, more than one thousand Americans who were unmarried but in a relationship, and between age 18 and 34, were recruited into the study. Over the course of the next five years, 418 of those individuals got married. We looked closely at those 418 new marriages. We examined the history of the spouses’ relationship, looked at their prior romantic experiences, and asked them about the quality of their marriages.

After analyzing the data, we came to three major conclusions that we will discuss in greater depth in this report:

- 1– What happens in Vegas doesn’t stay in Vegas, so to speak. Our past experiences, especially when it comes to love, sex, and children, are linked to our future marital quality.
- 2– Some couples slide through major relationship transitions, while others make intentional decisions about moving through them. The couples in the latter category fare better.
- 3– Choices about weddings seem to say something important about the quality of marriages.

Our first major conclusion challenges what we'll call the Vegas Fallacy—the idea that what happens in Vegas stays in Vegas. Actually, what people do before marriage appears to matter. Specifically, how they conduct their romantic lives before they tie the knot is linked to their odds of having happy marriages.

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Consider sex. The vast majority of Americans—about 90 percent—have sex before marriage (Finer, 2007). Many of them have sex with multiple partners before finding the person they will eventually marry. Do premarital sexual relationships relate to later marital quality? Yes and no. It depends on who you are having sex with. Men and women who only slept with their (future) spouse prior to marriage reported higher marital quality than those who had other sexual partners as well. Further, for women, having had fewer sexual partners before marriage was also related to higher marital quality. This doesn't mean that sex before marriage will doom a marriage, but sex with many different partners may be risky if you're looking for a high-quality marriage.

Our second major conclusion revolves around the way people go through important relationship transitions. “Sliding versus deciding” is a theme we'll return to throughout the entire report. Relationships, as we have mentioned, go through various important milestones—like having sex for the first time, moving in together, getting engaged, getting married, and having children. Each transition involves consequential decisions: Do we move in together after we're engaged or before, or do we wait until after we marry? Do we have kids before we get married or after? Do we want to have a wedding or elope?

How couples handle these choices seems to matter. Some make definitive decisions that move them from one stage of a relationship to another. Others are less intentional. Rather than consciously deciding how and when to transition to the next stage of the relationship, they slide through milestones without prior planning. Our findings show that couples who slide through their relationship transitions have poorer marital quality than those who make intentional decisions about major milestones.

Decisions matter. At times of important transitions, the process of making a decision sets up couples to make stronger commitments with better follow-through as they live them out. This is undoubtedly why all cultures have rituals that add force to major decisions about the pathway ahead. We tend to ritualize experiences that are important. Couples who decide rather than slide are saying “our relationship is important, so let's think about what we're doing here.” Making time to talk clearly about potential transitions may contribute to better marriages.

Our final set of findings is related to the biggest ritual of most relationships: the wedding. We discovered that having more guests at the wedding is associated with higher marital quality. This pattern held when we controlled for factors such as income and education, which are proxies for how much the wedding might have cost. It may be that having community support both while you date and through your marriage is very important for marital quality.

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One obvious objection to this study is that it may be capturing what social scientists call “selection effects” rather than a causal relationship between our independent variables and the outcome at hand. That is, this report's results may reflect the fact that certain types of people are more likely to engage in certain behaviors—such as having a child prior to marriage—that are correlated with experiencing lower odds of marital quality. It could be that these underlying traits or experiences, rather than the behaviors we analyzed, explain the associations reported here. This objection applies to most research that is not based on randomized experiments. We cannot prove causal associations between the personal and couple factors we explore and marital quality.

We do control for a range of variables, such as education, race/ethnicity, and religiousness, that might otherwise explain the association between the factors this study analyzes and marital quality. We also track our respondents longitudinally over time, so we know that their behaviors precede their marital outcomes and not vice versa. Moreover, we offer explanations for why we think the experiences of the men and women in this study might plausibly have an impact on their marital futures.

Finally, we believe that arguments about selection can be taken too far, and end up implying deterministically that individuals have no power to affect their odds of achieving success in relationships or other areas. We take the view that both selection and personal choices matter for how life unfolds. In this report, we focus more attention on experiences that people can control to some degree. With the help of our research, we hope current and future couples will better understand the factors that appear to contribute to building a healthy, loving marriage in contemporary America.

## PRIOR ROMANTIC RELATIONSHIPS

You don't have to consult social scientists to know that sex before marriage is the norm among young Americans. In our sample, the average respondent reported having five sexual partners before marriage. Do those prior romantic relationships impact couples' marital well-being? Many in Generation YOLO (you only live once) believe that what happens while you're young won't affect your future. But our research paints a different picture.

Prior research suggests that if the only person you had sex with prior to marriage was your eventual spouse, your odds of marital stability are good. Data collected in the 1990s on women who married a generation ago (men weren't included) showed that women who had sex with only their future spouse before marriage were at no greater risk for divorce than those who waited until marriage to have sex (Teachman, 2003).

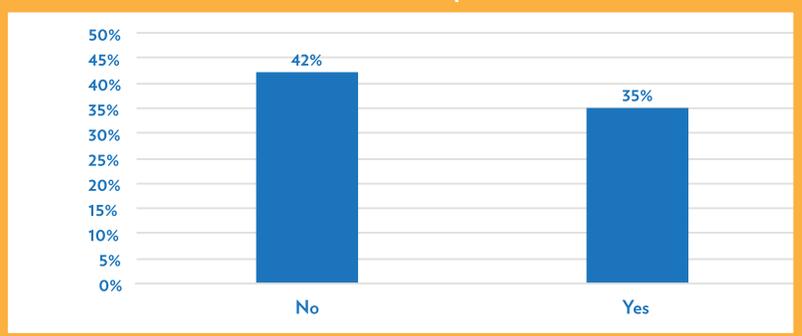
But that's not most people. In our sample, only 23 percent of the individuals who got married over the course of the study had had sex solely with the person they married. That minority of men and women reported higher marital quality than those who had had sex with other partners prior to marriage. We further found that the more sexual partners a woman had had before marriage, the less happy she reported her marriage to be. This association was not statistically significant for men.

There are two other related premarital risk factors for low marital quality in our research sample: Having lived with someone other than a future spouse and/or having been married previously. These findings echo other research showing that having cohabited with multiple partners is a risk factor for divorce (Lichter & Qian, 2008) and that second marriages are more prone to divorce than first marriages (Bramlett & Mosher, 2001).

To illustrate findings throughout the report, we use bar charts in which we define high-quality marriages as those that score in the top 40 percent on a measure of overall marital quality. For convenience, we refer to these as "higher-quality marriages." To put it in terms of percentiles, this group is at or above the sixtieth percentile: according to their own reports, they have better marriages than the other 60 percent of our sample. Clearly, these couples are doing well above average when it comes to their marital quality.

Figure 1 shows that 35 percent of those who cohabited with someone other than their spouse before marrying reached

Figure 1: Percent in Higher-Quality Marriages, by Lived with Romantic Partner Other than Future Spouse



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

## Methods

Data for the analyses in this report come from the Relationship Development Study at the University of Denver, which was initially funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development.

In 2007 and 2008, a calling center used a targeted-list sampling strategy to recruit 1,294 participants who were unmarried at the time, but in a relationship with someone of the opposite sex, into the longitudinal Relationship Development Study. The 418 participants who married over the course of the next five years are the focus of the analyses conducted for this report. They were between the ages of 18 and 40 during the study.

Comparing the make-up of the larger sample to 2010 Census data indicates that it was reasonably representative of unmarried adults in the United States in terms of race/ethnicity and income, though the sample included more women (65 percent) than men.

In the report, before- and after-marriage data from an average of nine waves and multilevel modeling were used to prospectively estimate how premarital characteristics are related to marital quality.

Marital quality was measured by the four-item version of the Dyadic Adjustment Scale, a scale that includes items about marital happiness, confiding in one another, believing things are going well in the relationship, and thoughts of divorce (Sabourin, Valois, & Lussier, 2005; Spanier, 1976).

The analyses described in this report control for the following factors: race/ethnicity, years of education, personal income, religiousness (i.e., “All things considered, how religious would you say you are?”), and frequency of attendance at religious services. Findings with and without the control variables are included in Table 2 in the Appendix.

The primary findings discussed in this report analyze the outcome, marital quality, as a continuous measure. To facilitate a visual representation of the associations in this report, we illustrate key findings by graphing the percentage of individuals who fall in the top 40 percent of marital quality. This cut point was selected by inspection of the distribution. While it is somewhat arbitrary, we reasoned that these people are not just doing “above average” in their marriages, but are doing quite well. Dichotomizing marital quality in this way provides a means to display groups’ relative likelihood of reporting higher levels of marital quality.

the top 40 percent of marital quality, whereas 42 percent of those who had not cohabited at all or cohabited only with their spouse before marriage were in the top 40 percent. Cohabiting only with their future spouse raised respondents' chances of being in a flourishing marriage.

As a whole, these findings demonstrate that having more relationships prior to marriage is related to lower marital quality. In some ways, that seems counterintuitive: Why would having more experience be associated with worse outcomes? We generally operate under the assumption that people with more experience, in a job, for example, are experts and therefore better than novices or new hires. Shouldn't having more relationship experience also make people wiser in their love lives?

One reason that more experience could lead to lower marital quality is that more experience may increase one's awareness of alternative partners. A strong sense of alternatives is believed to make it harder to maintain commitment to, and satisfaction with, what one already has (Rusbult & Buunk, 1993; Thibaut & Kelley, 1959). People who have had many relationships prior to their current one



can compare a present partner to their prior partners in many areas—like conflict management, dating style, physical attractiveness, sexual skills, communication ability, and so on. Marriage involves leaving behind other options, which may be harder to do with a lot of experience.

**Having had more relationship experiences prior to marriage also means more experience breaking up. A history of multiple breakups may make people take a more jaundiced view of love and relationships.**

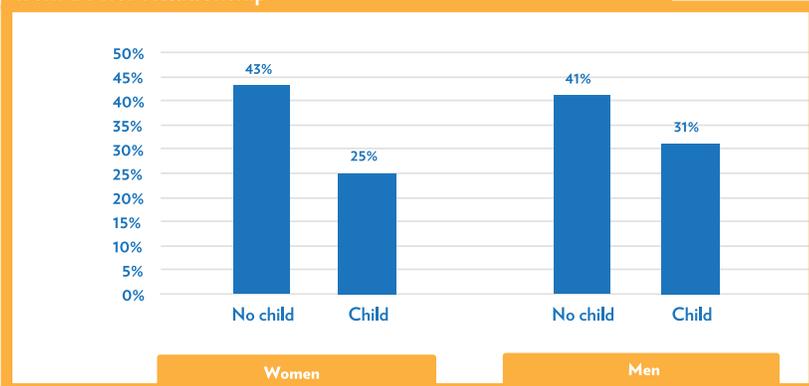
Having had more relationship experiences prior to marriage also means more experience breaking up. A history of multiple breakups may make people take a more jaundiced view of love and relationships.

Another way marriage is complicated by prior relationship experiences is through children. In our sample, 16 percent of the newly married individuals had children from prior relationships and 16 percent reported that their partners had children

from prior relationships. (These groups overlapped somewhat; a total of 24 percent of respondents reported that they and/or their partner had a child from a prior relationship.) Although there are mixed findings on the impact of having children on marital happiness (Kluwer, 2010), there is no question that raising children from prior relationships can add stress to

a marriage (Bray & Hetherington, 1993; Bumpass, Sweet, & Martin, 1990; Monte, 2011). We found that for women, but not for men, having had a child in a prior relationship was associated, on average, with lower marital quality.

**Figure 2: Percent in Higher-Quality Marriages, by Had a Child from a Prior Relationship**



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services. The difference between the “no child” and “child” categories is statistically significant for women, but not men.

Figure 2 illustrates this finding: only 25 percent of women who had a child from a prior relationship were in the top 40 percent of marital quality, whereas 43 percent of women who did not have a child from a prior relationship were in the top 40 percent. The percentages for men were 31 percent

and 41 percent, respectively. In other words, both men and women experienced lower marital quality if they had children from previous relationships, but the difference was larger and statistically significant for women. This difference is likely attributable to the fact that women are far more likely to have custody and therefore to have their children from prior relationships living with them and their new husbands.

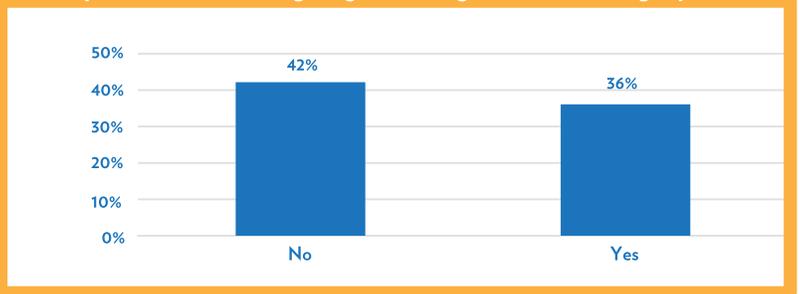
Of course, this finding about children from prior relationships parallels the findings covered above about cohabitation and prior romantic experiences. Those who have children from prior relationships are more likely to have cohabited with and to have had more romantic relationships with people who are not their current partner. All of these now-common premarital experiences seem to pose an interrelated set of risks to marriages down the road.

## BEFORE THEY SAID “I DO”: HOOKING UP, COHABITING, AND HAVING KIDS

The experiences that you have (or do not have) with your spouse before marrying are also linked to the quality of your marriage.

One-third (32 percent) of individuals in our sample reported that their relationship with their eventual spouse began as a hook-up. We did not give an exact definition of hooking up, but let people classify their relationship’s beginning themselves with the question, “Did the history of you two being together begin with hooking up?” Those who answered yes reported, on average, lower marital quality than those who answered no. [Figure 3](#) illustrates this finding, showing that 36 percent of individuals whose relationship with their spouse began as a hook-up reached the top 40 percent of marital quality, versus 42 percent of those who did not report their relationship beginning this way.

Figure 3: Percent in Higher-Quality Marriages, by “Did the History of You Two Being Together Begin with Hooking Up?”



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

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**In general, couples who wait to have sex later in their relationship report higher levels of marital quality.**

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These findings are consistent with what others have found about the association between marital quality and how long a couple waited before they had sex (Busby, Carroll, & Willoughby, 2010; Sassler, Addo, & Lichter, 2012). In general, couples who wait to have sex later in their relationship report higher levels of marital quality. There are many possible explanations for this link. One is that some people who are already more likely to struggle in romantic relationships—such as people who are impulsive or insecure—are also more likely to have

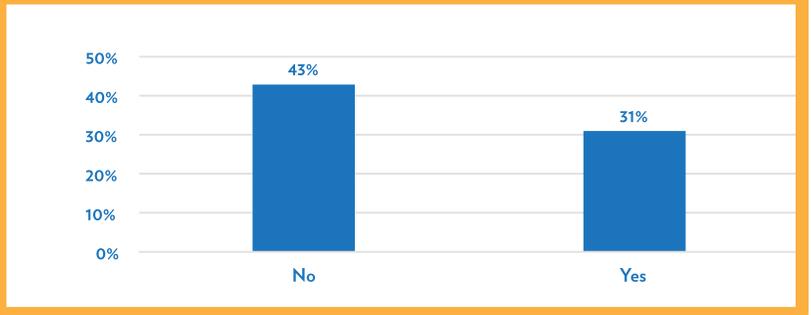
casual sex. Those in our study who reported that their relationship began by hooking up also tended to report having more sexual partners.

A second possible explanation for this finding is that relationships that begin with a hook-up may be relationships whose partners are not as well matched on other characteristics that promote marital happiness, such as sharing similar worldviews, values, and interests. Certainly many relationships that begin with hook-ups do not end in marriage, but of those that do, some will likely have couples who were primarily drawn together because of sexual attraction before they could assess one another on other important aspects of compatibility. The context of hooking up may mean getting together under hazy circumstances, after something that “just happened” one night, and then sliding into a longer relationship.

No matter how their relationship starts, couples today soon face the question of whether to move in together. Although this association may have weakened in recent years, cohabitation before marriage has historically been associated with greater odds of divorce (Jose, O’Leary, & Moyer, 2010; Stanley, Rhoades, & Markman, 2006). In this study, those who lived with their eventual spouse before having a mutual and clear commitment to marry reported lower levels of marital quality than those who waited until after planning marriage or getting married to move in together. Controlling for race/ethnicity, education, income, and religiousness decreases the magnitude of the difference ( $p < .10$ ), but this finding matches what several published studies with a variety of data sets have reported (Goodwin, Mosher, & Chandra, 2010; Kline et al., 2004; Manning & Cohen, 2012; Rhoades, Stanley, & Markman, 2009a; Stanley, Rhoades, Amato, Markman, & Johnson, 2010).

Figure 4 shows the nature of this finding. Thirty-one percent of those who cohabited prior to having plans for marriage were in the top 40 percent of marital quality versus 43 percent of those who only cohabited after getting married or making a commitment to marry.

Figure 4: Percent in Higher-Quality Marriages, by Lived Together Before Making a Specific Commitment Together to Marry



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services

In theory, it seems like adjusting to living together before marrying would help a couple negotiate the transition to marriage more smoothly. So why might cohabiting before making a commitment to marry be associated with lower marital quality? One problem is that it may make it harder for a couple to break up (Rhoades, Stanley, & Markman, 2012). Cohabiting couples buy furniture together, adopt pets, sign leases, and get used to a routine of living in a certain place together, all constraints that may keep people in a relationship even when they are not sure they want to stay. Some may therefore slide into a marriage that they would have otherwise avoided (Kline et al., 2004; Stanley, Rhoades, et al., 2006; Stanley, Rhoades, & Whitton, 2010; Stanley, Whitton, & Markman, 2004). In short, living together creates a kind of inertia that makes it difficult to change course (Stanley, Rhoades, et al., 2006).

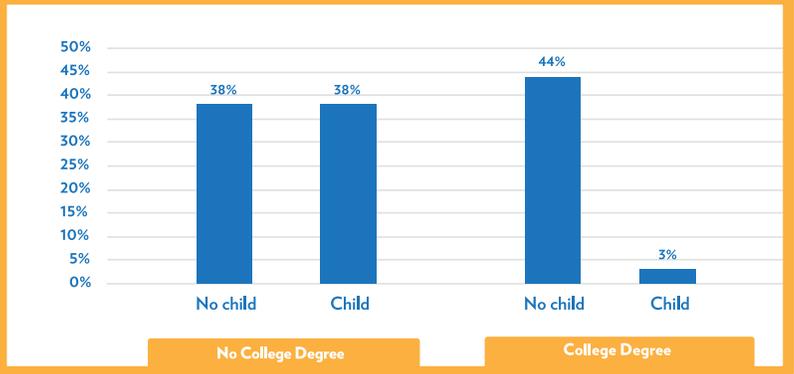


The problem of inertia is compounded by the fact that people tend not to make decisions about living together. Other researchers have found that many couples slide into living together, saying it “just happened” (Lindsay, 2000; Manning & Smock, 2005; Stanley, Rhoades, & Fincham, 2011). In this study, we asked our research participants directly if they slid into premarital cohabitation or made a decision about it. They could indicate their degree of sliding versus deciding on a five-point scale. The more strongly respondents categorized the move as a decision rather than a slide, the greater their marital quality later on. Why would making a decision matter? Making decisions consciously is related to a stronger commitment to follow through on those choices (Harmon-Jones & Harmon-Jones, 2002). This finding could also simply reflect that couples who deliberately decided to cohabit are better at talking about important transitions in general, a skill that could help them build a happy marriage.

The findings across this report on cohabitation bring up a difficult conundrum: how do you know for sure before living together that your partner is “the one”? If it is risky to live with someone you don’t wind up marrying, but you want to test the relationship or get to know each other’s habits before deciding whether to get married, what can you do? As we have noted elsewhere (Rhoades, Stanley, & Markman, 2009b, 2010), cohabiting may not be a good test of a relationship because constraints (e.g., merging finances, sharing friends, adopting a pet) may make it more difficult to end the relationship when you realize a partner has failed the test. Other ways to test a relationship, without increasing constraints, may be more beneficial: plan a trip together, meet each other’s parents, observe your boyfriend/girlfriend in many different settings, or seek other people’s opinions.

A third element from a couple’s premarital relationship that relates to marital quality is having a child together. Among couples in our sample, having a child together or being pregnant before marriage was associated with lower ratings of marital quality, but only for those with a college degree. For those without a college degree, having or expecting a child together before marriage was not associated with the quality of marriage. This finding is illustrated in Figure 5. Among those with a college degree, 44 percent of those without a child together before marriage were in the top 40 percent group for marital quality while 3 percent of couples with a child together before marriage were in the top group.

Figure 5: Percent in Higher-Quality Marriages, by Partners Shared a Biological Child Together or Were Pregnant Before Marriage

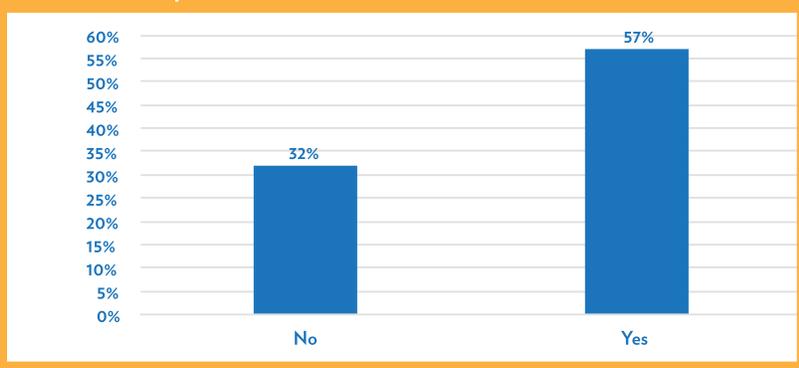


Within each subgroup, these percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services. The difference between the “no child” and “child” categories is statistically significant for those with a college degree.

Different social norms may explain why having children before marriage affects college-educated and non-college-educated couples differently. In this sample, only 7 percent of those with college degrees had a child together before marriage versus 31 percent of those without college degrees. This gap likely reflects and reinforces different perceptions about the acceptability of having children outside marriage.

There are at least two other reasons that these college-educated couples who have a child (or more than one) together or who are expecting a baby before marriage may struggle more. First, having a child before marriage may mean that a couple starts off their marriage with more strain related to family responsibilities and roles, which can lower their ability to build a sustained, positive connection at a critical time of relationship development (Kluwer, 2010). Second, while shotgun weddings are rarer now than they used to be, there are likely some people in this group who, due to discovering a pregnancy or having a child, felt compelled to marry a partner they wouldn’t have married otherwise

Figure 6: Percent in Higher-Quality Marriages, by Had Premarital Preparation



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

## Should I Stay or Should I Go?

Some of the risk factors we examined in our study represent warning signs that were apparent before a couple married. Couples may be able to overcome serious risk factors with determination and, sometimes, help from others, but each of the next three factors represents a grave problem that could become even worse down the road. In our view, each of these factors should raise a red flag and lead to serious consideration about the relationship's future.

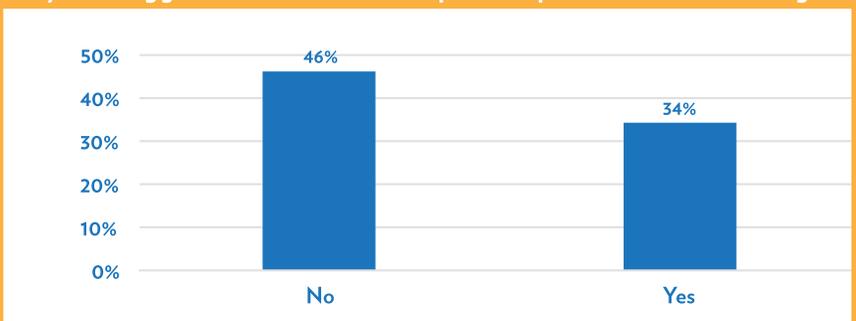
**Different commitment levels.** By commitment, we mean how much each partner desires a future together, how strongly he or she believes the two partners are on the same team, and how much he or she is willing to sacrifice for or give to the partner and the relationship. Most people consciously know how committed they are to their partner, and have some perception of how committed their partner is in return. We found that when one partner perceived his or her commitment as being stronger than the other partner's before marriage, he or she later reported lower marital quality than those who did not perceive such a difference in commitment.

**Premarital infidelity.** Though many behaviors and norms around relationships have changed dramatically over the decades, most people still expect sexual faithfulness in their relationships (Treas & Giesen, 2000). In this study, 16 percent of participants reported that while dating their eventual spouse, they themselves had sex with someone else. Further, 10 percent of the participants reported that they knew for sure that their eventual spouse had sex with someone else while they were dating. Reporting having had sex with someone else while dating their eventual spouse was not significantly associated with later marital quality, perhaps because in some significant number of cases, the partner did not know about the transgression (see Allen et al., 2005). Those who knew that their partner had cheated on them while they were dating, however, did experience lower marital quality later, although the magnitude of this finding was diminished after controlling for race/ethnicity, education, income, and religiousness.

**Physical aggression.** Those who reported having experienced physical aggression in their relationship prior to marriage reported lower marital quality later on. In this sample, 53 percent of respondents said that they had experienced or instigated one or more of these forms of aggression: grabbing, slapping, throwing something that could hurt, pushing or shoving, twisting the partner's hair or arm, sustaining an injury, or feeling physical pain the next day due to a fight with their partner. As Figure 7 illustrates, only 34 percent of those who reported aggression in their history with the person they married reached the top 40 percent of marital quality, whereas 46 percent of those who reported never experiencing aggression in their relationship reached the same level.

While the types and severity of aggression vary (e.g., Johnson & Leone, 2005), any form of aggression is a clear red flag in a relationship. Aggression is always dangerous, particularly to women and for any children who may be in the home. Aggression often indicates significant difficulty managing conflict or regulating strong emotions. Particularly when aggression is paired with controlling behavior (e.g., one partner isolates the other, threatens to harm the other or their children), ending the relationship may require some professional assistance, such as from the National Domestic Violence Hotline (1-800-799-SAFE) or a local domestic violence shelter.

**Figure 7: Percent in Higher-Quality Marriages, by Ever Reported Physical Aggression in Relationship with Spouse Before Marriage**



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

or who felt compelled to marry before they were ready. It is also important to keep in mind that because so few college graduates in our sample had a child together before marriage, this finding should be re-examined with a larger sample.

If moving in together and having a child together can be risky, how should you and your partner equip yourselves for the serious commitments marriage entails? One good way to prepare for marriage appears to be premarital education. Forty-three percent of our sample reported having participated in premarital education. Consistent with many studies (Carroll & Doherty, 2003; Fawcett, Hawkins, Blanchard, & Carroll, 2010; Stanley, Amato, Johnson, & Markman, 2006), those who reported having taken part in such services had higher marital quality than those who didn't. Figure 6 illustrates this finding, showing that 32 percent of those who did not have premarital preparation reported marital quality in the top 40 percent, versus 57 percent of those who did take part in premarital preparation.

In this sample, couples with risk factors for lower marital quality (e.g., certain socio-demographic risk factors) were the least likely to report having used premarital education. Thus, it seems that those who may most need such relationship education services have the least access to them (Stanley, Amato, et al., 2006; Sullivan & Bradbury, 1997).

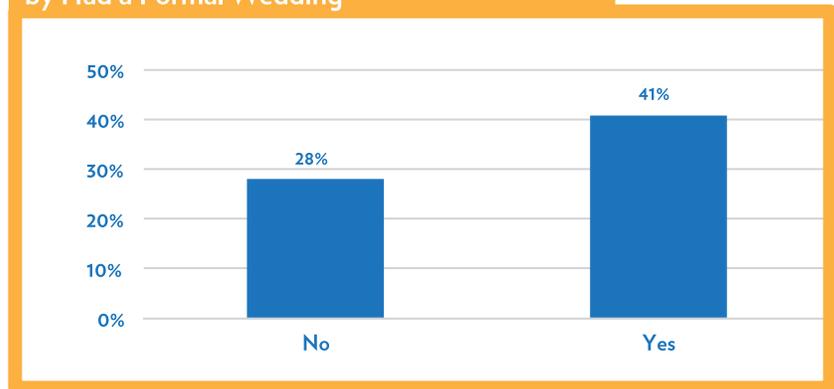
## THE WEDDING RITUAL: CEREMONY AND COMMUNITY

Most of the individuals who married over the course of our study, 89 percent in all, reported having had a formal wedding. Those who did reported higher marital quality than those who did not. Figure 8 depicts this finding, with 28 percent of those who did not have a formal wedding having marital quality in the top 40 percent of respondents compared to 41 percent of those who did have a wedding.

One interpretation of this finding is that not having a wedding is merely a reflection of other disadvantages or characteristics some couples have (other than those we've controlled for, such as income levels). For example, couples who are struggling or less happy in their relationship may be less likely to want to celebrate getting married. Relatedly, couples who already had a child together, or who had a child on the way, when they got married were less likely to have a formal wedding. But such factors do not explain all of the association we find between weddings and marital quality.

The finding may also have to do with the act of having a public ceremony, which symbolizes a clear decision to commit to one's marriage. As we discussed earlier, making a clear, deliberate decision to commit to one option and reject alternative options strengthens a person's tendency to follow through on the commitment. Wedding ceremonies ritualize the foundation of commitment.

Figure 8: Percent in Higher-Quality Marriages, by Had a Formal Wedding



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

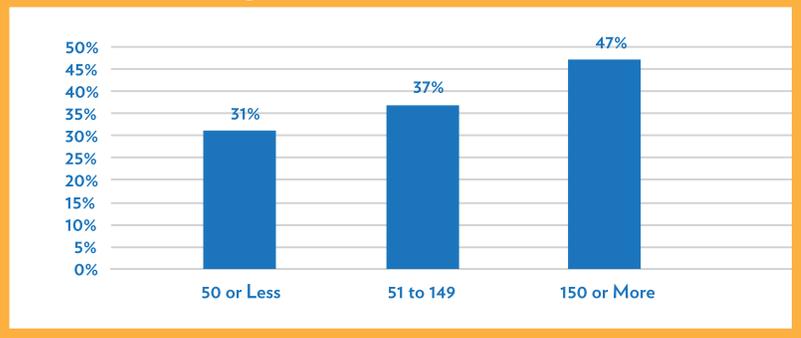
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**Making a clear, deliberate decision to commit to one option and reject alternative options strengthens a person's tendency to follow through on the commitment.**

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Small or large, wedding ceremonies also reflect and enhance the community context of marriages. Weddings, after all, are public celebrations involving family, close friends, and often a wider network of people around a couple. Emile Durkheim, the celebrated sociologist, is famous for arguing that community, and the rituals associated with collective life, give meaning, purpose, and stability to social life. The association between having a wedding and having a stronger, happier marriage could reflect two dynamics in this context. First, weddings may foster support for the new marriage from within a couple's network of friends and family. Second, those who hold a formal wedding are likely to have stronger social networks in the first place.

Figure 9: Percent in Higher-Quality Marriages, by Number of Wedding Attendees



These percentages are adjusted for race/ethnicity, years of education, personal income, religiousness, and frequency of attendance at religious services.

Specific aspects of a formal wedding may also be linked to the quality of a couple's marriage. We found that among our participants, having more guests at their wedding was associated with higher marital quality. To illustrate this association, we divided the sample into those who had weddings with 50 or fewer attendees, 51 to 149 attendees, or 150 or more attendees. Figure 9 displays the proportion of each group reporting high marital quality: of those with 50 or fewer attendees, 31 percent had marital quality in the top 40 percent; of those who had 51 to 149 attendees, 37 percent had marital quality in the top 40 percent; and of those who had 150 or more attendees, 47 percent had marital quality in the top 40 percent of the sample.

We expected this association between wedding guests and marital quality to be mostly related to having more economic means, but controlling for income and education (as well as race/ethnicity and religious differences, which we did not expect to be significant here) did not eliminate a strong association. We were unable to control for other variables that could be important, such as parental

income and the cost of the wedding. At the same time, there is some reason to believe that having more witnesses at a wedding may actually strengthen marital quality. According to the work of psychologist Charles Kiesler (1971), commitment is strengthened when it is publicly declared because individuals strive to maintain consistency between what they say and what they do.

We try to keep our present attitudes and behaviors in line with our past conduct. The desire for consistency is likely enhanced by public expressions of intention. Social scientist Paul Rosenblatt applied this idea specifically to marriage (Rosenblatt, 1977). He theorized that, early in a marriage, marital stability and commitment would be positively associated with the ceremonial effort and public nature of a couple's wedding. Rosenblatt specifically suggested that holding a big wedding with many witnesses would lead to a stronger desire—or even need—to follow through on the commitment. Our findings suggest that he may have been right. Nevertheless, it is also important to keep in mind that because these questions about weddings have received so little attention in prior studies and because only a small percentage of respondents reported not having a wedding, these findings should be tested in other samples.



## CAN I CHANGE MY ODDS?

There is no denying that relationships in the twenty-first century are fundamentally different than they were in the nineteenth and even twentieth centuries. The majority of couples have sex and move in together before they get married, and a substantial number of them end up having their first child prior to marriage (if they marry at all). The relationship sequence of the past no longer guides most young adults today.

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**What happens in Vegas—everything you do before settling down in marriage—may not stay there.**

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But there are ways to effectively navigate this new, complicated reality. First, people should realize the importance of the past. What happens in Vegas—everything you do before settling down in marriage—may not stay there. The ghosts of prior romances can haunt new ones. Those who have had more romantic experiences—for example, more sexual or cohabiting partners—are more likely to have lower-quality marriages than those with a less complicated romantic history. It is common among social scientists to dismiss these associations as being attributable to preexisting risks based in family, socio-economic context, or underlying personality traits (i.e., selection). Indeed, such background factors and prior risks matter quite a bit. At the same time, many associations between life experiences and marital quality do not disappear even after researchers control for background factors. Moreover, prior experiences of the sort we have emphasized here also reflect behaviors that people have some control over, and their choices can either constrain or protect their romantic and life options in the future. Avoiding one particularly high-risk relationship or avoiding having a child before marriage may alter the course of a person's life significantly, whatever his or her family and economic background.

Second, couples should beware of sliding through major relationship milestones rather than making decisions about them. Those milestones are critical for your future as an individual and as a couple. Transitions related to being officially “together,” having sex, moving in together, getting engaged, having a child, and planning a wedding are not trivial life events. When changes have the potential to be life-altering, people do well to decide rather than slide. For individuals, that means thinking carefully about what you want when it comes to romantic partners, sex, living together, and having children, and keeping these desires in mind as you navigate relationships. For couples, deciding means taking the time to communicate and to make mutual decisions when something important is at stake.

Finally, rituals and community matter. One of the most surprising findings to come out of our study concerned the wedding day. We found that couples who had more than 150 guests at their ceremony had the greatest marital quality down the line. We think this finding has to do with making a public declaration of commitment and having community support. The more support a couple has, the better they are able to navigate the occasional choppy waters associated with marriage. Many couples would do well to consider ways to be more connected, as couples, with others in the community. Maintaining important friendships and family connections, making new friends together, and getting involved in the community may enhance a couple's relationship in multiple ways (Amato, Booth, Johnson, & Rogers, 2007).

Though some people reading this report may have some of the characteristics and experiences we found to be associated with lower marital quality, no one is doomed to an unhappy marriage. Indeed, many of the readers of this report enjoy protective factors—such as a college education—that offset some of the risk factors identified above. Here are some suggestions for increasing your chances of marital success, even with risk factors in your past.

- 1– Adopt a deciding mindset going forward. Understand that future transitions may impact later outcomes, and make decisions that are right for you.
- 2– Talk with your partner about your background and your future relationship. For example, if you have lived

with other partners outside of marriage or if you are entering your second or third marriage, talk about how your experiences have impacted you and what positive lessons you have learned.

**3–** Consider seeking wise advice from others, perhaps through books, programs, workshops, or counseling. These can help you increase your odds of success in marriage.

**4–** If you and your partner have some characteristics as a couple that we described as being associated with lower marital quality (e.g., having had a child together before marriage) and you want to increase your chances of building and sustaining a strong relationship, consider talking through these issues together and attending a workshop or counseling. There is good evidence that couple therapy and relationship education programs work (e.g., Blanchard, Hawkins, Baldwin, & Fawcett, 2009; Christensen et al., 2004; Christensen & Heavey, 1999; Fawcett et al., 2010; Hawkins, Blanchard, Baldwin, & Fawcett, 2008).

Above all, our bottom-line advice to Americans hoping to marry is this: Remember that what you do before you say “I do” seems to have a notable impact on your marital future. So decide wisely.

## References

- Allen, E. S., Atkins, D. C., Baucom, D. H., Snyder, D. K., Gordon, K. C., & Glass, S. P. (2005). Intrapersonal, interpersonal, and contextual factors in engaging in and responding to extramarital involvement. *Clinical Psychology: Science and Practice, 12*(2), 101-130. doi: 10.1093/clipsy.bpi014
- Amato, P. R., Booth, A., Johnson, D. R., & Rogers, S. J. (2007). *Alone together*. Cambridge, MA: Harvard University Press.
- Blanchard, V. L., Hawkins, A. J., Baldwin, S. A., & Fawcett, E. B. (2009). Investigating the effects of marriage and relationship education on couples' communication skills: A meta-analytic study. *Journal of Family Psychology, 23*(2), 203-214. doi: 10.1037/a0015211
- Bramlett, M. D., & Mosher, W. D. (2001). First marriage dissolution, divorce, and remarriage: United States. *Center for Disease Control and Prevention Advance Data, 323*.
- Bray, J. H., & Hetherington, E. M. (1993). Families in transition: Introduction and overview. *Journal of Family Psychology, 7*(1), 3-8. doi: 10.1037/0893-3200.7.1.3
- Bumpass, L., Sweet, J., & Martin, T. C. (1990). Changing patterns of remarriage. *Journal of Marriage and Family, 52*(3), 747-756. doi: 10.2307/352939
- Busby, D. M., Carroll, J. S., & Willoughby, B. J. (2010). Compatibility or restraint? The effects of sexual timing on marriage relationships. *Journal of Family Psychology, 24*(6), 766-774. doi: 10.1037/a0021690
- Carroll, J. S., & Doherty, W. J. (2003). Evaluating the effectiveness of premarital prevention programs: A meta-analytic review of outcome research. *Family Relations, 52*(2), 105-118.
- Christensen, A., Atkins, D. C., Berns, S., Wheeler, J., Baucom, D. H., & Simpson, L. E. (2004). Traditional versus Integrative Behavioral Couple Therapy for significantly and chronically distressed married couples. *Journal of Consulting and Clinical Psychology, 72*(2), 176-191. doi: 10.1037/0022-006X.72.2.176
- Christensen, A., & Heavey, C. L. (1999). Interventions for couples. *Annual Review of Psychology, 50*, 165-190.
- Copen, C. E., Daniels, K., & Mosher, W. D. (2013). First premarital cohabitation in the United States: 2006-2010 National Survey of Family Growth. *National Health Statistics Reports 64*, 1-16.
- Fawcett, E. B., Hawkins, A. J., Blanchard, V. L., & Carroll, J. S. (2010). Do premarital education programs really work? A meta-analytic study. *Family Relations, 59*(3), 232-239. doi: 10.1111/j.1741-3729.2010.00598.x
- Finer, L. B. (2007). Trends in premarital sex in the United States, 1954-2003. *Public Health Reports, 122*(1), 73-78.
- Goodwin, P. Y., Mosher, W. D., & Chandra, A. (2010). Marriage and cohabitation in the United States: A statistical portrait based on Cycle 6 (2002) of the National Survey of Family Growth. *Vital Health Statistics (Vol. 23, pp. 1-55)*: National Center for Health Statistics.
- Guterbock, T. M., Diop, A., Ellis, J. M., Holmes, J. L., & Le, K. T. (2011). Who needs RDD? Combining directory listings with cell phone exchanges for an alternative telephone sampling frame. *Social Science Research, 40*(3), 860-872.
- Harmon-Jones, E., & Harmon-Jones, C. (2002). Testing the action-based model of cognitive dissonance: The effect of action orientation on postdecisional attitudes. *Personality and Social Psychology Bulletin, 28*, 711-723.
- Hawkins, A. J., Blanchard, V. L., Baldwin, S. A., & Fawcett, E. B. (2008). Does marriage and relationship education work? A meta-analytic study. *Journal of Consulting and Clinical Psychology, 76*, 723-734.
- Johnson, M. P., & Leone, J. M. (2005). The differential effects of intimate terrorism and situational couple violence: Findings from the National Violence against Women Survey. *Journal of Family Issues, 26*(3), 322-349.
- Jose, A., O'Leary, D. K., & Moyer, A. (2010). Does premarital cohabitation predict subsequent marital stability and marital quality? A meta-analysis. *Journal of Marriage and Family, 72*(1), 105-116. doi: 10.1111/j.1741-3737.2009.00686.x
- Kiesler, C. (1971). *The psychology of commitment*. New York: Academic Press.
- Kline, G. H., Stanley, S. M., Markman, H. J., Olmos-Gallo, P. A., St. Peters, M., Whitton, S. W., & Prado, L. M. (2004). Timing is everything: Pre-engagement cohabitation and increased risk for poor marital outcomes. *Journal of Family Psychology, 18*(2), 311-318.
- Kluwer, E. S. (2010). From partnership to parenthood: A Review of marital change across the transition to parenthood. *Journal of Family Theory & Review, 2*(2), 105-125. doi: 10.1111/j.1756-2589.2010.00045.x
- Lichter, D. T., & Qian, Z. (2008). Serial cohabitation and the marital life course. *Journal of Marriage and Family, 70*(4), 861-878.
- Lindsay, J. M. (2000). An ambiguous commitment: Moving into a cohabiting relationship. *Journal of Family Studies, 6*(1), 120-134.
- Manning, W. D., & Cohen, J. A. (2012). Premarital cohabitation and marital dissolution: An examination of recent marriages. *Journal of Marriage and Family, 74*(2), 377-387.

- Manning, W. D., & Smock, P. J. (2005). Measuring and modeling cohabitation: New perspectives from qualitative data. *Journal of Marriage and Family*, 67, 989-1002.
- Martin, J. A., Hamilton, B. E., Osterman, M. J. K., Curtin, S. C., & Mathews, T. J. (2013). Births: Final data for 2012. *National Vital Statistics Reports* 62(9), 1-87.
- Monte, L. M. (2011). Multiple partner maternity versus multiple partner paternity: What matters for family trajectories. *Marriage and Family Review*, 47(2), 90-124. doi: 10.1080/01494929.2011.564526
- Raudenbush, S. W., Bryk, A. S., Fai, C. Y., Congdon, R., & du Toit, M. (2011). *HLM 7: Hierarchical linear and nonlinear modeling*. Lincolnwood, IL: Scientific Software International, Inc.
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009a). Couples' reasons for cohabitation: Associations with individual well-being and relationship quality. *Journal of Family Issues*, 30(2), 233-258. doi: 10.1177/0192513x08324388
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2009b). Working with cohabitation in relationship education and therapy. *Journal of Couple and Relationship Therapy*, 8, 95-112. doi: 10.1080/15332690902813794
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2010). Should I stay or should I go? Predicting dating relationship stability from four aspects of commitment. *Journal of Family Psychology*, 24, 543-550. doi: 10.1037/a0021008
- Rhoades, G. K., Stanley, S. M., & Markman, H. J. (2012). The impact of the transition to cohabitation on relationship functioning: Cross-sectional and longitudinal findings. *Journal of Family Psychology*, 26(3), 348-358. doi: 10.1037/a0028316
- Rosenblatt, P. C. (1977). Needed research on commitment in marriage. In G. Levinger & H. Raush (Eds.), *Close relationships: Perspectives on the meaning of intimacy*. Amherst, MA: University of Massachusetts Press.
- Rusbult, C. E., & Buunk, B. P. (1993). Commitment processes in close relationships: An interdependence analysis. *Journal of Social and Personal Relationships*, 10(2), 175-204.
- Sabourin, S., Valois, P., & Lussier, Y. (2005). Development and validation of a brief version of the Dyadic Adjustment Scale with a nonparametric item analysis model. *Psychological Assessment*, 17(1), 15-27. doi: 10.1037/1040-3590.17.1.15
- Sassler, S., Addo, F. R., & Lichter, D. T. (2012). The tempo of sexual activity and later relationship quality. *Journal of Marriage and Family*, 74(4), 708-725. doi: 10.1111/j.1741-3737.2012.00996.x
- Spanier, G. B. (1976). Measuring dyadic adjustment: New scales for assessing the quality of marriage and similar dyads. *Journal of Marriage and Family*, 38, 15-28.
- Stanley, S. M., Amato, P. R., Johnson, C. A., & Markman, H. J. (2006). Premarital education, marital quality, and marital stability: Findings from a large, random, household survey. *Journal of Family Psychology*, 20, 117-126.
- Stanley, S. M., Rhoades, G. K., Amato, P. R., Markman, H. J., & Johnson, C. A. (2010). The timing of cohabitation and engagement: Impact on first and second marriages. *Journal of Marriage and Family*, 72(4), 906. doi: 10.1111/j.1741-3737.2010.00738.x
- Stanley, S. M., Rhoades, G. K., & Fincham, F. D. (2011). Understanding romantic relationships among emerging adults: The significant roles of cohabitation and ambiguity. In F. D. Fincham & M. Cui (Eds.), *Romantic relationships in emerging adulthood* (pp. 234-251). New York: Cambridge University Press.
- Stanley, S. M., Rhoades, G. K., & Markman, H. J. (2006). Sliding vs. deciding: Inertia and the premarital cohabitation effect. *Family Relations*, 55, 499-509. doi: 10.1111/j.1741-3729.2006.00418.x
- Stanley, S. M., Rhoades, G. K., & Whitton, S. W. (2010). Commitment: Functions, formation, and the securing of romantic attachment. *Journal of Family Theory and Review*, 2(4), 243-257.
- Stanley, S. M., Whitton, S. W., & Markman, H. J. (2004). Maybe I do: Interpersonal commitment and premarital or nonmarital cohabitation. *Journal of Family Issues*, 25(4), 496-519.
- Straus, M. A., Hamby, S. L., Boney-McCoy, S., & Sugarman, D. B. (1996). The Revised Conflict Tactics Scales (CTS2): Development and preliminary psychometric data. *Journal of Family Issues*, 17(3), 283-316.
- Sullivan, K. T., & Bradbury, T. N. (1997). Are premarital prevention programs reaching couples at risk for marital dysfunction? *Journal of Consulting & Clinical Psychology*, 65(1), 24-30.
- Teachman, J. D. (2003). Premarital sex, premarital cohabitation and the risk of subsequent marital dissolution among women. *Journal of Marriage and Family*, 65(2), 444-455.
- Thibaut, J. W., & Kelley, H. H. (1959). *The social psychology of groups*. Oxford, England: Wiley.
- Treas, J., & Giesen, D. (2000). Sexual infidelity among married and cohabiting Americans. *Journal of Marriage and Family*, 62(1), 48-60.

# APPENDIX

## *Table of Contents*

**Pg. 19**– Detailed description of participants, procedures, measures, and results

**Pg. 24**– Table of correlations among predictors (Correlations among Predictors)

**Pg. 25**– Table of main findings (Premarital Predictors of Marital Quality)

## PARTICIPANTS

During the Relationship Development Study, 418 individuals married. The sample included 148 men and 270 women who were, on average, 26.00 years of age when the study began ( $SD = 4.55$ ) with a median education level of 15 years and median income of \$20,000–29,999. The sample was 9.1 percent Hispanic or Latino. In terms of race, the sample was 83.7 percent white, 9.3 percent African American, 3.1 percent Asian, and 0.7 percent American Indian/Alaska Native; 3.2 percent reported more than one race or did not report race.

The 418 participants used for the analyses presented in this report provided, on average, nine waves of data on the focal relationship (Range = 1 to 11,  $Mdn = 10$ ). Of them, 20 experienced the break-up of their marriage during the study. The mean length of marriage at the time of divorce or the end of the study was 28.77 months ( $Mdn = 20.66$ ,  $SD = 13.82$ , Range .45 to 56.58 months). The average number of time points included during marriage is five ( $Mdn = 5$ , Range 1 to 10). For 13 individuals, we did not have any data on the focal relationship before marriage because the first time point after marriage was also the first time point during the study that they were in that relationship. For the other 405 individuals, we had an average of 4 time points ( $Mdn = 4$ , Range 1 to 10) on the focal relationship before marriage. On average, individuals married at 27.85 years of age ( $SD = 4.42$ , Range 19.82 to 39.04).

## PROCEDURES

The sample for the larger project was recruited by a calling center using a targeted-listing sampling strategy. Targeted-listing sampling was selected for this project over a random-digit dialing approach because cell phones cannot legally be called through random-digit dialing, and being able to contact cell phones and not only land lines seemed imperative for the age range of interest (for a related discussion, see Guterbock, Diop, Ellis, Holmes, & Le, 2011). Recruitment for this study began in July of 2007 and was completed in March 2008 by a private phone survey firm, Cole, Hargrave, Snodgrass, and Associates. For recruitment, the survey firm began with a targeted (by age) list of 325,273 names that was purchased from Scientific Telephone Samples. These names and their contact information came from many different sources, such as the telephone white pages, warranty card information, public records, Department of Motor Vehicle records, voter registration records, and magazine subscriptions. All households that were called were in the contiguous United States.

Of this list of names and phone numbers, 73,508 (23 percent) were disconnected numbers, 186,647 were never answered live (57 percent), and 65,118 (20 percent) were answered. Of those who answered, 3,570 (5 percent) were ineligible for this research because the answerer did not speak English, 22,375 (34 percent) refused to answer any screening questions, 37,468 (56 percent) answered screening questions but were ineligible due to age or relationship status, and 2,658 (5 percent) were eligible. Eligibility requirements included an age range of 18 to 34 and for the individual to be in an unmarried relationship with a member of the opposite sex that had lasted two months or longer. The criterion for length of the relationship was established so that we obtained data on relatively stable dating relationships, which was a necessity for the aims of the larger project.

Of those who were eligible, 2,327 (88 percent) completed the phone survey and provided their contact information for the longitudinal study. Of those who provided their contact information, 2,213 (95 percent) provided complete and usable

mailing addresses and were mailed forms within two weeks of their phone screening. Of those who were mailed forms, 1,447 individuals returned them (65.4 percent response rate); however, 154 of these survey participants indicated on their forms that they did not meet requirements for participation, either because of age, language, or relationship status, leaving a sample of 1,293. These 1,293 participants were sent 11 waves of surveys over the course of the next five years. The first six waves were four months apart. The next five waves were six months apart. Of the larger sample, 418 married over the course of the study, and they are included in this report. Participants did not need to marry the partner they had been with when the study began to be included in this report. Attrition was low in this sample. For example, of all of the surveys sent over time, 91 percent were returned, and 85 percent of the sample completed the last wave of the study. The present study received ethics approval from the University of Denver's Institutional Review Board.

## MAIN OUTCOME MEASURE

Marital quality was measured with the four-item version of the Dyadic Adjustment Scale (Sabourin, Valois, & Lussier, 2005; Spanier, 1976). This measure includes items about relationship happiness, thoughts about dissolution, frequency of confiding in one another, and a general item about how well things are going between the partners. Response options vary across the four items. As suggested by the authors (Sabourin et al.), the scale was scored by summing the items ( $\alpha = .81$ ). Higher scores indicate higher marital quality and could range from 0 to 21. Actual scores in this sample ranged from 0 to 21 ( $M = 16.45$ ,  $SD = 3.68$ ). Those who scored 19 or above were in the top 40 percent of marital quality and categorized in the "higher-quality marriages" group for all figures in this report.

## PREDICTORS

Each of the predictors presented in Tables 1 and 2 is described below.

*Gender.* Participants indicated their gender by circling "male" or "female." Men were coded as 0 and women were coded as 1.

*Education.* Participants were asked to indicate the number of years of education with response options ranging from 7 to 24. Graduated with high school diploma was coded based on responses to the item, "What is your highest degree?" Those who selected "high school diploma" or higher (e.g., Bachelor's) were coded as 1. Those with a GED or no degree were coded as 0. Similarly, the variable graduated college with bachelor's degree used the same item. Those who responded with "Bachelor's or higher" were coded as 1 and those with a degree less than a Bachelor's were coded as 0.

*Income.* Income was based on the item, "What is your annual income (not including your partner's)?" Response options could range from "0 to \$4,999" to "over \$100,000." Scores on these variables reflect the mean of the item across all premarital time points.

*Race and ethnicity.* These variables were based on responses to the item, "Please fill in all that apply," with the following response options: 1) White, 2) Hispanic or Latino, 3) American Indian/ Alaska Native, 4) Asian, 5) Native Hawaiian or Other Pacific Islander, and 6) Black or African American. These were later coded into four orthogonal categories for analyses: 1) Hispanic/Latino, 2) Black or African American, 3) Other, and 4) White.

*Religiousness.* Two items were used to measure religiousness: 1) "All things considered, how religious would you say you are?" with response options from 1 (Not at all) to 7 (Very religious), and 2) "How often do you attend religious services?" with response options from 1 (Never) to 9 (More than once a week). Scores on these variables reflect the mean of the item across all premarital time points.

*Family structure.* Lived with biological parents at age 14 was assessed with the question: "Think back to when you were 14 years old. At that time, did you and your biological parents all live together in one household?" "Yes" was coded 1 and "no" was coded 0.

*History of arrest.* Any positive (yes) response to "Have you ever been arrested?" before marriage was coded as 1.

*Sexual history.* Number of prior sex partners was based on the highest number reported to the write-in item, “How many sexual partners have you had (not including your current partner)?” The variable, only had sex with future spouse, no others, was coded 1 if the answers to the above question were consistently 0 throughout the study. All others were coded as 0.

*Cohabitation history.* Whether participants had ever cohabited with someone else was based on the write-in item, “How many other partners have you lived with outside of marriage (not including your current partner)?” Consistently answering 0 throughout the study was coded as 0. All others were coded as 1.

*Marital history.* Whether participants were entering a first marriage was based on the item, “How many times have you been legally married?” Consistently answering 0 in the time points before marriage in the focal relationship were coded as 1. All others were coded as 0.

*Children.* Child(ren) from prior relationship(s) was based on the difference in the write-in items, “How many biological children do you have?” and “How many biological children do you have from your current relationship (that is, both you and your partner are the biological parents)?”, where the “current” relationship was the focal relationship. The variable, partner has child(ren) from prior relationship(s), was based on the write-in item, “How many children does your partner have from previous partners?” Child(ren) or pregnant together before marriage was based on “Are you (or is your partner) pregnant?” and “How many biological children do you have from your current relationship (that is, both you and your partner are the biological parents)?”. For each of these constructs, answers that were consistently 0 premaritally were coded as 0. All others were coded as 1.

*Age at marriage.* Age at marriage (in years) was calculated by subtracting participants’ birthdates from their self-reported marriage dates.

*Length of relationship.* Length of relationship before marriage (months) was computed based on the largest difference across all waves between the item, “How many months have you been in this relationship?” and a calculated variable for length of marriage. The latter item was based on the date the survey was completed minus the marriage date.

*Hooking up.* Whether participants began the relationship with “hooking up” was based on the item, “Did the history of you two being together begin with hooking up?” Any positive (yes) response to this item across all waves of the focal relationship was coded as 1 for hooking up. Consistent negative (no) responses were coded as 0.

*Extradyadic involvement.* Had sexual relations with someone else while dating was based on the item, “Have you had sexual relations with someone other than your partner since you began seriously dating?”, with the following response items: 1) No, 2) Yes, with one person, and 3) Yes, with more than one person. Those who consistently answered “no” before marriage in the focal relationship were coded as 0. Those with any positive response before marriage were coded as 1. Whether one’s partner had sexual relations with someone else was based on the item, “Has your partner had sexual relations with someone other than you since you began seriously dating?”, with the following response items: 1) No, 2) Probably not, 3) Probably so, and 4) Yes, I know for sure. Participants who ever reported “yes, I know for sure” before marriage and during the focal relationship were coded as 1. All other responses were coded as 0.

*Physical aggression.* Ever reported physical aggression before marriage was based on responses to subscales of the Revised Conflict Tactics Scale (Straus, Hamby, Boney-McCoy, & Sugarman, 1996). We used the Minor Injuries Received subscale as well as the Minor Physical Aggression toward partner (e.g., “I pushed or shoved my partner”) and by partner subscales (e.g., “My partner did this to me”) to create the categorical history of physical aggression variable that was used in the analyses presented here. Individuals who reported that, premaritally, they had never sustained injuries due to a fight with their focal

partner, had never used physical aggression against their partner, and had never been the recipient of physical aggression from their partner were coded as having no history of physical aggression (coded 0). All other (positive) responses were coded as 1.

*Premarital cohabitation.* Lived together before commitment to marry was based on responses to: “Had the two of you made a specific commitment to marry when you first moved in together?” with the following response options: 1) Yes, we were already married, 2) Yes, we were engaged, 3) Yes, we were planning marriage, but were not engaged, and 4) No. Those who reported that they were married, engaged, or planning marriage before they moved in together were coded as 0. Those who ever reported “no” in the focal relationship were coded as 1.

*Sliding vs. deciding.* Among those cohabiting prior to marriage, decided to live together (rather than slid) was based on the item, “How did you start living together?” Response options ranged from 1 (We didn’t think about it or plan it. We slid in to it.) to 5 (We talked about it, planned it, and then made a decision together to do it.). Participants’ lowest score on this variable across all waves for the focal relationship was used.

*Perceived commitment differences.* Two items were used for the variables respondent perceived that he/she was more committed than the partner premaritally and respondent perceived that he/she was less committed than the partner premaritally: “How committed are you to this relationship?” and “How committed is your partner to this relationship?” The response options ranged from 1 (Not at all committed) to 7 (Very committed). Across all premarital waves of the focal relationship, if participants ever reported that they were 1 point (or more) more committed than their partner, they were coded as a 1 on the more committed variable. If participants ever reported that they were 1 point (or more) less committed than their partner, they were coded as a 1 on the less committed variable. Consistently reporting no differences in perceived commitment was coded as 0.

*Premarital education.* For this variable, we used the item, “Did you and your spouse have premarital preparation, such as educational classes, a workshop, or counseling designed to help you get a good start in marriage?” “Yes” responses were coded as 1 and “No” was coded as 0.

*Wedding.* The answer to the question, “Did you have a wedding?”, was used for the variable with the same name. Those who answered “Yes” were coded as 1. They were subsequently asked a write-in item, “If yes, how many people attended?”. This item was used for the variable, how many people attended your wedding?

## RESULTS

### *Data Analytic Strategy*

For these analyses, we used multilevel modeling and the HLM 7.01 software (Raudenbush, Bryk, Fai, Congdon, & du Toit, 2011). We used two-level models in which time-varying variables (i.e., marital quality) were modeled at level 1 and premarital predictors were modeled at level 2. (When control variables were entered, they were also modeled at level 2.) Time was not included in the final models so that the central outcome, Marital Quality, reflects the estimated average marital quality across all waves available after marriage for each participant. An example equation is below.

$$\text{Level 1: Marital Quality} = \pi + e$$

$$\text{Level 2: } \beta_{00} + \beta_{01}(\text{Age at Marriage}) + r_0$$

We first ran all models without controlling for demographic variables. We next re-ran all models regarding individual’s prior relationship experiences and couple premarital behavior and dynamics controlling for race/ethnicity, income, education, religiousness, and religious attendance. Table 2 presents results with and without these control variables, and these findings are described below. Lastly, we tested whether any of the results regarding individual’s prior relationship experiences or couple premarital behavior and dynamics were moderated by gender or having graduated college with a bachelor’s degree. These results are described below.

### *Socio-demographic Predictors*

We examined several potential socio-demographic predictors of marital quality, including gender, years of education, whether the respondent earned a high school diploma, whether the respondent graduated college with a bachelor's degree, income, race/ethnicity, religiousness, religious attendance, whether the respondent lived with his or her biological parents at age 14, and whether the respondent had ever been arrested before marriage. Five of these factors were significantly associated with later marital quality. Having graduated from high school with a diploma, having graduated college with a bachelor's degree, and having lived with one's biological parents together at age 14 were associated with significantly higher marital quality. Additionally, being female and being Black/African American or categorized as Other (rather than White) were significantly associated with lower marital quality.

### *Individuals' Prior Relationship Experiences*

We examined six types of prior relationship experiences: whether the respondent had sex only with his/her future spouse, the number of sexual partners the respondent had prior to the focal relationship, whether the respondent had ever cohabited with someone else, whether the respondent was entering a first marriage, and whether the respondent or his/her partner had children. Each of these variables predicted marital quality, with more sexual partners, having cohabited with someone else, having been married before, and having children from prior relationships (either one's own or one's partner's) being associated with significantly lower marital quality and having had sex only with one's future spouse being associated with higher marital quality. The strongest predictors of marital quality in this category were the variables regarding having children from prior relationships.

### *Couple Premarital Behavior and Dynamics*

We examined 14 behaviors and dynamics related to the focal relationship as predictors of marital quality: age at marriage, length of relationship before marriage, whether the couple had a child or were pregnant together before marriage, whether they began their relationship with hooking up, whether the respondent had sexual relations with someone else while dating his/her future spouse or knew that his/her partner had, whether the respondent reported any physical aggression in the relationship before marriage, whether the couple cohabited before making a mutual commitment to marry, the degree to which the respondent reported sliding into living together vs. deciding to do so, whether the respondent perceived that he or she was more or less committed than the partner before marriage, whether the couple received premarital education, and whether the couple had a wedding, as well as how many people attended the wedding. Of these predictors, all of them, except length of relationship before marriage, having had sexual relations with someone else while dating, and perceiving that the partner was more committed, were significantly associated with later marital quality. Specifically, older age at marriage, having a child or being pregnant together, beginning the relationship with hooking up, reporting that one's partner had sexual relations with someone else, reporting any physical aggression while dating, living together before reaching a mutual commitment to marriage, and the respondent's perception that he/she was more committed to the relationship than the partner were each associated with lower marital quality. Having received premarital education, having had a wedding, and the number of people who attended the wedding were each associated with higher marital quality. Among those who cohabited, having decided to live together (rather than sliding into cohabitation) was associated with higher marital quality. Among all these couple premarital behaviors and dynamics, having a child or being pregnant together before marriage, knowing that one's partner had had sexual relations with someone else while dating, the respondent's perception that he/she was more committed than the partner prior to marriage, and having had a wedding were the strongest predictors of marital quality.

### *Control Variables*

Although a number of associations were somewhat reduced when adding the control variables (i.e., race/ethnicity, income, education, religiousness, and religious attendance), the only two associations that fell from significant to just outside the cutoff were 1) whether the couple lived together before a mutual commitment to marry (the coefficient fell from -0.68 ( $p = .02$ ) to -0.56 ( $p = .07$ )) and 2) whether the respondent's partner had sexual relations with someone else while they were dating (the coefficient fell from -1.23 ( $p = 0.006$ ) to -0.77 ( $p = .07$ )).



**TABLE 2**

Premarital Predictors of Marital Quality

	Mean (SD) or percentage	Average Marital Quality	Average Marital Quality (with controls)
<b>Socio-demographic factors</b>			
Gender	65 percent	-0.60*	
Years of education	15 years	0.05	
Graduated with high school diploma	95 percent	2.30***	
Graduated college with bachelor's degree	56 percent	0.54*	
Income	\$20,000-29,999	-0.01	
Race (White reference group)			
Hispanic/Latino	9 percent	-0.04	
Black or African American	9 percent	-2.69***	
"Other"	6 percent	0.80*	
All things considered, how religious would you say you are?	4.18 (1.69)	0.12	
How often do you attend religious services?	Several times/yr	0.06	
Lived with biological parents at age 14	75 percent	1.16***	0.54+
Ever arrested before marriage?	17 percent	-0.36	-0.02
<b>Individuals' prior relationship experiences</b>			
Only had sex with future spouse, no others	23 percent	1.04***	0.58*
Number of prior sex partners	8.78 (10.72) <i>Mdn 5</i>	-0.05***	-0.04**
Ever cohabited with someone else?	39 percent	-1.08**	-0.83**
Entering a first marriage	91 percent	1.06*	1.06*
Child(ren) from prior relationship(s)	16 percent	-1.82***	-1.32***
Partner has child(ren) from prior relationship(s)	16 percent	-1.72***	-1.13**
<b>Couple premarital behavior and dynamics</b>			
Age at marriage (in years)	27.85 (4.42)	-0.11***	-0.11**
Length of relationship before marriage (months)	58.37 (38.65)	0.002	0.004
Child(ren) or pregnant together before marriage	18 percent	-1.45***	-1.18***
Began relationship with "hooking up"	32 percent	-0.95**	-0.67*
Had sexual relations with someone else while dating	16 percent	-0.67+	-0.30
Partner had sexual relations with someone else	10 percent	-1.23**	-0.77+
Ever reported physical aggression before marriage	53 percent	-0.81**	-0.70**
Lived together before commitment to marry	28 percent	-0.68*	-0.56+
Among those cohabiting prior to marriage, decided to live together (rather than slid)	3.80 (1.39)	0.35**	0.30*
Respondent perceived that he/she was more committed than the partner premaritally	16 percent	-1.54***	-1.26***
Respondent perceived that he/she was less committed than the partner premaritally	11 percent	-0.69	-0.66
Premarital education <sup>a</sup>	43 percent	1.12**	0.86*
Did you have a wedding?	90 percent	1.64***	1.07*
How many people attended your wedding?	116.92 (98.29)	0.007***	0.005***

*Notes.* \*\*\*p < .001, \*\*p < .01, \*p < .05, +p < .10. Control variables include years of education, income, Hispanic/Latino, Black or African American, other non-White, religiousness ("All things considered, how religious would you say you are?"), religious attendance ("How often do you attend religious services?"). <sup>a</sup>Data were only available for 223 participants because the question was not asked at every wave of the survey.

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