

The Pennsylvania State University
The Graduate School
College of the Liberal Arts

**PREDICTORS OF MARRIAGE AND DISSOLUTION
AMONGST COHABITING COUPLES**

A Thesis in
Sociology
by
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Submitted in Partial Fulfillment
of the Requirements
for the Degree of

Master of Arts

August 2010

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ABSTRACT

This study assesses the relative risk of moving into a marriage relationship among cohabiting couples as opposed to dissolution. Various studies have posited a link between human and economic capital attainment and the likelihood of marriage. Using longitudinal data from the National Longitudinal Study of Youth 1997 we are able to assess how both personal and couple level variables affect the likelihood of a transition into marriage. It was found that there was no effect of household income, yet when the male partner earned more as compared to the female partner, the likelihood of marriage increased. It was also found that conceiving a child increased the probability of marriage, while having a child present or giving birth had no effect. Thus among some couples, cohabitation may be an expression of commitment rather than marriage.

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Chapter 1

Introduction

Nonmarital cohabitation is becoming a part of the life course for a large section of the population. It has been estimated that half of the population will now experience a cohabitating relationship in their life time (Bumpass and Lu 2000). Cohabitation remains the subject of a lively debate in the literature, as there is no consensus on the form it takes and the effects it has on relationships and individuals. This is in part due to its heterogeneous nature; as people can cohabit at any stage in the life course, cohabitation can take many different forms and meaning (King and Scott 2005).

Studies have long identified negative consequences for cohabiting couples on outcomes such as marital quality (Amato et al. 2003; Dush et al. 2003) and risk of divorce (Amato et al. 2003; Brines and Joyner 1999; Martin et al. 2001). However, studies that restrict a premarital cohabitation to those who only cohabit with their marital partner have found that the negative impact on marital quality (Teachman 2003) and positive association with divorce disappears (DeMaris and Rao 1992). Studies have also found that couples who transition into marriage experience increases in relationship quality compared with those who remained cohabiting (Brown 2004; Skinner et al. 2002). Thus, there is an interest in studying a person's first cohabitation relationship, as the successful transition to marriage increases current relationship quality and dissolution can have negative effects upon future relationships.

Couples cohabit for a multitude of reasons, based upon their stage in the life course and personal beliefs. Older adults (King and Scott 2005) and those who have experienced a previous divorce (Dush et al. 2003; Martin et al. 2001; Qu 2003) may turn to cohabitation as an alternative to marriage. Alternatively, they may use cohabitation as a trial marriage and devote more time to a subsequent partner search. This may also be the case for some younger cohabiters, as studies have found that people who have experienced a parental divorce are more likely to experience a premarital cohabitation rather than marry directly (Dush et al. 2003; Glezer 1993). Those with more egalitarian gender roles also are more likely to cohabit (Batalova and Cohen 2002; Budinski and Trovato 2005; Glezer 1997; Thornton et al. 1992), as are those who are less religious (Eggebeen and Dew 2009; Glezer 1993; Stanley et al. 2004).

The current study focuses upon young adults in their prime union formation years. I use 11 waves of data from the National Longitudinal Study of Youth 1997 cohort to study first cohabitation relationships and trace the relationship transition, if any, to marriage or dissolution. The use of a longitudinal data set allows the construction of time varying variables, which makes it possible to follow respondents as they experience relationship transitions. This study builds upon previous research by constructing a person month file, which allows precise measures of the timing of couples' relationship experiences. The current study has two primary objectives. The first objective is to determine the duration of first cohabitations and the percentage that transition to marriage, as compared to either dissolution or continuing to cohabit. The second objective, which is primarily explanatory, is to identify individual and couple characteristics that predict if a relationship ends in marriage or dissolution.

Chapter 2

Background

Exchange Theory

Exchange theory was developed in the seminal work *Social Behavior as Exchange* (Homans 1958) to explain why humans interact with each other on a daily basis, especially in small groups. This was extended to cover dyadic interactions, with people being attracted to others if they expect that interacting with the other will bring benefits to themselves (Blau 1964). The extent to which they continue to interact with the other will be determined by the rewards that they continue to receive. As this is a dyadic process, the longest associations will be those where both participants are receiving a high level of rewards from the interaction. Thus, a person tries to make an interaction a positive experience for their partner if they hope to extend the interaction and gain rewards for them self.

Exchange theory has been extended to marriage relationships, with some important modifications. The first is that marriage is a legally binding institution and is invested with a wide variety of social meaning that a friendship is not. General social interactions are not mutually exclusive; one can have many friends, acquaintances and business partners. Though we may give preference to our closest friends, having one friendship does not preclude other possible friendships. This is not the case with (most) intimate relationships; there is the expectation that if one is involved with an intimate

partner, one is not involved with any others. Therefore, in an intimate relationship a person is faced with the prospect that other relationships may provide more benefits. Thus, exchange theory, when applied to marriage, involves the conception of attractions, barriers and alternatives (Levinger 1979).

Benefits

Benefits are defined as the benefits of the relationship minus the costs. As it is assumed that every relationship has both positive and negative aspects, it is the balance that drives relationship cohesion (Levinger 1979). As noted above, people are simultaneously trying to attract partners and predict likely rewards as well. Thus, there is a sorting process, as people try to attract the best mates, but are limited by what they can offer a partner (Becker 1973). This theory was developed by Becker (Becker 1973; Becker 1974) in regards to marriage entry and extended to explain dissolution (Becker et al. 1977). People will enter relationships if they believe that the relationship will maximize their personal benefits more than any other possible relationship or if they were to remain single. Benefits include tangible aspects such as wealth, income and domestic labor as well as more intangible aspects such as caring, love and support.

As marriage is a socially and legally recognized union, there are barriers that must be overcome when dissolving a marriage. Economic barriers include the cost of divorce, legal fees, the division of assets and the increased cost of living associated with living as a single person, and possibly as a single parent. Couples also may face social stigma and religious disapproval (Levinger 1979).

A limitation of this theory is it assumes that people have accurate information on a partner's skills and attributes, yet a young adult's future earning potential is often vague and unpredictable (Oppenheimer 1988). I argue that cohabitation provides an opportunity for couples to accrue and develop economic capital while in a relationship that involves relatively low barriers to dissolution if this potential is not realized. The theory needs to be extended when applied to cohabitation. In a marriage, people have two possible outcomes, they can decide to continue a relationship or they can dissolve it. In cohabitation, people have three possible outcomes, they can decide to continue the cohabitation relationship, they can dissolve the relationship, or they can progress to marriage. Using the above formulation, I propose an individual will take steps to marry once the attractions to a relationship become realized and the individual wants to provide a barrier against dissolution to secure these attractions. Those whose partners continue to exhibit potential will continue to cohabit while those who fail to live up to potential will dissolve their relationship.

This conceptualization can help explain the high rates of dissolution among cohabiting couples. It has been estimated that by the second year 34% of unions have dissolved, with 34% marrying and 32% continuing in a cohabitation relationship (Lichter et al. 2006). Other estimates include 32% married and 20% dissolved (Smock and Manning 1997) and 41% married and 29% dissolved (Bumpass and Sweet 1989) by the second year. Reasons for the above variability include the construction of the sample, such as the inclusion of divorcees, and the time period of the survey. Lichter et al. (2006) used data from the NLSY79 (waves from 1979-2000) where respondents were aged 14-22 years in the first wave and included divorcees and those who had cohabited

previously. Smock and Manning (1997) used data from the National Survey of Families and Households, which captured couples who were cohabiting in 1987-88 and did not include information about previous relationships.

As noted above, an individual is simultaneously engaged in two activities, acquiring the benefits that they can offer a partner and trying to accurately assess their partner's potential. If a person is developing their potential at a faster rate than their partner is, they may be faced with a wider (or higher quality) possible dating pool. Thus, people may dissolve a cohabitation relationship as their partners are not realizing their full potential, or because they have access to more dating partners as their own dating capital accumulates. This reasoning suggests that transitions will thus happen quickly as people assess their partner's potential and then make a transition accordingly. As these couples are cohabiting, it is assumed that they have already assessed their partner's potential to some extent. The partner has demonstrated enough potential to be a suitable residential partner, but not enough potential as a suitable marriage partner.

According to Becker's original formulation, economic factors play a large role, with the most desirable husbands being those who have the highest earning potential and thus can provide economic security to a partner (Becker 1973). Numerous studies have found that those at a socioeconomic disadvantage are more likely to cohabit. In a study of non-married women who are dating, women with lower educational attainment were more likely to cohabit rather than be in a non-cohabitating dating relationship (McGinnis 2003). Other studies confirm that the trend toward cohabitation is led by those who are the least educated, with cohabitation replacing early marriage among this population (Bumpass and Lu 2000; Bumpass et al. 1991). Limited economic resources also play a

part in decisions to cohabit, with qualitative interviews finding that financial pressure often encouraged people into cohabitation (Sassler 2004; Smock et al. 2005). Thus, people at (or close to) the poverty level may use cohabitation as a way to obtain the attractions of a residential relationship, yet avoid the legal barriers that may prevent a quick dissolution if partner economic circumstances change.

In a study consisting of 25 college students (Sassler 2004), financial reasons were the most commonly cited reason for starting a cohabitation relationship. Although this sample was relatively advantaged, financial pressures played a significant role in the decision to cohabit, saving on rent without having to live with a random roommate was a common theme. Among these couples, using cohabitation as a trial marriage, or to establish compatibility, was very seldom mentioned. This has been supported by qualitative interviews with couples from Australia (Carmichael and Whittaker 2007) and from Scotland (Jamieson et al. 2002).

Looking at economic factors as predictors of dissolution or marriage, mixed results are found. A study that looked at female cohabiters, and included all previous relationship statuses, found that female income for non-poor women had a negative association with the probability of marriage, with no effects for poor women (Lichter et al. 2006). Other studies have found no effect for female income, but found that male earnings is positively related to the odds of marriage vs. cohabitation with no effects upon dissolution (Sanchez et al. 1998). Other studies have found that increased couple income is related to increased risk of dissolution (Brines and Joyner 1999).

As couples may be in the early years of their union formation, earnings potential or education achievement may be a strong predictor of union transitions. It has been

found that males with a college education are more likely to transition to marriage than their counterparts who have less than a high school degree (Smock and Manning 1997). This is supported by Lichter et al. (2006) who find no effect for females, yet males with a high school degree are more likely to both marry and dissolve than those with less than high school degrees while those with a college degree are more likely to marry. This supports the above theory, with males who exhibit the greatest earning potential more likely to marry.

Barriers

A related conception of commitment involves attractions, barriers and alternatives (Levinger 1976). Attractions to marriage are the benefits a person perceives from the relationship, this might be economic or may involve intangible things like love or caring. Barriers are the consequences that will follow from dissolving a union such as losing contact with a child, religious prohibitions and loss of partner income. A study on divorces found two distinct groups, those with low and high distress marriages. It was hypothesized that those with low distress marriages (ones we would think of as containing attractions for the partners) dissolved as there were low barriers to divorce (Amato and Hohmann-Marriott 2007). The benefits to a relationship are not static, but accrue over time as relationship specific capital (Becker 1981). Relationship specific capital includes joint assets, children as well as shared experiences. The loss of this capital is considered a barrier, as dissolving the relationship involves the disentangling and probable loss of this capital. Thus, when a relationship is new, there is very little

relationship-specific capital as partners have invested very little of their time, effort and money into a relationship; therefore it has low barriers to dissolution.

According to the above theories, those in partnerships with more traditional gender roles are more likely to have a stable relationship. If one partner specializes in market labor, yet has no domestic skills, their ideal match is a partner who lacks market skills but specializes in domestic labor; both partners will increase their wellbeing by entering into a relationship (Becker 1973; Oppenheimer 1988). Marriage provides extra security against dissolution, which allows each partner to develop their complementary skills, which is especially important for the partner who is forgoing labor skills in favor of non-market skills. This couple has both high attractions, as one can supply a skill the other lacks, and high barriers to dissolution, as they become codependent on each other as the relationship progresses. Note that a stable relationship is not necessarily a good one, as women lacking economic power may be unable to leave an unhappy or abusive relationship due to the economic barriers they face.

In contrast to those with traditional gender relationships, the extra security that marriage provides may not be applicable to those with egalitarian partnerships. As both partners may have a similar skill set and a gendered division of labor is not applicable, it is not as necessary to provide the security that allows each partner to develop their skills. A study comparing cohabitation rates in Canada found that Quebec had the highest proportion of cohabiters, which the author's attribute to Quebec's tendency to promote more egalitarian gender roles (Le Bourdais and Lapierre-Adamcyk 2004). There is also support on specific measures of gender equality, such as participation in housework, where it was found that men in cohabitation relationships perform a larger percentage of

household task than their married counterparts (Ciabattari 2004). It has also been found that married men who cohabited pre-maritally participate in a larger percentage of housework than their directly marrying counterparts (Batalova and Cohen 2002).

However, measures of women's participation in the labor force and men's housework may also be associated with lower income couples. As noted above, lower income couples are more likely to cohabit, so this may be a spurious relationship. Qualitative interviews with cohabiting couples provide a valuable insight into these processes. A study of 115 lower-middle and working class couples (Smock et al. 2005) provides a more nuanced picture of cohabitation. In this sample, approximately 85% of women were working, which could be considered a sign of egalitarian gender roles. When asked about barriers to marriage 72% of all respondents reported at least one financial concern. However, three times as many women mentioned that a change in their partner's employment would be required for marriage as compared to men. Additionally a third of people mentioning economic factors as a barrier to marriage explicitly mentioned that a man's role was to provide for his family. Among these couples, although they may objectively have an egalitarian relationship if measured by economic variables, the male fulfillment of his traditional provider roles was a prerequisite for marriage.

When considering children and fertility, there are very few studies that have addressed this explicitly, which is unusual as around 40% of cohabitating couples have children present (Casper and Bianchi 2002) and 11% of children are born to cohabiting parents (Bumpass and Lu 2000). One study which addressed the role of fertility explicitly found that conceiving a child during a cohabitation increased the probability of marriage

and decreased the odds of dissolution, while a cohabiting birth decreased the chances of marriage (Manning 2004). Thus, it seems that if a couple does not marry when they are pregnant, they are less likely to marry later in the child's life. Marriage is not a prerequisite for childbearing among these couples. It has also been found that even when a couple marries after a premarital birth, they are still at greater risk of divorce than those who gave birth within a marriage (Manning et al. 2004). Another study compared the risk of dissolution for those who had their first child in a cohabitation relationship as compared to those whose first child was born while married (Wu and Musick 2008). The authors found that those who had their child while cohabiting and did not eventually marry had the highest risk of dissolution.

Other studies include children as control variables, yet do not always provide specific information about the timing of the fertility events or if the child is the biological child of both parents. Lichter et al. (2006) finds having children in the household reduces the odds of dissolution for poor women and Smock and Manning (1997) find that having a child present increases the likelihood of transitioning to marriage with no association with dissolution.

Racial Differences

Studies have shown that there are racial differences when it comes to family formation behaviors. Looking at young women under 24, it has been found that among those that had children, 66% of white births were non-marital compared to 96% among black women (Schoen et al. 2007). This study also found that white women were more

likely to cohabit before the age of 24 (76.5% compared to 62.5% for Blacks), with white women also more likely to marry. For women aged 15-44 who have married, 33.7% of white women had experienced a cohabitation compared to 22.9% of Black women (Bramlett and Mosher 2002).

Lichter et al. (2006) found that Black women were significantly less likely to transition to marriage than white women were, but there was no association with the odds of dissolution. They were also significantly more likely to dissolve their relationship rather than marry. When considering cohabiting parents, it was found that there was no difference between black and white women when it came to the risk of dissolution (Osborne et al. 2007). Turning to predictors of marriage, it has been found that Black cohabiters are more likely to report marital intentions, yet less likely to marry when compared to white couples (Guzzo 2009).

Manning and Smock conducted separate analysis by race to test for differences in predicting dissolution and marriage amongst black and white cohabiters. They found that background variables had significantly more effect among blacks, with receiving public assistance as a child reduced the likelihood of marriage while having a mother with a greater than high school education increased marriage probability (Manning and Smock 1995). There were no effects on these variables for whites. It was also found that being pregnant significantly increased the probability of marriage for whites when compared to Blacks, though both had a positive coefficient.

Chapter 3

Current Study

The current study seeks to build upon the previous literature in several ways. By using monthly measures of relationship status, relationships are as short as a month and as long as 11 years are included. As noted above, most cohabitation relationships are of short duration, thus being able to include these cases allows us to capture a larger percentage of cohabitation relationships. Monthly data also allows a test of the effect of fertility events on union transitions; this is vital to establish the correct temporal order of these events. The data also allows us to separate a couple's biological fertility events from those that involved a previous partner. There is also higher confidence in the accuracy of the data as respondents are being asked about events that happened within the previous year, with studies showing that retrospective surveys contain errors when estimating time in a cohabitation relationship (Teitler et al. 2006) and men's fertility (Rendall et al. 1999).

The first wave of respondent information was gathered in 1997 with the latest released wave coming from 2007. The latest available information on young adult relationships is used, providing an update of previous estimates. The sample is also focused upon first cohabitations, which are likely to differ from cohabitations later in the life course, especially those that occur after divorce. Previous studies predict that the predictors or relationship transitions differ by gender, therefore separate analyses will be

run for each group. For exploratory purposes, the sample will also be divided by (a) Non-Hispanic Blacks and Non-Hispanic Whites and (b) those who experienced a fertility event and those who did not.

Hypotheses

The following hypotheses are derived from exchange theory and earlier studies.

- (1) The majority of cohabiters will dissolve their unions rather than marry.

Previous studies, as well as exchange theory, predict that, among young people, dissolution is the most probable outcome. I expect that the most optimal partners will be selected into marriage without any cohabitation; it is those who are uncertain about their partners will cohabit and thus are more prone to dissolution. It is expected that most union transitions will occur quickly, with couples gaining information on their partner's suitability quickly. The probability of marriage will be greatest at the start of the relationship, with the probability of dissolution increasing as the relationship lengthens without marrying.

- (2) Higher household income will be associated with a higher probability of marriage while discouraging dissolution.

Many studies have identified a lack of money as a barrier to marriage and that marriage is more likely among those with higher socioeconomic status.

- (3) A higher proportion of male income will be associated with increased chances of marriage.

Previous studies indicate that traditional gender roles are still play a role in the decision to marry. Exchange theory predicts that couples that specialize are more likely to marry, as the non-market partner wants to secure a legal claim on their partner's income.

(4) Those currently enrolled in education will be less likely to marry

As students are in the process of gaining economic capital, their successful acquisition of economic capital is not yet assured. Though they may be committed to a partner, cohabitation rather than marriage will be an expression of this commitment. For this reason, they will also be less likely to dissolve.

(5) Those who are not able to report their partners income will have a high chance of dissolution and a low probability of marriage

This may indicate a low level of commitment to a relationship. Their partner may be deliberately withholding this information from the respondent, or they may be at such an early stage of their relationship that they have not discussed financial information.

Alternatively, the couple may dissolve their relationship, as they are not able to adequately assess the potential of their partner as they are lacking information.

(6) Experience of a pregnancy will be strongly associated with the probability of marriage while providing a protective effect against dissolution.

Exchange theory states that having a child together is one of the main forms of relationship specific capital. Having a biological child present will have no effect on marriage odds but may provide a protective effect against dissolution. Couples may be entering the relationship with a child or when pregnant with a child, thus moving into a cohabitation may be an expression of commitment among these couples. Among those

that become pregnant within the relationship, if they do not marry when pregnant, I hypothesize that having the child will not promote extra commitment. The presence of a non-biological child will lower marriage probability and increase the risk of dissolution.

(7) It is expected that white respondents will have the highest chances of marriage while blacks will experience the greatest instability.

Previous studies consistently report this disparity and though they have tried to account for these racial differences, it has been without success. Therefore, although separate models will be run by race; no significant difference is expected among the predictors.

Sample

Data were drawn from the National Longitudinal Survey of Youth 1997 cohort (NLSY97), a longitudinal study that, to date had 11 waves of data available, with information being drawn from all waves. When first interviewed in 1997, the respondents were aged from 12-18 with the ages ranging from 22-28 in the latest data wave in 2007. Thus, the sample is not generalizable to the population at large, as it focuses specifically upon young people and, for the purposes of this study, those in the prime age for relationship formation. Data collection was through computer assisted personal interviews with the preferred method of collection being a face-to-face interview. Respondents were interviewed annually. The sample was selected using a stratified sampling method and was designed to be nationally representative of youth living in the United States at wave 1 and who were born between January 1, 1980, through December 31, 1984. Of the 9,806 people identified as eligible, 8,984 completed the first wave

interview, for a response rate of 92% (Moore et al. 2000). The original sample size in wave one was 8984 with 83% of respondents retained in the final wave for a sample size of 7,418. If a respondent was not retained between waves, the information that was collected previously was used in the analysis, though no information on their relationship outcome could be included.

On my variable of interest, 4,139 people (46% of the original sample) had cohabited with a romantic partner by the last data wave. Only those who had cohabited were included in the sample. Those who married directly (or had been in a previous marriage) and those who had not yet lived with a romantic partner were excluded; that is, only those who were in a cohabitation as their first residential relationship were included in the data set. Only those who cohabited with an opposite sex partner were included. One advantage of the NLSY97 data is it allows the construction of monthly measures of respondent relationship status; thus, relationships ranging from a month to 11 years in duration are included. As a discrete-time event history analysis was used, a person month data file was constructed, with each month for each respondent contributing an observation, resulting in a total of 80,812 observations. Thus, the number of observations is determined by T where T is the number of months that case i was in the data set.

Independent Variable

The research question is focused on transitions in relationship status for people who were in their first cohabitation relationship. Therefore, a nominal variable was constructed indicating their relationship status in each month, with a base value of 0 for

those who were currently cohabiting. A value of 1 indicates that the respondent had married that month, while a 2 indicates that the relationship had dissolved. Once people had made this transition, they were censored from the data set, as I was interested in predicting the transition from cohabitation and not people's subsequent relationship trajectories. A person entered the data set in two ways; they were either cohabiting at the first round (330 cases) or when they subsequently entered a cohabitation relationship (3809 cases)

Dependent Variables

The literature identifies economic factors as primary when people discuss barriers to marriage. Therefore, several indicators and measures of socioeconomic status were used to provide a nuanced analysis. The NLSY provides information on both partner and respondent income, allowing the generation of variables by gender to test if the percent of couple income provided by the male partner had an effect. Personal income consists of wages, tips, salary and income from a farm or business. Respondents were asked to provide a dollar amount. If they were not able to provide a specific amount, they were then asked to estimate which range their income was most likely to fall. In these cases, the midpoint of the range was used. If they failed to provide this as well, they were coded as missing. A household income variable was also constructed, as some income questions did not specify which partner was the one receiving income, and some income is generated from joint endeavors. In addition to containing the above personal income information from both partners, household income included social security payments,

alimony, pensions or retirement, insurance payments and any other source of income. Household income was logged due to the skewed distribution. A variable measuring if partner income information was missing was constructed as a measure of couple disclosure (0 = not missing, 1 = missing). Note that all income information was supplied by the respondent.

A dummy variable for college educational enrolment was created to signify if the respondent was engaged in tertiary education for that month. This variable includes 2 year or 4 year colleges as well as graduate programs (0 = not currently enrolled, 1 = currently enrolled). As this is a dynamic variable, respondents could move in and out of education depending upon their monthly enrolment status. A variable measuring years of education completed was also created. To measure monthly employment, hours worked per month was used. As some responses seemed unusually high (highest reported value was 672 hours, or 21.68 hours a day for 31 days), the analysis was run with a capped variable (capped at 10 hours a day for 31 days). No substantive differences were found in preliminary analyses, thus the uncapped variable was used.

Various measures of fertility events and children were also constructed. A measure of pregnancy was constructed, indicating if the respondent or the partner was pregnant in that month (0 = not pregnant, 1 = pregnant). Only those who were pregnant by their current partner were included in this variable. As no information was available on time of conception, this variable was constructed by assuming conception was 9 months before the month in which the child was born. Two variables indicating the presence of a child were also created, with the first measuring the presence of a biological child (both partners are biological parents) and a non-biological child (only one partner is

a biological parent). Thus, a person would be coded as pregnant for 9 months, and then coded as having a child present in the household. Note that these are binary variables, so they are not sensitive to the number of children. A separate variable was also constructed to indicate if the couple experienced a biological fertility event at any stage of their relationship. This is a time invariant variable, if they experienced an event at any stage, they were coded as one. This variable was used to divide the sample into those who experienced no fertility events and those with biological fertility events. Separate analysis was then run for each group to see if any predictors differed.

Three racial categories were created, with Non-Hispanic White, Non-Hispanic Black, and Other race. Dummy variables for Non-Hispanic Black and Other were created, with Non-Hispanic White as the reference category. A variable measuring the respondent's age at first sex was created. The age of the respondent when starting the relationship was also included. Both these variables were measured in months. A variable measuring the length of the relationship in months was created, as was a squared term to capture nonlinearity. As an event history analysis requires a measure of time to be included, this variable fulfills model requirements and provides a variable of substantive interest.

Missing Data

Table 1 shows the number of missing values within the data set (note that variables with no missing data were not included in the table). There is a large amount of missing data upon income variables. As noted above, respondents were given a range of

options when answering this question and were only coded as missing if they could not supply any information. Creation of the ‘male percent of couple income’ variable required valid responses from both partners, thus there is more missing data upon this variable. As can be seen, the largest number of missing data came from respondent’s being unable to report their partner’s income. To correct for possible bias, a dummy variable was included in all models indicating if this information was missing. All missing values were dealt with using multiple imputation using STATA’s MICE (multivariate imputation by chained equations) program (Royston 2005). This had been identified as one of the best methods of dealing with missing data (Allison 2002). Ten iterations were used.

Table 1: Missing values in data set

	No. of missing observations	% of missing observations	% of missing cases
Race	96	0.12	0.24
Age at first sex	15941	19.73	18.05
Years of education	9124	11.29	3.26
Respondent Income	12883	15.94	8.17
Partner Income	39635	49.05	46.24
Household Income	9744	12.06	5.87
Male Percent of Couple Income	42002	51.97	48.22
Possible no. of valid observations/cases	80812		4139

Note: First two columns refer to the person-month file while the third column refers to the number of respondents

Chapter 4

Results

Descriptive Statistics

Descriptive statistics are available in Table 2. This table was divided into two parts, one for the categorical variables and the other for the continuous variables. Table 2a provides the total number of person months provided by the people in each category for the stable variables (race, gender), the cases in each category and the percentage of person months that the people in each category contributed. For the dynamic categories such as enrolment status or pregnancy, the table shows the number of cases who experienced a state, the number of person months spent in a state, and the percentage of person months spent in the state. The number of cases refers to the amount of people who experienced any time in a state. Table 2b provides the mean, standard deviation, minimum and maximum values. These statistics were also presented for those that ended up in marriage, those that dissolved their union and those who were still cohabiting at the last data wave.

Overall, out of the sample of 4,139, 907 people got married, 2,930 relationships ended in dissolution, and 302 were still cohabiting at the last data wave. Thus only 22% of relationships transitioned into marriage. The majority, 61%, of the sample did not experience any fertility event (defined as a pregnancy, birth, or presence of a child) with 27% experiencing a fertility event with their current partner and 12% with a different

partner, defined as a partner that was not their first residential partner. Looking at race, the sample was 51% Non-Hispanic White, 25% Non-Hispanic Black, and 24% Other.

With respect to the dynamic variables, 933 (23%) of respondents were enrolled in college for some portion of their relationship and the sample spent 14% (11282 person months) of their time in college. Couples who were pregnant with a biological child contributed 5.6% of person months and 18% of couples experienced a pregnancy during their cohabitation period. Those who had a biological child with their partner contributed 30% of the person months with 23% of respondent households containing a biological child at some stage. Those (10%) who had a non-biological child in the household at some stage contributed 8% of person months.

In Table 2b, which shows the continuous variables, the average age that a relationship started was 20.3 years old. The average age at first sex was 16.41 years, and the average cohabitation length was 18.5 months, while those still cohabiting at the last wave had an average cohabitation length of 2.3 years. Table 3 provides an intriguing look at the rate of union transitions by relationship length. By the first year of their relationship 36.5% of the couples had broken up, 10% had married and 54% were continuing to cohabit. By the 2nd year only 28% of the couples were still cohabiting, with the couples who dissolved their union outnumbering the couples who married by almost 3 to 1.

Figure 1 shows this graphically. The percentage of couples cohabiting drops

Table 2a: Descriptive Statistics - Categorical Variables

Time Invariant		Total			Marriages			Dissolution			Cohabit		
		Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months
Full Sample		4139	80812		907	16994		2930	55116		302	8702	
Female		2233	44180	54.67	514	9799	57.66	1579	30301	54.98	140	4080	46.89
Fertility Events (Any pregnancy or child present during the relationship)													
None		2515	41007	50.74	502	9068	53.36	1853	28493	51.7	160	3446	39.6
With Partner		1116	31684	39.21	340	6902	40.61	681	20448	37.1	95	4334	49.8
With Other Partner		508	8121	10.05	65	1024	6.03	13.52	6175	11.2	47	922	10.6
Race*													
Non- Hispanic White		2107	38739	47.94	600	11018	64.83	1366	23978	43.5	141	3743	43.01
Non- Hispanic Black		1034	18728	23.18	108	2063	12.14	857	14728	26.72	69	1937	22.26
Other		1018	23344	28.89	203	3912	23.02	723	16410	29.77	92	3022	34.73
Time Varying		Total			Marriages			Dissolution			Cohabit		
		Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months	Cases	Person Months	Percent Person Months
Enrolled in Education Yes		933	11282	13.96	216	2955	17.39	658	7445	13.51	59	882	10.14
Currently Pregnant with biological child? Yes		735	4499	5.57	246	13190	7.76	423	2759	5.01	66	421	4.84
Currently have child with partner? Yes		947	24027	29.73	236	4507	26.52	618	15925	28.89	93	3595	41.31
Have child with other partner? Yes		428	6772	8.38	51	768	4.52	330	5109	9.27	47	895	10.28
Partner Income Missing Yes		2143	38810	48.03	665	10768	63.36	1307	23914	43.39	171	4128	47.44

*Note that race values differ between imputations and thus may not equal 100%

Table 2b: Descriptive Statistics - Continuous Variables													
		Total			Marriages			Dissolution			Cohabitation		
		mean	min	max	mean	min	max	mean	min	max	mean	min	max
Time Invariant													
Age relationship started	Months	243.97 (28.83)	168	331	241.79 (26.8)	168	322	242.24 (28.64)	168	328	259.22 (29.35)	194	331
	Years	20.33	14	27.58	20.15	14	26.83	20.19	14	27.33	21.60	16.17	27.58
Age at first sex	Months	196.94 (29.1)	36	376	199.13 (28.34)	74.33	308.76	195.85 (28.5)	36	376	199.55 (33.58)	67	326
	Years	16.41	3	31.33	16.59	6.19	25.73	16.32	3	31.33	16.63	5.58	27.17
Length of Relationship	Months	18.52 (18.49)	0	130	17.74 (15.76)	1	92	17.81 (18.3)	1	130	27.54 (24.54)	0	116
	Years	1.54	0	10.83	1.48	0.08	7.67	1.48	0.08	10.83	2.30	0	9.67
Time Varying													
Years of education	Years	11.88 (2.28)	0	21.58	12.27 (2.29)	0	20.24	11.70 (2.22)	3.24	20.3	12.23 (2.48)	3.30	21.58
Age	Months	262.00 (29.79)	168	335	257.28 (27.83)	168	332	260.04 (29.61)	168	335	283.57 (25.36)	194	335
	Years	21.83	14	27.92	21.44	14	27.67	21.67	14	27.92	23.63	16.17	27.92
Hours worked in month	Years	111.75 (89.05)	0	696	118.19 (87.11)	0	672	107.36 (89.4)	0	668	126.96 (88.19)	0	696
Household income		26774.54 (25424.92)	0	566009	30123.51 (25576.16)	0	348000	24725.37 (25301.68)	0	566009	33213.25 (24104.24)	0	175650
Male Percent of Couple Income*		0.61 (0.18)	-0.57	1.74	0.62 (0.18)	-0.37	1.54	0.60 (0.18)	-0.30	1.57	0.61 (0.18)	-0.57	1.74

Note: Standard errors in brackets

*True values range from 0 - 1, error due to imputation

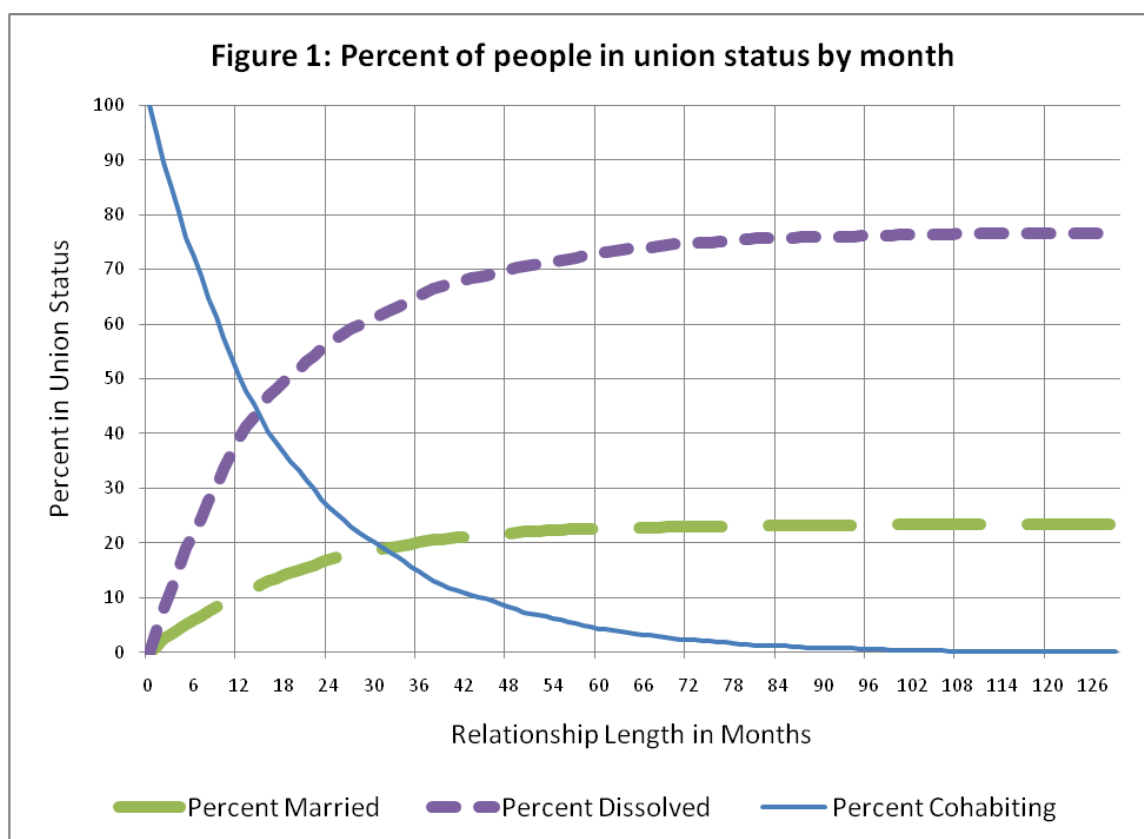
dramatically within the first few years, after which the rate of transitions becomes more gradual. The graph also emphasizes the rate of dissolution that cohabitation relationships experience, with 77% of couples dissolved by the 10th year, 23% who have married and less than 1% had been in a cohabitation relationship for this length of time. The average education of the sample was approximately a high school degree (11.9 years) and the average hours worked in a month was 112. Looking at the economic variables, males contributed an average of 61% of a couple's income. The average household income was \$26,775.

Logistic Results

Model 1 in Table 4 includes all variables excluding any measures of fertility. The probability of marrying was 55% lower for Non-Hispanic Blacks compared to Non-Hispanic Whites, a result that stays relatively constant across all models. Non-Hispanic Blacks were also more likely to dissolve their relationship. People in the other race category were less likely to both marry and dissolve as compared to Non-Hispanic Whites, suggesting that long-term cohabitation was more likely among this group. The length of the relationship was positively related to the probability of both marriage and dissolution; however, there was a curvilinear association with marriage probabilities. This is shown graphically in figure 2, with the probability of dissolution by time shown

Table 3: Percentage of people in unions by time

	Percent who have married	Percent who have dissolved	Percent still cohabiting
6 months	5.1	19.1	75.8
12 months	9.7	36.5	53.8
18 months	13.6	48.2	38.2
24 months	16.5	55.5	28.0
30 months	18.4	60.5	21.1
36 months	19.8	64.5	15.7
42 months	21.0	67.7	11.3
48 months	21.7	69.7	8.7
54 months	22.2	71.2	6.5
5 Years	22.6	72.9	4.6
6 Years	22.9	74.7	2.4
7 Years +	23.1	75.7	1.2

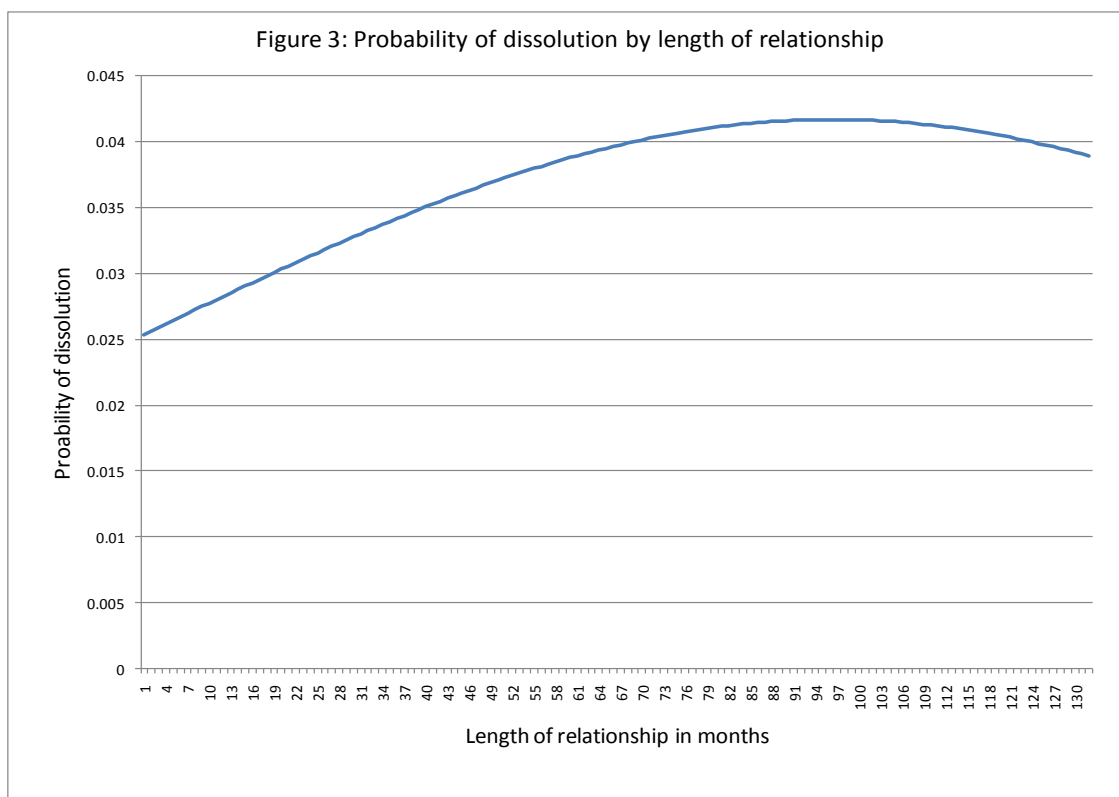
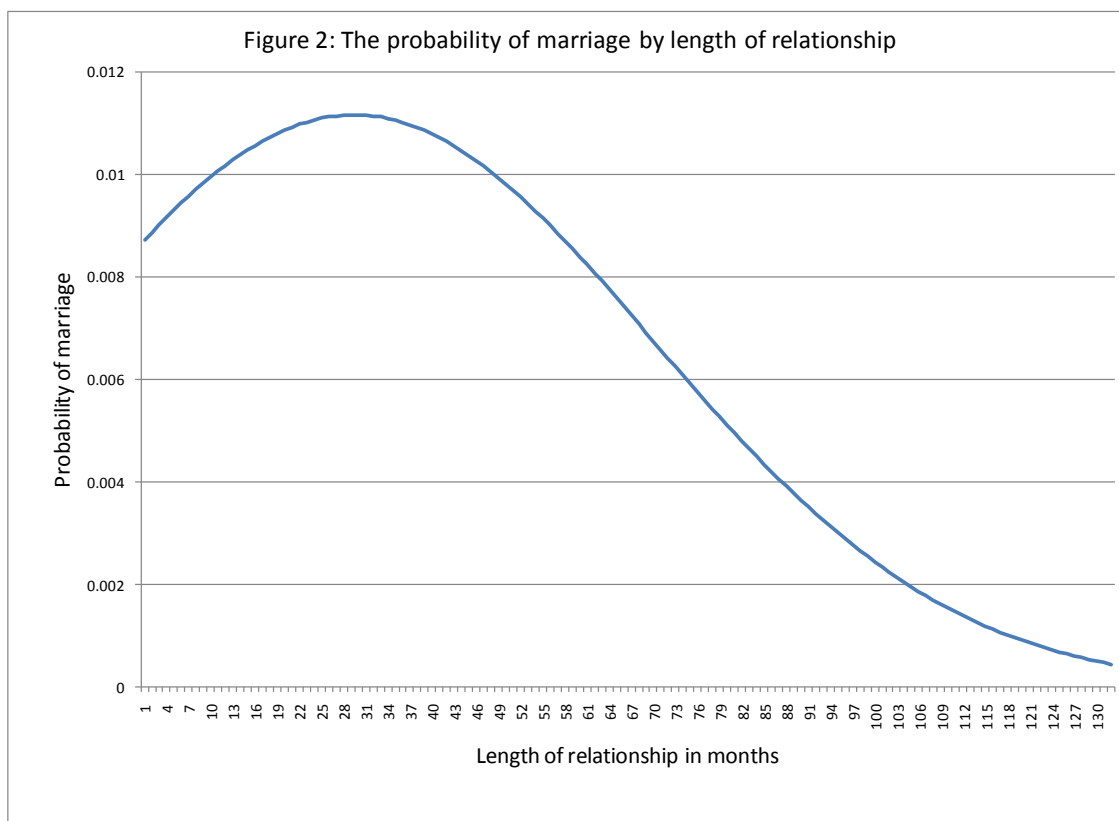


in figure 3. These graphs were constructed using mean-centered variables to provide the intercept and use all the variables from model 2. The age of the respondent when the relationship started had no association with the probability of either marriage or dissolution. Age at first sex had no significant association with the probability of marriage while it was negatively related to the probability of dissolution.

Being currently enrolled in education had a negative association with the probability of marriage by 39% with no association on dissolution. This finding suggests that people who are enrolled in school postpone marriage until they either graduate or drop out. Years of education had a positive association with the probability of marriage and dissolution, with each year of education associated with a 10% increase in the probability of marriage, while increasing the probability of dissolution by 4%.

Household income had no association with either marriage or dissolution. If partner income was missing, it was associated with a decrease of marriage probability by 39% while increasing the probability of dissolution by 197%. The male percent of couple income was positively related to the probability of marriage and negatively related to dissolution probability, suggesting that those couples that had more traditional gender roles were more likely to marry and to continue a cohabitation relationship rather than dissolve. Interestingly, higher hours at work were also associated with lower dissolution risk.

In models 2-4, various fertility indicators were included to test their association with relationship transitions. Having a biological pregnancy (defined as both partners being a biological parent) was associated with an increase of probability of marriage by



142% and a decrease in the probability of dissolution by 59%. Thus, experience of a pregnancy seems to increase commitment to a relationship; if it does not transition to marriage, it at least had a protective effect against dissolution. In model 3, pregnancy was removed and a variable that indicated the presence of a biological child was used. The presence of a biological child had no association with the probability of marriage, but it discouraged dissolution. Having a non-biological child in the household was associated with an increase in the risks of dissolution by 21%.

It seems that biological children had a stabilizing effect on with relationships. However, it was only the experience of pregnancy that resulted in a greater chance of marriage. It suggests that among some couples marriage is still important for child bearing, while for others commitment to a partner is through cohabitation. Note that those who were classified as having a biological child includes both those who had the child within the relationship (n=566) and those who entered with a child (n=381), thus moving into a cohabitation relationship may be an expression of commitment for the latter group. A Non-biological child has a disruptive effect.

The inclusion of the fertility variables had little association with the other variables, with months squared having a significant negative association. All other coefficients had the same levels of significance (months since relationship started was significant at the 0.05 level for marriage in model 2, compared to the 0.01 level for all other models) with little change in the magnitude of the coefficients. This suggests that fertility events had a minor role in mediating the other variables in the model; that is that the fertility variables do not affect the relationship between the other variables and the probability of union transitions.

Table 5 divides the sample up by gender, to see if predictors differ by gender. Note that all comparisons of coefficients between groups were conducted using the Clogg test (Clogg et al. 1995). Comparing with model 2 in table 4 (containing biological conception), there are few differences between that model and table 4. A t-test shows a significant difference in the association with hours worked between males and females for dissolution, while male employment had a stronger negative association with the probability of dissolution, although the female association was in the same direction. There are significantly different coefficients for dissolution among Non-Hispanic Blacks with males having a negative association with dissolution probabilities with no significant association for females.

Looking at the racial differences in table 6, it is found that length of relationship and length of relationship squared were significant for Non-Hispanic Whites with no association for Non-Hispanic Blacks and the coefficients were significantly different from each other. Age at first sex had no association for either race, although there was an association in the full model with dissolution. Enrolment in college reduces the probability of marriage for Non-Hispanic Whites by 39%, yet no significant association exists for Non-Hispanic Blacks, although the two coefficients do not significantly differ from each other. Each year of education increased the association with probability of marriage by 15% and by 5% for dissolution for Non-Hispanic Blacks, while education increased the association with marriage for Non-Hispanic Whites by 9% for each year of education. The percent of male income was positively related to marriage for Non-Hispanic Whites, with a relative risk ratio of 2.01. If partner income was missing, there was a significantly stronger association with dissolution for Non-Hispanic Whites as

Table 5: Multinomial Logistic Regression by Gender								
	Females				Males			
	Marriage		Dissolution		Marriage		Dissolution	
	Coeff	RRR	Coeff	RRR	Coeff	RRR	Coeff	RRR
Non-Hispanic Black	-0.736** (0.147)	0.479	0.081 ^a (0.064)	1.085	-0.929** (0.162)	0.395	-0.171** ^a (0.070)	0.843
Other	-0.376** (0.110)	0.686	-0.178** (0.066)	0.837	-0.662** (0.135)	0.516	-0.347** (0.074)	0.707
Months since relationship start	0.025** (0.008)	1.025	0.009* (0.004)	1.009	0.010 (0.009)	1.010	0.014** (0.004)	1.014
Months Squared	-0.000** (0.000)	1.000	-0.000 (0.000)	1.000	-0.000 (0.000)	1.000	-0.000 (0.000)	1.000
Age relationship started	-0.003 (0.002)	0.997	0.007** (0.001)	1.007	-0.000 (0.002)	1.000	0.006** (0.001)	1.006
Age at first sex	0.002 (0.002)	1.002	-0.003* (0.001)	0.997	0.000 (0.002)	1.000	-0.001 (0.001)	0.999
Enrolled in College	-0.578** (0.136)	0.561	0.037 (0.074)	1.038	-0.243 (0.185)	0.784	-0.107 (0.103)	0.898
Years of education	0.113** (0.030)	1.120	0.047** (0.016)	1.048	0.083** (0.030)	1.087	0.037* (0.016)	1.038
Household income (logged)	0.031 (0.048)	1.032	-0.007 (0.018)	0.993	0.118 (0.064)	1.125	0.005 (0.021)	1.005
Male Percent of Couple Income	0.639* (0.281)	1.894	-0.326 (0.184)	0.722	0.340 (0.310)	1.406	0.133 (0.185)	1.142
Partner Income Missing	-0.530** (0.119)	0.589	1.223** ^a (0.067)	3.397	-0.370** (0.123)	0.691	0.830** ^a (0.074)	2.292
Hours worked in month	-0.001 (0.001)	0.999	-0.005** ^a (0.000)	0.995	-0.000 (0.001)	1.000	-0.007** ^a (0.000)	0.993
Currently Pregnant With Biological Child?	0.739** (0.152)	2.094	-0.852** (0.172)	0.427	1.046** (0.159)	2.846	-0.946** (0.198)	0.388
Constant	-5.761** (0.639)		-5.084** (0.345)		-6.382** (0.738)		-5.111** (0.334)	
Person Months	44180				36632			
Cases	2233				1906			
Events	514		1579		393		1351	
F_mi	30.42				27.89			

Standard errors in parentheses

** p<0.01, * p<0.05, a = indicates a significant difference between pairs of coefficients at p<0.05

Table 6: Multinomial Logistic Regression for Non-Hispanic Whites and Blacks								
	Non-Hispanic White				Non-Hispanic Black			
	Marriage		Dissolution		Marriage		Dissolution	
	Coeff	RRR	Coeff	RRR	Coeff	RRR	Coeff	RRR
Months since relationship start	0.040 ^{**a}	1.041	0.017 ^{**}	1.017	-0.004 ^a	0.996	0.008	1.008
	(0.008)		(0.004)		(0.012)		(0.005)	
Months Squared	-0.001 ^{**a}	0.999	-0.000	1.000	0.000 ^a	1.000	-0.000	1.000
	(0.000)		(0.000)		(0.000)		(0.000)	
Age relationship started	-0.000	1.000	0.006 ^{**}	1.006	0.006	1.006	0.005 ^{**}	1.005
	(0.002)		(0.001)		(0.005)		(0.002)	
Age at first sex	0.002	1.002	-0.002	0.998	0.003	1.003	-0.001	0.999
	(0.002)		(0.001)		(0.004)		(0.001)	
Enrolled in College	-0.490 ^{**}	0.613	-0.070	0.932	-0.219	0.804	0.190	1.209
	(0.132)		(0.084)		(0.312)		(0.116)	
Years of education	0.090 ^{**}	1.094	0.017	1.017	0.143 [*]	1.153	0.044 [*]	1.045
	(0.025)		(0.017)		(0.061)		(0.021)	
Household income (logged)	0.040	1.041	0.005	1.005	0.122	1.130	-0.009	0.991
	(0.048)		(0.020)		(0.097)		(0.025)	
Male Percent of Couple Income	0.698 [*]	2.009	-0.247	0.781	0.179	1.196	-0.101	0.904
	(0.288)		(0.199)		(0.568)		(0.239)	
Partner Income Missing	-0.399 ^{**a}	0.671	1.269 ^{**}	3.556	-0.491 [*]	0.612	0.853 ^{**a}	2.346
	(0.105)		(0.069)		(0.223)		(0.097)	
Hours worked in month	-0.000 ^a	1.000	-0.006 ^{**}	0.994	-0.003 [*]	0.997	-0.004 ^{**a}	0.996
	(0.001)		(0.000)		(0.001)		(0.000)	
Currently Pregnant With Biological Child?	0.935 ^{**}	2.548	-1.065 ^{**}	0.345	1.237 ^{**}	3.447	-0.960 ^{**}	0.383
	(0.142)		(0.219)		(0.266)		(0.242)	
Constant	-6.413 ^{**}		-4.776 ^{**}		-9.815 ^{**}		-4.870 ^{**}	
	(0.579)		(0.350)		(1.390)		(0.428)	
Person Months	38725				18725			
Cases	2107				1034			
Events	600		1366		108		857	
F_mi	36.20				11.67			

Standard errors in parentheses

** p<0.01, * p<0.05, a = indicates a significant difference between pairs of coefficients at p<0.05

compared to Non-Hispanic Blacks. For Non-Hispanic Whites missing partner income was associated with an increased the probability of dissolution by 256%, while this increased the probability for Non-Hispanic Blacks by 135%. Hours worked was associated with a reduced marriage probability of 3% and dissolution probability by 4% for Non-Hispanic Blacks, which seems unusual. As income is included in the model, this suggests that those who work longer, while controlling for income (that is working longer without earning increasing income), were less likely to marry.

Table 7 divides the sample up into people who had no experience of a fertility event during their relationship and those who experienced a fertility event with their partner at any stage of their cohabitation relationship. The length of the relationship had a positive association (and length squared had a negative) with the probability of marriage for those who had no fertility events, while there was no association for those with fertility events, and the coefficients differ significantly from each other. For dissolution, those with fertility events had a positive association with the length of relationship and a negative association with months squared. Among those with fertility events, length of relationship had a positive association with dissolution odds, with no curvilinear association.

Enrollment in college was associated with the reduced probability of marriage by 39% for those with no fertility events, while there was no association for those with fertility events, suggesting that people will only delay marriage while enrolled in college if they had no fertility events to hasten marriage. However, years of education increased the association with probability of marriage by 13% and the probability of dissolution by

Table 7: Multinomial Logistic Regression by Fertility Event

	No Fertility Events				Experienced Fertility Event With Partner			
	Marriage		Dissolution		Marriage		Dissolution	
	Coeff	RRR	Coeff	RRR	Coeff	RRR	Coeff	RRR
Non-Hispanic Black	-0.767** (0.184)	0.464	0.070 (0.065)	1.073	-0.815** (0.158)	0.443	0.099 (0.100)	1.104
Other	-0.290* (0.123)	0.749	-0.142* (0.063)	0.867	-0.591** (0.127)	0.554	-0.149 (0.099)	0.862
Months since relationship start	0.031*** (0.009)	1.031	0.033** (0.005)	1.033	-0.006 ^a (0.009)	0.994	0.022** (0.005)	1.023
Months Squared	-0.000** (0.000)	1.000	-0.000*** (0.000)	1.000	-0.000 (0.000)	1.000	-0.000 ^a (0.000)	1.000
Age relationship started	0.001 (0.002)	1.001	0.006** (0.001)	1.006	-0.005 (0.003)	0.995	0.014*** (0.002)	1.014
Age at first sex	0.002 (0.002)	1.002	-0.003* (0.001)	0.997	0.002 (0.002)	1.002	-0.002 (0.002)	0.998
Enrolled in College	-0.495** (0.129)	0.609	-0.113 (0.068)	0.893	-0.395 (0.236)	0.673	-0.151 (0.166)	0.860
Years of education	0.060* (0.027)	1.062	0.004 (0.014)	1.004	0.122** (0.041)	1.130	0.061* (0.025)	1.063
Household income (logged)	0.064 (0.057)	1.066	0.005 (0.014)	1.005	0.061 (0.060)	1.063	0.011 (0.027)	1.011
Male Percent of Couple Income	0.359 (0.289)	1.432	-0.059 (0.162)	0.942	0.690* (0.334)	1.994	-0.278 (0.273)	0.757
Partner Income Missing	-0.515** (0.116)	0.598	1.200*** (0.063)	3.322	-0.431** (0.135)	0.650	0.738*** (0.091)	2.091
Hours worked in month	-0.001 (0.001)	0.999	-0.006** (0.000)	0.994	0.000 (0.001)	1.000	-0.007** (0.001)	0.993
Constant	-6.449** (0.676)		-4.511** (0.296)		-5.286** (0.779)		-7.688** (0.502)	
Person Months	41007				31684			
Cases	2515				1116			
Events	502		1853		340		681	
F_mi	39.33				17.80			

Standard errors in parentheses

** p<0.01, * p<0.05, a = indicates a significant difference between pairs of coefficients at p<0.05

6% for those with fertility events. Male percent of couple income had no association with marriage or dissolution probabilities for those with no fertility events, yet increased the probability of marriage by 99% for those with fertility events. Thus, it seems that gender-traditional roles had the strongest association for those with fertility events, although a ttest shows that the two coefficients were not significantly different.

Chapter 5

Discussion and Conclusion

This study extends exchange theory (Becker 1973; Becker 1974; Becker 1981; Levinger 1979) to cohabitation relationships. Traditional exchange theory revolves around the conceptualization of attractions, barriers and alternatives. I theorized that cohabitation would provide a chance for people to explore the possible attractions of a relationship without facing the same barriers to leaving should these attractions fail to materialize. As people gained economic capital and increased their education, their access to higher quality partners would increase and thus they would increase their pool of alternative partners.

Hypothesis one predicted that the probability of marriage would be higher the shorter the relationship was, as people would sort themselves into quality marriages quickly. Previous literature also predicted a high rate of dissolution within the first two years. Although this was confirmed, much higher rates of dissolution were found. At 2 years, it is found that only 16.5% had married with 55.5% dissolving and 28% still cohabiting. This compares to 34% married and 34% dissolved found by Lichter et al. (2006), 32.2% married and 20.3% dissolved (Smock and Manning 1997) and 41% married and 29% dissolved (Bumpass and Sweet 1989).

The sample used by Lichter et al. (2006) used data from 1979-2000 with an age span in this period ranging from 12-43. In addition, no information was available on when a cohabitation started, it only measured the presence of a partner at the date of the

survey, and thus cohabitations that were shorter than a year were not included. Smock and Manning (1997) and Bumpass and Sweet (1989) used data from the National Survey of Families and Households that contained data from people over 19 and included any cohabitation experience, which was asked retrospectively. It has been found that retrospective data is susceptible to misreporting on relationship experiences, especially those that dissolved (Teitler et al. 2006)

Thus, there are several possible explanations for the high rates of dissolution that were found. First, the sample is quite young and younger cohabiters may be more likely to dissolve a union rather than marry. Secondly, the data is the most current and may be capturing a change in relationship behavior among cohorts, relationships may be tending towards unstable cohabitations rather than marriage. Thirdly, the current study was able to include cohabitations as short as a month using recently obtained data. Therefore, the cohabitations included in the sample were more inclusive and the data is less susceptible to misreporting of cohabitation experiences.

The results were consistent with hypothesis one, with the probability of marriage highest in the first two years before it decreases, while the probability of dissolution increased in a linear fashion. Respondents are making relationship decisions quickly, which fits with the sorting hypothesis; that is, people quickly gain information on their partner and make the appropriate transition. Very few people are staying in a cohabitation relationship long term, thus it does not seem that many among the sample are using cohabitation as a substitute for marriage.

The most unexpected finding was the absence of associations between household income and relationship transitions, which is contrary to the second hypothesis. This

contradicts research that has found that household income has a negative effect upon the probability of dissolution (Lichter et al. 2006). Male percent of couple income was positively associated with the probability of marriage in the full sample. This supports qualitative studies that find that gender roles still play a large role in marriage decisions (Smock et al. 2005). However, finding is extended by showing that this only has an association among those who have experienced a fertility event with their partner.

Thus, it may be specialization that affects the probability of relationship transitions, rather than absolute increases in income. This study is unique in showing that the male percent of couple income only has an association with the marriage probability for those who have had a fertility event. This fits well with exchange theory, as if one partner begins to specialize in market work, the non-market partner is motivated to secure a legal claim on the market partner's income (Becker 1974). This is especially important when there are children involved, as the female partner is more likely to specialize in non-market work once a child is born (Becker 1981).

Hours worked in the month had a negative association with the probability of dissolution, with no association with marriage probabilities, except for Non-Hispanic Blacks. As income is included in the model, this result must be interpreted with this in mind. This means that increasing of work hours independent of income (that is without an increase in income) provides a protective effect against dissolution. This fits with the theory of cohabitation as a capital building stage as a respondent may show increased potential as a marriage partner by increasing their hours and showing a commitment to work. Even though it is not associated with an increase in the probability of marriage, it provides protection against dissolution. This is shown when the sample is divided by

gender, with a significantly lower probability of divorce when work hours increase among men.

Enrollment in college is negatively associated with the probability of marriage, which provides partial support for hypothesis four. When the sample is divided up by gender, there is only an association for females, with no association for males. It is important to note that there is no significant difference for the coefficients for males and females, thus this discrepancy may be due to the loss of statistical power when dividing the sample. However, there is no association with dissolution probabilities. It seems that women may be delaying marriage while earning a degree, but they are willing to leave a discouraging relationship.

Years of education has a positive association with both marriage and dissolution for the full sample and when the sample is divided by gender. This contradicts previous research which shows effects for males but not females (Lichter et al. 2006), although this study shows higher education is associated with both marriage and dissolution. As education rises, individuals may choose to marry as their partner realizes their potential and becomes an attractive marriage partner, or alternatively their own rising education may increase their capital and increase their pool of alternative partners. This question requires further study to support the hypothesis; education increases dating capital, marriage may depend upon a partner's successful acquisition.

If a respondent did not report their partner's income this was associated with a reduction of in the probability of marriage and an increase in the probability of dissolution. This was found across all models and subgroups, suggesting this finding is robust. The non-disclosure of income information suggests that partners are not

committed or do not fully trust each other. An alternative explanation suggests that if a partner is not sharing this information, the respondent is unable to assess accurately a partner's earning capabilities and may not be able to quantify the attractions of the relationship. The stronger probability of dissolution for females suggests that it is more disruptive when a male partner does not disclose his income, which fits the theory of male income playing a larger role in relationship transitions.

Consistent with previous studies, Non-Hispanic Blacks have a lower probability of marriage when compared to whites with no difference in dissolution probabilities (Guzzo 2009; Lichter et al. 2006; Osborne et al. 2007). When running separate regressions in table 6, it was found that there was no association for length of relationship for Non-Hispanic Blacks, which was significantly different from the coefficients for Non-Hispanic Whites. Only two other differences were found, though these were differences in magnitude rather than significance of direction. Partner's income missing had a significantly smaller positive coefficient for Non-Hispanic Blacks while hours worked had a significantly smaller negative coefficient when compared to Non-Hispanic Whites. The lack of difference is consistent with previous studies that have explored this (Manning and Smock 1995).

Turning to the fertility variables, it is found that those couples who are pregnant have greatly increased chances of marriage while being less likely to dissolve. However, having a child in the household has no association with marriage odds. This presents a problem for Becker's theory, as having a child with a partner represents relationship specific capital and therefore partner's should take steps to secure their investment of this capital. However, having a child still reduces the probability of dissolution, so among

those with children, marriage may not be required as an extra barrier. This differs from previous research, as it was not found that a premarital birth decreased the probability of marriage (Manning 2004) or increased the probability of marriage (Smock and Manning 1997). However, it was found that a pregnancy increases marriage odds and provided a protective effect against dissolution (Manning 2004) and that having a child present decreases the probability of dissolution (Lichter 2006).

In table 7, separate regressions were conducted for those who had not experienced any fertility event and those who had experienced either a birth or a pregnancy with their partner. There are only a few significant differences between the two groups. Age at first sex has a positive association with dissolution for both groups, though it is significantly higher for those with fertility events. Having your partner's income missing had a positive association with dissolution probability, but this difference was significantly lower for those with no fertility events (109% for those with compared to 222% for those without).

Length of relationship has no association with marriage amongst those with fertility events, suggesting that the fertility event may be the deciding factor of the transition timing, rather than length. For dissolution, there is a positive linear association, suggesting that the cohabitation relationships of those with fertility events become more unstable over time. Combining this with the results from the full model, it appears that a biological fertility event provides a protective effect against dissolution, but this association weakens over time. Thus, a fertility event may provide an extra barrier to dissolution, but this is not stable over time, this will slowly weaken as the cohabitation relationship progresses. Thus, it may be that although a fertility event discourages

dissolution, the same relationship capital needs to be accumulated to protect against dissolution in the long term. In fact, those with fertility events have very similar predictors of dissolution as the full model does.

This study contributes to the literature on cohabitation transitions by testing various hypotheses drawn from both previous studies and exchange theory. This study suggests that exchange theory is applicable to cohabitation relationships; yet more work needs to be done. Possible suggestions for future research include using a fixed effects model to test if a change in a person's financial and fertility statuses result in changes in their marriage or dissolution probabilities. This study could also benefit from the inclusion of a more precise measure of financial disclosure, does the couple have a shared bank account for example. A major limitation of this study was the lack of available information on relationship quality and intention. Exchange theory explicitly includes relationship quality as a vital part of its formulation, yet due to a lack of information, this could not be included. Thus, this study was restricted to mainly economic explanations, which may be misrepresenting the union formation process. There was also no information on if respondents were engaged when moving in together, which is vital when discussing relationship commitment. Thus, this study provides evidence for exchange theory as applicable to cohabitation, though more work is needed.

A significant finding from this study was that although having a fertility event discouraged dissolution, this effect was not static, but decreased over time. As there was little change in the significant predictors among those with fertility events and the full model, this suggests that the same predictors still apply, but as a child introduces a new barrier, people have more time to achieve these prerequisites before a relationship

dissolves. It was also found that the traditional male breadwinner arrangement only promotes marriage among those who have experienced a fertility event, suggesting that exchange theory is most applicable to those couples that have gender traditional arrangements.

This study builds upon previous literature by including shorter cohabitation relationships that have been missed in previous studies. As this study found a large number of transitions within the first year of a relationship, this is an important improvement. Using prospective data allows us to have greater confidence in the findings and allowed the correct temporal ordering of events. This is especially relevant for the fertility variables, which allowed precise measurement of fertility timing. From this study, it seems that cohabitation relationships are particularly unstable among recent cohorts. It is possible that multiple cohabitations before marriage will become the norm among young adults and this trend may increase over time.

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