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*2018 Working Paper Series*

**COHABITATION AND CONTRACEPTIVE USE IN THE UNITED STATES:  
A FOCUS ON RACE AND ETHNICITY**

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This research was supported in part by the Center for Family and Demographic Research, Bowling Green State University, which has core funding from the Eunice Kennedy Shriver National Institute of Child Health and Human Development (P2CHD050959)

## **Cohabitation and Contraceptive Use in the United States: A Focus on Race and Ethnicity**

### **ABSTRACT**

While cohabitation has been increasing and a growing context to have and raise children, there has been little attention to one of the key determinants of fertility, effective contraceptive use. Drawing data from the 2013-2015 National Survey of Family Growth (N=2285), we provide a contemporary portrait of contraceptive use among cohabiting American women. Specifically, we were guided by two main goals. First, we compared cohabiting and married women's contraceptive use patterns and the variation by race and ethnicity. Second, we focused solely on cohabiting unions; and examined the racial and ethnic variation among cohabiting women. We found that cohabiting women are more likely to use effective methods of contraception than married women. Nonetheless, our findings point to the fact that White cohabiting women are driving the higher patterns of contraceptive use among cohabiting women. Indeed, a further examination of the variation among women in cohabiting relationships show that non-Hispanic Black cohabitators are less likely to use effective contraception in cohabiting relationships, compared to Whites. Our findings contribute to understanding the reproductive behaviors among a growing set of couples, cohabitators.

**Key words:** Cohabitation, contraceptive use, race and ethnicity, United States

Cohabitation has dramatically altered American family life, with three-quarters of Americans having spent time in a cohabiting union (Kennedy and Bumpass 2008; Manning and Stykes 2015). In addition, cohabitation has become a common context for having and raising children (Musick and Michelmore 2015), about 26% of cohabitators have a child together (Guzzo 2017a). While these family patterns are well established, there is a wide variation according to race and ethnicity. For example, African American and Hispanic children have higher risks of experiencing parental cohabitation than White children (Lichter et al 2012; Kim and Raley 2015). A key proximate determinant of fertility, contraceptive use, produces these fertility differentials (Bachrach 1987; Sweeney 2010); but there has been little attention to racial and ethnic patterns of contraceptive use among cohabiting women, especially during the last decade.

Researchers have consistently shown that there are race and ethnic variations in the pattern of contraceptive use (Sweeney and Raley 2014; Daniels et al 2015; Jacobs and Stanfors 2013; Jones et al 2012). White and Hispanic women have the highest prevalence of contraceptive use compared to Black women. For example, use of long active reversible contraceptive methods are greater among Hispanic (15.1%) and White (11.4%) contraceptive women and lower (8.6%) among Black women (Daniels et al 2015). Despite these important racial and ethnic variations, there is limited evidence about whether there are racial and ethnic patterns for cohabiting and married women. Sweeney (2010) reported that in 2002 the racial and ethnic patterns of contraceptive use were similar for cohabiting and married women.

To provide a contemporary portrait of contraceptive use variation among cohabiting Black, White, and Hispanic women, we drew data from the 2013–2015 National Survey of Family Growth (NSFG). These data allow us to keep pace with the changing levels of

cohabitation by providing the opportunity to analyze recently collected nationally representative data. Specifically, we examine two main goals. First, we compare cohabiting and married women's contraceptive use patterns with attention to race and ethnic similarities and differences. Second, we consider patterns of contraceptive use among cohabiting women. Prior studies that focus on overall union status patterns mask key race and ethnic differentials in contraceptive use among women in cohabiting unions. Most of the recent studies on racial and ethnic differentials in contraceptive use have concentrated on never-married single young adult women (see Moreau et al 2013; Choi and Hamilton 2016; England et al 2016; Hayford and Guzzo 2013). We extend and update prior research by contrasting the racial and ethnic differences in contraceptive use patterns between cohabiting and married women; as well as examining the patterns among cohabiting women.

## BACKGROUND

### Cohabitation and Contraceptive Use

Cohabitation has become an acceptable context for childbearing and childrearing (Gibson-Davis and Rackin 2014); and studies show the increasing rate at which children are being raised in cohabiting unions. A large majority, about 75%, of American women report it would be all right to have children while cohabiting (Stykes 2015; Guzzo 2017b). Most of the rise in nonmarital childbearing has been due to increases among cohabiting women with about 60 percent of all nonmarital births now occurring in cohabiting unions (Lichter et al 2014; Manning et al. 2014; Raley 2001). About 34% of children born to cohabiting couples are unplanned births (Guzzo 2017b), lower on average than single women, and higher than married women (Rajan et al 2017; Sweeney and Raley 2014).

A key factor determining fertility within cohabiting unions is contraceptive use. At the bivariate level between 1995 and 2010, the levels of contraceptive use in cohabiting unions are on par with those in marriages (Sweeney et al. 2015). Cohabiting women rely on highly effective reversible methods (i.e. pill or IUDs) while their married counterparts use both reversible and irreversible (sterilization) methods (Sweeney et al. 2015; Eackhaut et al 2014). However, after accounting for age and parity Sweeney et al. (2015) report that in 1995 and in the 2006-2010 periods, cohabiting women are more likely than married women to rely on effective methods of contraception.

These overall patterns mask potentially significant racial and ethnic variation in contraceptive use among cohabiting and married women. There was a substantial increase in cohabitation between 1987 and 2013 for both White and Hispanic women (by 100% and 113% respectively); while the share of Black women cohabiting has leveled (Manning and Stykes 2015). Coinciding with these patterns there has been greater growth in fertility within cohabiting unions for Whites and Hispanics than Blacks (Bumpass and Lu 2000; Kennedy and Bumpass 2008; Manning, Brown and Stykes 2015). Only one in five White cohabiting couples have children together (18%) while nearly half (47%) of Black cohabiting couples and 43% of Hispanic couples do so (Cohen 2011). Yet there is scant research on White, Black, and Hispanic differentials in contraceptive use. Sweeney (2010) reports that between 1982 and 2002 there were no racial and ethnic differences in the patterns of contraceptive use between cohabiting and married women. These patterns have not been documented since 2002. In this paper, we update and extend the work of Sweeney (2010) by examining whether the racial and ethnic patterns of contraceptive use between cohabiting and married women have been sustained. Given the race-

ethnic differentials in the growth and levels of cohabitation, we expect new race-ethnic gaps in contraceptive use.

There is extremely little quantitative research on the patterns and variation in contraceptive use among women within cohabiting unions. Cohabitation does not operate in the same manner for everyone; and based on prior work we expect there to be differentials among cohabitators according to race and ethnicity (Osborne, Manning, and Smock 2007). The bulk of the quantitative analyses are limited to single, unmarried women and find that compared to their non-Hispanic White counterparts, non-Hispanic Black and Hispanic unmarried women are less likely to use very effective birth control method (Schneider 2017; Choi and Hamilton 2016). They do not include cohabiting women in their analyses, but we expect a similar pattern to exist for cohabiting women. The few available qualitative studies have reported that contraceptive use among cohabitators is dependent on the duration of the union; and that cohabitators in longer relationships or who have marital intentions were less effective contraceptors (Sassler and Favinger 2008; Reed et al 2014). Nonetheless, these studies did not consider the racial and ethnic variations among cohabiting couples.

#### Race-Ethnic Differences in Contraceptive use

Previous research identified four main sources of racial and ethnic differentials in contraceptive use for cohabiting and married women: (1) age and parity; (2) relationship stability (or union duration); (3) socio-economic resources; (4) and religiosity

#### *Age and Parity*

Most studies of contraceptive use control for age and parity of women as these are key factors predicting birth intentions. Prior research showed that there are strong positive correlations between age and parity and very effective contraceptive use (Kavanaugh et al 2015;

Sweeney et al 2015; Eeckhaut et al 2014; Godecker et al 2001; Jones et al 2002). However, parity may affect contraceptive use differently for cohabiting and married women. Generally, married women (because they are older on average) tend to have more children than cohabiting women. This means that married women more often may be at the end of their reproductive careers and hence are more likely to use very effective contraceptive methods, compared to cohabiting women (Jones et al 2012; Eeckhaut et al 2014). Despite the significant positive association between parity and very effective contraceptive use (Sweeney 2010; Frost et al 2007), cohabiting women with children may still be less likely to use an effective birth control method because their births are more often unintended and mistimed than births to married women (Sweeney and Raley 2014; Finer and Zolner 2011; Hayford and Guzzo 2013).

Concerning race and ethnicity, there is a sharp variation in parity across race and ethnicity. Generally, White women have lower parity or fewer number of children than Black and Hispanic women (Sweeney and Raley 2014; Gibson-Davis and Rackin 2014; Choi and Hamilton 2016). Specifically, White cohabiting women are less likely to have children compared to Black and Hispanic cohabiting women (Lichter et al 2016; Cherlin et al 2016; Wu 2008; Manning 2001). Thus, assessments of racial and ethnic variation in contraceptive use require attention to parity.

#### *Relationship Duration*

Cohabitation is more fragile than marriage (Brown et al 2006; Lichter et al 2016), with cohabiting unions more likely to dissolve than marriages. Relationship stability or union duration is an important predictor of contraceptive use (Manning et al 2009), because duration of a relationship determines women's anticipation, and adequate protection, for sex (Sweeney and Raley 2014). Recent studies have shown a positive significant association between union duration and very effective contraceptive use (see Sweeney et al 2015), when adjusting for race

and ethnicity (Sweeney and Raley 2014). Hence, cohabiting women may be less likely to use effective methods given their shorter relationship horizon. Further, African-American and Hispanic women experience higher rates of union dissolution compared to Whites (Raley et al 2015; Sweeney 2016; Hummer and Hamilton 2010; Lichter and Qian 2008; Cherlin 1998). Consequently, these shorter union durations may mean less effective contraceptive use for racial minority women.

#### *Socio-economic resources*

With regard to economic resources, studies have consistently shown married women to have relatively higher educational attainment than cohabiting women (Sweeney 2016; Hiekel et al 2014). At the same time economic resources are important predictors of contraceptive use (Kost et al 2008; Kavanaugh et al 2015; Daniels et al 2015; Sweeney 2010; Ranjit et al 2001). This means that, married women may be more likely to practice contraceptive use compared to cohabiting women (Sweeney et al 2015).

Generally, Blacks and Hispanics in cohabiting and married unions have fewer economic resources, compared to their White counterparts. Researchers find economic barriers to effective contraceptive use among Whites, Blacks and Hispanics (Dehlendorf et al 2011). Related to union status, married women have higher economic resources than cohabiting women across racial and ethnic groups, but the gap is greatest among Whites (Schwartz and Han 2014; Schneider 2011). As a result, it is important to account for socioeconomic factors as they may help explain union status differentials as well as racial and ethnic disparities in contraceptive use.

#### *Religiosity*

Cohabiting women are less likely to report being very religious compared to married women (Fehring and Ohlendorf 2007). For example, in terms of church attendance, Mahoney et al



(2015) report that religious attendance is highest among married women, with nearly half (49%) attending religious services at least 2 or 3 times a month and only 23% of cohabiting women attend religious services 2 or 3 times a month or more frequently. With regard to contraceptive use, very religious women are less likely to use very effective methods of contraception, compared to women who considered themselves as less religious (Fehring and Ohlendorf 2007; Hayford and Morgan 2008; Montgomery and Casterline 1996). Higher levels of religious attendance may mean women have a more traditional family attitude towards childbearing (Prettner and Strulik 2016; Hayford and Morgan 2008; Montgomery and Casterline 1996). Furthermore, African-Americans and Hispanics are more likely to be very religious compared to Whites (Shieman 2010; Chatters et al 2009; Wuthnow 2003) so we expect religiosity to be an important factor that may explain racial and ethnic differences in effective contraceptive use.

#### Current Investigation

Given the continuous rise in childbearing within cohabiting unions (Cherlin et al 2016; Lichter and Qian 2008; Perelli-Harris et al 2010; Guzzo 2017a), it is important to assess the factors most strongly associated with childbearing, contraceptive use. While the racial and ethnic differentials in childbearing are well established, there is little recent research about the racial and ethnic variation in patterns of contraceptive use. We employ the most current nationally representative survey data (the 2013-2015 NSFG) and explore the patterns of contraceptive use among White, Black, and Hispanic women. Cohabitation is more often a family context to have children for Blacks and Hispanics than Whites (Cohen 2011). Our first research question examines whether the different patterns of contraceptive between cohabiting and married women vary according to race and ethnicity. Overall, we expect cohabiting and married women to share similar levels of effective contraceptive use, but we anticipate a gap may remain for White women but not Blacks

and Hispanics. We assess whether the union status and racial and ethnic variations in contraceptive use persist with the inclusion of age parity, relationship duration, socio-economic resources (specifically education) and religiosity. By testing interaction terms, we determine whether union status operates in a similar manner for Blacks, Whites and Hispanics.

Our second goal focuses solely on cohabiting unions; and examines race and ethnic variation among cohabiting women. We consider to what extent the age and parity, relationship duration, and socioeconomic characteristics explain these racial and ethnic patterns. Among cohabiting women, we expect White cohabiting women to be more likely to use effective contraception than their Black and Hispanic counterparts.

## DATA AND METHODS

We use data from the 2013-2015 NSFG, conducted by the National Center for Health Statistics, which interviewed a national probability sample of 5,699 women aged 15-44. The 2013-2015 NSFG is the most recent cycle. The 2013-2015 NSFG is particularly appropriate for the current analyses for two reasons: (1) It included detailed information on contraceptive use and self-reported union status at the time of the interview. (2) It provides the most updated contraceptive use behaviors of American women. Thus, these data ensure an accurate analysis of how cohabitation and contraceptive use vary among White, Black, and Hispanic women in a cohabiting or marital relationship.

[TABLE 1 ABOUT HERE]

The analytic sample is composed of 2,285 women who were either married ( $n=1523$ ; 67%) or cohabiting ( $n=762$ ; 33%) at the time of the interview. This sample excludes 3,052 (54%)

women who were single, divorce/separated or widowed at interview<sup>1</sup>. Based on previous studies, an additional 411 women (7% of the original sample) who identify their race and ethnicity as anything other than non-Hispanic White, non-Hispanic Black, or Hispanic were also excluded (see Sweeney 2010; Kim and Raley 2015; Choi and Hamilton 2016). In all the analyses and descriptive statistics, we adjusted for the complex sample design of the NSFG using STATA svy routines with probability sampling weights.

### Dependent Variable

The dependent variable for this study is contraceptive use. To measure this variable, respondents were asked whether they were using any birth control method (and the specific method used) at the time of the interview. Consistent with prior work current contraceptive use was coded as a binary variable: Women were coded 1 if they used a very effective contraceptive method ( $n=1226$ , 54%) and 0 for those who used *other* or no method. ( $n=1059$ , 46%). We defined “very effective” contraceptive methods in accordance with Sweeney (2010): to include male and female sterilization, pill, intrauterine device, and other hormonal methods. We focused on the “very effective” methods because of their meaningful reduction in the risks of an unintended pregnancy, compared to other methods (Gibbs 2014; Sweeney 2010). Also, because very effective contraceptive methods do not require any specific intervention at the time of intercourse, these contraceptive methods are particularly important for cohabiting and married

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<sup>1</sup> Our salient goal was to examine the race-ethnic variations in contraceptive use among contemporary cohabiting and married women in America. Single (especially never-married) women have entirely different socio-demographic characteristics that may bias race and ethnic patterns of contraceptive use (Choi and Hamilton 2016).

women as they are presumed to be having regular intercourse with their intimate partners (Sweeney 2010; Sweeney and Raley 2014).

### Independent Variables

The two focal variables are union status and race/ethnicity. Current *union status* of the woman is the main independent variable in these analyses. We measure it as a dichotomous variable: women who were cohabiting (n=762, 33%) and those who were married (n=1523, 67%) at interview. *Race and ethnicity* is measured using three categories: Hispanic (n=629, 22%), non-Hispanic White (n=1349, 68%), and non-Hispanic Black (n=307, 10%) coded as a series of dummy variables. Due to small sample sizes, women who reported as belonging to “other” racial backgrounds were excluded.

The following set of independent variables are included as key set of confounding variables. The *age* of the woman is measured as a continuous variable and the mean value is 33 years. *Parity*, measured as a continuous variable, is defined as the number of children of the woman at the time of the survey (Sweeney 2010); and in our sample, the average parity was approximately two children. *Union duration* is based on the women’s report of the month and year the couple began living together as cohabiting or married partners and was computed as a continuous variable using month and year of interview. At the time of interview, cohabiting women had mean union duration of approximately 4 years; while married women had a mean union duration of approximately 10 years. We use education as the basic indicator of socio-economic resources. Women’s *education* is recoded into four categories; less than high school (14%), high school (21%), some college (23%), and college degree or more (42%). *Religiosity* is measured as a continuous variable, indicating the frequency of religious attendance with responses ranging from never (1) to more than once a week (7).

## ANALYTICAL STRATEGY

At the first stage, we present a descriptive analysis showing the distribution of respondents across the dependent and independent variables with reports of percentages and means (Table 1). We then estimate logistic regression models to predict the likelihood of using very effective contraceptive method. In Table 2, the first model includes union status, race/ethnicity, age, parity, and union duration. For the second model, in addition to the first model, we add the woman's educational level and religiosity. Model 3 tests interactions for union status and race and ethnicity. For Figure 1, we present the predicted probabilities of very effective contraceptive use according to union status and race/ethnicity. We arrive at these estimations based on interaction terms that were added to model (Model 3) in Table 2. In Table 3, we limit our focus to cohabiting couples and present a first model, including race and ethnicity, age, parity and union duration. The second model includes the educational level of the cohabiting women and religiosity.

## RESULTS

The distribution of the dependent and independent variables are shown in Table 1 for the entire sample; and separately by union status. Table 1 shows that in both cohabiting and married unions, approximately 4 out of 10 women use effective contraception (46.23% and 46.39% respectively). The distribution of use of ineffective methods is also similar for both cohabiting and married women. About half of women in either cohabiting or married unions do not use any effective method of contraception (53.77% and 53.61% respectively).

The characteristics of the sample of married and cohabiting women are consistent with prior studies. Regarding race and ethnicity, minorities are more likely to be cohabiting than married. Greater share of White women are married (70%), compared to those cohabiting (66%).

About 8% of married women are Black and 13% of cohabiting women are Black. Cohabiting women (29%) are significantly 5 years younger than married women (34%) at the time of the interview. A greater share of cohabiting women have no child (38.89%), compared to married women (19.52%). Married women have higher parity than cohabiting women. For example, 28% of married women had three or more births in contrast to 20% of cohabiting women. Consistent with previous studies, marital unions are more stable than cohabiting unions. Married unions are 6 years longer than cohabiting unions (9.83 years vs. 3.66 years). Married women have higher educational levels than cohabiting women. Nearly one-half of married women had a college degree, in contrast to 28% of cohabiting women. Consistent with prior studies, cohabiting women report lower levels of religiosity than married women.

[TABLE 2 ABOUT HERE]

Table 2 shows two logistic regression models, with married as the reference union status category, predicting the likelihood of using very effective contraceptive use. The first model included union status, race/ethnicity, age, parity, and union duration. The second model added women's educational level and religiosity. In addition, a third model (not shown) tests interactions for union status and race/ethnicity. Our fundamental question is whether union status and racial and ethnic variation in very effective contraceptive use persist with the inclusion of age, parity, relationship duration, education and religiosity; and whether union status operates in a similar manner for Blacks, Whites and Hispanics.

In the first model (Table 2), the equation shows that, compared to married women, cohabiting women have significantly higher chances of using very effective contraceptive methods, controlling for race/ethnicity, parity, age and union duration. Cohabitors are 45%  $[(\exp).369 - 1]$  more likely to use a very effective contraceptive method than married women,

net other factors. Consistent with previous studies, race and ethnicity was significantly associated with very effective contraceptive use, with Whites having higher chances of using an effective method than the other racial minorities. Specifically, Model 1 shows that compared to Whites, Hispanics are 69% [exp (-.369)] less likely to use very effective contraceptive method. Similarly, Blacks are 62% less likely to use a very effective contraception, compared to Whites. For parity, consistent with prior studies, Model 1 continues to show that higher parity is associated with higher odds of very effective contraceptive use. For example, compared to women with zero parity, those with two children are 168% more likely to use a very effective contraceptive method. Similarly, women with three or more births are 216% more likely to use a very effective contraceptive method, compared to women without any children. Age and union duration are not significantly associated with very effective contraceptive use. It should be noted that age and union are not significant in the zero order model (table not shown).

Model 2 (of Table 2) adds education and religiosity to assess whether the significant association between union status and effective contraceptive use is due to higher education and religiosity of married women. Unlike Model 1 which shows a strong positive association ( $b=0.369$ ,  $p<0.05$ ) between cohabitation and very effective contraceptive use net other factors, Model 2 indicates there is only a marginal positive association ( $b=0.328$ ,  $p=0.061$ ). In this model, cohabitators are 39% more likely to use effective contraceptive methods. The significant association between race/ethnicity and contraceptive use persists with the inclusion of education and religiosity with lower odds of effective use among Black and Hispanic women than their White counterparts. Model 2 shows that women who had attended *some* college are 49% more likely to use very effective method of contraception, compared to those who graduated high

school. Religiosity does not have any significant association with very effective contraceptive use (the zero-order model indicates a similar finding).

[FIGURE 1 ABOUT HERE]

We estimate an interaction model (results not shown) of race/ethnicity and union status. To illustrate the interactions we predict the probabilities of very effective contraceptive use according to union status and race/ethnicity relying on the estimates from the interaction model (Figure 1). The results of the interaction model are best understood substantively through a consideration of the predicted probabilities of using a very effective method. Cohabiting women appear to have higher chances of using very effective contraception than married women across race and ethnic groups, but this difference was only significant among Whites. Among Whites, the probability of effective contraceptive use was marginally significantly higher among cohabiting than married women (0.64 vs. 0.54 respectively). Further, regardless of union status Whites reported significant higher probabilities of effective contraceptive use. Among racial minorities, the predicted probabilities of using a very effective method did not differ by union status. Thus, largely, Whites drive the union status differential that we report in Table 2. This contrasts with previous research, which finds that in 2002 union status, operates in the same manner for race/ethnic groups (Sweeney 2010).

[TABLE 3 ABOUT HERE]

Although Table 2 shows that cohabiting women are more likely to use very effective method than married, we believe that not all cohabiting women use very effective contraceptive methods. In fact, Table 1 shows that about 54% of cohabiting women do not use very effective contraceptive methods. Consequently, the second key research question was to assess variations in very effective contraceptive use among cohabiting women (Table 3). In the first model of



Table 3, Black cohabiting women are significantly (55%) less likely to use very effective contraceptive methods compared to their White cohabiting counterparts. Hispanic and White cohabiting women share similar odds of effective contraceptive use. Cohabiting women with two and three or more births are more likely to use very effective contraceptive method (167%, 413% respectively), compared to women without a child. Age was significantly and positively associated with very effective contraceptive use. Model 1 also shows union duration is negatively associated with very effective contraceptive use. The second model includes the education and religiosity measures. Except for cohabiting women who had *some* college education, educational level of cohabiting women is not associated with effective contraceptive use. Cohabiting women who had some college education are 98% more likely to use very effective method, compared to high school graduate cohabitators. The religiosity of cohabiting women is not a significant predictor of very effective contraceptive methods.

## DISCUSSION

This study examines the relationship between cohabitation and very effective contraceptive use; and how this relationship varies by race and ethnicity. While the racial and ethnic differentials in childbearing are well established, few studies have considered racial and ethnic variation in the patterns of contraceptive use for married and cohabiting women. Our work builds on Sweeney's (2010) study by providing a contemporary portrait of contraceptive use variations among cohabiting Black, White, and Hispanic women; and considering how they compare with their married counterparts.

Our findings reveal new patterns of contraceptive use among American women. The study shows that cohabiting women are more likely to use very effective contraceptive methods than married women. This finding is consistent with previous work that shows that cohabiting

women are more likely to use very effective contraception compared to their married counterparts (see Sweeney et al 2015; Eackhaut et al 2014). We anticipated that the gap might have narrowed given that cohabitation is increasingly a family context to have children. Thus, cohabitation has not become completely similar to marriage in its patterns of contraceptive behavior in contemporary America. More generally, the reproductive behaviors, contraceptive use, fertility, birth intentions, of cohabitators are distinct from married couples (Bachrach 1987; Lichter et al 2014; Edin and Kefalas 2011; Sassler and Favinger 2008).

The race and ethnic differentials in family behavior (Sweeney and Raley 2014) and contraceptive use (Choi and Hamilton 2016) guided us to examine whether the union status patterns of contraceptive use are similar for White, Black and Hispanic women. Among White women cohabitators are more effective contraceptive uses than married women. While Blacks and Hispanic cohabiting and married women share similar odds of effective contraceptive use. Thus, race/ethnic differentials are masked when examining all women together. Perhaps White cohabitators are more effective contraceptors because they consider cohabitation as a temporary relationship, which leads to marriage; on the contrary, cohabitation is viewed more as an alternative to marriage for Blacks and Hispanic women (see Manning and Landale 1996; Hayford et al 2014; Lichter et al 2016). These findings are consistent with the higher childbearing rates for Black and Hispanic cohabiting women.

Not all cohabiting women are using effective methods, about half (54%) of cohabiting women are using effective birth control methods. We find that Hispanic and White women share similar odds of using effective methods. Black cohabiting women are less likely to use very effective contraceptive methods compared to their White counterparts. These patterns are then reflected in the odds of having children in cohabiting unions with greater levels among Black

women (Cohen 2011; Lichter et al 2014; Hayford et al 2014). These results demonstrate the importance of distinguishing race and ethnic groups in studies of cohabitation and reproduction.

While we provide some new insights into contraceptive use patterns, there were some limitations to this study. First, this study relied on a static measure of union status. The study could not address the union transitions that are typical of American families. Future research on union transitions and contraceptive behaviors using the same data is needed. Second, this study focused on contraceptive use at the current union status. We did not consider whether women were already using contraceptives before transition to their current unions. This is particularly important for cohabiting women because of the fragile nature of their unions. We did not account for their contraceptive behaviors prior to their current unions; and the racial and ethnic variations in these behavioral patterns. Lastly, this study relied on responses from only women. A couple-based study may advance our understanding of contraceptive use patterns and decisions according to union status.

Taken together this study provides a basis to understand the fertility patterns observed among cohabiting women. As cohabitation becomes an increasingly acceptable family context to have and raise children, we expect that the distinctions in contraceptive use will diminish. However, not all women share these views so we may continue to observe differentials in contraceptive use for different subgroups of women. Assessments of fertility behaviors will remain important signals of the place of the cohabitation in the American family system.

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Table 1: Distribution of Dependent and Independent Variables by Union Status

	Cohabiting	Married	Total
<i>Dependent Variable</i>			
Contraceptive use			
Very effective	46.23	46.39	46.34
Not very effective	53.77	53.61	53.66
<i>Independent Variables</i>			
Race/Ethnicity			
Hispanic	23.40	21.65	22.15
Non-Hispanic White	63.17 <sup>a</sup>	70.42	68.35
Non-Hispanic Black	13.43 <sup>a</sup>	7.92	9.50
Age (mean)	29.18 <sup>a</sup>	34.60	33.05
Parity			
0	38.89 <sup>a</sup>	19.72	25.21
1	23.78 <sup>a</sup>	19.52	20.74
2	17.39 <sup>a</sup>	33.04	28.56
3 or more	19.93 <sup>a</sup>	27.72	25.49
Union duration (mean)	3.66 <sup>a</sup>	9.83	8.06
Education			
Less than High school	19.74 <sup>a</sup>	11.49	13.85
High school	26.06 <sup>a</sup>	19.53	21.40
Some college	26.14	21.61	22.91
College	28.06 <sup>a</sup>	47.36	41.83
Religiosity (mean)	2.86 <sup>a</sup>	3.93	3.62
N	762	1523	2285

Source: 2013-2015 National Survey of Family Growth

Note: All values were weighted. Percentages or means reported depending on the nature of the variable.

<sup>a</sup> Significant differences between cohabiting and married respondents,  $p < 0.05$ .

Table 2: Logistic Regression Predicting Very Effective Contraceptive Use

Independent Variables	Model 1		Model 2	
	$\beta$		$\beta$	
Union Status (ref. Married)				
Cohabiting	0.369	*	0.328	#
Race/Ethnicity (ref. White)				
Hispanic	-0.369	*	-0.317	*
Black	-0.474	**	-0.441	**
Parity (ref. no birth)				
1	-0.255		-0.257	
2	0.987	***	1.015	***
3 or more	1.149	***	1.201	***
Age	0.008		0.008	
Union duration	0.003		0.004	
Education (ref. High school)				
Less than High school			-0.029	
Some college			0.402	*
College			0.029	
Religiosity			-0.035	
Intercept	-0.647	#	-0.625	
N	2285		2285	

Source: 2013-2015 National Survey of Family Growth

Note: #p<0.10 \*p<0.05, \*\*P<0.01 , \*\*\*p<0.001; All values were weighted

Table 3: Logistic regression predicting very effective contraceptive use among women

Independent Variables	Model 1	Model 2
	$\beta$	$\beta$
Race/Ethnicity (ref. White)		
Hispanic	-0.404	-0.442
Black	-0.596 *	-0.715 *
Parity (ref. no birth)		
1	0.356	0.369
2	0.983 **	1.068 **
3 or more	1.635 ***	1.828 ***
Age	-0.014	-0.019
Union duration	-0.052 *	-0.050 #
Education (ref. High school)		
Less than High school		0.062
Some college		0.685 *
College		0.165
Religiosity		0.030
Intercept	0.370	0.388
N	762	762

Source: 2013-2015 National Survey of Family Growth

Note: #p<0.10, \*p<0.05, \*\*P<0.01 , \*\*\*p<0.001; All values were weighted

Figure 1: Predicted probability of effective contraceptive use according to union status and race/ethnicity

