

Extended Abstract

Dramatic changes to the form of American families have occurred in recent decades. In particular, scholars have focused on the shifts in union formation patterns of emerging and young adults. More young adults are delaying first marriage until their late twenties and nonmarital cohabitation is steadily increasing (Bumpass & Lu, 2000; Raley, 2000; Smock, 2000; U.S. Bureau of the Census, 2012). Nevertheless, despite changes to family formation patterns over the past half century, most Americans still view marriage as important and expect to marry in the future (Goldstein & Kenney, 2001; Thornton & Young-DeMarco, 2001). These shifts in union formation are tied to changes in attitudes about marriage and cohabitation (Bumpass, Sweet, & Cherlin, 1991; Thornton & Young-DeMarco, 2001). Therefore, understanding such attitudes may provide further insight into future trends in marriage and cohabitation.

In addition to union formation patterns of emerging and young adults, scholars have documented the high prevalence of risky sexual behaviors, such as multiple and concurrent sexual partners, among young adult populations in the United States (Lam & Lefkowitz, 2013; Paik, 2010). Research has also illustrated race and gender variations in prevalence estimates among young adults (Santelli, Brener, Lowry, Bhatt, & Zabin, 1998; Halpern, Hallfors, Bauer, Iritani, Waller, & Cho, 2004). For instance, a study using data from the National Survey of Adolescent Males (NSAM) found that African American males reported the highest rates of sexual risk and compared to White and Latino males, African American males had higher odds of maintaining high sexual risk and increasing sexual risk over time (Dariosis, Sifakis, Pleck, Astone, & Sonenstein, 2011). As a result of the implications of these behaviors for outcomes such as unintended pregnancy and STIs, it is important to understand and identify which factors contribute to individual differences in risky sexual behavior.

Given the prevalence and potentially deleterious consequences of risky sexual behaviors, empirical research has focused increased attention on identifying a wide range of predictors, correlates, and moderators of individual differences in risky sexual behaviors, including family factors such as parenting and family structure (Halpern, Waller, Spriggs, & Hallfors, 2006; Landor, Simons, Simons, Brody, & Gibbons, 2011; Zimmer-Gembeck & Helfand, 2008) and individual factors such as religiosity, intelligence, and permissive attitudes (Halpern, Joyner, Udry, & Suchindran, 2000). Substantially less research, however, has examined whether specific individual factors such as attitudes toward marriage and cohabitation influence subsequent risky sexual behaviors. Although, some recent evidence has begun to link how these attitudes may shape behaviors (Carroll, Willoughby, Badger, Nelson, Barry, & Madsen, 2007; Willoughby & Dworkin, 2009; Clark, Poulin, & Kohler, 2009). Without investigations of these relationships longitudinally and across racial and ethnic groups, scholars may be overlooking potentially important predictors of sexual behavior or mistakenly generalizing findings that may not hold across racial and ethnic groups and gender.

Furthermore, no published research has investigated another potentially influential individual factor: skin tone. This is surprising given suggestive evidence of an association between skin tone and marriage (Hamilton, Goldsmith, Darity, 2009; Udry, Bauman, & Chase, 1971), skin tone and spousal economic status (Hunter, 1998), as well as findings indicating darker skin tone as a societal disadvantage that increases the likelihood of participating in risk behaviors (Gyimah-Brempong & Price, 2006). To this end, skin tone may have implications for risky sexual behaviors and family formation attitudes, in particular, attitudes about marriage and cohabitation. Thus, examining the direct and moderating effects of skin tone on risky sexual behaviors may lead researchers to think about how skin tone plays a role in the lives of some individuals.

The Current Study

To build on previous research on marriage and cohabitation attitudes and the link between attitudes and behaviors, we draw on family studies and sociological literatures and theories as well as data from a nationally representative sample of contemporary young adults from the National Longitudinal

Study of Adolescent Health (Add Health) to address three questions: (a) *What are the marriage and cohabitation attitudes of emerging adults across racial and ethnic groups and gender in the United States?* Relatively few studies focus on racial and ethnic differences in marriage and cohabitation attitudes, those that do focus primarily on White-Black differences, thereby losing important descriptive information on attitudes held by other racial and ethnic groups. (b) *Are emerging adults' attitudes toward marriage and cohabitation longitudinally associated with risky sexual behaviors?* The marital horizon theory (Carroll et al., 2007) has recently been used to explain the relationship between marriage attitudes and behaviors among White samples and non-representative samples (e.g., college students) but has not been applied to the question of whether such attitudes in emerging adulthood forecast subsequent risky sexual behaviors among African American, Hispanic, and Asian young adults. The theory posits that individuals who place high value on marriage or anticipate marriage in their near future would be less experimental in their behaviors because they believe that risky behaviors, such as risky sexual behavior, are incompatible with married life. In addition to marital horizon theory, we employ principles of the life course theory and the theory of planned behavior to guide our conceptualization of these relationships. Furthermore, although studies have examined the relationship between attitudes toward cohabitation and sexual behavior, few have explored this association within racial and ethnic groups. And (c) *what role, if any, does skin tone play in these relationships?*

Method

Data and sample

The data for this study are from Waves III and IV of the National Longitudinal Study of Adolescent Health (Add Health), a nationally representative, probability-based, longitudinal study of approximately 20,000 adolescents in the United States in grades 7-12 in 1994-1995 (see Harris et al., 2009 for design details). Respondents were between the ages of 18-26 at Wave III. By Wave IV, respondents were between the ages of 24-32.

For this study, we limited the analyses to individuals who had valid sampling weights (n= 14,800), identified as 100 percent heterosexual at Wave III (n= 13,490), were never married by the time of the Wave III interview (n= 12,318), and had complete data on all study variables. In addition, we included only non-Hispanic Whites (n=4000), non-Hispanic African Americans (n= 1621), Hispanics (n= 1017), non-Hispanic Asians (n= 431). The final analytical sample included 7069 respondents (3568 males; 3501 females).

Measures

Risky sexual behavior. We used two variables from Wave IV to measure young adult risky sexual behaviors. Number of sexual partners in the past 12 months was assessed using responses to the question "With how many male/female [opposite-sex] partners have you had sex in the past 12 months, even if only one time?" Responses ranged from 1 to 50. Respondents were also asked about instances of concurrent sex partners in the past 12 months. The question asked "In the past 12 months, did you have sex with more than one partner at or around the same time?" Response categories ranged from 0 (no) to 1 (yes). Each outcome variable was tested in a separate model.

Marriage and cohabitation attitudes. At Wave III, respondents reported on their attitudes about marriage and cohabitation. We used four items to assess expectation of marriage, importance of marriage, desire to marry, and endorsement of cohabitation, based on the following questions. All items were continue variables and were reverse coded. Therefore, higher scores indicate more positive attitudes towards that specific item.

Skin tone. At Wave III, respondents were rated on their skin color by the interviewer. Each interviewer was asked "What is the respondent's skin color?" Responses were 1 (black), 2 (dark brown), 3 (medium

brown), 4 (light brown), and 5 (white). This item was reverse coded so that higher scores indicate a darker skin color.

Covariates. We controlled for religiosity at Wave III and Wave IV, age, education, and ever married at Wave IV, and Family SES at Wave I due to their significant associations with marriage and cohabitation attitudes and sexual behavior found in past literature.

Analyses. First, we examined the means and percentages of marriage and cohabitation attitudes and risky sexual behavior across race/ethnicity and gender and tested for racial/ethnic differences (see Table 1, males only). Next, hierarchical multiple regressions models were used for our continuous outcome of number of sexual partners and logistic regression models were used for our dichotomous outcome of concurrent sexual partner(s). Model 1 includes all control variables; Model 2 adds marriage and cohabitation attitudes to Model 1; Model 3 adds the skin tone variable to Model 2; Model 4 adds interaction terms between marriage and cohabitation attitudes and skin tone to Model 3. Post hoc analyses were conducted using a simple slope test when interaction effects were present (Aiken & West, 1991). We did not test for the direct and moderating effects of skin tone in the White group because there was little skin tone variation among this group. In addition, analyses used a weighted sample and controlled for survey design effects using STATA 11.0 “svyset” commands (Stata Corporation, College Station, TX). Given space limitations, all other tables and figures are not included.

Results and Discussion

The results show that the majority of emerging adults express strong expectation to marry and viewed marriage as an important institution. Thus, despite historical changes in union formation patterns, emerging adults continue to have high expectations to marry and are not rejecting marriage. However, most emerging adults do not desire to be “married now” but endorsed cohabitation, consistent with extant literature (Manning, Longmore, & Giordano, 2007; Willoughby & Carroll, 2010).

This study also found important racial and ethnic differences in marriage and cohabitation attitudes. For example, African American male and female emerging adults are least likely to expect to marry or to view marriage as important. Although we found no racial and ethnic differences among males in their desire to marry, African American females were more likely to desire to marry compared to other racial and ethnic groups. This is an interesting finding that suggests that despite disproportionately low marriage rates among African American women (Chambers & Kravitz, 2011), they still maintain a strong desire to marry. In addition, Whites report the highest level of endorsement of cohabitation whereas African Americans report the lowest level of endorsement of cohabitation. This latter finding is fascinating, given that African Americans are the most likely to cohabit (Kennedy & Bumpass, 2008; Phillips & Sweeney, 2005). Research suggests that although African Americans are less likely to endorse cohabitation, high unemployment and low earning potential among African American males reduce the pool of marriageable partners for African American women. Therefore they are more likely to cohabit with little to no incentive to form a legal partnership— marriage (Edin & Kefala, 2011; Smock, Manning, & Porter, 2005).

The second focus of this research was to investigate whether marriage and cohabitation attitudes in emerging adulthood are longitudinally associated with risky sexual behaviors in young adulthood across racial and ethnic group and gender. The findings show little support for hypotheses derived from marital horizon theory, life course theory, and the theory of planned behavior. Attitudes toward marriage were unassociated with subsequent risky sexual behaviors of Whites and African Americans. Though some links between attitudes toward marriage and risky sexual behaviors were evident among Hispanics and Asians, no meaningful pattern of differences emerged in the data. Similarly, although prior cross-sectional work on adolescent found associations between cohabitation attitudes and sexual behavior (Manning, Longmore, & Giordano, 2007; Willoughby & Carroll, 2010), current results revealed few longitudinal links when examined across gender and race/ethnicity groups. Taken together, findings

suggest that marriage and cohabitation attitudes likely play little role in sexual behavior patterns. Rather, other attitudes such as permissive sexual attitudes (Carroll et al., 2007) may be more important to engagement in risky sexual behavior.

We also found a link between skin tone and risky sexual behavior for some demographic groups (e.g., African Americans, Asians). Darker skin tone was found to be associated with risky sexual behavior, and also moderated associations between attitudes and sexual behavior in that at higher levels of positive attitudes toward marriage, lighter skin individuals had fewer sexual partners than darker skin individuals.

In conclusion, this study provides important descriptive information on the marriage and cohabitation attitudes of a contemporary sample of emerging adults across racial and ethnic groups and gender in the United States. In addition, it is the first study to examine whether emerging adults' attitudes toward marriage and cohabitation are longitudinally associated with risky sexual behavior. Unlike previous research that has been cross-sectional and controls for racial and ethnic group membership, we provide a more accurate picture of these associations across racial and ethnic groups and gender. Lastly, we are the first to investigate the role of skin tone in sexuality.

Findings suggest that it is not just individuals' attitudes that determine their behavior, especially sexual behavior, but how others perceive them as well as other aspect of their context. These findings also have important theoretical implications. Theorization related to marriage and cohabitation attitudes and how they may relate to sexual behavior should consider racial and ethnic differences as well as gender differences. The development of frameworks and theories as to how the relationships between marriage and cohabitation attitudes and behaviors play out across different racial and ethnic groups and gender will provide much needed additional insight. Both quantitative and qualitative research approaches will be useful toward this end.

Table 1. Mean score and percentage of marriage and cohabitation attitudes and sexual behavior, males grouped by race

	Males					Test statistic
	Total (N= 3568)	Non- Hispanic White (n= 2088)	Non-Hispanic African American (n= 705)	Hispanic (n= 542)	Non- Hispanic Asian (n= 233)	
	mean(SE)/ % (n)	mean (SE)/ % (n)	mean (SE)/ % (n)	mean (SE)/ % (n)	mean (SE)/ % (n)	
Marriage and cohabitation attitudes						
Marital expectation	3.88 (.028)	3.89 (.034)	3.75 (.063)	3.94 (.064)	4.12 (.073)	F(3,3568)= 7.14***
Marital importance	3.31 (.020)	3.34 (.024)	3.12 (.046)	3.26 (.059)	3.49 (.083)	F(3,3568)= 10.05***
Marital desire	2.24 (.040)	2.24 (.049)	2.26 (.072)	2.26 (.085)	2.03 (.130)	F(3,3568)= 1.31
Endorsement of cohabitation	3.67 (.035)	3.76 (.041)	3.37 (.102)	3.52 (.079)	3.54 (.135)	F(3,3568)= 28.08***
Sexual behavior						
Number of sexual intercourse partners	1.83 (.068)	1.66 (.067)	2.84 (.191)	1.74 (.123)	1.38 (.137)	F(3,3568)= 46.92***
Concurrent sexual partner (A)	18% (643)	15% (306)	31% (220)	19% (94)	11% (23)	χ^2 (n=3568)= 17.41***

*** p<.001; ** p<.01; * p<.05; N= 7069; (A) % represents adolescents who reported having had a concurrent sexual partner in past 12 months