Interracial Relationships and the Transition to Adulthood

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This study tracks and explains changing patterns of involvement in interracial sexual relationships during the transition to adulthood. Using a life course perspective that highlights the role of historical changes as well as age-graded changes in contexts and relationships, the authors hypothesize that involvement in interracial sexual relationships declines with increasing age among young adults. The analyses are based on some of the first nationally representative surveys to collect detailed information on sexual relationships: the National Longitudinal Study of Adolescent Health and the National Health and Social Life Survey. Findings from these surveys show that individuals are decreasingly likely to be in an interracial relationship between the ages of 18 and 35 years. They also suggest that the age decline in interracial involvement is a by-product of the transition to marriage in young adulthood and the increasing formation of interracial relationships in recent years. These findings have implications for future research on interracial relationships and family formation.

Scholars have long viewed interracial marriage as an indicator of the social and geographic distance between different racial groups (Blau 1994; Bogardus 1967; Gordon 1964; Lieberson and Waters 1988; Spickard 1989).\(^1\) Suggesting that barriers between racial groups have eroded in recent decades, data from the U.S. Census shows that the proportion of married couples with partners from different racial groups has increased remarkably since the 1960s. Although the number of marriages increased only marginally between 1960 and 2002, the number of interracial marriages increased from 157,000 to 1,674,000. However,
interracial marriage still is relatively uncommon. In 2002, only 2.9 percent of all marriages were interracial (U.S. Bureau of the Census 1998, 2003).²

Since the 1960s, men and women have been postponing the age at which they first marry, and they are increasingly likely to reach the age of 35 years without marrying. Furthermore, they are more likely than ever before to form a cohabiting relationship or accumulate five or more sex partners during the course of young adulthood (Bumpass and Lu 2000; Casper and Cohen 2000; Laumann et al. 1994). Although nationally representative studies of mate selection and family formation have broadened their scope to include cohabiting relationships (Raley 2001; Smock 2000), they generally have disregarded single (e.g., dating) relationships (for exceptions see Forste and Tanfer 1996; Waite and Joyner 2001).

The couple of representative studies that examine the racial mix of partners in both single and cohabiting relationships show that individuals in these types of relationships are more likely than married individuals to have a partner of a different race (Blackwell and Lichter 2004; Laumann et al. 1994). Although innovative, these studies focus only on current or relatively recent relationships in the early or mid 1990s. Consequently, we do not know the extent to which involvement in different types of interracial sexual relationships has increased in the past decade. Nor do we know why marriages are less likely than other types of sexual relationships to be interracial. Researchers speculate that individuals are increasingly selective with respect to race (and other traits) as they transition from single relationships to cohabitation to marriage, but they have not been able to examine matching processes fully because of incomplete data on the histories of sexual relationships (Blackwell and Lichter 2004).

Previous studies have yet to fully theorize or examine how involvement in interracial relationships changes with age. In a study that does address age differences in interracial marriage, Heaton and Albrecht (1996) found that in both 1980 and 1990 the likelihood of an individual having a spouse of a different race declined significantly with age.³ They argued that the age decline mainly reflects the fact that younger individuals began their marriages in more recent years when interracial marriage was more common. We predict that interracial involvement across a broader range of sexual relationships will show an even greater decline with age. After all, individuals are increasingly likely to be married as they get older, and marriages are less likely than single and cohabiting relationships to be interracial.

If interracial marriage is considered to be so critical, why is it worth investigating single and cohabiting relationships? Like interracial marriage, these other types of interracial relationships are indicators of the social barriers between racial groups, but they also may contribute to the erosion of these barriers by allowing individuals to learn about variation within racial groups and to question racial stereotypes (Kalmijn 1998). Additionally, it is critical to consider the racial mix of partners in single and cohabiting relationships because fertility rates within these relationships are increasing (Raley 2001). Finally, understanding other types of interracial relationships helps to enhance our understanding of interracial marriages. King and Bratter (2004) found that women are more likely to select husbands across racial lines if they select first sex partners across these lines.

To foreshadow the age decline, we use a life course perspective that highlights how relationships are socially structured by age and historical context (Crosnoe 2000; Elder 1998; Shanahan 2000). Our analyses are based on some of the first nationally representative surveys to collect detailed information on sexual relationships: the National Longitudinal Study of Adolescent Health (Add Health) and the National Health and Social Life Survey (NHSLS).

Focusing on current sexual relationships, the first part of our study uses data from both surveys to examine age differences in interracial involvement among young adults in two different periods (roughly 1990 and 2000). Turning

² These census statistics are based on the following categories of race: white, black, American Indian, Asian/Pacific Islander, and other. Hispanics are not included as a separate category.

³ The study by Heaton and Albrecht (1996) excluded marriages that included a Hispanic or Asian partner.
to sexual relationships formed by young adults between the two periods, the second part of our study uses data from Add Health to address how the formation of interracial relationships differs by age and historical period. Because we are able to examine the transition to marriage among single and cohabiting partners, we can explain why marriages are less likely than other types of sexual relationships to be interracial.

**INTERRACIAL RELATIONSHIPS IN A LIFE COURSE PERSPECTIVE**

We predict that involvement in interracial relationships will decline with increasing age on the basis of a life course perspective that draws attention to the role of historical changes (period and cohort effects) as well as age-graded transitions to different contexts and relationships (age effects). *Cohort effects* refer to influences associated with membership in a birth cohort, whereas *period effects* refer to influences across cohorts within a given historical period, and *age effects* refer to influences related to aging or movement through the life course (Glenn 1976). Whereas research on interracial marriage typically highlights period or cohort effects (Kalmijn 1993; Qian 1997), studies investigating the educational mix of partners in marriage have additionally emphasized age effects (Mare 1991). In the following sections, we discuss how preferences and opportunities for interracial relationships differ according to age, period, and cohort, and the role that these differences may play in the age decline in interracial involvement.

**Preferences for Interracial Relationships**

Researchers have long argued and found that social distance attitudes, or preferences for contact with other racial groups, are more restrictive as the relationship is increasingly intimate (Bogardus 1967; Park 1924; Schuman et al. 1997). They have continued to distinguish marriages from other types of relationships because of the greater commitment required in marriage. Marriage involves not only a public acknowledgement of the relationship, but also an intention to remain with the partner for a lifetime. To varying degrees, it also assumes that partners will share family and friends, pool resources, and have children (Blackwell and Lichter 2004; Laumann et al. 1994). Suggesting that preferences for interracial marriage are weaker than preferences for other types of interracial sexual relationships, studies find that marriages are less likely than single and cohabiting relationships to be interracial (Blackwell and Lichter 2000, 2004; Jepson and Jepson 2002; Laumann et al. 1994).

**Age Effects.** In samples of ongoing relationships, older individuals are more likely than younger individuals to be in marriages, and they are less likely to be in single and cohabiting relationships. In 2000, 1.9 percent of individuals between the ages of 15 and 19 years were married, as compared with 19 percent of those between the ages of 20 and 24 years, 47.2 percent of those ages 25 to 29 years, and 62.5 percent of those ages 30 to 34 years (U.S. Bureau of the Census 2001a). Speculating that the greater racial similarity among married couples reflects a *winnowing process*, researchers predict that interracial relationships are less likely than same-race relationships to eventuate in marriage (Blackwell and Lichter 2000, 2004). Involvement in interracial relationships may decrease in the transition to adulthood because the majority of individuals marry in this phase of the life course.4

Also in comparison with younger individuals, older individuals have formed their current relationships at older ages. As individuals get older, they may be decreasingly likely to form an interracial relationship because of greater anticipation that their relationships will eventuate in marriage. We term this process “anticipatory mate selection,” which is analogous to the broader concept of anticipatory socialization, a process whereby individuals ease into role transitions by taking on the values of the groups to which they aspire (Merton 1964). In the case

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4 If interracial relationships are less likely than same-race relationships to become marriages, they also may be more likely to dissolve. Nationally representative studies suggest that interracial relationships may be less durable than same-race relationships because of external pressures (Heaton 2002; Heer 1974; Monahan 1970). However, some of these studies are dated, and their evidence is inconclusive (Aldridge 1978).
of anticipatory mate selection, individuals are thought to select partners they expect to be more acceptable marriage partners, and consequently favor same-race partners over different-race partners. This tendency is expected to increase during the course of young adulthood.

**PERIOD EFFECTS.** The relationships of older individuals tend to be longer in duration than those of younger individuals. The decline in interracial involvement with age may reflect a period effect, because younger individuals have formed their relationships more recently and during a period of greater racial tolerance. Approval of interracial marriage in the general population has increased dramatically over the past four decades. In the late 1950s, only about 1 of every 20 whites approved of marriages between whites and nonwhites. By the late 1990s, more than 2 of 3 whites approved of these marriages (Schuman et al. 1997). Even in the late 1990s, social distance attitudes liberalized considerably. For instance, the percentage of whites who favored a relative marrying a black person increased from 17 to 23 percent between 1996 and 2000 (Krysan 2002).

**COHORT EFFECTS.** Individuals of any given age vary greatly with respect to the age and year that they formed their current relationships. At any specific age or within any specific period, individuals from later cohorts may be more likely than individuals from earlier cohorts to form interracial relationships because of their greater preferences for interracial contact. Previous research has found that within historical periods, individuals from earlier cohorts display less tolerant social distance attitudes than their counterparts from later cohorts, mainly because they developed their attitudes in periods that were less accepting racially. Although differences are somewhat slight, cohorts can be ordered monotonically in terms of their social distance attitudes (Schuman et al. 1997).

**OPPORTUNITIES FOR INTERRACIAL RELATIONSHIPS**

According to structural perspectives, individuals prefer to associate with members of their own racial group. However, the size of their racial group relative to other racial groups influences their ability to satisfy this preference. Individuals from smaller racial groups have less opportunity than individuals from larger racial groups to form relationships with members of the same race (Blau 1994). Supporting this perspective, studies that directly examine how the relative sizes of different racial groups in states and metropolitan areas influence rates of interracial marriage find that individuals have a greater chance of marrying interracially when their own racial group is smaller than other racial groups (Blau, Blum, and Schwartz 1982; Harris and Ono 2004; Rytina et al. 1988). Given the effect of relative racial group size, it is no coincidence that differences in interracial marriage by racial group correspond to differences in the relative sizes of racial groups. Whites are the largest racial group in the U.S. population, followed by blacks, Hispanics, and Asians. Focusing on married couples 20 to 29 years of age in 1990, Qian (1997) found that 2 percent of whites, 5.4 percent of blacks, 36.9 percent of Hispanics, and 63.9 percent of Asians were in marriages with a partner of a different race.

**COHORT EFFECTS.** Individuals from later cohorts may be more likely than their counterparts from earlier cohorts to form interracial relationships as a consequence of their greater racial diversity. But although the racial diversity of youth has increased over time, high schools continue to be racially segregated (Orfield et al. 1997; Reardon, Yun, and Eitle 2000). Previous studies of interracial friendship in adolescence based on Add Health suggest that economic and geographic segregation limits opportunities for interracial contact considerably across and within educational institutions (Moody 2001; Mow and Entwisle forthcoming; Quillian and Campbell 2003). Given the magnitude of school-based segregation, cohort differences in opportunities for interracial contact may play only a marginal role in the age decline in interracial involvement.

**AGE EFFECTS.** Individuals may be less likely to form interracial relationships with increasing age because of reduced opportunities for interracial contact, which reflect the declining educational enrollment of blacks and Hispanics between the ages of 14 and 17 years, and the fact that blacks and Hispanics are much less likely
than whites and Asians to attend college (U.S. Bureau of the Census 2001b). Yet, to the extent that educational institutions are segregated by race, opportunities for interracial contact may change little as individuals advance from one grade to the next, or as they make the transition from high school to college (Jacobs 1997). Once individuals enter the workplace, their opportunities for interracial contact may even increase. Suggesting this, social networks formed in the workplace tend to be more racially diverse than networks formed elsewhere (Marsden 1990; McPherson, Smith-Lovin, and Cook 2001; Reskin, McBrier, and Kmec 1999). The increased opportunities for interracial contact that accompany the transition to work, then, may partially suppress the age decline in interracial involvement.

**EXPECTATIONS AND OVERVIEW OF STUDY**

In summary, the age decline in interracial involvement is thought to reflect the selection of relationships at different ages. Individuals are increasingly likely to be in a marriage rather than a cohabiting or single relationship as they get older, and marriages are less likely than single and cohabiting relationships to be interracial. Also with increasing age, individuals have relationships that are longer in duration. These relationships were formed further back in time when interracial relationships were less accepted, and they were formed at older ages when marriage is more anticipated.

Focusing on current sexual relationships, the first part of our study examines age differences in the interracial involvement of young adults during two different periods. It shows how chances of interracial involvement change over the course of young adulthood. Considering the role that the transition to marriage plays in the age decline, the study shows the age decline in interracial involvement before and after the marital status of the relationship is taken into account. Residual age differences in interracial involvement (i.e., those that persist once marital status is taken into account) are thought to reflect age, period, and cohort differences in the formation of interracial relationships. We are not able to examine the independent influence of the year and age the relationship began on interracial involvement because these factors are confounded in analyses of current relationships.

Expanding the scope of the analysis to sexual relationships formed in young adulthood between the two periods, the second part of the study allows us to adjudicate better between age and period explanations for the age decline. We examine whether younger individuals are more likely than older individuals to form interracial relationships, and whether relationships are more likely to be interracial the more recently they were formed. We also examine transitions between different statuses within sexual relationships. Specifically, we compare interracial and same-race single relationships in terms of the likelihood that they will eventuate in cohabitation or marriage.

**DATA AND METHODS**

Data for our analyses come from the NHSLS, a survey administered in 1992 to a national probability sample of 3,159 adults between the ages of 18 and 59 years. We limit the NHSLS sample of adults to those 18 to 35 years of age at the date of the survey because this is the period during which the majority of adults marry for the first time.

Data for our analyses of young adults at the turn of this century come from Add Health, a school-based study of adolescents in grades 7 through 12 (Harris et al. 2003). On the basis of school rosters, Add Health selected a nationally representative sample of 12,105 students in these schools to participate in an in-home interview in 1994 and 1995. In 2001 and 2002, Add Health reinterviewed 9,130 of the wave one in-home respondents. Because most of these

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5 NHSLS is a study designed by Edward O. Laumann and Robert T. Michael with support from the NICHD and seven other agencies.

6 Add Health is a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the NICHD, with cooperative funding from 17 other agencies. Special acknowledgment is due to Ronald R. Rindfuss and Barbara Entwistle for assistance in the original design. Persons interested in obtaining data files from Add Health should contact Add Health, Carolina Population Center, 123 W. Franklin Street, Chapel Hill, NC 27516-2524 (addhealth@unc.edu)
respondents were between the ages 18 and 25 years at the time of the recent interview, we limit the Add Health sample to this age group. Both Add Health and NHSLS asked respondents about the race of all their sexual partners in the previous year, and about the status of their sexual relationships at the time of the interview (i.e., whether they were in cohabiting relationships or marriages). This allows us to compare the interracial involvement of young adults in two different periods, and to consider the role that marriage plays in the age decline in interracial involvement. We also are able to evaluate competing explanations for the age decline in interracial involvement because the recent wave of Add Health collected detailed information on sexual relationships since the first interview, a period of about five years.

**Samples of Relationships**

As mentioned earlier, our analyses for the first part of the study are based on the current sexual relationships of young adult respondents from NHSLS (n = 1,659) and Add Health (n = 5,189), which include single (e.g., dating), cohabiting, and married relationships. Our analyses for the second part are based on all sexual relationships formed by Add Health respondents since 1995 (n = 12,195). Relationships formed after the age of 18 years are examined because we focus on the age decline in young adulthood. Consequently, this study examines virtually all the sexual relationships formed by Add Health respondents in young adulthood.

For both parts of the study, our unit of analysis is relationships rather than individuals. Respondents could nominate as many sexual partners as they had in the preceding year (or previous five years in the case of Add Health respondents). Although our emphasis in some analyses of current relationships minimizes the bias toward individuals with several relationships, a sizeable number of respondents had more than one ongoing relationship at the time of the interview. We exclude relationships involving partners of the same sex because the number of these relationships in NHSLS is small, and because we emphasize the transition to marriage.

**Measurement of Race**

Respondents in both surveys were asked about their race (i.e., white, black, Native American/Alaskan Native/American Indian, Asian/Pacific Islander) and Hispanic status. In both surveys, respondents who reported more than one race were asked which one best identified them (see Harris and Sim 2002 for estimates of the proportion of Add Health respondents who report more than one race). On the basis of the race that best describes them, as well as their Hispanic status, we divide respondents into five mutually exclusive groups: white, black, Hispanic, Asian, or Native American. Respondents who identify themselves as Hispanic are defined as Hispanic, regardless of their race. We exclude from our sample the relationships of respondents who chose Native American as their best race because of their small number. We classify partners using categories identical to those we use for respondents.

**Dependent Variables and Models**

Because the numbers of respondents having specific types of partners are small, especially in NHSLS, we cannot make all the contrasts we would wish in our dependent variable. Consequently, our dependent variables simply take into account whether respondents have a different-race partner (e.g., whether a Hispanic respondent has a white, black, Asian, or Native American partner) or a same-race partner. A number of studies on interracial and interethnic marriage apply log-linear analyses to census data (Fu 2001; Rosenfeld 2001). Because these studies are based on variables with discrete categories (e.g., education), these methods are ideal. In contrast, we include several continuous variables (e.g., the racial composition of metropolitan areas) in our models of interracial involvement. Logistic regression models are more appropriate for our study because they can include both discrete and con-

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7 A total of 334 NHSLS respondents and 390 Add Health respondents reported having more than one relationship at the time of the interview.

8 Same-sex cohabiting couples are more likely than opposite-sex cohabiting couples and married partners to be interracial (Jepson and Jepson 2002).
We estimate multilevel models (Guo and Zhao 2000) to deal with the clustering of relationships within primary sampling units, which include National Opinion Research Center (NORC) metropolitan areas for NHSLS respondents and schools for Add Health respondents.

We also estimate Cox proportional hazard models that predict the timing to a coresidential relationship once sexual relationships are formed (Allison 1995). Focusing on respondents who form a coresidential relationship, we then use logistic regression models to predict whether the coresidential relationship begins with marriage.

**Independent Variables for Models Based on Current Relationships**

**Age.** To examine how current involvement in an interracial relationship differs across the period of young adulthood, we measure the age of respondents at the time of the interview.

**Type of Relationship.** We distinguish the current relationships of young adults according to whether they are single, married, or cohabiting relationships. Those that are not marriages or cohabiting relationships fall into the "single" category.

**Independent Variables for Models Based on All Young Adult Relationships**

**Age and Period.** For analyses based on all relationships formed in young adulthood, we measure the age and year the sexual relationship was formed. As suggested earlier, the likelihood of forming an interracial relationship may initially increase with age as a consequence of the transition from school to work, but later, interracial involvement may decrease with age because of the increased expectation that the relationship will eventuate in marriage. We use linear and squared measures of age to allow for a nonlinear effect. Because we do not know how the likelihood of forming an interracial relationship differs by year the relationship began, we use dummy variables to measure period effects. These variables indicate whether the relationship was formed in 1997–1998, 1999–2000, or 2001–2002, using relationships formed in 1995–1996 as the comparison group. We do not measure cohort effects because they are a linear combination of age and period effects (Glenn 1976; O’Brien 2000).

**Interracial Relationship.** For models of the timing to a coresidential relationship and whether the coresidential relationship is a marriage rather than a cohabitation, we include a variable indicating whether the relationship is interracial.

**Control Variables for All Models**

All the models control for several characteristics of respondents that differ by age, period, or cohort, and that are tangential to the life course perspective. These include indicators denoting whether respondents are black, Hispanic, or Asian; whether they are female; whether their mother has less than or more than a high school degree; and whether they are foreign born. We also take into account the racial composition of local areas because opportunities for interracial involvement may differ systematically with age as a consequence of how the primary sampling units were selected, particularly in Add Health. For young adults from NHSLS, we determine the racial composition of metropolitan areas by matching 1990 census data to the primary sampling unit of each respondent. We use the pro-

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9 For respondents who form a coresidential relationship, we measure the number of months between the formation of the sexual relationship and the formation of the coresidential relationship. For respondents who dissolve a single relationship, we measure the number of months between the formation of the sexual relationship and the dissolution of it. For respondents who are still in a single relationship at the time of the interview, we measure the number of months between the formation of the sexual relationship and the date of the interview. Respondents in these last two categories have censored observations.

10 We do not present the results of Cox models that predict the timing of marriage after cohabitation because the samples are smaller and more select.

11 We use mothers' level of education rather than that of respondents because their schooling is presumably completed before the period during which respondents form a sexual relationship.
portion of individuals in respondents' Standard Metropolitan Statistical Areas (SMSAs) who are of a different race as a crude measure of the opportunity for having an interracial relationship. For young adults from Add Health, we determine the proportion of individuals in their counties who are of a different race according to contextual data that the Add Health project produced using 1990 census data.

RESULTS

We first examine how current involvement in an interracial sexual relationship changes over the course of young adulthood. As stated earlier, our sample from NHSLS includes the sexual relationships of respondents 18 to 35 years of age in 1992, and our sample from Add Health includes the sexual relationships of respondents 18 to 25 years of age at the time of the recent wave, 2001-2002. Because Add Health is longitudinal, we also are able to include a sample of the current sexual relationships for respondents who were 12 to 19 years of age in 1995, the year of the first wave. Combining whites, blacks, Hispanics, and Asians, Figure 1 plots the percentage of current sexual relationships that are interracial for each two-year age group.

The patterns corresponding to adolescents and adults in the 1990s suggest that the likelihood of having an interracial relationship declines considerably during the course of adolescence and young adulthood. Among adolescents from the first wave of Add Health, the percentage of interracially involved individuals declines from 26.8 percent (among 12- to 13-year-olds) to 14.2 percent (among 18- to 19-year-olds). For young adults from NHSLS, interracial involvement declines from 12.4 percent (among 20- to 21-year-olds) to 6.9 percent (among 34- to 35-year-olds).

It should be noted that relatively few NHSLS respondents 18 to 19 years of age have an interracial relationship (i.e., 8.9 percent). We suspect that this anomalous statistic may reflect the fact that young adults in this age group are less rep-

![Figure 1. Adolescent and Young Adult Relationships that Are Interracial, by Age at Interview and Survey: Current Relationships of White, Black, Hispanic, and Asian Respondents from the NHSLS and Add Health](image)

Note: Add Health = National Longitudinal Study of Adolescent Health; NHSLS = National Health and Social Life Survey
resentative of the general population because NHSLS failed to interview institutionalized populations, such as college students in dorms. It also should be kept in mind that the sexual relationships of adolescents are increasingly select at younger ages, because fewer adolescents are having sex at younger ages (Carver, Joyner, and Udry 2003). For this reason, in subsequent analyses, we drop adolescent relationships from wave one of Add Health. Disregarding the extreme, it appears that the age decline in interracial involvement is roughly linear.

The patterns for young adults from Add Health that pertain to the beginning of this century similarly show an age decline in interracial involvement. For young adults interviewed in 2001–2002, interracial involvement declines from 19.7 percent (among 18- to 19-year-olds) to 16.2 percent (among 24- to 25-year-olds). A comparison of the lines for young adults from Add Health and NHSLS shows that within different age groups, interracial involvement was far more common in the early part of this decade than in the early to mid 1990s. Within each age group, it appears that interracial relationships are, on the average, about five percentage points higher in Add Health than in NHSLS.

Figure 2 shows the age decline in interracial involvement for white, black, and Hispanic respondents from NHSLS. Asian respondents, who have the greatest likelihood of interracial involvement, are not included in these comparisons because their numbers in some of the age groups are small, even in Add Health. We do not include NHSLS respondents 18 to 21 years of age because of the representational problem mentioned earlier, and because the number of minorities in this age group is small. For Hispanics, interracial involvement declines monotonically from one age group to the next, decreasing from 37.5 for 22- to 25-year-olds to 31.3 percent for 30- to 35-year-olds. Although

![Figure 2. Young Adult Relationships that Are Interracial, by Race of Respondent and Age at Interview: Current Sexual Relationships of Respondents from the NHSLS](image_url)

**Figure 2.** Young Adult Relationships that Are Interracial, by Race of Respondent and Age at Interview: Current Sexual Relationships of Respondents from the NHSLS

*Note: NHSLS = National Health and Social Life Survey*

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12 Additional results available on the ASR online supplement (http://www.asanet.org/journals/asr/2005/toc046.html) show for both surveys the proportion of respondents from different racial groups who have a partner of a specific race.
the patterns for blacks and whites are less systematic, there is a general decline among these groups. Between the extreme age groups, interracial involvement drops from 7.3 to 4.6 percent for whites and from 14.9 to 2.6 percent for blacks.

Figure 3 shows analogous statistics for young adult respondents from Add Health. As in Figure 2, an age decline is found for whites, blacks, and Hispanics, but the pattern is monotonic only for Hispanics. Between the two extreme age groups (18- to 19-year-olds vs 24- to 25-year-olds), interracial involvement declines from 16.2 to 11.9 percent among whites, from 20.2 to 14 percent among blacks, and from 44.9 to 32.9 percent among Hispanics. Both Figures 2 and 3 show Hispanics as the most likely to have an interracial relationship, followed by blacks and whites. As mentioned earlier, this ordering partly reflects differences in the relative sizes of the racial groups.

To examine the period increase in interracial involvement, we compare results from Figures 2 and 3. Such an exercise is useful only for whites and blacks because the sample of respondents in NHSLS does not include individuals who had difficulty understanding English. Presumably, the NHSLS sample includes more assimilated Hispanics who are expected to have a greater likelihood of interracial involvement. Focusing on respondents 22 to 25 years of age in both Figures 2 and 3, it appears that interracial involvement increased over time for both whites and blacks.

Figure 4 shows how interracial involvement differs across the three types of relationships for whites 21 to 25 years of age from both surveys. We focus on these groups to compare directly between the different types of relationships and across the two periods. This figure shows that cohabiting relationships are the most likely and marriages the least likely to be interracial, with single relationships falling in the middle. It also suggests that the increase in interracial involvement over time was greatest for cohabiting relationships (i.e., 71 percent = $\frac{15.6 - 9.1}{9.1}$),

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**Figure 3.** Young Adult Relationships that Are Interracial, by Race of Respondent and Age at Interview: Current Sexual Relationships of Respondents from Add Health

*Note: Add Health = National Longitudinal Study of Adolescent Health*
followed by single relationships (i.e., 53 percent = \[11.9 - 7.8\]/7.8), and then by marriages (i.e., 39 percent = \[7.5 - 5.4\]/5.4), although the estimates are not very precise because of small sample sizes.

Figure 5 shows the age decline for respondents from Add Health before and after the type of relationship is taken into account. Among respondents 18 to 21 and 22 to 25 years of age, respectively, 19.1 and 16 percent of all relationships are interracial. In addition, even within the three different types of relationships, an age decline exists. This suggests that the transition to marriage is not the only factor explaining the age decline in interracial involvement. Age, period, and cohort differences in the formation of sexual relationships also may play a role.

And Figure 5, similar to Figure 4, shows that, within any given age group, cohabiting relationships are the most likely to be interracial, marriages are the least likely, and single relationships are in the middle of this range. Considering recent sexual relationships among adults in NHSLS, Laumann et al. (1994) found this same pattern. The finding that cohabiting relationships are more likely than single relationships to be interracial seems to contradict the assertion that cohabiting relationships require greater commitment than single relationships (Blackwell and Lichter 2000, 2004). If interracial relationships are less likely than same-race relationships to become cohabiting relationships, then we would expect the proportion of interracial relationships to be smaller among cohabiting couples than among single couples. However, these results are based on current relationships. Figure 6, based on all relationships, sheds light on this pattern by considering transitions to cohabitation and marriage for all Add Health sexual relationships formed in young adulthood.

Figure 6 displays the probabilities of different transitions for both interracial and same-race relationships using a tree diagram, with the probabilities for interracial relationships in

Note: Add Health = National Longitudinal Study of Adolescent Health; NHSLS = National Health and Social Life Survey
Figures 5. Young Adult Relationships that Are Interracial, by Type of Relationship and Age: Current Sexual Relationships of White, Black, Hispanic, and Asian Respondents from Add Health

Note: Add Health = National Longitudinal Study of Adolescent Health.

Parentheses. These probabilities are based on the transitions of all young adult sexual relationships formed in the past five years by Add Health respondents. They show that single respondents in interracial relationships do not differ much from respondents in same-race relationships with respect to their chances of forming a coresidential relationship (i.e., a cohabitating relationship or marriage). The probability of forming a coresidential relationship is .247 (i.e., .211 + .036) for respondents in same-race relationships and .215 (i.e., .200 + .015) for respondents in interracial relationships. Respondents in interracial relationships, then, are about 87 percent (i.e., .870 = .215/.247) as likely as respondents in same-race relationships to coreside with a sexual partner.

Whereas respondents in interracial relationships differ only slightly from their counterparts in same-race relationships in their likelihood of forming a coresidential relationship, they differ greatly from their counterparts in the route by which they begin living together. Respondents in interracial relationships are about half as likely as their counterparts in same-race relationships to begin their coresidential relationship with marriage. Among respondents who coreside with their sexual partners, the probability of beginning the relationship with marriage is .146 (i.e., .036/[.036 + .211]) for those in same-race relationships and .070 (i.e., .015/[.015 + .200]) for those in interracial relationships. The difference between same-race and interracial relationships in the likelihood of marriage (i.e., .036 vs .015) is statistically significant.

Interracial cohabiting relationships are about three-fifths (i.e., .596 = .127/.213) as likely as same-race cohabiting relationships to become marriages. For example, the probability of marrying a partner is .213 for respondents in same-race cohabiting relationships and .127 for...
**Figure 6.** Probabilities of Different Transitions: All Young Adult Sexual Relationships of White, Black, Hispanic, and Asian Respondents from Add Health

Note: Statistics for same-race relationships are followed by those for interracial relationships in parentheses. N = 9,957/2,238. Assumes sexual relationship began before cohabitation and marriage, which is not the case for less than 5 percent of the marriages and less than 1 percent of the cohabiting relationships. Add Health = National Longitudinal Study of Adolescent Health. * p < .05; ** p < .01; *** p < .001 (two-tailed tests).

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Interracial relationships differ from same-race relationships not only in their chances of becoming marriages, but also in their likelihood of dissolving before the recent interview. Specifically, the probability of dissolving a single relationship is .598 for respondents in same-race relationships and .643 for respondents in interracial relationships, a difference that is statistically significant. Among relationships that become coresidential relationships, however, interracial relationships do not differ significantly from same-race relationships with respect to stability.
to be ongoing single relationships at the time of the interview, whereas 1,543 (i.e., 9,957 × 0.155) interracial relationships are estimated to fall in this category. Therefore, 17 percent (i.e., 17 = 318/[318 + 1,543]) of ongoing single relationships are estimated to be interracial. According to analogous calculations, 20 percent of ongoing cohabiting relationship and 12 percent of ongoing marriages are estimated to be interracial. Similar to the results in Figures 4 and 5, these calculations suggest that current cohabiting relationships are the most likely to be interracial, and that current marriages are the least likely to be interracial.

**MULTIVARIATE RESULTS**

Table 1 shows age effects for both samples of young adults based on multilevel logistic regression models of interracial involvement among the current sexual relationships of white, black, Hispanic, and Asian respondents. The first two columns show the odds ratios and logit coefficients for age in models with control variables, whereas the last two columns show these same statistics for models that add an indicator variable denoting whether the relationship is a marriage. Considering the effect of age before the marital status of the relationship is taken into account, we see that in NHSLS, the odds of interracial involvement decrease by 5.3 percent with each additional year of age (i.e., \[1 - .947\] × 100), and that in Add Health, the odds decrease by 4.9 percent with each year of age (i.e., \[1 - .951\] × 100).

As can be seen, the age effect is significant at a p value less than .05 until marital status is taken into account. It appears that more than two-fifths of the age decline in interracial involvement in both samples (i.e., \(.407 = [.054 - .032]/.054\) for NHSLS and \(.600 = [.050 - .020]/.050\) for Add Health) is attributable to the fact that the relationships of older individuals are more likely to be marriages rather than cohabiting or single relationships. Although it is interesting from an accounting perspective to understand how much of the age decline in interracial involvement is attributable to the transition to marriage, these models reverse the ordering of these events. In reality, the date of marriage follows the date the relationship began.

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15 These calculations differ slightly from statistics based on the sample of current relationships included in Figure 5 because the sample of relationships formed in young adulthood excludes relationships formed in adolescence or before 1995.

16 Additional results available on the ASR online supplement (http://www.asanet.org/journals/asr/2005/toc046.html) show descriptive statistics for the variables in these models, in addition to coefficients for baseline models. They also show how the

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17 Because the effect of age fails to differ significantly at a p level less than .05 by race in both samples, we do not include interaction terms between age and indicator variables for black, Hispanic, and Asian. Additional results are available on the ASR online supplement (http://www.asanet.org/journals/asr/2005/toc046.html).

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Table 1. Age Effects in Multilevel Logistic Regression Models of Interracial Relationships, by Survey: Current Sexual Relationships of NHSLS and Add Health Respondents

<table>
<thead>
<tr>
<th>Survey</th>
<th>Without Marriage Indicator</th>
<th>With Marriage Indicator</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Odds Ratio</td>
<td>Logit Coefficient</td>
</tr>
<tr>
<td>NHSLS (N = 1,639)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.947**</td>
<td>-.054**</td>
</tr>
<tr>
<td></td>
<td>(.018)</td>
<td>(.020)</td>
</tr>
<tr>
<td>Add Health (N = 5,189)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>.951*</td>
<td>-.050*</td>
</tr>
<tr>
<td></td>
<td>(.022)</td>
<td>(.023)</td>
</tr>
</tbody>
</table>

Notes: Standard errors are in parentheses. Models control for the following characteristics of respondents: gender, race, foreign born, maternal education, and local opportunity. Samples include white, black, Hispanic, and Asian respondents. The NHSLS sample includes the oversample of Hispanics. NHSLS = National Health and Social Life Survey; Add Health = National Longitudinal Study of Adolescent Health.

* p < .05; ** p < .01; *** p < .001 (two-tailed tests).
Still, these results suggest that much of the age decline in interracial involvement is explained by the shift from single and cohabiting relationships to marriages during the transition to adulthood.\textsuperscript{18}

Differences in the age or year that relationships were formed also may explain part of the age decline, but they are confounded in samples of current relationships. Table 2 estimates the likelihood of interracial involvement among all young adult sexual relationships formed in the past five years by white, black, Hispanic, and Asian respondents from Add Health. It allows us to examine both age and period effects on the formation of interracial relationships, net of control variables. Here we find little support for the anticipatory mate selection argument that individuals are less likely to form an interracial relationship as they get older because of the greater anticipation that they will marry. Neither the squared nor the linear term for age when the relationship began is significant.\textsuperscript{19}

The period explanation for the age decline in interracial involvement appears to be much more promising, as indicated by the significant effects of indicator variables for the time when the relationship began. Relationships are increasingly likely to be interracial the later they are formed in historical time. In comparison with relationships formed in 1995–1996,

\textsuperscript{18} For models of interracial involvement, we calculated Huber–White standard errors to deal with the correlations of errors for individuals with more than one relationship. Additional results are available on the ASR online supplement (http://www.asanet.org/journals/asr/2005/toc046.html). Because the $p$ values for the effects of variables in the models did not change substantively after we calculated these errors, we present the results of multilevel models that simply take into account the clustering of individuals within primary sampling units. Current relationships of NHSLS and Add Health respondents of different age groups differ by type of relationship, duration of relationship, year the relationship began, and age at which the relationship began.

\textsuperscript{19} Although not significant, the coefficients for the age at which the relationship began suggest that the likelihood of forming an interracial relationship with age has an inverted U-shape. The age at which the derivative of $b1(\text{age}) + b2(\text{age}^2)$ equals zero is $-b1/2b2$. At this age, the probability of having an interracial relationship is maximized. Respondents are most likely to form an interracial relationship when they are 21.5 years old (i.e., $.431/[2 \times .010]$). Increases in the formation of interracial relationships up to this age may reflect increased opportunities for interracial contact that accompany the transition from school to work, whereas decreases in the formation of these relationships beyond this age may reflect anticipatory mate selection.

### Table 2. Age and Period Effects in Multilevel Logistic Regression Models of Interracial Relationships: All Young Adult Sexual Relationships of Add Health Respondents

<table>
<thead>
<tr>
<th>Variables</th>
<th>Odds Ratio</th>
<th>Logit Coefficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age When Relationship Began</td>
<td>1.538</td>
<td>.431 (.353)</td>
</tr>
<tr>
<td>Age When Relationship Began Squared</td>
<td>.990</td>
<td>-.010 (.009)</td>
</tr>
<tr>
<td>Year Relationship Began</td>
<td></td>
<td></td>
</tr>
<tr>
<td>1995–1996</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>1997–1998</td>
<td>1.265*</td>
<td>.235* (.106)</td>
</tr>
<tr>
<td>1999–2000</td>
<td>1.379**</td>
<td>.321** (.107)</td>
</tr>
<tr>
<td>2001–2002</td>
<td>1.433**</td>
<td>.360** (.120)</td>
</tr>
<tr>
<td>Cases (N)</td>
<td>12,195</td>
<td></td>
</tr>
</tbody>
</table>

Notes: Standard errors are in parentheses. Models control for the following characteristics of respondents: gender, race, foreign born, maternal education, and local opportunity. Sample includes white, black, Hispanic, and Asian respondents. Add Health = National Longitudinal Study of Adolescent Health.

* $p < .05$; ** $p < .01$; *** $p < .001$ (two-tailed tests).
relationships formed in 1997–1998 have 23 percent higher odds of being interracial. The odds that relationships formed in 1999–2000 and 2001–2002 will be interracial are, respectively, 32 and 36 percent higher than for relationships formed in 1995–1996. Thus, the formation of interracial relationships increases monotonically across the year categories we measure. It is important to note that more recently formed relationships overrepresent individuals from later birth cohorts.

Table 3 addresses how interracial relationships differ from same-race relationships in their chances of eventuating in cohabitation or marriage. The first two columns show the hazard ratios and estimates for interracial involvement based on Cox proportional hazard models that predict the timing to a coresidential relationship. For those who form a coresidential relationship, the last two columns show the odds ratios and logit coefficients for the effects of interracial involvement based on logistic regression models of whether the coresidential relationship was begun with marriage. These models are stratified by the year the relationship began, because we find large differences in the formation of interracial relationships according to period. They include a variable for the age at which the relationship began, in addition to the control variables.

The results in Table 3 show that interracial relationships are not significantly less likely than same-race relationships to become coresidential relationships, even if formed in the earliest period. This finding is at odds with the assumption that coresidential relationships require greater investment than single relationships (Blackwell and Lichter 2000, 2004). In support of a winnowing process, however, interracial relationships are significantly less likely than same-race relationships to become coresidential relationships via the route of marriage, except for relationships formed in the most recent period. Furthermore, the patterns in this table suggest that differences between interracial and same-race relationships in terms of marriage likelihood are somewhat less pronounced for relationships formed later in historical time.

### CONCLUSION

Our study tracks and explains changing patterns of involvement in interracial sexual relationships during the transition to adulthood. The results suggest that among current sexual relationships in two different historical periods (roughly 1990 and 2000), interracial involvement declined with age for whites, blacks, and Hispanics. The results also suggest that, between these two periods, current involvement in interracial relationships increased more among cohabiting and single relationships than among marriages.

Results based on current sexual relationships suggest that in both periods, the age decline in interracial involvement reflects the transition to marriage during young adulthood. As evidence of this, age differences in interracial involvement lessen considerably once the mar-

<table>
<thead>
<tr>
<th>Year, Interracial Relationship</th>
<th>Timing to Coresidence</th>
<th>Marriage (vs. Cohabitation)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Hazard Ratio</td>
<td>Cox Estimate</td>
</tr>
<tr>
<td>1995–1996 (N = 1,070/354)</td>
<td>.691</td>
<td>-.369</td>
</tr>
<tr>
<td></td>
<td>(.193)</td>
<td>(.774)</td>
</tr>
<tr>
<td>1997–1998 (N = 2,747/877)</td>
<td>.918</td>
<td>-.086</td>
</tr>
<tr>
<td></td>
<td>(.099)</td>
<td>(.341)</td>
</tr>
<tr>
<td>1999–2000 (N = 5,067/1,293)</td>
<td>.964</td>
<td>-.037</td>
</tr>
<tr>
<td></td>
<td>(.078)</td>
<td>(.309)</td>
</tr>
<tr>
<td>2001–2002 (N = 2,733/413)</td>
<td>1.096</td>
<td>.092</td>
</tr>
<tr>
<td></td>
<td>(.138)</td>
<td>(.526)</td>
</tr>
</tbody>
</table>

Notes: Standard errors are in parentheses. Models control for the following characteristics of respondents: gender, race, foreign born, maternal education, local opportunity, and age relationship began. Sample includes white, black, Hispanic, and Asian respondents. Add Health = National Longitudinal Study of Adolescent Health.

* p < .05; ** p < .01; *** p < .001 (two-tailed tests).
tionships may have contributed to recent increases in cohabitation. Results based on all young adult sexual relationships formed between the two periods offer additional evidence that the age decline is a by-product of the transition to marriage. Consistent with a winnowing process, interracial relationships are considerably less likely than same-race relationships to lead to marriage, although differences between these relationships in terms of marriage likelihood appear to have lessened in more recent years.

We also speculated that the age decline in interracial involvement might reflect the possibility that within periods, older individuals are less likely than younger individuals to form interracial relationships because of their greater anticipation that their relationships will eventually end in marriage. We found no support for the anticipatory mate selection argument. Our analysis shows that relationships are more likely to be interracial the more recently they were formed, suggesting that the age decline may instead reflect the increasing acceptance of interracial relationships. Relationships formed further back in historical time overrepresent earlier birth cohorts that may have less tolerant social distance attitudes and fewer opportunities for interracial contact.

By restricting their focus to marriage, previous studies have overlooked the possibility that increases in the formation of interracial relationships may have contributed to recent increases in cohabitation. Whereas individuals are increasingly likely to form interracial relationships, the tendency to favor same-race partners as spouses and different-race partners as roommates has lessened only slightly. This means that a greater proportion of relationships are being channeled into cohabitation, and correspondingly, a smaller share of relationships are being funneled into marriage. But even more importantly, previous studies have underestimated the increase in interracial involvement during recent decades, and they have disregarded the age decline in interracial involvement.

Our study focuses on broader factors implicated in the age decline in interracial involvement. Future studies need to consider whether the increased diversity among the young adult population translates into greater opportunities for interracial contact. Further research also needs to examine whether the transition from school to work suppresses the age decline in interracial involvement by taking into account the institutional contexts of respondents at the time they formed their relationships. We presume that families and friends also affect the formation and development of interracial relationships, and that the strength of these influences changes over the life course. This is an issue that future research additionally needs to explore. Finally, subsequent studies need to make more refined distinctions in identifying the race of respondents and partners. Like previous research based on Add Health, studies need to consider the multiple-race identification of non-Hispanics (Harris and Sim 2002), the race of Hispanics (Quillian and Campbell 2003), and the ethnicity of Asians and Hispanics (King and Harris 2004).

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