"Multiracial" Today, but "What" Tomorrow?
The Malleability of Racial Identification Over Time

Jamie Mihoko Doyle
Population Studies Center
University of Pennsylvania
3718 Locust Walk
Philadelphia, PA 19104-6299

Email: jmdoyle@ssc.upenn.edu

Grace Kao
Department of Sociology &
Population Studies Center
University of Pennsylvania
3718 Locust Walk
Philadelphia, PA 19104-6299

Email: grace2@pop.upenn.edu

September 23, 2004

*Paper submitted for consideration for the 2005 Meetings of the Population Association of America. This research is supported by Grant 1 R01 HD38704-01A1 from the and a minority supplement to the grant from NICHD to the second author, and by the University Research Foundation of the University of Pennsylvania. This research uses data from Add Health, a program project designed by J. Richard Udry, Peter S. Bearman, and Kathleen Mullan Harris, and funded by a grant P01-HD31921 from the National Institute of Child Health and Human Development, with cooperative funding from 17 other agencies. Special acknowledgment is due to Ronald R. Rindfuss and Barbara Entwisle 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 (www.cpc.unc.edu/addhealth/contract.html). Special thanks to Susan Lee for her research assistance.

"Multiracial" Today, but "What" Tomorrow?
The Malleability of Racial Identification Over Time

Abstract

We use the National Longitudinal Study of Adolescent Health (Add Health) to examine the change in racial identification among Multiracial Adolescents and Monoracial Adolescents as they make the transition from adolescence to adulthood. In general, we find that Multiracial youth exhibit more volatile racial identities than Monoracial youth. Youth who reported Native-American & White in Wave I were the least likely to maintain this identity (22%), while about 50% of Asian-white and black-white youth maintained their identities. In empirical analyses, we find that youth with more highly educated mothers have more stable racial identities between two waves of the survey. Physical appearance, as described by the interviewer at Wave I, is an important predictor of change between Wave I and Wave III responses. Our results suggest that while racial identity is malleable, it is still conditioned on variation in physical appearances.

"Multiracial" Today, but "What" Tomorrow?
The Malleability of Racial Identification Over Time

The "Tragic Mulatto" and the "Marginal Man" are popular stereotypes of the multiracial person. According to these notions, multiracials straddle two (or more) racial worlds, being a part of neither yet attempting to exist in both. This intermediate status leads to conflict, struggle, and isolation as the multiracial person attempts to reconcile all ancestries into a single, well-defined racial identity (Root, 1992). Racial identity is unstable and continually revised during various stages of their identity formation. Policy makers, statisticians, and demographers are concerned about accounting for multiracials and their unstable, splintered identities fearing that they will infuse racial statistics with biases and jeopardize these principal indicators of social disadvantage. As a consequence, they will inadvertently dilute the importance of race.

In reality, multiracials are not the only "Marginal Men." In Robert Park's original paper, "Human Migration and the Marginal Man," (1928) Park comments on the struggles of immigrants who are torn between their culture and the culture of the host society. Park's student, Everett Stonequist, popularized this idea and applied it exclusively to multiracials. Over seven decades after its inception, the Marginal Man concept still lingers in contemporary research for describing the conflicted position of immigrants and their children. Immigrant children have to exist both in their new host society as well as in the imagined homeland of their parents (Zhou, 1996).

Moreover, racial and ethnic identification of most individuals in the U.S. is subject to change over time. Many scholars have examined the relative change shift from ethnic affiliations to an unhyphenated "white" identity (see Waters, 1987, Alba, 1992; Gans, 1982 for

examples). For Hispanics, the notion of an overarching Hispanic identity is still somewhat questionable by its own members, who may be more comfortable choosing an ethnic identifier (such as Mexican, Cuban, or Puerto Rican). This is even more so the case for Asian Americans. This category is a recent invention and most Asian Americans do not find this category to be particularly relevant. Given that most Asian Americans are first or second generation, their ethnic affiliations are still the most salient to their own identification (see Espiritu, 1992). Native American ancestry is further subject to change because the majority of Native Americans are likely to be multiracial (Snipp, 1989).

The essential problem is that racial categories are dependent on the assumption that racial categories are mutually exclusive. As sociologists and demographers, we know that this is a false assumption, and multiracial individuals who are allowed by a survey to choose more than one category forces us to come to terms with racial identity and how we measure it.

In addition, multiracials are not alone in changing their racial identification over time. Critics of multiple-race reporting often overlook ongoing inconsistencies in race reporting for "traditionally" single race groups, which is an endemic consequence of collecting these inherently subjective data (Lieberson 1993). Evidence for racial crossovers often surface when calculating statistics for small minority subgroups. For instance, in Matthew Snipp's Monograph on the 1980 Census, he reports that while 1.5 million people reported "American Indian" as their racial identification, 6.7 million people reported American Indian ancestry (Snipp, 1989). The majority of people (93%) who reported "American Indian" as their ancestry chose "white" as their racial background. This suggests that virtually all American Indians are multiracial. Moreover Snipp argues that the surge in pan-Indian activities in the 1960s and 1970s likely led to the expansive increase in the numbers of people claiming American Indian ancestry. Although

the case of Native Americans is a sound example of racial fluidity, larger single race groups are not impervious to similar identity switching.

This analysis is an extension of prior research on racial reporting and identity. We use nationally representative, longitudinal data to parcel out factors that significantly affect changes in race responses for both single and multiple race groups, and explore the traits of persons who consistently report their race at two points in time. This paper is organized as follows. First, we give a general overview of the extant literature on identity and the collection of racial data. Special emphasis will be given to studies that add a theoretical foundation to this study. Next, we further describe our data, the National Longitudinal Study of Adolescent Health. Third, we present our findings that use hierarchical logistic models to predict identity change from Wave I to Wave III (1995-1996 and 2001), and also take into account individual-level characteristics, parental characteristics, external perceptions, and the racial dispersion of respondents' neighborhoods at Wave 1. Our overall intent is to not only to monitor the magnitude of identity shifts, but also to map out explanations for their stability or volatility. We are also interested in exploring the direction of the shift for both monoracials and multiracials.

BACKGROUND

Determinants of identity change are not unfamiliar topics in demography, sociology, or psychology. Park and Stonequist have numerous academic descendents who utilize various data sources from narratives (Nakazawa 2003 ; Gaskins 1999), to large-scale health surveys, and to the U.S. Census (Jones and Smith 2001) in an attempt to provide additional insight into the mechanisms that shape race reporting and identity. Two motifs appear to thread many of the studies to date. First, remnants of the one-drop rule resonate even today, and remain a powerful

force that seems to truncate identity options for multiracials who have a Black parent. The one-drop rule (or 'hypodescent') was a political, pseudo-measurement of racial blood quantum used to differentiate Blacks and whites in the general population. "One-drop" of Black blood classified a person as Black. Though this archaic and stigmatized term vanished from political and social circles after World War II, there is evidence that this conceptualization of race still persists in U.S. society (Root, 1992). While numerous studies find this to be the case, one recent analysis provides a lucid, concrete example. Qian (2004), for instance, uses the Public Use Micro Sample (PUMS) from the 1990 Census to examine the racial identification of children from interracial households. He finds that the majority of parents with Black-White biracial children identify their children as Black. Furthermore, as compared to Asian-White, Native American-White, and Latino-White children, Black-White multiracials were least likely to be identified as White by their parents. What appears to differentiate multiracial subgroups—the Black from the White--is the flexibility to choose (and to maybe even to pass) for one race.

A second related theme is the flexibility of racial identity for Asian-White and Native American-White multiracials. Perhaps due to ongoing interracial mixing, multiracials are simply "wallflowers" among single race groups. Asian Americans, for example, have the highest outmarriage rate among all racial and ethnic groups (Kitano et al. 1984), and Native Americans have an extensive history of racial mixing with Whites. The question is, "Is this a sufficient explanation for this pattern?" The argument is certainly porous. The presence and salience of "mulattoes," for instance, predate Asian-White multiracials. Large immigrant flows from Asia did not occur until after the 1860s, while imports of slaves from Africa began in the 1600s. Another puzzling fact is that the U.S. continues to use blood quantum analogues to identify Native Americans for tribal membership (Snipp, 1989). As we mentioned previously, multiracial

Black-Whites were identified in the same manner at one point. So why is racial identification elastic for non-Black multiracials? What researchers can only infer from trends in macroscopic data, such as the Census, are that (again) phenotype and the ability to pass for the majority group broadens the number of groups for which multiracials can identify. In addition, society may not readily impose minority labels for Asian-White and Native American-Whites as they do for Black-Whites. This explanation is not absolute, since many multiracials express a phenotype that is racially ambiguous (Root, 1992). Nevertheless, previous analyses provide fairly consistent evidence of this possibility.

A central limitation to most previous studies of racial identity is the reliance on Census data. Responses to the race question may not describe how the child views himself/herself, since the head of the household often reports these data. In fact, results from these analyses may even tell an entirely different story all together. Specifically, it may be a story of how the characteristics of a household relate to how a parent identifies and views their child—***not*** the child's identity and their self-perceived position in society. Until recently, the U.S. Census provided the only means of obtaining a nationally representative sample large enough to sustain stable statistical estimates. Yet with the increasing visibility of multiracials, from Tiger Woods to Barack Obama, the abundance of data sources on this relatively small population will surely rise in coming years.

A critical, unanswered question is: How does the racial identity of individuals change over time and what characteristics precipitate its volatility? Simply put: Who are multiracials today? Are they still multiracial tomorrow? A snapshot of how people self-identify in a cross-section captures a "working copy" identity that is revised and rewritten across the lifecourse, but theoretically reaches stability after adolescence. Harris and Sim use Wave 1 of Add Health (a

cross-section) and extract respondents who are both in the In-home and In-school component of the survey. Several limitations accompany their study. First, there were adolescents who were surveyed in home, but not at school and vice versa. The in-home survey is a 20,745 subsample of the original 90,000 adolescents in the In-school component. Their exclusionary criteria shrinks the maximum possible number of multiracials they could consider. Second, Harris and Sim capture racial identification of persons in adolescence, perhaps the most critically unstable period of identity development. The transition to adulthood is a pivotal period whereby racial identity is experienced more independently from parents. By using longitudinal data, we can more accurately assess the change over time in racial identification, and examine how characteristics and outsider evaluations at an earlier point in time can affect racial identification seven years later.

DATA

This analysis is based on Waves 1 and 3 of the National Longitudinal Study of Adolescent Health (Add Health), which is a nationally representative sample of 20,743 students from 80 high schools in the U.S. The first wave was conducted from 1994-1995 (when the respondents were in Grades 7-12, and aged 12-18) and the third wave was conducted in 2000-2001 (when the respondents were Aged 18-25). This study takes advantage of the large overall sample size, which enables the estimation of stable statistical results for multiracial subgroups that are a relatively small fraction of the total U.S. population. We identify 371 multiracials, which includes 89 Black-Whites, 88 Asian-Whites, and 194 Native American-Whites. Other multiracial groups were too small to analyze separately. Among single race groups, 7864 Whites, 3079 Blacks, 996 Asians, and 83 Native Americans are also considered. In this paper, we only

examine non-Hispanics.[1] Since Add Health utilizes a longitudinal design, we need to address sample stability between these panels of data. Attrition is common in this type of study design. Of the original 20,745 adolescents in Wave 1, 5,548 respondents (or 27%) are lost between Waves 1 and 3. Considering that more than half of a decade elapsed between the two interview dates, the retention is quite high. The loss of respondents between Wave 1 and 3 also does not appear to differ by race (with the exception of Black-Whites). All groups experience between 24%-28% attrition. For more information regarding attrition by race of respondents, please see Appendix 1.

METHODS

The In-Home component was designed as a cluster sample by which clusters were sampled with an unequal probability. To address this issue, we use hierarchical logistic regression models to correct for lack of independence among observations. The primary sampling units (schools) are nested within regions in the statistical models. In this way we adjust for differences in selection probabilities and response rates, it and allows sample totals to serve as estimates of population totals. Failing to account for this complexity would have resulted in biased parameter estimates and incorrect variance estimates (Tourangeau and Shin 1998; Chantala and Tabor 1999; Chantala 2002.)

A number of covariates intended to capture individual-level factors fueling changes in race reporting, socioeconomic status, objective measures of phenotype, and finally neighborhood context. Our goal is to ensure a parsimonious model yielding meaningful results. The individual

[1] Changes in racial identity among Hispanics are discussed in a separate, related paper (Vaquera and Doyle 2004).

level characteristics were selected as basic demographic factors known to influence shifts in identity, which includes: Age, sex, and generational status. Sex and generational status are assumed to be fixed at Wave 1 while Age is measured (and accounted for) in both waves. One can argue that language is an important indicator of cultural attachment, which may result in the tendency of multiracials who speak a foreign language to identify with their foreign ancestry. Add Health has indicators for the language most frequently used in the household; however, nearly all multiracials were shown to speak only English.

RESULTS

Descriptive Statistics

Glimpses into the dynamic nature of racial identity are captured at the beginning of Table One. Changes in racial identity are exceptionally high for multiracials, and relatively stable for single race groups, with the exception of Native Americans. Nearly 35% of Native Americans identified in Wave 1 changed their self-identification in later years. Similarly, Native American-Whites also undergo shifts in how they view themselves. Their identity appears to be the most volatile, with 77% of respondents shifting their racial identification by the third wave. A subtle yet interesting finding is not among the multiracials, but among monoracials. All monoracial groups experience some change over time, which bends popular conceptions of fixed, immutable identities among single-race groups.

[Table 1 about here]

Individual-level characteristics may provide further insight into the stability of racial identification for some groups and the fluidity of others. With the exception of Asians, Native Americans, and Asian-Whites, most of the respondents are female. A peculiar even-split in

proportions female and male are apparent in the Asian-White group. Similar to prior studies, we find that the majority of Asians are first generation and have fairly well-educated parents. Their mixed-race counterparts, Asian-Whites, are mostly in high-order generations, yet have a more scattered generational distribution than other racial groups.

Socioeconomic status is another important consideration for how individuals solidify their identity. Multiracial adolescents with highly educated parents may reside in higher income areas that are predominantly White, which may result in a greater propensity to assert their "whiteness" either through a biracial or monoracial White identity. Black-Whites in Wave 1 appear to have a socioeconomic background similar to single-race Asians. On average, these multiracials have parents with at least 14 years of education. Keep in mind that time is a critical part of the story. At Wave 3, all of the respondents are adults aged 18-25 who may or may not be living with their parents, and by this age, respondents are likely to have explored different options for their racial identity.

The interviewer's remarks at Wave 1 provide a unique perspective and depth into understanding the circumstances that may differ for single and multiple race respondents. Racial identity does not develop in a vacuum. External perceptions of multiracials and an assessment of their phenotype are important because they represent the identification of strangers and proxy for how others might treat our respondents. Kao (1992) argues that while physical appearance and pheonotype do not cause multiracials to choose certain identities, it is something that all multiracials refer to no matter with which groups they choose to identify. The highest percentages of interviewer-respondent agreement in racial identification occur among single race groups and the lowest among Native American-Whites. Interviewers categorized 93% of Native American-Whites as White. Interestingly, this is exactly the same percentage of individuals who

reported Native American ancestry but identified as "white" in their racial identification in the 1980 Census (Snipp, 1989). Preliminary findings about the idea of "passing" occur among Black-White and Asian-White multiracials. The one race best describing 14% of Black-White multiracials by interviewers is White, while 46% of Asian-Whites were considered White by interviewers. Certainly by first inspection, especially given the racial ambiguity of mixed-race persons, racial distinctions are not readily apparent.

Unlike other datasets, Wave 3 of Add Health also asks interviewers to categorize the respondent's skin color. Traits other than skin color are undoubtedly important indicators of race. However, in the U.S and many other racialized societies, privilege is attached to "whiteness" and may give a more fine-tuned measure of the degree to which a person is able to "pass" for another race. From the results displayed in Table 1, we find no evidence of end-aversion or skew bias in the interviewers' responses.[2] Instead, the distribution is in varying gradations. A fascinating and salient finding is the differing patterns of skin color distinctions of monoracial Native Americans as compared to their mixed racial counterparts. Single-race Native Americans appear to be a fairly heterogeneous group in terms of skin color, and have representation in just about every shade in the color spectrum. On the other hand, the distributions for Native American-Whites are clumped toward the "White" category with a relatively small percentage in the Light Brown and Medium Brown categories. While Native American ancestry may be simply a symbolic distinction for these multiracials, this flexibility may not apply to their single race counterparts.

[2] End-aversion bias refers to the reluctance of some respondents to elicit answers at the extremities of a given scale. For more information, see Streiner and Norman, 2nd ed., (2003).

Finally, the bottom of the table displays the mean racial dispersion (by Census block) of each racial group in Wave 1. This measure gives the degree of representation of three racial groups in a given area: White, Black, and Other. Numbers approaching zero indicate little racial dispersion (If D=0 then only one category is nonzero), while values approaching one indicate a well-dispersed area (If D=1 all category frequencies are equal). Asians and Native Americans tend to reside in areas that are fairly diverse, whereas single race Whites reside in areas that are relatively homogeneous, on average. Among multiracials at Wave 1, Black-Whites live in more racially integrated areas than Asian-Whites and Native American-Whites. The representation of a wider variety of groups in the neighborhoods that Black-Whites live may signal a greater acceptability of multiracial identification in more diverse settings.

Next we turn to Table 2, which displays cross tabulations of self-reported race at Wave 1 by the race respondents report at Wave 3. Column percents are displayed. In addition to the categories we use in the analysis, we added "residual" and "did not identify with a race" as categories. "Residual" encompasses the remaining racial combinations, single race groups (such as "other"), and Hispanic groups that we do not include in the final analysis. The latter category is self-explanatory. The numbers on the diagonal (which are displayed in bold-face) are the percentage of each group who reported the same racial background in Wave 1 versus Wave Three.

[Table 2 about here]

One salient pattern from this table is the consistent racial identification for Whites, Blacks, and Asians, and the relatively unstable racial identification among multiracials. Single-race Whites appear to have the most congruence in race reporting in both Waves, with 96% reporting white at both time periods. Blacks and Asians also have similar percentages of

agreement, which are both above 90%. Multiracials, on the other hand, elicit varied degrees of dissimilar responses depending on the subgroup in question. About half of Black-Whites and Asian-Whites identified self-reported as multiracial at both time periods. Conversely, there is little concordance among Native American-Whites. Only 22% of this group identified reported a consistent race. As mentioned previously, some groups have the flexibility to embrace a symbolic racial identity while others are constrained by societal labels. Even without accounting for various endogenous and exogenous factors, we can see the latitude of racial options given to various groups.

A second pattern related to our initial research questions relates to the direction of change among racial shifters. Among single-race groups, this change is often toward a multiracial identity. This trend particularly applies to Whites and Asians, where the change is often to a Native American-White and Asian-White identity, respectively. Single-race Native Americans show a somewhat muddled and puzzling pattern. While only 60% express a consistent identity, the distribution of alternative racial options for Native Americans do not exhibit a uniform and universal pattern. The majority of these respondents report either a single-race White identity in the second period (11%) or a multiracial Native American-White identity (14%). The remainder of this group is quite diffuse, with representation among groups such as single-race Blacks (2%), Asians (5%), and multiracial Black-Whites (1%).

The most interesting finding, and perhaps the most relevant to Census users, is the direction of identity shift for multiracials. The elasticity of choices for some groups and the limited array of options for others are best displayed here. Consistent with Xie and Goyette's (1997) findings, Asian-Whites appear to have little constraints in how they choose to identify. While 25% of Asian-Whites choose single-race Asian by the second period, about 13% choose

White. A plausible explanation could be that children in multiracial households are compelled to have a spliced identity, since both heritages are readily visible in the household. However, increases in education and the transcendence to independent living may be catalysts for an elevated sense of pride and interest in their minority culture. Similarly, feelings of "otherness" in the broader society, outside of their childhood neighborhoods, may spark changes toward a minority identity as they become racialized in U.S. society.

Native American-Whites also have flexible racial options, yet a similar racialization process may not readily apply. Only 22% of this group expressed the same race at Wave 3. An overwhelming majority of Native American-Whites chose single race White in the second period. The inverse of the Asian-White pattern is apparent and perhaps a similar explanation can be drawn. Given that 93% of these respondents were considered white by interviewers at wave 1, and 89% were reported to have a "white" skin color at Wave 3, their ability to pass for white in a broader society may influence their choices later in life. To put this in simpler terms, the lived racial experience for Native American-Whites may resemble whites, where they do not experience similar disadvantages and discriminatory practices than their Native American counterparts.

While speculations about why the aforementioned multiracial groups cannot be extrapolated in this table alone, remnants of the "one drop rule" are fairly clear for Black-Whites. The degree of passability truncates seem to truncate their alternatives. About 40% of respondents who self-identified as Black-White during the first interview reported only single-race Black during the later interview. Only 2% identified as single-race white during the reinterview. One can conjecture that the transition to adulthood particularly for Black-Whites (as well as Asian-Whites) is an important period of identity formation where the forces of the U.S.

racial stratification system--extending beyond the comfort and security of their parent's household--impinges upon them, perhaps compelling them to adopt a minority status later in life. Therefore, their lived racial experience as persons in a multicultural society may not be as "marginal men," but rather as racial minorities.

Hierarchical Logistic Models

One of our research questions pertains to the explanations for identity change, and the impetus for this change. Table 3 displays five hierarchical logistic models to not only correct for study design effects (clustering), but also enable the addition of our contextual variable (racial dispersion). Model 1 considers only race as a categorical independent variable and change/no change as the dichotomous dependent variable. As compared to Whites (the reference), overall multiracials have the largest proclivity toward change. Native American-Whites are over 140 times more likely than whites to change their identity between the two periods. The magnitude of change is less for Black-Whites and Asian-Whites, with odds ratios at about 23 and 27, respectively.

[Table 3 about here]

Single race groups also experience some volatility in self-identified race. Native American-Whites, in particular, are more apt to change than any other single race group considered (OR=15) followed by single-race Asians (OR=2). Surprisingly, a comparison of single-race Blacks and single-race Whites cannot be made in this model. Perhaps due to similar distributions in the dependent variable (no change) and hence piling of observations toward "no change," a viable comparison of these two groups cannot be made at this time.

Model 2 takes considers individual-level characteristics that may account for these differences. Generational status may be particularly important since this could be a proxy for the relative salience of cultural distinctions. Hypothetically, these should be important markers for changes in identity. However, they do not show significance in any of he statistical models. Native American-Whites show a slight diminution in the odds for change by Wave 3 (as do Asian-Whites). For Native American-Whites, generational status is unlikely to fuel changes in racial identity. Rather, age and gender are probably the factors prompting change. For Asian-Whites, on the other hand, generational status may be an important indicator of cultural salience, particularly for lower order generations such as first and second.

Model 3 takes into account a proxy for socioeconomic status, which we measure by maternal education. Overall, for every one-year increase in maternal education the odds of changing identity decrease by 6 percent. While the effect of this single variable is relatively small (yet significant), the addition of this variable results in a corresponding change in the coefficients for several racial groups. On the one hand, the addition of maternal education decreases the rift between Whites and Native Americans and Black-Whites, signaling that differences in maternal education help explain the differences in race reporting stability. The odds of change reduce by about 2-3% for each group. On the other hand, the addition of maternal education only widens the gap between Whites and other racial groups. This pattern indicates that differences in the odds of changing identity for the aforementioned groups can be largely attributable to differences in the distribution of socioeconomic status. For instance, we can see that there is an inverse relationship between maternal education and change in self-identification. Educated mothers seem to have children with more stable identities. For Native American-Whites, the differences in the distribution of maternal education partially mask the

odds of changing their self-identification at the third wave. After taking socioeconomic status into account, the odds of change for this group spike upward by about 45%.

The most provocative findings stem from the addition of interviewer's remarks. From their descriptions of respondents (although far from perfect) may give a glimpse as to how societal perceptions of the respondent influences how they self-identify. Nearly the entire difference between single-race Blacks and single-race Whites can be attributable to differences in phenotypic traits. This finding is aligning with common sense, so perhaps these measures are finer tuned than we previously thought. One principle component to how people racially self-identify is their appearance or their ability to "pass." From Model 4, we can see that appearance is a powerful mediator of identity change, particularly for Native American-Whites, Asian-Whites, and single-race Native Americans. After controlling for differences in skin color and interviewer's response to what single race best identifies this respondent, the differences between Whites and the three aforementioned groups only become larger. These findings suggest that racial options are perhaps more abundant and fluid for Asian-Whites and those of Native American ancestry.

These findings also suggest that racial ambiguity in appearance and the "ability to pass" are important factors contributing to the volatility of identity for Black-White multiracials. Nearly the entire difference between Black-Whites and Whites can be accounted for by differences in phenotypic traits. Given the same gender, age, generational status, socioeconomic status, and similar phenotypic traits, the stability of racial identification among whites looks similar to that of Black-Whites.

Finally, Model 5 takes into account the racial dispersion of the neighborhood (Census block) that the respondent lived in Wave 1. This tests whether the racial composition of their

neighborhood context exerts a normative influence on how the respondent chooses to self-identify. The model-to-model differences are not as striking as the previous model. One trend seems to resonate across all groups. The racial composition of a person's neighborhood seems to matter. After considering racial dispersion, all groups have odds ratios that suggest that they are more similar to Whites, indicating that they are less apt to change how they report their race from Wave 1 to Wave Three. It is important to note, however, that the differences between non-White groups and the White group are still substantial.

CONCLUSION

Add Health's unique design enabled us to capture the individual, societal, and contextual factors that may explain why changes in self-identification occur over time. Individual characteristics are self-reported by the respondent, maternal education is self-reported by the mother, interviewer remarks are also self-reported, and finally the contextual variable is geocoded by Census block. Furthermore, Add Health is nationally representative and longitudinal. This analysis undoubtedly takes advantage of its multifactorial construction, adding greater depth to the extant literature on identity.

Our overall intent was to not only monitor the magnitude of identity shifts over time, but also account for the direction of shifts, and provide explanations as to why they occur. Much variation exists within group and between groups. Overall, multiracials tend to have volatile racial choices than single-race groups with Native American-Whites with the least amount of consistency between waves. Only 23% of this group identified as Native American-White in Waves 1 and Three. Yet the concordance in racial identification for other multiracial groups

hovers around 50%. Single race groups show similar diversity. While 97% of Whites report the same race in both interview dates, only 64% of Native Americans did so a Wave Three.

Yet another interesting question is, among those multiracial that do change, with which race (majority or minority) do they best identify? Furthermore, do some respondents who viewed themselves as monoracial at Wave 1 have a newfound multiracial identity as they grow older? The results are certainly mixed. Among multiracials, part Asians and part Blacks tend to have an affinity for their respective minority race if they change how they identify. On the other hand, Native American-Whites at Wave 1 have a greater tendency to self-identify as White by the next interview. Among monoracials, Native Americans—by far—lack considerable consistency in alternative racial choices. Responses at Wave 3 for this group varied from White to Black to Asian to a multiracial combination.

Our third question relates to disentangling the factors that significantly account for racial identity and the change in racial identity. The stability and volatility of racial self-identification are firmly rooted in differences in two factors: socioeconomic status and physical appearance. Increases in maternal education are associated with elevated odds of reporting the same race over time. Perhaps more educated mothers are better attuned to how their children will be situated in a society demarcated by rigid racial lines, in addition to having the financial flexibility to choose neighborhoods and schools that are racially integrated.

Differences in physical characteristics are important predictors that explain account for change among some groups, and mask the underlying volatility for others. Racial identification tends to be an option for Native American-Whites, Asian-Whites, and single-race Native Americans. The odds of racial identification change balloon after accounting for differences in phenotypic traits. Perhaps their ambiguous physical appearance or tendency to adopt a more

"symbolic" identity makes racial lines more permeable for these groups. For persons having Black ancestry, phenotypic traits account for a significant difference between them and Whites. After accounting for these characteristics, single-race Blacks have an overwhelmingly stable identity over time while for Black-White multiracials they explain their volatility almost entirely.

Our results suggest that multiracial youth are still under much pressure to identify with a single racial group – even when they are given the choice to choose multiple groups and even when they have done so in the past. These findings suggest that lifelong experiences of how one is treated by others may largely be determined by phenotype, and that in turn motivates some multiracials to only choose one race. On the other hand, we also find that certainly among some monoracials are multiracials who feel more comfortable in choosing two (or more) races during young adulthood.

BIBLIOGRAPHY

Alba, Richard D. 1990.
Ethnic Identity: The Transformation of White America. New Haven: Yale University Press.

Christian, John, Nicholas J. Gadfield, Howard Giles and Donald M. Taylor. 1976.
"The Multidimensional and Dynamic Nature of Ethnic Identity ." *International Journal of Psychology.* 11:281-291.

Clark, Margaret, Sharon Kaufman and Robert C. Pierce. 1976.
"Explorations of Acculturation: Toward a Model of Ethnic Identity" *Human Organization*. 35:231-238.

Comas-Diaz, Lillian. 2001.
"Hispanics, Latinos, or Americanos: The Evolution of Identity." *Cultural Diversity and Ethnic Minority Psychology.* 7(2):115-120.

Denton, Nancy A. and Douglas S. Massey. 1989.
"Racial Identity among Caribbean Hispanics: The Effect of Double Minority Status on Residential Segregation." *American Sociological Review*. 54:790-808.

Field, Lynda D. 1996.
"Piecing Together the Puzzle: Self-Concept and Group Identity in Biracial Black/White Youth." *The Multiracial Experience: Racial Borders as the New Frontier*. Ed. Maria P.P. Root. Thousand Oaks, CA: SAGE Publications. 211-226.

Gaskins, Pearl Fuyo. 1999
What Are You? Voices of Mixed-Race Young People. Henry Holt & Company

Grove, Kwai Julienne. 1991.
"Identity Development in Interracial, Asian/White Late Adolescents: Must It Be So Problematic?" *Journal of Youth and Adolescence.* 20:617-628.

Jaret, Charles and Donald C. Reitzes. 1999.
"The Importance of Racial-Ethnic Identity and Social Setting for Blacks, Whites, and Multiracials." *Sociological Perspectives.* 42(4):711-737.

Kao, Grace. 1992.
"The Process of Formulating a Racial Identity Among Biracials." In Margo Ruark Hearst (editor), *Interracial Identity: Celebration, Conflict, or Choice?* Chicago: Biracial Family Network of Chicago.

Nakazawa, Donna Jackson. 2003.
Why Does Anybody Else Look Like Me? A Guide to Raising Multiracial Children. Perseus Publishing

Rockquemore, Kerry Ann. 2002.
"Negotiating the Color Line: The Gendered Process of Racial Identity among Black White Biracial Women." *Gender & Society*. 16: 485-503.

Root, Maria P. P. 1992.
Racially Mixed People in America. Newbury Park, CA: Sage Publications, Inc.

Rumbaut, Ruben G.
"The Crucible Within: Ethnic Identity, Self-Esteem, and Segmented Assimilation Among Children of Immigrants." *International Migration Review.* 28(4): 748-794.

Saenz, Rogelio and Sean-Shong Hwang, Benigno E. Aguirre, Robert N. Anderson. 1995.
"Persistance and Change in Asian Identity Among Children of Intermarried Parents." *Sociological Perspectives*. 38: 175-194.

Snipp, C. Matthew. 1989.
American Indians: The First of this Land. New York: Russell Sage Foundation.

Spickard, Paul R. 1989.
Mixed Blood: Intermarriage and Ethnic Identity in Twentieth-Century America. Madison: The University of Wisconsin Press.

Stephan, Cookie White and Walter G. Stephan. 1989.
"After Intermarriage: Ethnic Identity among Mixed-Heritage Japanese Americans and Hispanics." *Journal of Marriage and Family.* 51: 507-519.

Waters, Mary C. 1990.
Ethnic Options: Choosing Identities in America. Berkeley: University of California Press.

Xie, Yu and Kimberly Goyette. 1997.
"The Racial Identification of Biracial Children with One Asian Parent: Evidence from the 1990 Census." *Social Forces.* 76: 547-570.

Zhou, Min. 1997.
"Growing Up American: The Challenge Confronting Immigrant Children and Children of Immigrants." *Annual Review of Sociology.* 23: 63-95.

Table 1: Unweighted Descriptive Statistics of Respondents, Add Health In-home Sample. Respondents That are in Both Waves 1 and 3*

	White	Black	Asian	Native American	Black and White	Asian and White	Native American and White
Outcome Measure: Identity							
Change from Wave 1 to Wave 3							
Change	2.94	3.28	6.84	35.9	48.28	43.37	77.25
No Change	97.06	96.72	93.16	64.1	51.72	56.63	22.75
Individual-Level Characteristics							
Gender							
Male	47.06	44.56	52.21	54.22	40.45	50.00	48.45
Female	52.94	55.44	47.79	45.78	59.55	50.00	51.55
Generation Status							
First Generation	1.17	1.95	45.18	3.61	3.37	10.23	0.52
Second Generation	2.57	2.63	26.10	1.20	5.62	22.73	2.58
Third Generation	86.67	80.38	12.85	89.16	78.65	55.68	88.66
Missing	9.59	15.04	15.86	6.02	12.36	11.36	8.25
Age at Wave 1[a]	15.63	15.67	16.13	15.48	15.62	15.52	15.54
(Standard Deviation)	1.75	1.77	1.66	1.70	1.66	1.67	1.64
Age at Wave 3[a]	21.88	21.92	22.42	21.79	21.85	21.84	21.84
(Standard Deviation)	1.75	1.79	1.68	1.63	1.63	1.72	1.70
Parental Characteristics							
Years of Education[a]	13.68	13.40	14.11	13.00	14.46	13.21	13.21
(Standard Deviation)	2.30	2.50	2.86	2.53	2.45	2.64	2.13
Years of Education Missing	10.08	15.78	32.23	4.82	15.73	12.50	8.76
Interviewer's Remarks							
Respondent's Race, Wave 1							
White	99.80	0.23	0.72	14.46	22.22	46.43	93.30
Black	0.17	99.61	0.10	1.20	77.78	0.00	0.00
Native American	0.00	0.10	0.82	81.93	0.00	2.38	6.70
Asian	0.04	0.06	98.36	2.41	0.00	51.19	0.00
Skin Color, Wave 3							
Black	0.18	28.08	0.30	2.41	5.62	0.00	0.52
Dark Brown	0.15	28.83	2.61	22.89	6.74	1.14	0.00
Medium Brown	0.37	31.17	17.37	26.51	32.58	7.95	3.61
Light Brown	2.57	11.58	49.90	14.46	44.94	37.50	6.70
White	96.73	0.33	29.82	33.73	10.11	53.41	89.18
Contextual Variable							
Racial Dispersion, Census Block[a]	0.1	0.4	0.6	0.5	0.4	0.2	0.2
(Standard Deviation)	0.2	0.2	0.3	0.3	0.9	0.2	0.2
Total N	7864	3079	996	83	89	88	194

* Reported are column percents, unless otherwise indicated. Columns may not sum to 100% due to rounding error

[a] Means and standard deviations as indicated by " ( ) "

Table 2: Unweighted Descriptive Statistics of Respondents' Racial Identity Self-Reported at Wave 1 by Self-Reported Racial Identity Reported at Wave 3

	Race at Wave 1								
Race at Wave 3	**White**	**Black**	**Asian**	**Native American**	**Black and White**	**Asian and White**	**Native American and White**	**Did not Identify with a Race**	**Residual**
Monoracials									
White	96.15	0.52	1.10	10.84	2.25	12.50	67.01	36.36	3.01
Black	0.18	95.71	0.10	2.41	40.45	0.00	0.52	18.18	4.05
Asian	0.06	0.00	90.26	4.82	0.00	25.00	1.03	0.00	1.20
Native American	0.06	0.26	2.31	60.24	0.00	0.00	6.70	0.00	0.62
Multiracial									
Black and White	0.09	0.62	0.00	1.20	50.56	0.00	0.00	0.00	0.31
Asian and White	0.17	0.00	2.91	0.00	0.00	53.41	0.00	0.00	0.35
Native American and White	2.30	0.00	0.00	14.46	0.00	0.00	22.16	0.00	0.15
Did Not Identify With a Race	0.13	0.00	0.10	0.00	0.00	1.14	0.00	0.00	0.04
Residual	0.86	2.89	3.21	6.02	6.74	7.95	2.58	45.45	90.28

Table 3: Hierarchical Logistic Models with Change in Racial Identity as a Dichotomous Dependent Variable[a,b]

	Model 1	Model 2	Model 3	Model 4	Model 5
Individual-Level Characteristics					
Race of Respondent, Wave 1					
[White]					
Black	0.95 (0.66-1.36)	0.95 (0.66-1.38)	1.04 (0.70-1.55)	0.06*	0.06*
Asian	2.46*	3.04*	4.17*	7.51*	7.07*
Native American	15.12*	14.85*	11.94*	31.67*	30.71*
Black and White	23.39*	23.67*	21.91*	2.24 (0.18-28.59)	2.23 (0.18-27.71)
Asian and White	26.98*	26.71*	33.97*	43.42*	42.90*
Native American and White	140.25*	141.56*	187.52*	209.48*	201.60*
Gender					
[Male]					
Female		1.03 (0.79-1.33)	1.04 (0.79-1.39)	1.04 (0.79-1.39)	1.04 (0.78-1.38)
Age					
Wave 1		1.09 (0.80-1.51)	1.19 (0.85-1.65)	1.20 (0.86-1.69)	1.20 (0.85-1.69)
Wave 3		0.87 (0.63-1.21)	0.79 (0.56-1.13)	0.78 (0.55-1.12)	0.79 (0.55-1.13)
Generational Status					
[3rd Generation]					
1st Generation		0.59 (0.28-1.27)	0.53 (0.23-1.23)	0.55 (0.24-1.26)	0.55 (0.24-1.25)
2nd Generation		1.15 (0.65-2.10)	1.02 (0.55-1.96)	1.01 (0.53-1.93)	0.99 (0.52-1.91)
Missing		1.10 (0.67-1.80)	0.79 (0.09-6.89)	1.02 (0.12-8.37)	1.00 (0.12-8.06)
Parental Characteristics					
Mother's Education					
Years of Education			0.94*	0.95*	0.94*
Interviewer's Remarks					
Respondent's Race, Wave 1					
[White]					
Black				20.81*	20.72*
Native American				0.39 (0.01-1.40)	0.39 (0.01-1.41)
Asian				0.48 (0.03-0.83)	0.50 (0.04-0.84)
Other				2.87	2.89
Skin Color, Wave 3					
[White]					
Black				0.91 (0.35-2.37)	0.90 (0.34-2.35)
Dark Brown				1.10 (0.32-3.75)	1.09 (0.32-3.71)
Medium Brown				0.48 (0.20-1.14)	0.46 (0.20-1.09)
Light Brown				1.10 (0.57-2.13)	1.09 (0.55-2.12)
Contextual Variable					
Racial Dispersion,					1.13 (0.55-2.33)
N		11555	9983	9966	9872
Deviance/Degrees of Freedom		484	481	473	476

[a] " [ ]" Indicates reference category

[b] Confidence intervals (CI) are displayed when significance statistics are above the critical level of 0.05.

* P< 0.05

Appendix 1: Unweighted Descriptive Statistics of Respondents in Add Health, In-home Sample.

	White	Black	Asian	Native American	Black and White	Asian and White	Native American and White
Attrition							
In Wave 1 Only	24.78	28.73	24.2	27.83	37.32	29.6	25.95
In Waves 1 and 3	75.22	71.27	75.8	72.17	62.68	70.4	74.05
Outcome Measure: Identity							
Change from Wave 1 to Wave 3							
No Change	97.06	96.72	93.16	64.1	51.72	56.63	22.75
Change to White	n/a	0.53	1.14	11.54	2.3	13.25	68.78
Change to Single Race Minority	0.31	0.26	2.49	7.69	41.38	26.51	8.47
Change to Multiracial or Other Multiracial	2.63	2.49	3.21	16.67	4.6	3.61	0

* Reported are column percents