# Back to Basics: Examining the Essence of Merton's Status Exchange Theory using Husband-Wife Education Differences

### Abstract:

Most studies of racial intermarriage aiming to test Merton's status exchange theory use education to determine the odds of intermarriage, but none have actually used intermarriage to predict the difference in education among intermarried spouses. This study examines the relationship between husband-wife education differences and intermarriage among U.S. blacks as a test of Merton's status exchange theory. According to evidence from 2008-2010 IPUMS-ACS data, black husbands tend to engage in "status exchange" more than black wives when marrying across racial lines. Ordinary least squares regression was used to analyze the relationship with husband-wife education difference and intermarriage questioning if Merton's status exchange theory is still relevant in the 21<sup>st</sup> century. Findings indicate the theory still may be useful because husband-wife education differences for black husbands are impacted by whether they are intermarried or not. For black wives, the picture is not as clear.

# Background

Demographers and sociologists who have do research on interracial marriages are particularly interested in the characteristics of the individuals who are involved in these unions. Specifically, they look at the intersection of race, class, and the element of gender that come to shape these relations. Even W.E.B. DuBois, one of the preeminent scholars in the field of sociology, early in his career documented in *The Philadelphia Negro* that "it is often said that only the worst Negroes and the lowest whites intermarry" (DuBois 1899:366). In his sample of 33 intermarried couples, he found this assertion to be "dubious at best" (DuBois:366-67). So even before Merton's interest in explaining intermarriage, DuBois was astute to the academic conversations concerning the socioeconomic characteristics of those who intermarry.

Merton's status exchange theory has been used to understand how socioeconomic status of a black man could make way for marriage to a white woman in a time where racial animosity dominated social interactions between the two racial groups. Interracial marriages has been used in previous research as a social indicator of race relations by addressing the integration of blacks into the American mainstream in respect to education (Kalmijn 1993; Rosenfeld 2005; Gullickson 2006) and gender differences in out-marriage rates among blacks (Tucker and Mitchell-Kernan 1990 Pascoe 1991; Jacob and Labov 2002). Education attainment and gender differentials in out-marriage are two prominent features of black interracial marriage that must status exchange has been called to answer to. Before I discuss the contemporary state of black intermarriage in the U.S., we must contextualize it from where it began socially in U.S. history.

Since the Loving v Virginia, black interracial marriage has become more common, although it still remains the least common interracial pairing (Lee and Edmonston 2005). Black men interracially married to white women constitute up to three-fourths of all black-white couples (Lichter and Qian 2004; Qian and Lichter 2011). In the U.S., Qian and Lichter (2011) found that black-white marriages for black men increased from 4.7% in 1980 to 14.4% in 2008, while black-white marriages for black women increased 1.3% to 6.5%, meaning that black men marry whites at least twice the rate of black women (Qian and Lichter 2011). According to the 2010 U.S. Census, 10.8% of married black husbands and 4.6% of married black wives have non-Black spouse (U.S. Census 2010). As it pertains to black intermarriage, 8.5% of black husbands (390,000) have white wives compared to only 3.9% of black wives (168,000) with white husbands (U.S. Census 2010). This difference of out-marriage by black men and women speaks to racial and gender aspects of intermarriage as a social phenomenon. A driving question of this study is do these interracial couples exhibit characteristics different than intraracial couples. The focus on black-white marriage is quite similar to that of sociologist Robert K. Merton in attempting to explain intermarriage in between two racial groups with the deepest and most enduring division in the United States (Rosenfeld 2005).

### **Role of Education**

Education has been the primary characteristic of interest as a predictor of interracial marriages (Tucker and Mitchell-Kernan 1990; Qian 1997; Rosenfeld 2005; Gullickson 2006). Merton's status exchange theory suggests that black men who marry white women engage in an "exchange" in which black men who hold high socioeconomic status exchange it for racial status of white women. Educational attainment is used as a proxy for status as it stands in for an individual's potential earnings making the test for status exchange more understandable. While many studies have used education attainment as a predictor of intermarriage, this forthcoming study switches the dependent and primary independent variables to understand status exchange theory by predicting the husband-wife education difference based on whether a black spouse is involved in same race or interracial marriage.

### **Literature Review**

The objective of this work is to interrogate the viably of Merton's status exchange theory by comparing and contrasting the husband-wife education differences of black interracial couples to exclusively black couples. Merton predicted the "exchange" taking place in this specific union would the educational/socioeconomic status of the black husband and the "racial status" of the white wife (Merton 1941). Regarding status exchange theory, I will review what the theory is and the debate surrounding its legitimacy or lack thereof because it is still a central point discussion of explaining the occurrence of intermarriage in the U.S. (Kalmijn 1998).

Merton in 1941 developed his concept of "status exchange theory" when he analyzed frequency counts of interracial marriages between blacks and whites and noticed that black men married across racial lines more than black women. Merton assumed most of these black men had to offer something of high value to their white wives in order to marry them given the racial tension of the time period. The rudimentary argument is that even in the face of the most stringent intergroup boundaries and strong preference to marry within one's own racial group, black men more than black women of high socioeconomic status could marry across racial lines. This claim is explained by an "informal exchange" where blacks exchange a high socioeconomic status for whites' higher ascribed social status that is more pronounced in black male-white female unions than white male-black female unions. Merton noted that in order for an "exchange" to be legitimate, at least two characteristics of each individual had to be different i.e., race and socioeconomic status (educational attainment, income, occupation index). Merton's status exchange theory would become an innovative way to discuss racial and gender dynamics in intermarriage with educational attainment being a key variable of interest to identify evidence of "exchange" among spouses.

## Supporters of Status Exchange Theory

Kalmijn (1993) analyzes annual marriage license data for 33 states from 1968 to 1986 with the use of hypergamy ratio to test status exchange theory. Hypergamy ratio is calculated by the number of women marrying up with respect to education relative to the number of women marrying down to with respect to education. The main comparison was the observed hypergamy ratios within interracial marriages to the expected hypergamy ratios from log-linear models under quasi-symmetry. The expectation Kalmijn (1993) notes was that hypergamy ratios would arise from differences in marginal distributions and not from asymmetric selection. His findings cite that for black husband-white wife marriage type there was a much larger observed hypergamy ratio than expected hypergamy (1.252 (observed) as opposed to .928 (expected)) under the quasi-symmetry model. Under this model, assuming no difference, white women would be more likely to marry up than expected. As for white husband-black wife marriage type, the observed hypergamy ratio was .910 while the expected hypergamy ratio was 1.289 indicating that black women would be more likely to marry down than expected.

Schoen and Wooldredge (1989) uses harmonic means to make the point that black men tended to marry up more often when the spouse was a white woman as opposed to a black woman in respect to education. Similarly, white women tended to marry up more often when the spouse was a black male versus a white male. When examining white men and black women, the same trend was noted; black women married up less often while white men married down less often. Their hypothesis that majority men and women marry a minority spouse was supported partly under the condition of socioeconomic status gain once the asymmetries in the spouse's educational characteristics were adjusted for the marginal distributions of education of race-sex groups.

Qian (1997) found educational homogamy in intermarriage for blacks, Hispanics and Asian Americans falling in line with status exchange hypothesis using 1980 and 1990 Census data. Moreover, he claimed while the odds of intermarriage increased with the couple's educational attainment. In cases where spouses with different educational attainments, minorities with high education levels married whites with low education level more often than not.

Gullickson (2006) examines status exchange from the standpoint of how an individual's education will affect his or her likelihood of interracial marriage using 1980, 1990 and 2000 U.S. Census data. He found partial support for status exchange theory within black male-white female unions is present. While his results could for the relationship between white spouses' education and their likelihood of interracial marriage cannot be described in any fashion, the same could not be said about black spouses' and their likelihood of interracial marriage. In fact, the association between a black spouse's education and the likelihood of interracial marriage, however, is consistent. Moreover, the critical dividing line for both black husbands and black wives tended to be between those with a high school education or less and those who at least

attended college. Gullickson cites support for status exchange with his findings on two points: black spouses with at least some college attendance were 35 percent more likely to be in an interracial marriage than those who obtained at the most a high school education, and white women who married black men were more likely to be in an educationally hypergamous union than white women married to white men.

Fu (2001) claimed to improve the range of the status exchange hypothesis with the use of 1990 Census data that in fact points to status exchange between whites and black and whites and Mexican Americans. His findings of support status exchange theory were largely consistent with Kalmijn (1993) and Qian (1997) findings that were based on the hypergamy ratio approach. Specifically, in his discussion on "Status Exchange for Blacks," Fu points out that white husbands of black and white women have essentially the same amount of schooling, while black husbands of white wives have more schooling than black husbands of black wives. Moreover, he adds that the odds that a black woman's black husband falls into the higher of two adjacent schooling categories are 25 percent less than the odds that a white woman's black husband does so. These findings would suggest status exchange support for black men, not black women. In their case, endogamous intermarriage is taking place where the level of education is similar among black-white marriages.

## Critics of Status Exchange Theory

There are also detractors of status exchange theory who claim intermarriage follows the main pattern of marriage that is status homogamy where people marry those who are like themselves. Bernard (1964) use of 1960 Census data found marriages to be homogamous in respect to education. Heer's (1974) findings from 1970 Census data were consistent with Bernard (1964) where both black men and women with at least 13 years of education were likely

to be intermarried. While whites had about nine years of education were prevalent to intermarriage (Tucker and Mitchell-Kernan 1990). Heer (1974) also suggested that racial-caste homogamy has no empirical support until availability of marriage partners by educational attainment has been controlled for in the analysis. Heaton and Albrecht (1996) using 1980 and 1990 PUMS data found that regardless of race or gender, individuals in interracial unions are likely to have higher SES than those in racially endogamous union. They conclude based on these findings that racial borders in mate selection are dwindling. Lieberson and Waters (1988) found that increases in education were associated to increases in white interethnic marriage (Kincannon 2009).

Jacobs and Labov (2002) suggested that while members of the high status minority group did marry into the majority group supporting status exchange, members of the majority group were not low status, indicating there is not full support of status exchange theory. What they found is that intermarriage fell more in line with William Julius Wilson's thesis that middle class African Americans would marry whites who were similar in status. Moreover, white women married to black men were not educationally disadvantage relative to white women married to white men. Jacobs and Labov conclude that intermarriage is facilitated by education, but there is no indication of a tradeoff or social or cultural status against race or ethnic status that Merton predicted. College education could be an indicator of greater tolerance to marry across racial lines, but it also creates larger marriage market than those who do not attend college.

Rosenfeld's (2005) research on the status exchange theory and intermarriage lead him to see the contradictions in the literature of what seems to be support for status homogamy, but is mistaken for status exchange. He notes the lack of appreciation for black-white inequality is the reason why status exchange is accepted among those in this area of research. Moreover, he found the support for status exchange is not robust. The contradictions of the results of simple tabulation that question the legitimacy of status exchange and more complex methods that support status exchange places more emphasis on the overall complication of understanding the dynamics of status exchange theory. Rosenfeld's coveting of simple tabulation questions the validity of status exchange theory and its justification for its continued use.

#### Husband-Wife Education Difference

Many of the cited studies predict the odds of intermarriage using education as the primary predictor variable as a method to test status exchange theory, but none of the literature to my knowledge attempts to test status exchange theory by predict husband-wife education differences based on whether a couple is intermarried or not. Specifically, if Merton's status exchange theory asserts that black men who marry white women should demonstrate a notable difference in status, why not husband-wife education difference as a representation of a "gap" between the husband and wife. In effect, we could use intermarriage to predict husband-wife education differences of intermarried couples to test Merton's status exchange theory in a way not done before in the field. This new contribution at best can challenge the existing literature on intermarriage.

Rosenfeld (2010) writes that in order to measure status exchange theory, within log-linear models or any other method, one needs to demonstrate a status gap between blacks and their white spouses that are larger than one would otherwise expect. I believe using husband-wife education differences to serve as a "status gap" falls in line with Rosenfeld's understanding of testing status exchange theory. The line of logic here is that if husband-wife education difference does in fact serve as a status gap, then it must also appropriate to assess Merton's status exchange theory. Moreover, if Merton's status exchange theory is valid, then the husband-wife

education difference between a black husband and a white wife should be greater than the husband-wife education difference between a black husband and a black wife. A similar position is taken for black wives married to white husbands. I believe the use of intermarriage to predict husband-wife education difference serves as a proxy to test status exchange theory among those in black intermarriages. A new approach to address status exchange theory does not come without its issues.

One problem with the use of husband-wife education difference is that Merton did not establish a "magnitude" of what is considered to be an adequate exchange, but just that there should be a difference in status between a black husband and a white wife. This begs the question if the difference noticed is black husband with a bachelor's degree with a white wife that has less than a high school degree is the same as a black husband with a master's degree and a white wife with a bachelor's degree? While many of these studies only use four categories of education (less than high school, high school, some college, and college) this study will use seven categories (no high school, less than high school, high school, some college, bachelors, masters, doctorate/professional degree) to allow more distribution of the dependent variable, husband-wife education difference. The lack of education categories was a criticism Rosenfeld (2005) had of Fu (2001), Qian (1997), and Kalmijn (1993), which he claims, "understated the extent of educational differences such as status-caste exchange because they rely on a reduced set of educational categories" (Rosenfeld 2005:1298). Logically, fewer categories, increase the likelihood of any two persons would be in the same category, but the reduction is a requisite for estimating log-linear models (Agresti 1990). I will not be using log-linear modeling to avoid this modeling issue. Moreover, more education categories allows for more values husband-wife education differences

Another issue is that no current research has used husband-wife education differences to test Merton's status exchange theory. Specifically, when assessing the impact of intermarriage on husband-wife education difference, there are no studies to directly compare the results with. I can only indirectly confirm my results as it pertains to the role intermarriage plays in husbandwife education difference with previous works.

## Data and Analysis of Sample

This research investigates husband-wife education differences in black-white intermarriage vs. black same race marriage in the United States. Blacks who are married constitute the unit of analysis. For these individuals, I categorize their marriages as "same-race" marriage when the race of their spouse is black and as intermarriage when the race of their spouse is identified as white.

I obtained the data for this analysis from the 3 percent sample of Integrated Public Use Microdata Sample (IPUMS) of the 3-year American Community Survey (ACS) (2008-2010) (Ruggles et al. 2010). The ACS-IPUMS includes individual and households records of the characteristics for a 3 percent sample of person and housing units. The ACS is a national survey conducted annually by the U.S. Census Bureau. It is designed to "provide estimates of demographic, housing, social, and economic characteristics every year for all states, as well as for all cities, counties, metropolitan areas, and population groups of 65,000 people or more" (Ruggles et al. 2010). I obtained the ACS data using the Integrated Public Use Microdata Series: Version 5.0, made available by the Minnesota Population Center by downloading the dataset and codebook from the IPUMS website

The initial sample universe included only married black adults in the United States. Accordingly, I selected all married black individuals and appended social and demographic information for their spouse based on matching wives to husbands and husbands to wives using the IPUMS spouse identification variable. I excluded individuals who were not black and individuals who were not married. I then excluded individuals whose spouses were not black or Non-Hispanic white. This simplified the analysis by limiting focus to black intermarriage with whites, the type of intermarriage most relevant for Merton's theory of status exchange. Based on this, the sample includes four types of marriage based on the gender of the individual and whether they were in an intraracial (same race) or interracial marriage. The four combinations were: black husband-black wife, black husband-white wife, black wife-black husband, and black wife-white husband. The combinations of black husband-black wife and black wife-black husband involve the same couples. But the data are organized and analyzed separately for the individual men and women in these couples. In order to have credible results from the forthcoming analysis, restrictions were applied to the data.

The sample is restricted to individuals born in the United States in order to avoid complicating factors associated with early socialization of race relations within the U.S. context. Based on similar reasoning, I also excluded individuals whose spouse was foreign born. The sample is restricted to individuals from age 20 to 64 to account for the number of times married. This is a departure from intermarriage literature that restricts their samples to ages 20-29 or 20-34 to account only first marriages (Qian 1997; Qian and Lichter 2007) Since I believe number of times married has an impact on husband-wife education differences, it is imperative to have a larger age pool. Because the percentage of blacks in interracial marriage is low, the 3-year ACS-IPUMS file is used in order to obtain a larger sample size to assure the analysis sample was adequate for testing my research hypotheses.

After applying these restrictions, the resulting analysis sample included 69,156 married couples unweighted (weighted: 2,633,877). The resulting samples for married black individuals were as follows: black husbands with black wives, 60,656 (weighted: 2,326,028); black husbands-white wives, 6,085 (weighted: 222,148) for a total of 66,741 (weighted: black husbands; black wives with black husbands, 60,656 (weighted: 2,326,028); and black wives with white husbands, 2,415 (weighted: 85,702) for total of 63,071 (weighted: 2,411,730).

# Hypotheses

Based on the previous discussion, this study hypothesizes the influence of intermarriage on the husband-wife education differences:

Hypothesis 1: The husband-wife education difference will be greater for black men married to white women than for black men married to black women.

Hypothesis 2: The husband-wife education difference will be less for black women married to white men than for black women married to black men.

Hypothesis 3: The husband-wife education difference will be greater for black men married to white women than for black women married to white men.

## **Descriptive Statistics**

#### Husband-Wife Education Difference

Table 4-1 provides a percentage distribution of the dependent variable, husband-wife education difference, by marriage type. Ninety-five percent of the distribution lies between values of -2 and 2 for the husband-wife education differences. More than 40 percent of that distribution indicates spouses have the same level of education regardless of marriage type. Each marriage type also shows that more than 20% of the marriages have a wife with exactly one more level of education than her husband. This trend follows the notion that most people marry those who are similar to them in respect to education. Table 4-2 presents the weighted

percentages that reflect the same trends as Table 4-1.

_	Distribution in Percentages				
_	Black Husbands		Black Wives		
Range of <b>Educ. Diff.</b>	White Wives	Black Wives	White Husbands	Black Husbands	
-7	0.00	0.00	0.00	0.00	
-6	0.00	0.01	0.00	0.01	
-5	0.02	0.08	0.12	0.08	
-4	0.44	0.58	0.79	0.58	
-3	2.45	2.72	1.90	2.72	
-2	8.18	9.64	7.74	9.64	
-1	22.97	24.79	22.07	24.79	
0	40.79	40.92	40.21	40.92	
1	18.13	15.72	18.67	15.72	
2	5.42	4.38	5.96	4.38	
3	1.30	0.94	1.82	0.94	
4	0.23	0.19	0.58	0.19	
5	0.05	0.02	0.12	0.02	
6	0.00	0.01	0.00	0.01	
7	0.02	0.00	0.00	0.00	
N	6,085	60,656	2,415	60,656	

**Table 4-1.** Distribution of Husband-Wife Education Differences of Black Spouses by Marriage Type, Unweighted (Coding Scheme 1)

Source: American Community Survey 2008-2010

Note: For the range of Education, a score of "0" indicates spouses with equal educational attainment, negative scores indicates wives with higher educational attainment than their husbands, and positive scores indicate husbands with higher educational attainment than their wives.

### **Black Husbands**

As predicted in the first hypothesis, intermarried black husbands would have greater husband-wife education than same race married black husbands throughout all three models. Table 4-15, presents four ordinary least squares regression models, building in sequence, illustrating the impact of additive and interacting variables to explain husband-wife education differences for black husbands. The key variable of interest is the intermarriage coefficient. Positive coefficients indicate black husbands having greater education than their white wives while negative coefficients indicates the opposite.

Model 1 only includes the primary predictor, intermarriage, a dummy variable that indicates whether being intermarried has an effect on the husband-wife education difference. For clarification, this coefficient means that as the intermarriage variable moves from "0" to "1", the intermarried black husband moves 12.4 percent up of one point on the husband-wife education difference scale. This means black husbands married to white wives have more education on average compared black husbands married to black wives, who move down the scale by 26.8 percent of a point in in favor their wives. This finding upholds the first hypothesis of intermarried black husbands having greater education on average than same race married black husbands.

The final model (Model 3) in Table 4-15 has both additive and interaction predictors to mediate the relationship between husband-wife education difference and intermarriage. The interpretation of the intermarriage coefficient of .152 only includes black husbands married to white wives who are aged 35-54, married only once and live in the South. The coefficient is statistically significant which means these husbands who are aged 35-54, married once and reside in the South have more education than their wives and move up 15.2

	В	lack Husbands	
	Model 1 (Baseline)	Model 2 (Controls w/o	Model 3 (Full
		interactions)	model)
Intermarried	0.124***	0.131***	0.152***
Age	-	<1>***	<1>***
Age1	-	-0.092***	-0.091***
Age2 (RG)	-	-	-
Age3	-	0.028***	0.028***
ТМ	-	-0.071***	-0.080***
Region	-	<2>***	<2>***
West	-	0.130***	0.148***
South (RG)	-	-	-
Midwest	-	0.020	0.027
Northeast	-	-0.022	-0.014
Constant	-0.268***	-0.263***	-0.273***
	Inte	eractions	
IM x Age	-	-	<3>
IM x Age1	-	-	0.002
IM x Age3	-	-	-0.007
IM x TM	-	-	0.094**
IM x Region	-	-	<4>*
IM x West	-	-	-0.117**
IM x MW	-	-	-0.077
IM x NE	-	-	-0.091

**Table 4-15** Ordinary Least Squares Regression of Husband-WifeEducation Differences for Black Husbands-Models 1-3

\*=p-value>.05, \*\*= p-value>.01, \*\*\*=p-value>.001; Age1= 20-34; Age2= 35-54; Age3=55-64 TM= Twice Married; RG=reference group; <1>= Global test for the set of age dummy variables; <2>= Global test for the set of region dummy variables; <3> =Global test for the set of intermarriage and age interaction dummy variables; <4>= Global test for the set of intermarriage and region interaction dummy variables.

percent of a point on the husband-wife education difference scale. The move upward on the husband-wife education difference scale indicates the hypothesis is upheld. What about all of the other husbands who are not in the reference categories? Well, the interactions of the primary predictor and the control predictors provided can answer this question.

#### Interactions

Interactions answer the question of whether the effects of intermarriage on the husbandwife education differences change given an "interaction" with another x-variable. Since a central question of this study asks if there are there distinct differences between intermarried black husbands and intramarried black husbands, we must set up every interaction with an intermarriage variable and a control variable. The coefficient rendered is then added to intermarriage coefficient of the reference category to understand the impact of the interaction on husband wife differences. I assume the interactions of intermarriage and the control variables will have a larger impact on husband-wife education difference for intermarried black husbands than those married to black wives. In other words, intermarried black husbands should move up on the husband-wife education difference scale at a greater percentage than black husbands married to black wives.

## Twice Married

For the interaction of being married at least twice and being interracially married, the coefficient of .094 is statistically significant. This finding illustrates that there is a difference in the slopes of black husbands married to white wives than black husbands married to black wives in respect to being married twice. The new intermarriage coefficient of .246 (sum of .152 + .094) indicates black husbands married to white wives who have been married at least twice have greater education than their wives. This suggests there is some truth that those who have been

married more than once will face a marriage market penalty and education can be used to compensate for the penalty. Moreover, black husbands tend to pay the penalty when they intermarry according to the husband-wife education differences.

### West

The interaction of intermarriage and West (region) with a coefficient of -.117 is also statistically significant meaning that the slopes of black husbands married to white wives and black husbands married to black wives are different by region. The sum of the reference category intermarriage coefficient and West interaction coefficient yields a new intermarriage coefficient of .035. This .035 coefficient indicates black husbands living in the West move up the husband-wife education difference scale only 3.5 percent of a point, while those in the South move up 15.2 percent, both in the husband's favor. While we do not know if the couples married where they reside, we can interpret this finding as the intermarried black husbands living in the West are not as concerned about an "exchange" as intermarried couples in the South.

## Summary for black husbands

As predicted by the main hypotheses concerning black husbands, husband-wife education difference increases in favor of the intermarried black husband compared to the same race married husband in each successive model. Model 1 provided a coefficient of .124 meaning intermarried black husbands moved up 12.4 percent of a point on the husband-wife education difference scale compared to black husbands in same race marriages, who move down by 26.8 percent in favor of their wives. After controlling for age, region and being married at least twice in Model 2, the impact on husband-wife education difference remained in favor of the intermarried black husband with a percentage increase of .07 to 13.1 percent compared to black husbands married to black husband with escale to 26.3 percent in favor of the wife.

Model 3 aimed to distinguish the effects of intermarriage on husband-wife education difference based on interactions with the control variables. Only the interactions of intermarriage West and being married at least twice were statistically significant. The percentages of 3.5 and 24.6 for intermarriage interaction with West and twice married, respectively, both indicate intermarried black husbands have larger husband-wife education difference in the husband's favor compared to same race married black husbands. Intermarriage for black husbands proved to be a large factor in the movement either up or down the husband-wife education scale. Some interactions with intermarriage made its impact even more pronounced.

## **Black Wives**

As predicted in the second hypothesis, intermarried black wives would have lower husband-wife education difference than same race married black husbands throughout all three models. Table 4-16 provides successive OLS regression models for the effects of predictors on husband-wife education difference for black wives. The key variable of interest is the intermarriage and the associated coefficient. Positive coefficients indicate black wives have less education than their white husbands while negative coefficients indicates the opposite.

The base model includes only the intermarriage variable that is a statistically significant coefficient of .187, indicating that black wives married to white husbands have less education than their husbands compared to black wives married to black husbands. Specifically, black wives married to white husbands have husbands who move up 18.7 percent of a point on the husband-wife education difference scale in favor of white husbands. Those married to black husbands move down 26.8 percent of a point husband-wife education difference in the wife's favor. The second hypothesis of intermarried black wives having lower husband-wife education differences is upheld.

		Black Wives	
	Model 1 (Baseline)	Model 2 (Controls w/o interactions)	Model 3 (Full model)
Intermarried	0.187***	0.180***	0.114*
Age	-	<1>***	<1>***
Age1	-	-0.081****	-0.08***
Age2 (RG)	-	-	-
Age3	-	0.027***	0.025***
TM	-	-0.003	-0.006
Region	-	<2>***	<2>***
West	-	0.146***	0.148***
South (RG)	-	-	-
Midwest	-	0.029**	0.026
Northeast	-	-0.002	-0.008
Constant	-0.268***	-0.271***	-0.284***
	Int	teractions	
IM x Age	-	-	<3>*
IM x Age1	-	-	-0.007
IM x Age3	-	-	0.061*
IM x TM	-	-	0.059
IM x Region	-	-	<4>
IM x West	-	-	0.015
IM x MW	-	-	-0.048
IM x NE	-	-	0.075

**Table 4-16** Ordinary Least Squares Regression of Husband-Wife EducationDifferences for Black Wives-Models 1-3

\*=p-value>.05, \*\*= p-value>.01, \*\*\*=p-value>.001; Age1= 20-34; Age2= 35-54; Age3=55-64 TM= Twice Married; RG=reference group;<1>= Global test for the set of age dummy variables; <2>= Global test for the set of region dummy variables; <3> =Global test for the set of intermarriage and age interaction dummy variables; <4>= Global test for the set of intermarriage and region interaction dummy variables.

Model 2 controls for age, at least married twice and region on the effect of intermarriage on husband-wife education differences, but no meaningful movement on the husband-wife education scale is noted. It is concluded that the hypothesis concerning intermarried black wives is still upheld.

Model 3 provides additive and interaction predictors to determine the relationship between intermarriage and husband-wife education difference. These interactions of control variables (age, at least twice married, and region) and intermarriage allow for effects to differ depending on whether the black wife is intermarried or not. The intermarriage coefficient of .114 is only interpreted for the reference group: intermarried black wives, ages 20-34, married only once who live in the South. These black wives move up 11.4 percent of a point on the husbandwife education difference in the husband's favor. In comparison, black wives married to black husbands who are middle aged, married once and live in the South move up by 28.4 percent of a point on husband-wife education difference in favor of the wife. What we find is that intermarried black wives are not moving on in their favor on the husband-wife education difference scale in the same manner as intermarried black husbands did.

## Interactions

From examining the interactions, none of them are statistically significant meaning that the change of the intermarriage variable from "0" to "1" was not important according to OLS regression. Even though this may be the case, significant points of interest are found in interaction of region and intermarriage. The results show a sharp contrast in respect to the South for intermarried black wives than what was observed for intermarried black husbands.

For example, when comparing intermarried black wives in the South to any other region, the South has the lowest percentage movement on the husband-wife education difference scale compared to the West (12.9 percent), Midwest (16.2 percent), and Northeast (18.9 percent). This means that intermarried black wives move up only 11.4 percent of a point in South which has the most noted racial animosity, while other regions with less racial tension in comparison to the South have larger husband-wife education differences. This finding is surprising given the racial history in the U.S. where the South has always been less tolerant of interracial relationships. Moreover, I did not predict this relationship for intermarried black wives. This finding may indicate a gender dynamic in intermarriage for black wives that are not addressed in Merton's status exchange theory.

The findings from Table 4-16 upheld the second hypothesis concerning the husband-wife education difference of intermarried black wives versus black wives in same race marriage. Models 1-3 all suggest black wives married to white husbands have lower husband-wife education difference percentages than black wives married to black husbands. When it comes to interactions, intermarried black wives were quite different than what was found for black husbands. From the black husband's perspective, there were two interaction effects (twice married and living in the West) that indicated statistical significance with the husband-wife education difference, but none were found among black wives. This would uphold conclusions made from previous studies (Tucker and Mitchell-Kernan 1990; Jacobs and Labov 2002; Qian 1997) that all suggest intermarriage patterns vary distinctly for blacks across gender lines.

## Summary

In summary, all three hypotheses concerning the husband-wife education difference were upheld for both black husbands and black wives. OLS regression was the most simplistic method to analyze intermarriage as social phenomena after considering robustness of the data and husband-wife education difference scale. The implications of these results point to the fact that husband-wife education difference is an adequate way to assess Merton's status exchange. Moreover, the theory may not be as strong now as it was when he first developed the theory. Black husbands who were intermarried did not move too far up on the husband-wife education difference scale going from Model 1 to Model 3. Black wives who were intermarried did not move too far down from Model 1 to Model 3 on the husband-wife education difference scale. In short, husband-wife education differences are impacted by intermarriage by black husbands to larger degree compared to black wives who intermarry.

#### Conclusion

Black intermarriage will continue to be a social phenomenon of interest of the United States as the population continues to racially diversify. Merton's status exchange theory ever its inception in 1941 has been the primary lens by which black-white marriage dynamics are analyzed. In this study, I introduced the concept of husband-wife education difference being predicted by whether a black spouse was intermarried or not as an indicator of status exchange among spouses. A measure using intermarriage to predict spousal difference to gauge a status gap has not used in current literature to my knowledge.

Based on its use, the primary OLS results from my analyses show that husband-wife education difference for black husbands and black wives are each affected by intermarriage. Specifically, black husbands more than black wives felt the impact of intermarriage on husbandwife education differences overall which was indicated by the larger percentages of a point gained by black husbands who intermarried versus black men who married black wives. A finding such as this does offer evidence of status exchange theory by Merton's definition.

When interactions with marriage and the control variables (age, number of marriages, and region) were taken into account, the impact on husband-wife education difference was felt

more by black husbands than black wives. On the case of black husbands, the statistical significance of the interaction of twice married and intermarriage along with the interaction of region and intermarriage indicated there was a difference in the husband-wife education difference scores intermarried black husbands than black husbands married to black wives. As it pertains to black wives, only the interaction of intermarriage and older black wives was found to be statistically significant. Such a finding again points to affirmation of intermarried black husbands are distinct from intramarried black husbands in contrast to the differences noted between intermarried black wives and intramarried black wives.

Intermarriage patterns, I predict, will not be mediated by an "exchange" in the coming years. Specifically, intermarriage will continue to be an upward trend for those with at least a college degree because college education promotes greater tolerance for difference (Wilson 1994). This can only mean that the college-educated blacks are most at risk for intermarriage versus those without degrees bring up an interesting dynamic of race, class and gender all simultaneous playing a role in marriage selection. This study has attempted to answer questions about black intermarriage. More importantly, the big question remains: does Merton's status exchange theory offer enough theoretically in the 21<sup>st</sup> century to explain the intricacies of intermarriage?

# REFERENCES

Agresti, Alan. 1990. Categorical Data Analysis. New York: John Wiley.

Aldridge, Delores P. 1978. "Interracial Marriages: Empirical and Theoretical Considerations." *Journal of Black Studies* 8(2):355-368.

Anderson, Robert and Rogelio Saenz. 1994. "Structural Determinants of Mexican American Intermarriage, 1975-1980." *Social Science Quarterly* 75 (2):414-430.

Bernard, Jessie. 1966. "Note on Educational Homogamy in Negro-White and White-Negro Marriages, 1960." *Journal of Marriage and the Family* 28:274–76.

Blum, Terry. 1985. "Structural Constraints on Interpersonal Relations: A Test of Blau's Macrosociological Theory." *The American Journal of Sociology* 91(3):511-521.

Chito-Childs, Erica. 2005. "Looking behind the Stereotypes of the 'Angry Black Woman': An Exploration of Black Women's Responses to Interracial Relationships." *Gender and Society* 19(4):544–61.

Cready, Cynthia M., and Rogelio Saenz 1997 'The Nonmetro/metro context of racial/ethnic outmarriage: Some differences between African Americans and Mexican Americans." *Rural Sociology* 62(3):335-362.

Crowder, Kyle and Stewart Tolnay. 2000. A New Marriage Squeeze for Black Women: The Role of Racial Intermarriage by Black Men. *Journal of Marriage and Family* 62(3):792-807.

DuBois, William E.B. 1899. The Philadelphia Negro: A Social Study. New York: Shocken.

Feagin, Joe. 2010. The White Racial Frame. New York: Routledge.

Fu, Vincent Kang. 2001. "Racial Intermarriage Pairings." Demography 38(2):147-159.

Gullickson, Aaron. 2006. "Education and Black-White Intermarriage." *Demography* 43(4):673-689.

Heer, David. 1974. "The Prevalence of Black-White Marriage in the United States, 1960 and 1970." *Journal of Marriage and the Family* 36:246–58.

Jacobs, Jerry and Teresa G. Labov. 2002. "Gender Differentials in Internarriage Among Sixteen Racial and Ethnic groups." *Sociological Forum* 17(4):621-646.

Jan, Jie-Sheng. 2011. "Ethnic Language Retention and East Asian Endogamy and Exogamy in the United States." Dissertation. Texas A&M University, United States. 149 pp.

Kalmijn, Matthijs. 1998. "Intermarriage and Homogamy: Causes, Patterns, Trends." *Annual Review of Sociology* 24:395-421.

Kalmijn, Matthijs. 1993. "Trends in Black/White Intermarriage." Social Forces 72:119-46.

Kincannon, Heather. 2009. "Interracial Marriage in the U.S. in 2006." Dissertation. Texas A&M University, United States. 176 pages.

Lee, Sharon M. and Barry Edmonston. 2005. "New Marriages and New Families: U.S. Racial and Hispanic Intermarriages." *Population Bulletin* 60(2):1-36

Lieberson, Stanley, Mary C. Waters, and National Committee for Research on the 1980 Census. 1988. *From Many Strands: Ethnic and Racial Groups in Contemporary America*. New York: Russell Sage Foundation.

Lichter, Daniel and Zhenchao Qian. *Marriage and Family in a Multiracial Society*. 2004. New York: Russell Sage Foundation.

Long, J. Scott and Jeremy Freese, 2006. *Regression Models for Categorical Dependent Variables Using Stata*. 2<sup>nd</sup> ed. Texas: Stata Press.

Merton, Robert. 1941. "Intermarriage and the Social Structure: Fact and Theory." *Psychiatry* 4:361-374.

Pascoe, Peggy. 1991. "Race, Gender, and Intercultural Relations: The Case of Interracial Marriage." *Frontiers: A Journal of Women Studies*, 12(1):5-18.

Pfeffermann, Danny. 1991. "The Role of Sampling Weights When Modeling Survey Data." *International Statistical Review* 61(2):317-337.

Qian, Zhenchao. 1997. "Breaking the Racial Barriers: Variations in Interracial Marriage Between 1980 and 1990." *Demography* 34(2):263-276.

Qian, Zhenchao and Daniel T. Lichter. 2007. "Social Boundaries and Marital Assimilation: Interpreting Trends in Racial and Ethnic Intermarriage." *American Sociological Review* 72(1): 68-94.

Qian, Zhenchao and Daniel T. Lichter. 2011. Changing Patterns of Interracial Marriage in a Multiracial Society. *Journal of Marriage and Family* 73:1065-1084.

Rosenfeld, Michael J. 2005. "A Critique of Exchange Theory in Mate Selection." *American Journal of Sociology* 110(5):1284-1325. Rosenfeld, Michael J. 2010. "Still Weak Support for Status Exchange Theory." *American Journal of Sociology* 115(4):1264-1276.

Ruggles, Steven J. Trent Alexander, Katie Genadek, Ronald Goeken, Matthew B. Schroeder, and

Matthew Sobek. *Integrated Public Use Microdata Series: Version 5.0* [Machine-readable database]. Minneapolis: University of Minnesota, 2010. Assessed April 12, 2013.

Schoen, Robert, and James R. Kluegel 1988 "The Widening Gap in Black and White Marriage Rates: The Impact of Population Composition and Differential Marriage Propensities." *American Sociological Review* 53:895-907.

Schoen, Robert and John Wooldredge. 1989. "Marriage Choices in North Carolina and Virginia, 1969-71 and 1979-81." *Journal of Marriage and Family* 51(2):465-481.

Treiman, Donald J. 2009. *Quantitative Data Analysis: Doing Social Research to Test Ideas*. California: Jossey-Bass.

Tucker, Belinda M. and Claudia Mitchell-Kernan. 1990. "New Trends in Black American Interracial Marriage: The Social Structural Context. *Journal of Marriage and the Family* 52(1):209-18.

Wilson, Thomas. 1994. "Trends in Tolerance toward Rightist and Leftist Groups, 1976-1988: Efforts of Attitude Change and Cohort Succession." *Public Opinion Quarterly* 58(4):539-557.

Wilson, William J. 1978. *The Declining Significance of Race: Blacks and Changing American Institutions*. Chicago: University of Chicago Press.

U.S. Census Bureau. (2010). "Table FG4. Married Couple Family Group, by Presence of Own Children In Specific Age Group, and Age, Earnings, Education, and Race and Hispanic Origin of Both Spouses: 2010 (thousands)". Washington, DC: Government.