Are Black Students Punished for "Acting White"?: Race, Academic Achievement, and Friendship Choices

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Friendships are more likely among individuals with similar characteristics. The decisions of individuals and their opportunities for friendships give rise to this pattern. In this paper, I will model adolescents' friendship group choices, accounting for the opportunities available to them. I will estimate the effect of racial and academic friendship group composition on individuals' probabilities of choosing particular friendship groups. I will further show how individuals' race and academic achievement interact with friendship group characteristics to affect their friendship group choices. Using data from the National Longitudinal Study of Adolescent Health (Add Health) and discrete-choice analysis, this study will contribute to the debate over the potential burden faced by black adolescents for "acting white".

Introduction and Background

Although disparities in black and white academic achievement in the United States have declined in the last 30 years, a significant gap remains (Gamoran 2001; Jencks & Phillips 1998; Kao & Thompson 2003). In order to explain this gap, many theorists argue that black students face a burden of "acting white" (Fordham & Ogbu 1986; Ogbu 1978). Black students who are academically successful or engage in behaviors associated with academic success—such as taking AP classes, doing homework, or participating in class—are thought by their black peers to be "acting white" (Neal-Barnett 2001). In order for their black peers to accept them, black students reject the pro-education norms associated with white culture, thereby reducing their overall academic achievement. The result is a gap in achievement between blacks and whites.

Three papers attempt to document the existence of a burden of "acting white" using nationally representative data¹. Using regression analysis and self-reported measures of popularity and academic achievement, both Ainsworth-Darnell and Downey (1998) and Cook and Ludwig (1998) study the relationship between academic achievement and race on the one hand, and popularity on the other. Contrary to the "acting white" hypothesis, they find that high-achieving black students are as popular as or more popular than both high-achieving whites and lower-achieving blacks. At first glance, these results contradict the argument that blacks under-achieve in order to avoid social punishment. These results, though, cannot differentiate between popularity among blacks, popularity among whites, and popularity among the whole school population. It is consistent with these results that high-achieving blacks may be both popular among white students and socially rejected by their black peers.

In order to correct for the bias introduced by using self-reported popularity and to differentiate between same-race and cross-race popularity, Fryer and Torelli (2005) use

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¹ There are many qualitative analyses documenting this phenomenon as well as quantitative analyses based on regional data but these analyses are small n analyses that cannot be generalized beyond the study population (see for example, Ferguson 2001; Horvat & Lewis 2003; Tyson et al 2005)

actual friendship nominations to measure adolescents' popularity among students of the same race. Regressing students' academic achievement and race on their same-race popularity, they show that the relationship between popularity and academic achievement is different for different racial groups. While high-achieving white students are the most popular students among their white peers, high-achieving black students have on average 1.5 fewer same-race friends than high-achieving white students. Middle-achieving black students are the most popular among their same-race peers. Although these results are weakened by the inclusion of school racial and academic composition, the basic finding that high achieving black students are less popular than high achieving white students remains significant. Fryer and Torelli (2005) treat these results as support for the "acting white" hypothesis.

Although Fryer and Torelli (2005) make great strides forward by using friendship nominations rather than self-reported popularity, their approach confounds opportunities for friendships and preferences for friendships. As a result, their results can be interpreted in two ways: 1) Low-achieving black students may reject high-achieving black students because they do not approve of their "acting white". The consequence of this rejection is that high-achieving black students are less popular among their black peers. 2) Alternatively, high-achieving black students may reject low-achieving black students, preferring instead to be friends with other high-achieving students. Because fewer black students are high-achieving, high-achieving black students are less likely to be friends with black students. As a result of this preference and the options available for friendships, high-achieving black students are less popular among their black peers. In scenario 2) high-achieving blacks are not burdened by "acting white", instead *they* are rejecting the low-achieving students. Both scenarios are consistent with Fryer and Torelli's results but lead to very different conclusions regarding the potential stigma attached to high achievement among blacks.

This paper extends prior research by studying adolescents' friendship group choices and preferences to determine whether there is in fact a burden associated with "acting white". Using discrete-choice analysis to model students' friendship group choices, I can account for and separate students' preferences for friendship groups from students' opportunities for friendships. If black students are burdened by "acting white", high-achieving black students should choose friendship groups with fewer black students, compared to their non-high-achieving black counterparts. High-achieving black students should have significantly smaller friendship groups than both their high-achieving non-black peers and their non-high-achieving black peers². Furthermore, non-high-achieving black students should have an extremely low probability of choosing a black high-achieving friendship group while high-achieving blacks should show no preference for or against low-achieving black friendship groups. Modeling the effect of racial and academic characteristics of friendship groups on the probability of choosing a particular friendship group will allow me to disentangle the potentially different and contradictory preferences of high- and non-high-achieving black and non-black adolescents. Only

² Although previous research deals with the black/white dichotomy, I will focus on the black/non-black dichotomy. In future research I hope to expand this work to other race/ethnic groups but in order to maintain clarity I stick with two categories. I will test results for sensitivity to the inclusion of other races in the non-black category but I expect results to be stronger when limited to whites and blacks rather than weaker.

when such preferences are disentangled can we determine whether there is in fact a burden associated with "acting white".

Data

This analysis will use data from the National Longitudinal Survey of Adolescent Health (Add Health). Add Health surveyed seventh- through twelfth-grade students in 144 sampled schools in 80 U.S. communities between September of 1994 and April of 1995 (N=89,940). Nearly all students in participating schools completed the in-school survey, containing basic socio-demographic information including academic achievement (self-reported grades) as well as friendship nominations. Each student was asked to identify up to ten friends, five male and five female. All students participating in the inschool survey were linked to their nominated friends, providing a unique opportunity not only to consider the relationship between race, academic achievement, and friendships but also to formally model adolescents' friendship group choices and the characteristics that are most important to their choices. (Bearman et al 1997)

Methods

I plan to model adolescents' friendship group choices using a discrete-choice analysis. This method of analysis will allow me to compare an adolescent's chosen friendship group to the friendship groups that the adolescent could have chosen but did not choose. The set of possible friendship group choices will be defined as all possible combinations of up to five male friends and five female friends within each student's school. Because the size of the choice-set increases more than exponentially with the school size, I randomly sample non-chosen friendship groups within the school.³ I therefore estimate a conditional logit model with corrections for choice based sampling. For individual i the observed utility V of friendship group alternative n is a function of the individual's characteristics X and the group alternative's characteristics Y, or:

$$V_{in} = \alpha_n + X_{in}\beta_n + Z_iY_n \tag{1}$$

The probability
$$\pi$$
 of choosing friendship group alternative n by individual i is:
$$\pi_{i}(n|\mathbf{D}) = \frac{\exp[(V_{in}) + \ln \pi_{i}(\mathbf{D}|n)]}{\sum_{m \in \mathbf{D}} \exp[V_{im} + \ln \pi_{i}(\mathbf{D}|m)]}, \qquad n \in \mathbf{D}$$
(2)

where **D** is the set of friendship group alternatives, including the chosen alternative (McFadden 1978; Ben-Akiva and Lerman 1985). **D** contains group alternative n as well as all other group alternatives m sampled in the choice-set. $\pi_i(\mathbf{D}|n)$ is the joint probability of choosing each element of **D** given that the probability of choosing n is 1. The log of this term is included in the model as an offset to correct for sampling (McFadden 1978; Ben-Akiva and Lerman 1985).

Whereas Fryer and Torelli look at the number of same-race friendship nominations an individual receives, I look at each individual's friendship group nominations and the other friendship groups they could have nominated but did not nominate.

³ Schools in Add Health vary in size from 25 students to 2,551 students. In the smallest school there are 3,774,680 possible friendship groups of up to 10 students (five girls, five boys). In the largest school there are 7.85×10^{26} possible friendship groups.

Preliminary Results

This project deals with the intersection of preferences for academic and racial characteristics of friendship groups, and how those preferences differ by individuals' academic and racial characteristics. Table 1 describes the basic descriptive differences between black adolescents and non-black adolescents. Overall, black adolescents achieve less in school; 17% of black students have a GPA at or above 3.5—my cutoff for high achievement—compared to 31% of non-black students. Black adolescents also have fewer friends on average than their non-black peers though the difference in average number of friends is relatively small. In terms of the composition of students' friendship groups, black adolescents' chosen friendship groups are on average 60% black with an average GPA of 2.14, compared to non-black friendship groups that are on average 4% black with an average GPA of 2.48. Disaggregating friendship group characteristics by both race and academic achievement, table 2 shows that high-achieving blacks have on average more friends than non-high-achieving blacks but fewer friends than both highachieving and non-high-achieving non-blacks. As expected, high-achieving blacks are in higher achieving friendship groups than both non-high-achieving blacks and non-highachieving non-blacks but have friendship groups with a *larger* proportion of black students than non-high-achieving black adolescents. Figures 1 and 2 present preliminary predicted probabilities of each groups' probability of choosing friendship groups with given levels of academic achievement and given proportions of black students. These results suggest 1) that high and non-high-achieving black adolescents have similarly high probabilities of choosing friendship groups with a majority of black adolescents, and 2) that high-achieving black adolescents prefer high-achieving friendship groups while nonhigh-achieving black adolescents have an equal probability of choosing high or lowachieving friendship groups. These results provide preliminary support for the conclusion that high-achieving black students are rejecting their non-high-achieving black peers, rather than the other way around as the "acting white" hypothesis suggests.

Next Steps

The results above look only at one friendship group characteristic at a time. Future models will include both average academic achievement and proportion black in the friendship group, as well as interactions between these friendship group characteristics. I will then test the sensitivity of results to the inclusion of non-reciprocated friendships by restricting friendships to reciprocated friendships. Because previous research has restricted their samples to black and white students, I will rerun all models on this more restricted sample to verify that my conclusions are consistent. Finally, adolescents' friend choices are constrained by the options available to them in their schools. In order to confirm that results are not the product of compositional differences of schools, I will run this analysis for four categories of schools: high-achieving black schools, high-achieving integrated schools, low-achieving black schools, and low-achieving integrated schools.

Table 1 Means and Standard Deviations of Individual and Friendship Group Variables by Race

Variable	Whole population		Non-Black		Black	
	Mean	S.D.	Mean	S.D.	Mean	S.D.
Black	.151	.358	0	0	1	0
Number of friends	5.373	3.443	5.50	3.423	4.937	3.523
Number of same-race friends	3.133	2.586	3.152	2.884	3.024	2.692
GPA	2.841	.799	2.882	.800	2.609	.752
Friendship group proportion black	.125	.291	.037	.144	.616	.401
Friendship group average GPA	2.426	1.166	2.476	1.162	2.143	1.147
N	59,831		51,421		8,410	

Table 2 Means of Friendship Group Variables by Individual Race and Academic Achievement

Variable	No	n-Black	Black		
	High-Achiever	Non-High-Achiever	High-Achiever	Non-High-Achiever	
Number of friends	5.79	5.30	5.17	4.89	
Friendship group proportion black	.03	.04	.64	.61	
Friendship group average GPA	2.79	2.33	2.44	2.08	
N	15,694	35,727	1,304	7,106	

Figure 1

Probability of Friendship Group Choice by Friendship Group Percent Black

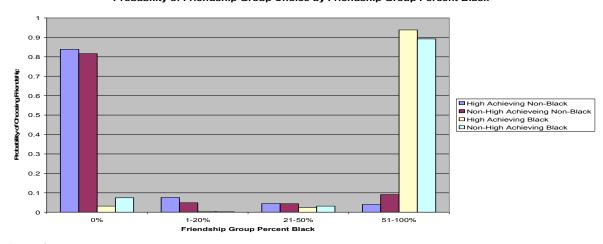
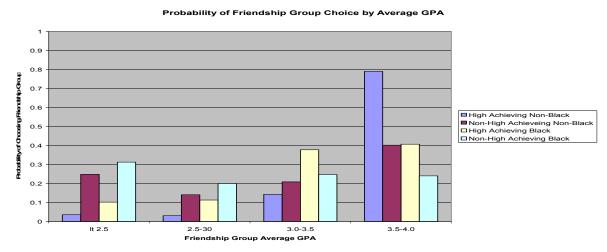


Figure 2



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