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Exploring the divergent academic outcomes of U.S.-origin and immigrant-origin Black undergraduates

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Abstract

To explore the divergent academic experiences and outcomes of U.S.-origin and immigrant-origin Black Americans, we drew on *Tinto's model of persistence* (1993) to test a three-wave longitudinal model of college persistence using path analysis. Our sample was comprised of 101 ethnically-diverse Black students who were randomly selected from nine public high schools in the metropolitan Boston area and went on to matriculate at 32 different, predominantly White colleges and universities. Specifically, we compared U.S.-origin and immigrant-origin Black undergraduates' reported college social support/social integration and academic integration; and measured the influence of these factors (as well as high school grades and socioeconomic status) on college persistence two years later. As predicted, and consistent with previous studies, immigrant-origin Black students academically outperformed their U.S.-origin Black counterparts, earning significantly higher high school grades and demonstrating greater persistence in college. However, when the effects of high school grades and SES on college persistence were included in a multivariate path model together with immigration status and college social and academic integration, immigration status no longer predicted college persistence. Neither social nor academic integration predicted college persistence, within the path model, as hypothesized, but social integration did predict academic integration as expected. In separate correlational analyses, academic integration and SES were associated with college persistence for U.S.-origin Black students, but this was not the case for immigrant-origin Black students. We discuss the implications of these findings for fostering greater success among diverse Black undergraduates.

Keywords

African Americans; immigrant Black Americans; college persistence; academic integration; social integration

Some investigators who conduct research on racially and ethnically diverse undergraduates have begun to underscore the need to disaggregate the academic data of broad, racialized groups of students (e.g., Charles, Torres, & Brunn, 2008; Massey, Mooney, Torres, & Charles et al., 2007; Williamson, 2007; Wong & Halgin, 2006). These scholars assert that by over-aggregating students based on racial or pan-ethnic labels, the relative academic underperformance and under-enrollment of subgroups of ethnic minority students are being overlooked and, consequently, educational performance evaluations and enrollment statistics

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of many diverse students are artificially inflated (e.g., Charles et al., 2008; Massey et al., 2007; Wong & Halgin, 2006). In addition, opportunities to provide critical support to certain groups of students are being missed and, as a result, these students continue to “fall through the cracks” (Tatum, 2007; Williamson, 2007). Conversely, researchers lose the chance to gain deeper insight into the protective factors and coping strategies utilized by subgroups of students that manage to excel academically, despite surrounding hardships, pressures, and systemic inequalities (Noguera, 2003).

The dearth of research examining the achievement gap between U.S.-origin and immigrant-origin Black students is an example of this problem (e.g., Bennett & Lutz, 2009; Charles, Torres, & Brunn, 2008). In one of the few studies exploring this academic disparity, striking immigrant-generational status differences were found in analyses of the 1999 National Longitudinal Survey of Freshmen (NLSF; Charles et al., 2008; Massey et al., 2007), which included more than 1,000 Black entering-freshmen at 28 selective colleges and universities. In 1999, Black immigrant-origin (i.e., first- or second-generation immigrant) entering freshmen made up 27% of the NLSF Black freshmen population, although they comprised only 13% of the U.S. Black population aged 18 to 19 (Massey et al., 2007); they were thus over-represented by more than double their share in the population. Moreover, the proportion of immigrant-origin Black undergraduates increased as school selectivity increased: first- and second-generation Black immigrants made up 24% of Black students at the least selective institutions, but 41% at Ivy League schools. In fact, Charles and colleagues (2008) found that, even after controlling for students’ social origins, academic backgrounds, and pre-collegiate experiences, second-generation African and Caribbean Black students were twice as likely as U.S.-origin (i.e., third-plus-generation) Black students to attend the most elite NLSF institutions.

While a number of studies have explored immigrant-generational enrollment differences among Black students (e.g., Bennett & Lutz, 2009; Massey et al., 2007), investigators have paid far less attention to the differences in academic experiences and college persistence once Black U.S.-origin and immigrant-origin students arrive on campus. An exception to this, Jenkins and colleagues (2004), studying Black students at one predominantly White institution (PWI), found that, despite having similar college GPAs, Black students whose fathers emigrated from the Caribbean or Africa were significantly more likely to remain in college for at least six full semesters than were Black students whose fathers were born in the U.S. Additionally, reading placement scores and aspects of academic self-confidence were predictive of persistence for Black children of foreign-born fathers, but not for Black children of U.S.-born fathers, suggesting that something other than academic ability is accounting for the differential rates of college persistence between the two groups. Because this study only took place on one college campus and because it looked solely at father’s birthplace and not mother’s, its generalizability is somewhat limited.

Clearly, immigrant-origin Black students are enrolling in post-secondary institutions at higher rates than U.S.-origin Black students. However, more attention must be focused on the experiences and persistence of these two groups once in college, in order to determine if immigrant-generational disparities continue after students enter campus contexts. The present study takes a modest step in this direction.

Theoretical Frameworks Explaining Immigrant-Generational Academic Disparities

Researchers have examined a number of factors to explain immigrant-generational academic disparities. An emerging body of research has documented differences in resources between first- and second- generation Black immigrants and third-plus generation Black youth (e.g.,

Bennett & Lutz, 2009; Dodoo, 1997; Massey et al., 2007) due to the selective nature of immigration. Because U.S. immigration criteria favor groups that are talented, highly educated, and affluent, Black immigrants often enter the U.S. with high levels of human, social, and economic capital (Butcher, 1994; Dodoo, 1997). One-quarter of all foreign-born Blacks (aged 25 or older) have at least a bachelor's degree, in contrast to just 16 percent of U.S.-born Blacks (U.S. Census Bureau, 2004). Not surprisingly, the educational and economic advantages of Black immigrants explain part or most of the relatively higher college enrollment of immigrant-origin Blacks in several studies (e.g., Ainsworth-Darnell & Downey, 1998; Bennett & Lutz, 2009; Hagy & Staniec, 2002; Massey et al., 2007).

Other theorists posit that immigrant-generational differences among Black students stem from their differing cultural perspectives on education. John Ogbu and colleagues (Ogbu, 1991, 2003; Ogbu & Simons, 1998) have offered the *Cultural-Ecological Theory of School Performance* to explain performance differences between immigrant-origin and U.S.-origin Blacks. According to Ogbu, the achievement differences between these two groups stem from the different cultural adaptations of voluntary immigrants versus involuntary immigrants (or involuntary minorities). Voluntary minority immigrants attribute the discriminatory treatment they receive in their host societies to their status as “guests in a foreign land” and believe that the barriers they face are temporary challenges they can overcome through hard work, greater acculturation, and academic attainment (Ogbu, 1991; Ogbu & Simons, 1998). Ogbu argues that these perspectives lead voluntary immigrants to place greater value on educational success, as a collective, relative to involuntary minorities who entered their host societies through conquest, colonization, and enslavement (Ogbu, 1991; Ogbu & Simons, 1998). Involuntary minorities tend to view discriminatory treatment as permanent and institutionalized. According to Ogbu, these groups often do not believe that education will enable them to overcome systemic oppression and attain economic success or societal status and, accordingly, invest less time and resources in an effort to achieve academic success.

Ogbu's Cultural-Ecological Theory of School Performance has been widely criticized for not accounting for the greater resources available to immigrant-origin Blacks relative to their U.S.-origin counterparts (Bennett & Lutz, 2009; Dodoo, 1997; Hagy & Staniec, 2002). Furthermore, Ogbu's perspective on the “oppositional culture” of involuntary minorities has been described as a form of reductionist “victim-blaming” that ignores broader societal forces that disproportionately disadvantage African Americans (e.g., Ainsworth-Darnell & Downey, 1998; Gilbert, 2009).

In explaining the divergent academic outcomes between immigrant generations, other scholars have considered the similarities and differences in how Black immigrants and African Americans are perceived and treated within predominantly White academic contexts (Dodoo, 1997; Tormala & Deaux, 2006). On one hand, African American, African Caribbean, and sub-Saharan African immigrant communities are all amalgamated into the same racialized group, which is afforded lower societal status within the U.S. and many other societies (e.g., Seaton et al., 2008). That is, despite their heterogeneous backgrounds and immigrant-generational status differences, members of all of these groups report experiencing cultural or structural marginalization and stereotyped perceptions that they lack academic aptitude and a strong work-ethic (Greer & Brown, 2011; Seaton et al., 2008; Tormala & Deaux, 2006). Indeed, diverse Black student populations experience greater racial-ethnic hostility, greater pressure to conform to stereotypes, higher perceived marginality, more overt faculty and peer racism, and less equitable treatment by university faculty and staff than do European American and other racial minority students (e.g., Ancis et al., 2000; Hall & Carter, 2006; Reid & Radhakrishnan, 2003).

Yet, on the other hand, an emerging body of research has established that immigrant-origin Black students are often regarded by faculty and peers as being more intelligent, academically-motivated, and affable than U.S.-origin Blacks (Charles et al., 2008; Offoh, 2003; Tormala & Deaux, 2006; Williamson, 2007). Consequently, relative to Black immigrants, U.S.-origin Blacks experience greater academic stigmatization and may feel less supported and less comfortable navigating predominantly White contexts (Deaux et al., 2007; Williamson, 2007). These social adjustment difficulties often impair U.S.-origin Blacks' academic performance and increase their vulnerability to processes such as *stereotype threat* and *social identity threat* (i.e., the fear of doing something that might confirm a negative stereotype and the concomitant psychophysiological arousal that undermines cognitive and interpersonal functioning; Deaux et al., 2007; Steele, Spencer, & Aronson, 2002),

Conversely, immigrant-origin Blacks come from (or in the case of second-generation immigrants, have been greatly influenced by their parents who come from) cultural contexts in which Blacks have historically held significant positions of political and social power and racialization was absent within societal institutions (Dodoo, 1997; Tormala & Deaux, 2006). Thus, relative to U.S.-origin Blacks, Black immigrants may feel more comfortable interacting and building relationships with outgroup members and, consequently, may engender more support from White faculty and peers (Deaux et al., 2007; Massey et al., 2007; Tormala & Deaux, 2006; Williamson, 2007). This support may have a positive effect on immigrant students' academic performance (Williamson, 2007; Gerdes & Mallinckrodt, 1994).

Tinto's Model of College Persistence

Findings emphasizing the ameliorating role of college social support closely correspond with *Tinto's interactionalist model of student departure* from college (1993), which is the most widely tested and utilized model in studies of college persistence (Milem & Berger, 1997). According to Tinto (1993), student persistence depends on the extent of successful integration into the social and academic structures of the institution. These processes are influenced by pre-college-entry characteristics as well as interactions between the student and faculty and peers. In fact, Tinto contends that, after matriculation, students' perceived faculty and peer support has the greatest influence on whether students adequately integrate into their college social and academic environments. In turn, this social and academic integration promotes subsequent commitment to the institution, and positively influences persistence to graduation.

Social and academic integration are particularly crucial for many Black undergraduates who face the challenge of acclimating to predominantly White campus cultures while likely experiencing marginalization and a reduced social network (e.g., Davis, 1994; Gloria et al., 1999). However, most of the research addressing these phenomena among Black undergraduates contrasts the experiences and perceptions of Black students with those of European American and other racial minority students (e.g., Jay & D'Augelli, 1991; Kalsner & Pistole, 2003), but does not examine differences among diverse subgroups of U.S. Blacks (e.g., U.S.-origin vs. immigrant-origin students).

The few existing within-group examinations of Black undergraduates have found that relative to immigrant-origin Black students, U.S.-origin Black students report lower perceived support and social and academic integration (e.g., Offoh, 2003; Williamson, 2007). Yet, much of this research consists of qualitative studies, which offer rich, nuanced details about students' experiences and perceptions, while at the same time limiting generalizability. While findings suggest that perceived social support on one's college campus and integration into the campus social milieu help to foster academic integration,

which in turn may promote college persistence, there is very little research exploring Black immigrant-generational differences in perceptions of social support in postsecondary contexts. Moreover, the differential effects of perceived support and social integration on academic integration and college persistence for different Black subgroups have not been adequately examined. To begin to address this gap, we have compared U.S.-origin and immigrant-origin Black undergraduates' perceptions and outcomes. Given the emerging research documenting higher perceived support and academic success among immigrant-origin Blacks, in comparison to U.S.-origin Blacks, we hypothesized that immigrant-origin Blacks would: (1) report higher *high school grades*, *college social support/social integration*, and *academic integration* and (2) persist in college significantly more often. We have drawn on Tinto's model of persistence (1993) to test a longitudinal model of college persistence for Black undergraduates at 32 different PWIs using path analysis. Specifically, we measured the influence of *immigrant-generational status* on high school grades, college social support/social integration, and *college persistence*; the influence of high school grades on academic integration; the influence of academic integration on college persistence; and the influence of *socioeconomic status* (SES) and high school grades on college persistence (see Figure 1). Because research suggests supportive social interactions are pivotal for the academic adjustment of racial and ethnic minority students (e.g., Davis, 1994; Gerdes & Mallinckrodt, 1994), we hypothesized that college social support/social integration would predict academic integration, rather than the reverse.

Methods

Data for this study came from a longitudinal NIMH project directed by Gore (Gore, NIMH, RO1-MH55626), and a supplementary project funded by the William T. Grant Foundation directed by Aseltine and Liem (William T. Grant Foundation, #98190598). Participants were randomly selected from nine public high schools in the metropolitan Boston area to maximize the likelihood of obtaining a sample representative of the racial, ethnic, and socioeconomic backgrounds of individuals living in southeastern Massachusetts. Structured interviews, averaging 70 minutes in length, were conducted in 1998, 2000, and 2002 by trained professional interviewers from the University of Massachusetts Center for Survey Research.

The total sample at Time 1 (T1: 1998; during respondents' senior year of high school) consisted of 1325 late adolescents/young adults. However, for the purposes of this study, only those respondents who self-identified as Black or African American and met a number of criteria were included: (1) Respondents who indicated that they considered themselves to be of Hispanic or Latino origin were precluded from the sample; (2) Respondents were asked to select up to three racial categories to describe their race or self-define with whatever alternative terms (e.g., ethnicities) they preferred – those who described themselves *first* as Black or African American were included in the study; (3) Only Black respondents who indicated that they were attending a predominantly White two- or four-year college or university following high school were included in this study. 265 Black respondents were interviewed at Time 1 when they were seniors in high school. Of those, 209 again participated at Time 2 (T2: 2000; during the summer following most respondents' sophomore year of college). Of those 209 respondents, 101 (53 females; 48 males) indicated that they were or had been previously attending a two- or four-year predominantly White institution (PWI). These 101 respondents comprise the sample used for this study. Of the 101 Time 2 interviewees, 85 were also interviewed at Time 3 (T3: 2002; during the summer following most respondents' junior or senior year of college). Comparison of the 16 participants who dropped out of the study after Time 2 versus those who provided Time 3 data did not reveal any significant differences in terms of demographic, high school (Time 1), or college (Time 2 and Time 3) study variables, except for college social support/

integration at Time 2, with those who dropped out of the study reporting significantly lower college social support/integration, $F(1, 100) = 5.63, p < .05$.

Of the 101 Time 2 college attendees, 94 respondents described themselves as Black or African American and did not mention any other race or ethnicity; the other seven described themselves first as Black or African American and then as American Indian, Alaska Native or Native Hawaiian/Pacific Islander. 59 respondents indicated that they were born in the U.S., whereas 42 respondents reported that they were born outside of the U.S. 34 respondents indicated that they and both their parents were born in the U.S. (U.S.-origin), whereas 67 respondents reported that they or at least one of their parents were born outside the U.S. (immigrant-origin). A majority of the immigrant-origin respondents and/or their parents were born in either Haiti or Cape Verde; the remaining were born in countries in the Caribbean, Africa, and Europe. 54 respondents (27 males; 27 females) indicated that neither parent had attended college for one year or more; whereas 47 respondents (21 males; 26 females) indicated that one or both parents had attended college for at least one year.

Measures

Interviews consisted of structured questions drawn from highly reliable, standardized assessment tools that are widely used in educational and mental health survey research.

U.S.-origin status and immigrant-origin status—Interviewees were grouped based on whether they and both their parents were born in the U.S. (U.S.-origin, $n=34$, 17 males and 17 females) or if they or at least one of their parents were born outside of the U.S. (Immigrant-origin, $n=67$, 31 males and 36 females). Massey et al. (2007) also defined Black students who reported having at least one parent born abroad as being of immigrant-origin and all others as native (or U.S.-origin). They opined that even though many of the immigrant-origin students had been born in the U.S., because at least one of their parents was born abroad, they were growing up in immigrant households. This rationale is consistent with findings that Black second-generation immigrant students achieve greater academic success relative to their third-plus generation counterparts (Bennett & Lutz, 2009; Massey et al., 2007; Rong & Brown, 2001).

College social support/social integration—College social support/social integration was assessed at Time 2, using a seven-item measure. The measure was derived from the Quality of School Life Scale (Epstein & McPartland, 1976) and the school inquiry section of the Monitoring the Future Study (Bachman, Johnston & O'Malley, 1996). A sample item is, "You have done a lot of things socially with people at school." All items were four-point scales. To offset possible differences stemming from scaling responses on varying ranges (i.e., from 'very true' to 'not at all true', 'very helpful' to 'not at all helpful', and 'often' to 'never'), the seven items were standardized before being combined to form the measure. College social support/social integration was treated as an outcome variable and as a predictor of college persistence. The alpha coefficient for college social support/social integration was .70.

Academic integration—Academic integration was assessed at Time 2, using a six-item measure that explored students' feelings about whether or not they felt they were academically successful and enjoyed their school work and time on campus. This measure was also derived from the Quality of School Life Scale (Epstein & McPartland, 1976) and the school inquiry section of the Monitoring the Future Study (Bachman, Johnston & O'Malley, 1996). A sample item is "You are satisfied with the level at which you are achieving." All items were four-point scales. To offset possible differences stemming from scaling responses on varying ranges (i.e., from 'very true' to 'not at all true' and 'often' to

‘never’), the six items were standardized before being combined to form the measure. Academic integration was treated as an outcome variable and as a predictor of college persistence. The alpha coefficient for academic integration was .78.

College persistence—College persistence was assessed at Time 2 and Time 3, using a series of questions that inquired about: (a) how many different schools respondents attended since the previous interview at Time 1 or Time 2; (b) whether respondents were still enrolled there; (c) whether respondents had graduated or left before completing their course of study; and (d) what degree or certificate respondents “are/were” working toward receiving. Based on whether or not respondents were still enrolled at a 4-year or 2-year college (even if they had transferred to another college) as of Time 2 and Time 3 or had received their degree or left prior to completing their course of study, respondents were classified as either having (a) persisted as of Time 3; (b) persisted as of Time 2, but left prior to completion as of Time 3; or (c) left prior to completion as of Time 2. Of the 16 participants who dropped out of the study after Time 2, seven had left college prior to completion as of Time 2, and were coded as such; whereas the remaining nine were not assigned a college persistence score. Thus, only 92 respondents were included in the college persistence analyses (including the path analyses parameters predicting college persistence), whereas the entire sample of 101 was included in all of the other analyses.

High school grades—High School grades were determined by respondents’ Time 1 self-report of grades in the past academic year, with values along a 10-point scale from “Mostly A’s” to “Mostly D’s and F’s.” Dornbusch and colleagues (1987) found that self-reported grades were highly correlated with actual grades from school-issued transcripts.

Demographic characteristics—Participants were also asked to report on their date of birth, country of origin, parents’ country of origin, family structure (i.e., whether they came from two-parent or one-parent families), special education classes, and presence of a learning disability. Demographic information about socioeconomic status (SES) was derived from a question about whether respondents were eligible or not eligible for free or reduced-rate lunch at school.

Analyses & Results

Overview of Model Testing and Preliminary Analyses

The proposed model of college persistence among U.S.-origin and immigrant-origin Black undergraduates was tested using the analysis of moment structures (AMOS) 16.0 program (Arbuckle, 2007) to conduct path analysis. We selected this approach because it simultaneously examines multiple hypothesized paths of direct and indirect influence and can provide global indices of the fit between the data and a proposed theoretical model (Kline, 1998). Nevertheless, our small sample size ($N = 101$; and, for paths predicting college persistence, $n = 92$) should be factored in, as it is at the bottom threshold of numbers required for the statistical indices to perform adequately and yield meaningful and interpretable values. Quintana and Maxwell (1999) have observed there is limited consensus for determining the sample size for adequate power and have indicated that some goodness-of-fit indices perform adequately with sample sizes as small as 100 participants. In the current sample, the ratio of number of participants to the number of parameters (6:1) met the minimum ratio for significance testing of model effects (i.e., five times as many participants as parameters; Bentler & Chou, 1987; Kline, 1998; Quintana & Maxwell, 1999). However, it did not meet the recommended target ratio of 10 participants to one parameter (Kline, 1998). These limitations should also be considered when interpreting the results. In addition, the small sample size imposed a number of limitations on model testing. We could only

examine the interrelations among observed indicators, and could not use multiple indicators to model interrelations among latent constructs or compute modification indices. In addition, we were unable to use group modeling to separately test model fit for U.S.-origin students and immigrant-origin students.

We screened the data using SPSS 16.0 and found that all the variables met the assumptions of normality and linearity for path analysis, as described by Tabachnick and Fidell (2007). In addition, using correlational analyses, we examined the following variables as potential covariates in the model: SES, high school grades, family structure (i.e., coming from two-parent vs. one-parent families), attending special education classes, presence of a learning disability, and college institutional selectivity. Only SES and high school grades were correlated with one or more predictor and outcome variables, and were therefore included as covariates in the model.

Characteristics of the Sample

The demographic data for the U.S.-origin and immigrant-origin undergraduates, along with the means and standard deviations for the T1 through T3 variables are presented in Table 1.

Given the research documenting preferential treatment of immigrant-origin Black students relative to U.S.-origin students, as well as the academic gap between U.S.-origin and immigrant-origin Black undergraduates at secondary and post-secondary levels, we expected immigrant-origin students to report significantly higher social and academic integration, high school grades, and college persistence. Contrary to our hypothesis, univariate analyses of variance (ANOVAs) showed that U.S.-origin and immigrant-origin Black undergraduates only differed on two variables. Immigrant-origin students reported significantly higher high school grades, $F(1, 101) = 4.42, p < .05$, with a medium to small effect size ($\eta^2 = .043$), and significantly higher college persistence, $F(1, 92) = 6.30, p < .05$, with a medium effect size ($\eta^2 = .065$). Thus, the differences between these groups were not only statistically significant, but also meaningful, based on their effect sizes.

In addition, we ran a cross-tab analysis comparing college persistence among immigrant and US origin Blacks and found that among U.S.-origin undergraduates, 36.4% did not persist to Time 2 and an additional 21.2% did not persist to Time 3 (in total, 57.6% dropped out of college); whereas among immigrant-origin undergraduates, 16.9% did not persist to Time 2 and an additional 15.3% did not persist to Time 3 (in total, 32.2% dropped out of college) – a significant difference ($\chi^2 = 6.09, p < .05$). Thus, it seems that more of the immigrant-origin students managed to persist regardless of their levels of social and academic integration or SES.

Prior to testing the path model, we examined bivariate correlations among variables separately for the 34 U.S.-origin and 67 immigrant-origin respondents (see Table 2). The expected relations were generally observed. For U.S.-origin respondents, college persistence was significantly associated with SES, high school grades, and academic integration; however, for immigrant-origin respondents, the only significant correlate of college persistence was high school grades.

Testing the Fit of the Hypothesized and Final Models

We tested the hypothesized model with path analysis, using the *Analysis of Moment Structures* (AMOS) 16.0 program (Arbuckle, 2007). Several fit statistics were used to assess the goodness of fit between the model and the sample data. The most basic indicator of model fit is a chi-square (χ^2), reflecting the degree of discrepancy between the observed covariance matrix derived from the data and that predicted by the model. However, the chi-square statistic is dependent on sample size and sensitive to model complexity (e.g., Hu &

Bentler, 1998; Kline, 1998; Schermelleh-Engel, Moosbrugger, & Müller, 2003). Accordingly, we report additional fit indices that circumvent these problems. First, the ratio of chi-square/degrees of freedom (χ^2/df) takes model complexity into account. The root-mean-square error of approximation (RMSEA) provides a measure of approximate fit in the population and is therefore concerned with the discrepancy due to approximation. The Tucker-Lewis Index (TLI; also known as the Nonnormed Fit Index - NNFI) and Comparative Fit Index (CFI; Bentler, 1990) indicate the degree to which the theoretical model better fits the data than a base model constraining all constructs to be uncorrelated with one another. The TLI and CFI are considerably more robust than the chi-square statistic in the face of deviations from multivariate normality (e.g., Schermelleh-Engel, Moosbrugger, & Müller, 2003). Finally, we considered two additional indices for systematically fitting the candidate models and for choosing among them on the basis of fit, parsimony, and interpretability: the Parsimony Normed Fit Index (PNFI) and Akaike Information Criterion (AIC). The PNFI ranges between zero and one, with *higher* values indicating a more parsimonious fit; for the AIC value, the *lower* the AIC measure, the better the fit (e.g., Schermelleh-Engel, Moosbrugger, & Müller, 2003).

The hypothesized model (see Figure 1) fit the data provided by the respondents according to all of the fit indices, $\chi^2 (7, N = 101) = 7.21, p = .41, \chi^2/df = 1.03, RMSEA = .017, TLI = .99, CFI = 1.00$ (see Table 3). However, two paths were neither significant nor approached significance. We trimmed the model one non-significant parameter at a time and noted the effects on the remaining coefficients with each deletion. Deletion of these paths did not degrade the fit of the model, $\chi^2 (9, N = 101) = 9.53, p = .39, \chi^2/df = 1.06, RMSEA = .024, TLI = .98, CFI = .99$ (see Table 3). Because some data were missing, we were unable to compute modification indices with the AMOS 16.0 program, and, therefore, could not determine if the addition of other direct paths would improve the fit of the data. The resulting difference in fit ($\chi^2 (2, N = 101) = 2.32, p > .05$) suggested that the final model was not significantly different than the hypothesized model. However, comparisons between the PNFI and AIC of the hypothesized model (PNFI = .31; AIC = 47.21) versus those of the revised model (PNFI = .38; AIC = 45.53) revealed that the revised model was a better fit to the data.

The final model with standardized path coefficients is illustrated in Figure 2. All of the paths in the model are significant, with the exception of the direct path from immigrant-generational status to college persistence, which approached but was not significant ($\beta = .17, p = .068$). In total, the predictors accounted for 28.6% of the variance in college persistence.

Immigrant-generational status (i.e., being an immigrant-origin student) predicted high school grades ($\beta = .21, p < .05$). In turn, high school grades predicted academic integration ($\beta = .43, p < .001$) and college persistence ($\beta = .37, p < .001$). Thus, immigrant-generational status had an indirect rather than a direct effect on college persistence ($\beta = .08$) through its effect on high school grades.

As predicted, college social support/social integration did predict academic integration ($\beta = .33, p < .001$). This supports the premise that for Black undergraduates, college social support and social integration stemming from that support play a role in adjusting to the academic demands of the university. However, contrary to our hypotheses, academic integration did not directly affect college persistence. The two predictors of college persistence in the path model were SES ($\beta = .32, p < .001$), and high school grades ($\beta = .37, p < .001$),

DISCUSSION

We drew on Tinto's model of persistence (1993) to explore the academic experiences and outcomes of U.S.-origin and immigrant-origin Black undergraduates at 32 different PWIs. After comparing U.S.-origin and immigrant-origin students' college social support/social integration and academic integration, we modeled the influence of that social and academic integration on college persistence in combination with the influence of socioeconomic status (SES) and high school grades.

Only 42% of U.S.-origin Blacks first interviewed in 1998 had persisted in college as of 2002; whereas 68% of immigrant-origin Blacks had persisted during that same period, $\chi^2 = 6.09$, $p < .05$. This corresponds with previous findings that children of Black immigrants report significantly higher college persistence rates than third-plus-generation Black students (Jenkins et al., 2004). However, in a path model that included the direct effects of high school grades and SES on college persistence, immigrant-generational status had only an indirect effect on college persistence through its direct effect on high school grades; the direct path from immigrant-generational status to college persistence only approached significance.

We suspect that low-sample size and the high proportion of college-persisting immigrant-origin students in our sample contributed to these findings. Immigrant-origin undergraduates ($n = 67$) comprised two-thirds of our sample, and only a small number of these students ($n = 19$) dropped out of college. Thus, even immigrant-origin students who reported low social and academic integration or low SES managed to persist in college, and this reduced the variability in college persistence within our sample.

Interestingly, in correlational analyses, academic integration and SES were significantly associated with college persistence for U.S.-origin Blacks, but not for immigrant-origin Blacks. Taken together with our finding that college social support/social integration predicted academic integration, supportive interactions with college faculty and peers appear to be particularly important for U.S.-origin Blacks, who may hold membership in a more academically-stigmatized group. College social support and social integration stemming from that support play a role in helping both U.S.-origin and immigrant-origin Black undergraduates adjust to the academic demands of the university. In turn, for U.S.-origin Blacks, this successful academic integration is associated with greater college persistence. Future research with larger samples providing greater power and the opportunity to utilize group modeling may uncover significant immigrant-generational differences in Black undergraduates' pathways to college persistence. Nevertheless, for this study, because social and academic integration did not predict college persistence when tested within the path model, there are other factors (not tested in the model) that better explain the differences in persistence between U.S.-origin and immigrant-origin Blacks.

Possible alternative factors that might have influenced students' college persistence include racial and ethnic identity development, which have been shown to influence students' perceptions of faculty and peers in academic contexts (e.g., Deaux et al., 2007; Hall & Carter, 2006). Because we did not measure students' racial and ethnic identities, we do not know if these identity dimensions may have played a more prominent role than U.S.- or immigrant-origin group membership in influencing on-campus social and academic experiences, as has been suggested by other research involving Black immigrant-origin students (Deaux et al., 2007; Hall & Carter, 2006). Future studies should measure these identity dimensions and assess the impact of various types of support (e.g., support from college peers vs. support from faculty; support from same-race faculty and peers vs. support from White faculty and peers) for each of these student groups.

It is especially important to note the effects of immigrant-origin status on high school grades and high school grades on college persistence in the current path model. Improving college persistence requires attending to pre-college academic experiences as we note in the next section.

Implications

These findings have a number of implications for research and academic interventions and we respectfully offer the following recommendations:

1. Researchers and academic administrators should reject a monolithic portrayal of Black students as socially, economically, and culturally similar. Instead, investigators and university personnel should recognize that the demographic heterogeneity of this student population promotes variation in academic achievement and psychosocial acclimation to college (Charles et al., 2008). To this end, and in order to better promote the academic success of Black undergraduates, academic institutions should provide professional development opportunities, allowing college faculty and student leaders to explore their own assumptions and biases and recognize the heterogeneity among Blacks and the varying potential for stigma-induced threat vulnerabilities, based on social identities and subgroup membership.
2. University personnel should consider examining differences based on a number of identity dimensions when tracking the persistence and performance of student populations. This will better elucidate potential inconsistencies in supporting some Black student subgroups (e.g., immigrant-origin students) while neglecting the needs of others (e.g., U.S.-origin students) and provide a better gauge for determining whether institutional approaches to promoting college persistence are effective for all Black student subgroups, rather than only for those groups that are less academically-stigmatized. Instead of using demographic forms that merely ask students to check a box indicating their race, academic researchers and institutional policymakers and admissions administrators should allow students to offer a more detailed description of their racial and ethnic origins and immigrant-generational status. For example, Suyemoto's culturally sensitive *Comprehensive Demographics Questionnaire* (2010) attends to a range of identity dimensions, including race, ethnicity, immigrant-generational status, gender identity, sexual orientation, college student generation status, and SES. Nevertheless, it is still necessary to compare the academic experiences and outcomes of various undergraduate racial groups (and not act as if "race does not matter or exist"). Because Black students from ethnically diverse backgrounds often have shared on-campus experiences of racialization, these statistics can provide valuable information about faculty and peer interactions and pedagogy and their influence on performance across racial lines.
3. Given that the immigrant-generational achievement gap appears to begin in high school (or earlier), as evidenced by the significantly higher grades of immigrant-origin students during their high school years and the effect of high school grades on college persistence, intervention must begin long before academically stigmatized Black students reach the college campus. One successful approach taken by some universities involves forming partnerships with public elementary and secondary schools, in order to reach out to racially and ethnically diverse students. For example, one enrichment program that was honored by the White House in 2010, *Project ALERTA*, has provided supplementary academic service to more than 3000 Latina/o children during their early years of school (i.e., third through fifth grade; Bayles, 2010). This partnership between faculty from both

Boston Public Schools and the University of Massachusetts Boston provides after-school programming at seven public schools and at the University campus, during school vacations, emphasizing respect for students' culture and language. Through educational and social development, student participants build the academic skills, confidence, and drive necessary to gain admission into and thrive within the most competitive local middle and high schools. In turn, this type of success in high school has a direct effect on college persistence. Programs such as this make explicit the message that is apt to be implicit for non-stigmatized students – the message of belonging, and of still untapped intellectual potential. Moreover, it seems logical to surmise that, years later, when applying to colleges, program participants are likely to view the universities that hosted these programs as welcoming and supportive of diverse learners. Making that type of impression on large numbers of prospective applicants of color could go a long way in enhancing efforts to recruit and retain underrepresented ethnic minority students.

Limitations and Future Directions

Although this study is a modest step in providing insight into the differences in academic experiences and outcomes between U.S.-origin and immigrant-origin Black students at PWIs, there are a number of noteworthy limitations. Because our study utilizes secondary data from a larger study that was not primarily designed for the purposes of this study, there are a number of constructs that were not included that have been shown to influence the academic experiences and outcomes of diverse Black undergraduates. For example, Tauriac and colleagues have begun collecting longitudinal data for a study on the social, health, and academic perspectives and experiences (*SHAPE Study*) of students diverse in immigrant- and college student-generational status. Their questionnaire includes several measures that are sensitive to stigma-induced threats, including measures of stigma consciousness (Pinel, Warner, & Chua, 2005), outgroup comfort (Cole & Arriola, 2007), social identity threat endorsement (an adaptation of Cohen and Garcia's collective identity threat (2005), and ethnic identity (Phinney & Ong, 2007). These factors have all been linked to academic and social adjustment and/or performance.

Additionally, because we only had self-report data, we do not know how much students' interpersonal styles (versus their ethnic group membership) played a role in eliciting or discouraging supportive and engaging responses from college faculty and peers, regardless of students' group membership. Finally, our relatively small sample size did not allow us to use group modeling to test model fit for U.S.-origin students and immigrant-origin students separately or to conduct within subgroup comparisons (e.g., immigrant-origin males vs. females; immigrant students from Anglophone nations vs. those from nations where English is not generally taught in schools). To address this, additional research with larger samples is needed.

Conclusions

In no way do we intend to suggest that programs or policies supporting immigrant-origin Blacks are unnecessary or should be reduced. Certainly, research comparing immigrant-origin and U.S.-origin Whites to immigrant-origin Blacks shows that the overall academic performance of immigrant-origin Blacks lags behind those of both groups (Emeka, 2004; Massey et al., 2007). Furthermore, previous analyses of the socioeconomic attainment of Black immigrants to the U.S. have found that, relative to U.S.-origin Blacks, Black immigrants generally do not receive earnings benefits commensurate with their higher educational attainment (Corra, 2005; Dodoo, 1997). Rather, academic institutions should recognize that the practices and policies that have promoted slight gains for some Black student subgroups (e.g., immigrant-origin Blacks) have not effectively supported all Black

student subgroups; and have been particularly ineffective for members of groups that are more negatively stereotyped in academic domains (e.g., U.S.-origin Blacks). This is particularly noteworthy during this socio-historical period in which the election of a second-generation immigrant Black male – President Barack Obama – has been offered as evidence that equal educational opportunity initiatives are no longer needed (Associated Press, 2008; Pitts, 2009). During this historical period in which pundits have argued that U.S. society has entered a “post-racial” era and no longer requires policies promoting educational diversity and equity, there continues to be an enormous need for research illuminating differences in social and academic experiences and their effects on the academic success of all students.

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Figure 1.
Path analysis of the Hypothesized Model.

Figure 2.

Path analysis of the Final Model

Note. Full Model accounts for 28.6% of the variance in *College Persistence* at T3. The standardized path coefficients (which correspond to effect-size estimates) for each relationship between measured variables appear near each parameter.

* $p < .05$. ** $p < .01$. *** $p < .001$.

Table 1

Analysis of Variance and Means and Standard Deviations for U.S.-Origin and Immigrant-Origin Black Undergraduates' Socioeconomic Status, High School Grades, Social and Academic Integration, and College Persistence

	U.S.-origin (<i>n</i> = 34) <i>M</i> (<i>SD</i>)	Immigrant-origin (<i>n</i> = 67) <i>M</i> (<i>SD</i>)	<i>F</i> -ratios
Socioeconomic Status	1.97 (.90)	2.04 (.96)	.12
High School Grades	5.68 (1.90)	6.54 (1.96)	4.42 *
College Social Support/Social Integration	.17 (3.67)	-.06 (4.44)	.07
Academic Integration	-.98 (4.29)	.50 (3.96)	2.99
College Persistence	1.06 (.90)	1.51 (.77)	6.30 *

Note. To offset possible differences stemming from scaling responses on varying ranges, *College Social Support/Social Integration* items and *Academic Integration* items were standardized before being combined to form the measure. Scores of *College Social Support/Social Integration* ranged from -15.25 to 6.75, whereas scores of *Academic Integration* items ranged from -12.88 to 6.79.

*
p < .05.

Table 2

Correlations for U.S.-Origin and Immigrant-Origin Undergraduates

	SES	H.S. Grades	Soc Supp/Soc Integr	Academic Integration	College Persistence
SES	—	.48**	.02	.46**	.65**
H.S. Grades	-.13	—	.21	.42*	.48**
Soc Supp/Soc Integr	.15	.14	—	.40*	.33
Academic Integration	-.34*	.47**	.41**	—	.49**
College Persistence	.14	.35**	.12	.16	—

Note. U.S.-origin students' correlations are reported above the diagonal (n = 34) and immigrant-origin students' correlations are below the diagonal (n = 67). SES = *Socioeconomic Status*; H.S. Grades = *High School Grades*; Soc Supp/Soc Integr = *College Social Support/Social Integration*.

* $p < .05$.

** $p < .01$.

Table 3

Fit Indices for the Hypothesized and Final Models

	χ^2	<i>p</i>	df	χ^2/df	RMSEA	TLI	CFI	PNFI	AIC
Hypothesized Model	7.21	.41	7	1.03	.017	.99	1.00	.31	47.21
Final Model	9.53	.39	9	1.06	.024	.98	.99	.38	45.53

Note. χ^2 = Chi Square; df = degrees of freedom; RMSEA = root-mean-square error of approximation; TLI = Tucker-Lewis Index; CFI = Comparative Fit Index; PNFI = Parsimony Normed Fit Index; AIC = Akaike Information Criterion.