

Black Males in the Community College: Using Two National Datasets to Examine Academic and Social Integration

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Abstract

The purpose of this study was twofold. First, this study sought to examine the academic and social integration experiences of Black male students in the community college compared to non-Black male students. Second, this study sought to determine the usefulness of academic and social integration in predicting persistence among Black males in the community college. Data from this study was derived from the Educational Longitudinal Study (ELS: 2002/2006) and the Beginning Postsecondary Students Longitudinal Study (BPS: 2003/2009). Using logistic and ordinary least square regression procedures, this study found that Black males have significantly higher (though not large) odds of academic and social integration than their male peers. Further, differences in integration are predictive of racial/ethnic affiliation. Moreover, this study has also shown that academic and social integration are somewhat predictive of student persistence. However, while academic integration has a positive effect on persistence and social integration a negative effect, the relative importance of each form of integration to persistence was minor.

The community college has served as the primary pathway for Black males into public postsecondary education. Drawn to these institutions with the hope of enhanced social, economic, and political empowerment, many Black males do not achieve their desired academic goals (Bush, 2004; Bush & Bush, 2005, 2010). In fact, only

73% of Black males will persist through their first year of community college (U.S. Department of Education, 2006). Further, Esther and Mosby (2007) noted that only 16% of Black male students will graduate from public two-year institutions within a three year time span. As a result of these poor success rates, scholars (e.g., Flowers, 2006; Freeman & Huggans, 2009; Glenn, 2003-04; Hagedorn, Maxwell & Hampton, 2001-02; Mason, 1998; Rideaux, 2004) have set out to examine this populous, seeking to identify factors (e.g., academic, social, institutional, environmental, psychological, background) which are predictive of Black male persistence in the community college.

Overwhelmingly, the resulting body of literature, as well as persistence research on Black males in four-year institutions, has been guided by Tinto's (1975, 1993) departure theory (Wood, 2010). In short, Tinto's theory asserts that students' integration into the academic and social landscape of a college can lead to their enhanced commitment to the institution, resulting in greater levels of persistence (Dabney-Smith, 2009; Dorsey, 1996; Hampton, 2002; Ihekwebaba, 2001; Ray, Carly & Brown, 2009; Scaggs, 2004; Shannon, 2006). Given the perceived importance of integration on persistence, some research has even focused explicitly on differences in academic and social integration between and among groups as a mechanism for examining potential persistence considerations (Flowers, 2006; Dabney-Smith, 2009; Ihekwebaba, 2001; Shannon, 2006). For example, Flowers' (2006) conducted an examination of academic and social integration differences among Black male students in two- and four-year colleges. He noted that his study was undertaken to examine integration measures, as these measures "have been shown to positively influence the persistence and retention of college students" (p. 270). Using national data from the Beginning Postsecondary Students Longitudinal Study, he found that Black males in two year institutions had lower levels of academic (e.g., attending study groups, talking with faculty, meeting with advisers) and social integration (participation in clubs, attending fine arts activities, participation in intramural sports, going places with friends) than their four-year counterparts. After combining individual measures into integration constructs (and using multiple controls), he found that integration was predictive of institutional

affiliation, with academic and social integration accounting for moderate portions (28% and 38%) of the variance in institutional affiliation.

Study Purpose

Flowers' (2006) work served as the impetus for this current article for two primary reasons. First, his research examined integration differences between Black male populations in two- and four-year colleges. There are numerous differences between these institutional types (e.g., student demographics, faculty qualifications, institutional mission), which complicate cross-institutional comparisons (Davies & Casey, 1999; Pascarella, 1999; Piland, 1995; Rhine, Milligan & Nelson, 2000; Wang, Gibson, Salinas, Solis & Slate, 2007). These differences could lead to integration differences among students in these institutional types. For instance, as noted by Wood (in press), Black males in two- year colleges are more likely than Black males in four-year institutions to be older, independent with dependents, married, and to have delayed enrollment into postsecondary education. They are also less likely to have higher degree expectations, attend private high schools, and to have additional years of pre-collegiate preparation in foreign language, mathematics, and science. All these factors, could conceivably lead to lower levels of integration. Moreover, what remains unexamined in the current literature is whether Black males in two-year colleges have differing integration experiences than other male students in two-year colleges (a more suitable comparison population).

Second, Flowers' work, in tandem with other studies on Black males in community colleges which employ Tinto's framework, necessitate a more fundamental examination of the usefulness of integration in predicting persistence for two-year collegians, particularly Black males. Given that studies provide mixed results on the importance of integration for community college persistence (Axelson & Torres, 1995; Bers & Smith, 1991; Braxton, Hirschy, & McClendon, 2004; Pascarella, Duby & Iverson, 1983; Pascarella, Smart & Ethington, 1986; Sorely & Duggan, 2008; Wortman & Napoli, 1996),

the applicability of Tinto's model for Black male success is assumed, often employed, but relatively unproven. As such, the purpose of this study was twofold. First, this study sought to examine the academic and social integration experiences of Black male students in the community college in comparison to non-Black male students. Second, this study sought to determine the usefulness of academic and social integration in predicting persistence among Black males in the community college. With this in mind, the following research questions guided this inquiry.

- Research Question 1:* Are there any differences in academic and/or social integration between Black males and other male students in the community college?
- Research Question 2:* Does racial/ethnic affiliation (non-Black, Black) significantly predict academic and social integration in the community college?
- Research Question 3:* Does academic and/or social integration predict first year persistence among Black males in the community college?

To provide context for understanding this current study on academic and social integration, the next section will examine relevant literature. This section will begin with an overview of Tinto's integration theory, then discuss research on Black males in the community college which examines differential integration experiences, and conclude by focusing on research which either links integration to student success (e.g., persistence, achievement) or employs Tinto's integration theory as a guiding framework.

Relevant Literature

As previously noted, Tinto's (1975; 1993) framework has served as the predominant lens for examining persistence among Black males in the community college. Tinto suggested that student persistence be viewed on a longitudinal perspective. From this perspective, when a student enters college, they interact with the

academic and social systems within the institution. When students become part of the social fabric of these systems, they experience academic and/or social integration. Academic integration refers to students' academic performance (e.g., GPA) and cognitive development. This form of integration encompasses meeting established academic standards of success as well as students' personal identification as academic beings (in line with normative behaviors in the academic system). Social integration entails students' personal incorporation into the campus social environment. Primarily, social integration is facilitated by non-formal interactions with peers, involvement in extracurricular activities, and relationships with campus personnel.

For successful integration to occur, there must be congruence between students characteristics (e.g., demographics, background, beliefs) and those of other individuals within the social system. Further, interactions serve to foster students' feelings of personal commitment to the college. Interactions with campus systems also result in students' modification of academic and personal objectives. Ultimately, greater levels of commitment to the institution and to personal goals can lead to higher levels of completion. Tinto's model was informed by Durkheim's theory of suicide. Durkheim posited that individuals who fail to become fully integrated into society are more likely to commit suicide than those who are integrated. As such, while Tinto asserts that greater levels of integration can afford greater persistence, lower levels of integration may lead to departing college before one's academic goals have been attained (i.e., dropping out). Given the importance of preventing attrition, many studies have examined integration differences among students.

Differential Integration Experiences

In addition to Flowers' (2006) study, which illustrated that Black males in two-year colleges experience lower levels of academic and social integration than Black males in four-year institutions, three other studies (Dabney-Smith, 2009; Ihekweba, 2001; Shannon, 2006) have examined differences in integration among Black males. The dearth of

studies on integration for Black males, including within- and between-group differences, further illustrates the importance of this manuscript. Given the minimal number of studies, each is discussed individually.

Dabney-Smith (2009) examined within-group social and academic integration differences among African American males by age. Using class interval age groupings (e.g., 18-19, 20-21, 22-24), this study illustrated that significant differences by age were evident on two measures of academic integration and one measure of social integration. In terms of academic integration, significant differences were detected on students' perceptions of the quality of their relationships with campus administrative personnel. In this area, the eldest students (those 65 and older) had significantly lower mean scores, while those between the ages of 50 and 64 had the highest scores. Between-group differences were also evident on students' perceptions of the quality of their relationships with instructors. The eldest students (those 65 and older) had lower perceptions of relationship quality, with the highest ratings coming from students between 40 and 49 years old. In terms of social integration, students' perceptions of the quality of their relationships with other students differed significantly by age. The eldest students (65 and older) had the lowest perception of relationship quality while those 50 to 64 had the highest mean scores in this area.

Two studies examined integration differences between Black males and Black females. Ihekwaba (2001) found that Black females were more likely than Black males to persist in college. This difference was attributed to (in part) lower levels of academic and social integration among Black male students. Ihekwaba suggested that this occurs since Black males had greater difficulty in establishing positive interactions within the college system, resolving classroom conflicts, and coping with classroom and college power structures. Shannon (2006) also examined male-female integration differences, but focused on differences between Black males who were and were not parents. Shannon (2006) found that male students had differing integration experiences than their female counterparts. Shannon noted that Black males were less likely to participate in career placement activities and student organizations (e.g., student government, campus clubs, campus

newspaper); however, they were more likely to participate in college activities and intercollegiate athletics (in fact they were 3.5 times more likely to do so). Among males who were parenting and non-parenting, Black parenting males had lower levels of academic and social integration in college than their non-parenting male counterparts. Shannon noted that this was due to external pressures relevant to parenting demands which detracted from the integration process. In all, extant research suggests, directly or indirectly, that differential integration experiences facilitate lower success. The next section focuses on literature which employs integration theory as a guiding framework.

Integration and Black Males in the Community College

As noted, academic and social integration has been the predominant theoretical framework used in persistence research on Black males in the community college (Wood, 2010). However, its use as a framework is employed in several ways. Some authors (e.g., Bates, 2007; Miller, 2006) identify Tinto's (1975; 1993) work as a guiding framework, but then do not actually use it to guide their research design or analysis. Others identify integration theory as an important conceptual underpinning, assume its applicability, and then employ it as an indirect measure of persistence (Flowers, 2006; Hagedorn, Maxwell & Hampton, 2001-2002; Hampton, 2001; Mosby 2009). For example, Hagedorn et al. (2001-02) examined factors affecting the persistence of Black males in the community college. Using integration theory, they used a measure of goal commitment—an identified byproduct of integration—to illustrate the role of integration on student persistence. Similarly, Mosby (2009) used a qualitative research approach to examine students' feelings of connectedness to campus as an indirect measure of integration. Mosby found that students who participated in extracurricular activities (e.g., clubs, organizations) and who limited their relationships with friends not enrolled in college, focusing their time on friends who were in college, were more likely to succeed. Further, Mosby noted that students who established positive

relationships with faculty members, particularly faculty of color, continued in college.

Few quantitative studies, if any, investigate the direct effect of academic or social integration on persistence either through correlation, mean tests, or regression. The closest research comes from Scaggs (2004). He conducted a survey study of institutions with high retention and graduation rates in order to identify practices administrators at those institutions believed foster Black male success. Based on descriptive statistics, the findings from this study indicated: (a) the importance of student development programming, (b) academic support services for underprepared students, (c) course placement protocols, and (d) extracurricular programming. The latter, extracurricular programming, focused on the importance of campus activities designed to foster students' social integration into the campus setting. These activities, according to campus administrators, facilitated Black male retention and graduation success. A similar survey study was conducted by Dorsey (1996) on Black male community college students who graduated. It inquired about perceptions of persistence. Of those factors identified, only one—faculty-student relationships—focused on academic integration; none focused on social integration. The remaining factors were relevant to external persistence factors such as finances (the cost of education) and institutional considerations (e.g., availability of needed coursework, location of the college, and course convenience).

The majority of research seeking to establish a direct link between integration and persistence among Black males in the community college is qualitative in nature. Primarily relying upon interviews and focus groups with Black males, these studies overwhelmingly associate students' perspectives on factors facilitating their success to integration (Dabney-Smith, 2009; Ihekwaba, 2001; Jordan, 2008; Riley, 2006; Shannon, 2006). In particular, these qualitative works have emphasized the importance of academic integration, highlighting the importance of faculty student interactions on persistence. For example, Jordan (2008) noted the importance of positive faculty-student interactions on persistence, suggesting that

faculty who were caring to students facilitated a sense of belonging and affirmed students through interactions that aided retention efforts.

In addition to faculty-student interaction, researchers also identified the importance of library usage, study time (Shannon, 2006), student-staff relationships (Dabney-Smith, 2009), and use of collegiate support services (Ihekwaba, 2001) in fostering persistence. These studies also noted the importance of social integration on Black male student retention, focusing intently on the role of relationships with classroom peers (Dabney-Smith, 2009; Shannon, 2006). Relationships with classroom peers aided students in transitioning to college and situating themselves within the campus social system. However, it should be noted that while Tinto's (1975; 1993) framework was employed as the lens by which these studies were conducted; most of these works identified the importance of persistence factors which were not central to integration. In particular, the role of psychological dispositions (e.g., self-awareness, maturation, overcoming stereotypes, self-determination, self-efficacy, motivation) (Ihekwaba, 2001; Jordan, 2008; Riley, 2006) and environmental factors (e.g., familial support, media stereotypes, finances, work-related factors, community support) (Ihekwaba, 2001; Jordan, 2008; Shannon, 2006) were extolled as integral to Black male persistence in the community college.

Methods

Data from this study was derived from the Educational Longitudinal Study (ELS: 2002/2006) and the Beginning Postsecondary Students Longitudinal Study (BPS: 2003/2009). ELS is a nationally representative longitudinal survey of youth which tracks their transition from high school to college and/or the workforce. This survey follows students' academic and personal lives over three waves. The first wave was conducted in 2002, when respondents were tenth graders (sophomores). The second wave, followed up with students in 2004 (during their senior year) to examine gains in achievement, high school transition, early completion, and departure. In 2006, the third wave of ELS collected data relevant to college access, choice, and experiences, as well as other post high school transitions such as the

workplace lives of students after high school. For collegians, most would have completed the survey in their sophomore year in college. The survey has a fourth wave that will be collected in 2012 to examine college completion and labor market experiences. ELS was initiated with a population of 16,200 high school sophomores. This study employs data from the second follow-up which is delimited to male students, attending public two-year colleges. The total sample population of Black and non-Black males used in this study is representative of 1,533 unweighted cases.

BPS data was also employed in this investigation. Like ELS, BPS is a nationally representative sample of students. BPS is designed to investigate factors affecting the enrollment, persistence, attainment, and experiences of collegians. This dataset tracks students who are first-time college goers from their first year of college over a nine year time-frame. BPS also has three waves, the first collected from first-time collegians in 2003, with subsequent follow-ups in 2006 (three years later) and 2009 (six years later) (Cominole, Wheelless, Dudley, Franklin, & Wine, 2007). This study employs data from the first collection of ELS (at the end of students first year in college). BPS was initiated with a population of 16,100 students. This study draws upon data from 2,235, unweighted, Black and non-Black male respondents. Both datasets are employed in this study to provide a more comprehensive examination of integration. The next section discusses other variables employed in this study.

Variables

Three dependent variables were employed in this study. To address research question one, examining academic and social integration differences between Black and non-Black males, a dichotomous outcome of racial/ethnic affiliation was employed (Y). As a result, non-Black males were coded as '0' and Black males were coded as '1'. To investigate the second research question, the usefulness of racial/ethnic affiliation in predicting integration, continuous composite measures of integration were employed as outcomes (Y). For the third research question, examining predictive

usefulness of academic and social integration on Black male persistence, a dichotomous outcome of persistence was employed (Y). In this light, non-persisters were coded as '0' and students who persisted through their first year of college coded '1'.

Three control variables (Z) were employed in analyses conducted with both datasets. These variables represented several possible external factors which could limit students' time on campus, and as a result, their ability to integrate into the campus setting. Time status was identified as a control in this study, with '0' representing students who were enrolled full-time and '1' indicating part-time enrollment. The majority of students in the ELS sample were full-timers (82.5%) while a more limited percent were part-timers (17.5%). The BPS sample also had a greater percentage of full-time (60.7%) students in comparison to part-timers (39.3%).

The next control variable examined the number of hours students worked per week. This variable was categorical, ranging on a scale from '0' (no hours worked) to '6' (51+ hours worked) with successive numbers indicating increasing intervals of hours worked per week. ELS data indicated that most students (63.4%) worked during their first year of college. The percentage breakdown of hours worked per week is as follows: none, 36.6%; 1 to 10 hours, 2.5%; 11 to 20 hours, 14.6%; 21 to 30 hours, 20.7%; 31 to 40 hours 20.2%; 41 to 50 hours, 3.7%; and 51 hours or more per week, 1.6%. As with ELS participants, the vast majority (77.5%) of the BPS respondents worked while attending college. The percentage breakdown of hours worked per week is as follows: none, 22.5%; 1 to 10 hours, 5.7%; 11 to 20 hours, 15.8%; 21 to 30 hours, 20.7%; 31 to 40 hours, 26.0%; 41 to 50 hours, 6.2%; and 51 hours or more per week, 3.1%.

The last control variable used in both datasets examined whether the respondent had children. This variable was categorical, with '0' representing no children and '1' indicating that the respondent had at least one child. The vast majority of ELS respondents (96.7%) had no children while 3.3% had at least one child. A greater percentage of BPS students (12.8%) had children, while 87.2% had no children. An additional control variable was employed when using BPS data. A primary difference between the ELS and BPS datasets is that ELS is

collected by following a cohort of students from high school—ensuring a relatively similar age among respondents; while BPS follows first time collegians who may or may not have delayed their enrollment—which would result in age differences. As a result, BPS analyses also controlled for the age of respondents. Within the BPS dataset, 22% of students are 24 years of age or older, and 13.6% are 30 years or older. The remaining percentage breakdown is as follows: 15 to 18 years old, 35.0%; 19 years old, 24.9%; and 20 to 23 years old, 18.1%.

Several covariates (X) were employed in this study, each measuring students' integration experiences in college. ELS variables included students who: (a) talked with faculty about academic matters outside of class; (b) met with an advisor about academic plans; (c) worked on coursework at the school library; (d) used the web to access school library for coursework; (e) participated in intramural or non-varsity sports; (f) participated in varsity of intercollegiate sports; and (g) participated in extracurricular activities. In terms of BPS, the following variables were employed for students: (a) talked with faculty about academic matters outside of class; (b) had social contact with faculty outside of class; (c) met with advisor about academic plans; (d) participated in study groups; (d) participated in school sports—including varsity and non-varsity sports; (e) participated in school clubs and organizations; and (f) attended fine arts activities. Table 1 presents the percentage breakdown of the responses to these covariates as well as the control variables. In general, the percentages indicated a smaller percentage of respondents acknowledged that these academic experiences occurred 'often'. All of the ELS and BPS variables were rated by the respondents as (a) never, (b) sometimes, and (c) often. Both ELS and BPS data were treated dichotomously, coded '0' (for never) and '1' (for sometimes and often).

Table 1.

Total weighted counts and percentages for variables and variable levels

Variable	Levels	Weighted Percent (ELS)	Weighted Percent (BPS)
Racial/Ethnic Affiliation	NonBlack	88.1%	87.7%
	Black	11.9%	12.3%
Time status	Part-time	17.5%	39.3%
	Full-time	82.5%	60.7%
Hours worked per week	0	36.6%	22.5%
	1-10	2.5%	5.7%
	11-20	14.6%	15.8%
	21-30	20.7%	20.7%
	31-40	20.2%	26.0%
	41-50	3.7%	6.2%
	51+	1.6%	3.1%
Children	No	96.7%	87.2%
	Yes	3.3%	12.8%
Age	15-18	-	35.0%
	19	-	24.9%
	20-23	-	18.1%
	24-29	-	8.4%
	30+	-	13.6%
Talked with faculty about academic matters outside of class	Never	35%	35.8%
	Sometimes	50.9%	54.9%
	Often	14.2%	9.3%
Had social contact with	Never	-	70.3%

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faculty outside of class	Sometimes	-	24.4%
	Often	-	5.4%
	Never	30%	44.3%
Met with advisor about academic plans	Sometimes	55.5%	45.7%
	Often	14.5%	10.0%
	Never	30.0%	-
Work on coursework at school library	Sometimes	43.2%	-
	Often	26.3%	-
	Never	30.0%	-
Use the web to access school library for coursework	Sometimes	37.4%	-
	Often	35.9%	-
	Never	26.8%	-
Participated in study groups	Sometimes	-	39.2%
	Often	-	7.0%
	Never	-	62.8%
Participated in intramural or non-varsity sports	Sometimes	11.7%	-
	Often	7.7%	-
	Never	80.6%	-
Participated in varsity or intercollegiate sports	Sometimes	5.1%	-
	Often	7.6%	-
	Never	87.3%	-
Participated in school sports (varsity and non-varsity)	Sometimes	-	6.3%
	Often	-	5.8%
	Never	-	87.9%
Participated in other extracurricular activities	Sometimes	20.3%	-
	Often	10.7%	-
	Never	68.9%	-
Participated in school clubs	Sometimes	-	8.9%
	Often	-	3.7%
	Never	-	87.4%

Attended fine arts activities	Never	-	79.7%
	Sometimes	-	14.7%
	Often	-	5.6%

Analytic Procedure

This study sought to examine academic and social integration in the community college. To address the first research question (are there any differences in integration between Black and non-Black males?), this study employed logistic regression. Logistic analyses were used to determine whether measures of academic and social integration were predictive of males' racial/ethnic affiliation, when controlling for external factors (e.g., time status, hours worked per week, children). This resulted in seven individual regressions (with controls) for each dataset (ELS and BPS) allowing the researcher to determine the usefulness of each integration measure (e.g., talking with faculty, meeting with advisor, participation in sports) on predicting respondents' racial/ethnic category (Black, non-Black). Logistic regression was used in this study given that the outcome of interest (racial affiliation) was dichotomous in nature while the remaining variables (controls and covariates) were dichotomous and continuous in nature (Menard, 2002). To examine research question two (does racial/ethnic affiliation significantly predict integration?), composite measures of academic and social integration were employed (see findings section). Using ordinary least squares regression, racial/ethnic affiliation (non-Black, Black) were employed (with and without controls) to predict academic and social integration levels. Findings are reported using unstandardized beta coefficients. Finally, to examine the third research question (does integration predict first-year student persistence among Black males?), further logistic regression analyses were performed. These analyses used the composite measures of integration (with and without controls), to examine their effect on persistence. All logistic regression findings from this study are reported in the form of odds ratio, a ratio which indicates the odds that an event will take place (Rudas, 1998).

With respect to this study, the event is the outcome variable racial/ethnic affiliation (research question one) and persistence (research question three).

ELS data was accessed through the National Center for Education Statistics (NCES) Education Data Analysis Tool (EDAT). The EDAT tool allows researchers to obtain ELS non-restricted files in multiple software formats. In this case, data were analyzed using the SPSS Complex Sampling packages, an analytic add-on which can adjust for stratification, clustering, and weights. In this case, given that data were analyzed from the second follow-up, the weight F2QWT (second follow-up cross-sectional weight) was used. BPS data were derived from PowerStats, a statistical software available from NCES's datalab. This software allows for advanced statistical analyzes to be performed on multiple federal datasets. Data were analyzed using a cross-sectional weight for students who were respondents during their first year of college (WTB000) and in subsequent collections.

As with all research, this study is not without its limitations. The individual measures of academic and social integration employed in this study do not represent the totality of indicators of integration. Thus, this study is limited to those variables available within each dataset. This is one benefit of using two datasets, as ELS and BPS employ *some* differing integration variables. In addition, data on the individual integration measures are self-reported on a scale of 'never', 'sometimes', and 'often'. This poses two general problems. First, the difference between 'sometimes' and 'often' is based upon the subjective perspective of the student, which may differ. Second, this three-point scale (never, sometimes, often) provides a limited range of selection options, thereby reducing the likelihood of detecting differences. Finally, given the complex sampling design, readers are encouraged to interpret findings greater than .01 with caution. This may serve to reduce Type 1 error; that being said, findings are reported at 95% confidence. The next section presents findings from this study using the analytic procedure outline above.

FINDINGS

Differences in Integration by Racial/Ethnic Affiliation

- Research Question 1:* Are there any differences in academic and/or social integration between Black males and other male students in the community college?

The first stage of this analysis examined whether several individual measures of integration served as predictors of male students racial/ethnic affiliation (Black vs. non-Black). Each logistic regression analyses were conducted while controlling for time status, hours worked per week, and whether the student has a child (and with age for BPS data). The first analysis focused on measures of academic integration (see Table 2). With respect to ELS data, the first item illustrated that the odds of Black males talking with faculty about academic matters outside of class was 5.4% lower than that of their non-Black peers. This finding was not statistically significant ($p=n.s$). Black males had greater odds of meeting with academic advisors (by 18.5%) than other males, however this finding was also not significant ($p=n.s$). The remaining measures of academic integration served as significant predictors of racial/ethnic affiliation. This research found that Black males had a greater odds, by 96.5%, of working on coursework at the school library than their peers ($p<.01$). This study also found that Black males also had greater odds of using the web to access the school library for coursework. In this regard, Black males had a 119.3% greater odds of using the web for this purpose in comparison to their non-Black counterparts ($p<.01$). In all, findings from the first set of analyses indicated that (among this sample) Black males tended to have greater levels of academic integration than non-Black males in terms of library usage in relationship to studying and schoolwork.

Table 2.

Logistic Regression Analyses on Academic and Social Integration Items

		Odds Ratio	95% CI
<u>ELS</u>			
Academic Integration	Talk with faculty about academic matters outside of class	.946	.649-1.378
	Met with advisor about academic plans	1.185	.772-1.820
	Work on coursework at school library	1.965**	1.264-3.054
	Use the web to access school library for coursework	2.193**	1.332-3.610
Social Integration	Participate in intramural or non-varsity sports	2.082***	1.342-3.230
	Participate in varsity or intercollegiate sports	1.877*	1.080-3.260
	Participate in other extracurricular activities	.938	.605-1.457
	Talk with faculty about academic matters outside of class	0.957	0.668-1.370
<u>BPS</u>			
Academic Integration	Social contact with faculty	1.359	0.940-1.965
	Met with advisor about academic plans	1.135	0.770-1.671
	Participated in study groups	1.427	0.952-2.138
Social Integration	Participate in sports (varsity and non-varsity)	1.445	0.895-2.333

Attended fine arts activities	1.532*	1.045- 2.244
Participate in school clubs	1.158	0.693- 1.935

Note: Each analysis controlled for several external factors which could conceivably impact integration: part-time status, hours worked per week and whether the student has a child. BPS data also controlled for age of first enrollment.

The second set of ELS data analyses examined the usefulness of three measures of social integration in predicting racial/ethnic affiliation. From these analyses, this study found that Blacks had a greater odds (by 108.2%) of participating in intramural or non-varsity sports than their peers ($p < .001$). Similarly, the odds of Black males participating in varsity or intercollegiate sports was 87.7% greater than that of their male peers ($p < .05$). The final measure of social integration examined the predictive usefulness of participation in extracurricular activities. This study found that while Black males had a slightly lower odds of participating in extracurricular activities (by 6.2%), this result was not significant ($p = n.s.$). In general, findings from the social variables indicated that Black males had greater odds of athletic-related social integration than their male peers. In terms of BPS data, four measures of academic integration were explored as predictors of racial/ethnic affiliation. While these analyses illustrated that Black males had a 35.9% greater odds of having social contact with faculty and 42.7% greater odds of participating in study groups, none of the variables examined illustrated significance in predicting the outcome of interest. Three variables representing aspects of social integration were also examined. Only one of the three variables was significant. The odds of Black males attending fine arts activities are 53.2% greater than that of their non-Black peers.

Using Racial/Ethnic Affiliation to Predict Integration

- Research Question 2:* Does racial/ethnic affiliation (non-Black, Black) significantly predict academic and social integration in the community college?

A set of analyses were employed to determine the usefulness of the academic integration and social integration measures in predicting racial/ethnic affiliation. As a result, an exploratory factor analysis was conducted using unweighted ELS data in order to determine whether seven questions regarding students' collegiate experiences would indeed identify distinct constructs—social integration and academic integration. The dimensionality of these items was analyzed using a maximum likelihood procedure. Three criteria were employed to the number of factors to be rotated, including: an a priori hypothesis that the measure was unidimensional, the scree test, as well as the interpretability of the factor. Using the scree plot, two factors illustrated eigenvalues greater than one. As a result, two factors were rotated subjected to Varimax rotation.

Factor loadings illustrated that four items, (a) talked with faculty about academic matters, (b) met with advisor about academic plans, (c) worked on coursework in the school library, and (d) use the web to access school library for coursework were indeed associated with factor one. The last three items, (a) participated in intramural or non-varsity sports, (b) participated in varsity or intercollegiate sports, and (c) participated in other extracurricular activities, were associated with the second factor. In this case, the items from factor one were all relevant to academic experiences and were termed academic integration. The items relevant to the second factor dealt with students' participation in campus activities; these items were termed social integration. Academic integration accounted for 25.56% of the item variance, while social integration accounted for 21.41% of the variance. In total, the two factors accounted for 46.97% of the variable variance. The reliability of each scale was examined among Black male respondents, illustrating that the coefficient alpha for academic integration was .70 while the alpha for social integration was .79.

Given the reliability of the constructs, the researcher created composite measures of academic and social integration using a procedure employed among a similar set of variables in the Beginning Postsecondary Students Longitudinal Study (BPS). In BPS, the mean from the measures of each respective scale are calculated and then multiplied by 100. In this case, the same procedure was employed, where the items in each construct were averaged and then multiplied by 100. This created two new variables, a composite measure of academic integration (ranging on a scale from 400 to 1200) and a composite measure of social integration (on a scale from 300 to 900). Fortunately, no composite measures needed to be created for BPS, since the dataset already supported academic and social integration scales.

Table 3.
Ordinary Least Squares Regression Analyses of Academic and Social Integration Scales on Racial/Ethnic Affiliation

	<i>B</i>	<i>SE</i>	<i>Wald F</i>	<i>Pseudo R2</i>
<i>ELS -Without Controls</i>				
Academic Integration	19.470***	4.799	16.458***	.02
Social integration	12.118*	5.731	4.471*	.01
<i>ELS -With Controls</i>				
Academic Integration	18.795***	4.783	16.631***	.05
Social integration	11.225*	5.591	15.249***	.05
<i>BPS- Without Controls</i>				
Academic Integration	8.938*	3.762	5.644*	.01
Social integration	6.800*	2.838	5.741*	.00
<i>BPS- With Controls</i>				
Academic Integration	8.102*	3.229	9.344***	.06
Social integration	6.406*	2.976	17.652***	.06

Note: Each analysis controlled for several external factors which could conceivably impact integration: time status, hours worked per week and whether the student has a

child. BPS data also controlled for age of first enrollment. B= unstandardized beta coefficient, SE= standard error.

Racial/ethnic affiliation (e.g., non-Black, Black) was employed as a predictor of the integration scales (see Table 3). For ELS data, one analysis was conducted for each type of integration (academic, social) with controls (e.g., time status, hours worked per week, and whether the student had a child) and one without controls. Findings from the analysis without controls indicated that Black males had significantly greater odds of academic integration than non-Black males ($B=19.470$, $p<.001$). Further, Black males also had a slightly greater odds of social integration than their male counterparts ($B=12.118$), this finding was also significant ($p<.05$). Racial/ethnic affiliation, without controls, only served to predict one to two percent of the variance in student integration. The analysis of ELS data with controls also indicated significant findings. As such, racial/ethnic affiliation was positively predictive of integration differences for academic integration ($B=18.795$, $p<.001$), and social integration ($B=11.225$, $p<.05$). Overall, both models, even with the controls, only accounted for five percent of the variance in student integration. In terms of BPS data, analyses were also conducted with and without controls. Focusing on the latter, as with the ELS data, racial/ethnic affiliation was predictive of student academic integration ($B=8.938$, $p<.05$). This further substantiates the notion that Black males have greater levels of academic integration. As with the previous analyses, racial/ethnic affiliation was also significantly predictive of social integration ($B=6.800$, $p<.05$).

However, the models (without controls) only accounted for less than one to one percent of the variance in the outcome (integration). With controls, racial/ethnic affiliation further proved to be predictive of integration, with Black males have greater odds of academic ($B=8.102$, $p<.05$) and social ($B=6.406$, $p<.05$) integration than their male counterparts. That being said, the models only accounted for 6 percent of the variance in integration, with controls. Thus, while significant differences existed on the composite measure between Black and non-Black males, the predictive usefulness of the racial/ethnic affiliation measures was negligible.

Effect of Integration on Student Persistence

- Research Question 3:* Does academic and/or social integration predict first year persistence among Black males in the community college?

Logistic regression analyses were employed to explore the usefulness of integration in predicting persistence among Black male community college students. After delimiting the population to Black male students, analyses were run (with and without controls), inclusive of academic and social integration, in order to determine the importance of these forms of integration on persistence. In the ELS model without controls, academic integration was found to be a significant predictor of persistence ($p < .05$). In this model, social integration was also found to be predictive of persistence. However, this form of integration was negatively predictive of persistence, suggesting that greater levels of social integration impede success in college ($p < .05$). A measure of variance was calculated using Nagelkerke's R-squared. This measure of variances adjusts Cox and Snell's ranges to adhere to a traditional .0 to 1.0 scale. That being said, the overall model only accounted for two percent of the variance persistence. With controls, academic and social integration were still found to be predictive of persistence. As with the first ELS model, academic integration was found to be positively predictive of persistence ($p < .01$); social integration was negatively predictive of persistence ($p < .05$). The addition of the controls contributed a large amount to the pseudo R-squared, with the overall model accounting for 51 percent of the variance in persistence. Models ran using BPS data with and without controls did not illustrate significance. This is inclusive of measures of academic and social integration measures. In general, in the first model (without control variables), academic integration and social integration had a positive (though non-significant) relationship on persistence ($p = n.s.$). However, with controls, non-significant findings illustrated a similar relationship to persistence with the ELS models, where academic integration had a positive effect on persistence while social integration had a negative effect. Without controls, the model only accounted for one percent of the variance in persistence, while the model with controls increased the

variance accounted for to nine percent. Findings from the persistence analyses reveal that academic integration has a small positive effect on Black male student persistence in the community college, while social integration trends toward a small negative effect on persistence (see Table 4).

Table 4.

Logistic Regression Analyses of Black Male Academic and Social Integration on Persistence

	Odds Ratio	95% CI	Wald F	Pseudo R2
<i>ELS - Without Controls</i>				
Academic Integration	1.004*	1.001-1.007		
Social integration	.996*	.992-.999	5.425*	.02
<i>ELS - With Controls</i>				
Academic Integration	1.010**	1.004-1.015		
Social integration	.995*	.990-.999	10.304***	.51
<i>BPS - Without ontrols</i>				
Academic Integration	1.001	0.990-1.013		
Social integration	1.007	0.989-1.026	1.047	.01
<i>BPS - With Controls</i>				
Academic Integration	1.007	0.993-1.022		
Social integration	0.998	0.982-1.015	0.641	.09

Note: Each analysis controlled for several external factors which could conceivably impact integration: time status, hours worked per week and whether the student has a child. BPS data also controlled for age of first enrollment.

Discussion

Findings from this study shed new light on academic and social integration in the community college. Nine of the fourteen logistic regression analyses on academic and social integration items illustrated non-significant difference between Black males and non-Black males. However, several academic integration items indicated that Black males had greater odds of using library resources than their male peers. Further, social integration items indicated that Black males have greater odds of participation in athletic and fine arts related activities. Ordinary regression analyses of racial/ethnic affiliation on integration illustrated a significant prediction. Since the unstandardized beta coefficients reported were based upon dichotomous predictors (racial/ethnic affiliation), these coefficients can be interpreted as the mean differences between groups (non-Black, Black). Thus, the positive coefficients illustrated that Black males had higher levels of academic and social integration both on ELS and BPS data from analyses with and without controls.

As noted earlier, this is the first study to examine integration differences between Black males on other community college male groups. Given that Black males have the lowest persistence and graduation rates among all other male peer groups (Esther & Mosby, 2007; Wood & Turner, 2010), higher levels of integration present a conundrum. Seemingly, greater integration should lead to enhanced success rates. This is the same logic extended by Ihekwebaba (2001) and other scholars (e.g., Flowers, 2006; Shannon, 2006) who have sought to explain success differences by illustrating disproportionate levels of integration. In contrast, Black males in this study were found to have integration on par with or greater than their peers.

These findings necessitated the final analyses which examined the effect of integration on persistence. Using logistic regression, findings indicated that models employing composite measures of academic and social integration *may* significantly predict persistence. While the ELS models were significant and the BPS models were not, the general trend indicated that academic integration was positively

predictive of persistence while social integration was negatively predictive.

Findings regarding social integration are juxtaposed to extant research on persistence (Dabney-Smith, 2009; Ihekweba, 2001; Jordan, 2008; Riley, 2006; Shannon, 2006). The literature on this topic has been predominantly qualitative in nature with no quantitative efforts to investigate the effect of integration on persistence. Moreover, while integration has been extolled as facilitating student persistence, the integration models (without controls) illustrated negligible variance. However, when items controlling for external factors were introduced, the variance accounted for in the models rose (by 49% for ELS data and 8% for BPS data). As a result, the few external items employed accounted for more variance (r-square change) than the full composites for both academic and social integration.

While in some respect the findings were unanticipated, given the large increase in variance, these findings do compliment previous works. As depicted in this study's overview of relevant literature, even studies employing Tinto's integration theory as a guiding framework repeatedly emphasized the importance of external factors (e.g., work, familial considerations) on persistence (Dorsey, 1996; Ihekweba, 2001; Jordan, 2008; Shannon, 2006). In consideration of this study's findings, the next section presents implications for future research.

Implications for Future Research

This study has produced several important considerations for future research. First, this study has illustrated that Black males do have differing levels of integration than their male counterparts. While this study has explored differences in integration between Black males and other males, more information is needed on how integration may differ among Black males. As noted by prior studies, Black male integration does differ by age group (Dabney-Smith, 2009) as well as by parenting status (Shannon, 2006). A recent trend in the literature on Black males is the negation of monolithic depictions of Black men (Cuyjet, 2006; Harper, 2004, 2005, 2006; Harper & Quaye, 2007; Strayhorn & Terrell, 2010; Wood & Turner, 2011). Thus, future inquiries can focus on how

background and defining factors (e.g., major, first-generation, age, socio-economic status) may facilitate differential integration experiences.

In a similar manner, this study has shown the limited usefulness of academic and social integration in predicting Black male student persistence in the community college. However, this study did not investigate whether integration had differential importance in predicting persistence for differing groups of Black males. As such, further studies could examine whether certain student populations (e.g., degree-seeking students, older students, science majors) may have greater benefits from integration than the general Black male population. This will provide a more holistic picture on the role of integration in fostering positive student outcomes.

Moreover, data from this study focused on one cohort of Black males from ELS and BPS. Future studies should also examine differential integration experiences and the effect of integration on Black male persistence using additional data sources. This could serve to support or negate this study's assertion that integration has limited applicability for Black male persistence in the community college. Further, this study has even shown social integration to be negatively predictive of persistence. More studies are needed to determine whether social integration is, in general, negatively predictive of persistence; or, whether certain aspects of social integration (e.g., peer relationships, club participation, athletics) leads to lower persistence.

In closing, this study has added to the literature on Black males in the community college. This study has been the first to illustrate that Black males have significantly (though not large) different odds of academic and social integration than their male peers. Further, differences in integration are predictive of racial/ethnic affiliation. Moreover, this study has also shown that academic and social integration are predictive of student persistence. However, while academic integration has a positive effect on persistence and social integration a negative effect, the relative importance of each form of integration to persistence was minor.

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