RUNNING HEAD: MINORITY STUDENT INTENT TO STUDY ABROAD

Why do all the study abroad students look alike?

Using an integrated student choice model to explore differences in the development of white and minority students' intent to study abroad

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ABSTRACT

Despite substantial efforts across postsecondary education to increase minority participation in study abroad, the homogeneity of study abroad participants remains largely unchanged (Desoff, 2006; Shih, 2009). This study applies an integrated student choice model (Perna, 2006) to identify differences between white and minority (African-American, Hispanic, and Asian-American) students across measures of human, financial, social, and cultural capital previously shown to influence aspirations to study abroad (Salisbury et al., 2009). Analysis of data from 6,828 students at 53 institutions participating in the Wabash National Study on Liberal Arts Education suggests numerous differences between racial groups with considerable implications for institutions, scholars, and policymakers.

Key Words: college students, study abroad, minority students, student choice construct

During the previous decade, study abroad participation has enjoyed substantial growth – rising from 129,770 in 1998/99 to 262,416 in 2007/08 – as college students, administrators, and postsecondary policymakers have increasingly recognized the fundamental importance of international understanding and cross-cultural communication skills in the new global economy (Friedman, 2005; Green, Luu, & Burris, 2008; IIE, 2009; Lincoln Commission, 2005). This belief is supported by extensive research on study abroad that suggests numerous benefits for participants across a host of cognitive, affective, and interpersonal dimensions (Carlson, 1990; Douglas & Jones-Rikkers, 2001; Gammonley, Rotabi, & Gamble, 2007; Langley & Breese, 2005; McKeown, 2009; Milstein, 2005; Pascarella & Terenzini, 2005). Study abroad researchers have also found that participation can be particularly influential in improving international awareness, intercultural competency, and foreign language skills (Anderson, Lawton, Rexeisen, & Hubbard, 2005; Black & Duhon, 2006; Carlson; Freed, 1995; Lewin, 2009a; Magnan & Back, 2007; Savicki, 2008; Williams, 2005). Moreover, students who study abroad seem to involve themselves more deeply in integrative and reflective learning experiences upon their return to college (Gonyea, 2008) and may graduate at higher rates than non-participants (Posey, 2003). Given these findings it is little wonder that higher education institutions and policymakers have advocated strongly for large increases in study abroad scholarship funding to enable further growth in participation (Lewin, 2009b; Lincoln Commission).

Yet even as overall study abroad participation has increased, American students studying abroad have remained disproportionately white in comparison to the racial composition of postsecondary students overall (Desoff, 2006; IIE, 2009; Shih, 2009).

While 81.8% of all study abroad participants in 2007/08 were white, only 64.4% of all students enrolled in postsecondary education in 2007/08 were white (IIE; NCES, 2010). When comparing the racial distributions of study abroad participants specifically with that of full time college students - potentially a more apt comparison since study abroad participants are inherently full time students and minority students tend to be overrepresented among part-time college students (NCES) - the disparity in racial distribution between study abroad participation and postsecondary enrollment continues, with white students making up only 65.2% of all full-time postsecondary students in 2007/08 (NCES). Furthermore, a comparison between the increase in overall diversity among all postsecondary students and the slow growth of minorities studying abroad during the last decade suggests that the gap between the two is widening. Between 1998/99 and 2007/08, the percentage of white study abroad participants declined slightly from 85% to 81.8%. During the same period, the percentage of white postsecondary students dropped from 72.4% to 64.4% (IIE; NCES, 2001). Thus, while the proportion of minority students studying abroad increased by a mere 3.2 percentage points, the proportion of minority students enrolled in higher education increased by a full 8 percentage points over the same period.

Study abroad advocates have long labored to increase minority participation. Repeatedly, international education membership and advocacy organizations have argued that insufficient available funding and a lack of information about the benefits of study abroad have constrained minority student involvement (CIEE, 1988, 1991; Lincoln Commission, 2005; NAFSA, 2003, 2005). Research at individual institutions suggests that funding concerns can play a role in limiting minority student participation (Henbroff

& Rusz, 1993; Washington, 1998). The Gilman Scholarship Program, created in 2001 to improve study abroad opportunities for students receiving federal financial aid, has proved a particularly attractive scholarship in enabling minority study abroad participation, currently paying a portion of the costs for over 8,500 minority students studying abroad annually (Shih, 2009). However, after almost a decade the Gilman Scholarship program has yet to produce the large-scale gains in minorities studying abroad necessary to reduce the gap between minority and white study abroad participation. Although the Paul Simon Study Abroad Act – legislation that allocates over $100 million in study abroad scholarship money intended to grow overall participation while shrinking the participation gap between white and minorities - has twice been inserted into major bills (H.R. 2410, 2009; S. 3297, 2008), it has yet to survive the full legislative process and make it to the President's desk.

Addition inquiry has suggested that a combination of family concerns and obligations, familial pressures to move through college quickly and start a career, fears of racism abroad, a lack of minority faculty leading study abroad programs, and a perceived presumption among faculty and administrators that minorities lack an interest in study abroad adds to the propensity among minority students to forego participation (Carter, 1991; Desoff, 2006; Shih, 2009; Van Der Meid, 2003; Washington, 1998). However, these assertions are based on either casual anecdotal evidence or ex post facto surveys of small samples, making it difficult to determine the degree to which these concerns may have been actual deterrents prior to the opportunity to participate in study abroad or merely post hoc rationalizations of previous decision-making about educational opportunities. Despite continued passionate advocacy on behalf of international

education for minority students (Lincoln Commission, 2005; McLellan, 2007), slight declines in minority participation from the most recent year-to-year comparison data (IIE, 2009) provoked an unusually frank response from the Institute of International Education – the organization that compiles and publishes national data on study abroad. "It is very disheartening to see how slowly minorities' share of study abroad is increasing," said IIE Chief Operating Officer Peggy Blumenthal. "A lot of steps are starting to be taken, but it still doesn't seem to be moving the needle enough" (Shih, 2009). Although recent research has shed some light on the factors that influence the decision to study abroad (Goldstein & Kim, 2006; Salisbury et al., 2009) and differences in factors that influence study abroad intent between men and women (Salisbury, Paulsen, & Pascarella, 2010), a detailed understanding of the factors that shape the decision to study abroad among minority students remains elusive, even as such knowledge is urgently needed to ensure equitable and universal access to an educational experience that higher education organizations, public policymakers, and employers uniformly agree is critical for individual, social, and national prosperity in the 21st century (Green, Luu, & Burris, 2008; Lincoln Commission, 2005; NAFSA, 2005; Treverton & Bikson, 2003).

THEORETICAL FRAMEWORK

Several decades of research on college student decision-making demonstrates that students move through a complex sequence of decisions that, in turn, dictate the nature and scope of available options at subsequent decision points in this process (Hossler, Schmit & Vesper, 1999; Paulsen, 1990). The student-choice construct asserts that the sequence of college-related enrollment decisions (whether or not to go to college, which college to attend, whether to persist, etc.), are made within "situated" contexts that are

uniquely shaped by the combination of an individual's accumulated values, attitudes, beliefs, obligations, limitations, and opportunities. Moreover, because diverse students demonstrate diverse patterns of student choice, these patterns can only be fully understood through focused research that explores patterns of student decision-making across various categories of difference such as gender, socioeconomic class, or race (Paulsen & St. John, 2002; Perna, 2006; St. John, Asker & Hu, 2001).

Perna's integrated model of student college choice (2006) places the student-choice construct within a framework that accounts for the situated context of the student as well as the unique characteristics of a higher education environment. According to the model, students weigh the benefits and costs of college enrollment as an estimation of whether or not an investment in additional human capital will result in increased future earnings and quality of life. The model asserts that the criteria students consider as they proceed through the various decision-making stages of the student-choice construct function within layers of contexts that are derived from the economic theory of human capital and the sociological theories of habitus and social and cultural capital. Research grounded in economics, sociology, and the study of higher education has found that aspects of financial capital, human capital, social capital, and cultural capital accumulated prior to and during the decision-making process influence both the choice process and product (Becker, 1993; Bourdieu & Passerson, 1977; Coleman, 1988; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2006; Perna & Titus, 2005).

Human capital theory suggests that individuals accumulate productive capacities (knowledge, understandings, talents, and skills), which can be enhanced through investments in education and exchanged for increased earnings, power, and occupational

status (Becker, 1993; Paulsen, 2001; Paulsen & Toutkoushian, 2008; Rosenbaum, 1986). When making decisions about education, individuals compare the monetary and non-monetary benefits and costs of each option. Financial capital describes the real or perceived monetary resources at an individual's disposal that can be used to invest in additional education. Assessment of available financial capital is a critical element of the decision to enroll in higher education as students evaluate the costs and benefits of various forms of financial assistance (Paulsen, Perna & Titus, 2005).

Sociologists argue that students' educational choices are made within the boundaries of unique social contexts - often closely related to their socioeconomic backgrounds - that structure students' educational decision-making (Coleman, 1988). Similarly, the student-choice construct asserts that students' decisions are made in 'situated contexts' based on their habiti, as shaped by their home and school environments, and the range and type of accumulated social and cultural capital (St. John, Asker & Hu, 2001). Habitus refers to the enduring beliefs, attitudes, aspirations, perceptions, and values an individual acquires through home and school environments and social class that serve to frame and constrain their choices (Bourdieu & Passerson, 1977). Social capital encapsulates the access to information through networks, support systems, and knowledgeable persons that can improve an individual's ability to investigate, navigate, and choose advantageous options or opportunities (Massey, Charles, Lundy & Fischer, 2003; Perna & Titus, 2005; Portes, 1998). Cultural capital describes an individual's cultural knowledge, language skills, educational credentials and school-related information, derived largely from their parents' class status (Bourdieu, 1986; Bourdieu & Passerson, 1977).

Higher education researchers have repeatedly found that elements of habitus and all four forms of capital overlap within educational, family, and social contexts to shape college student decision-making (Paulsen & St John, 2002; Perna, 2000, 2006; Perna & Titus, 2005). Moreover, the student-choice construct has been specifically and successfully applied to better understand differences in enrollment and persistence decisions across different racial groups and socio-economic classes (Paulsen & St. John, 2002; St. John, Paulsen, & Carter, 2005). But while scholars have suggested that this framework should be useful to explain a wide range of student decisions throughout the college experience and identify diverse decision patterns across diverse student groups, few scholars have empirically tested this assertion beyond the decision to enroll or persist (Engberg & Wolniak, 2009; McDonough, 1997; Paulsen & St. John, 2002; Perna, 2000, 2006; Wells, 2008).

An extensive body of literature has repeatedly demonstrated the unique effects of race across a wide range of college experience (Harper & Quaye, 2009; Rankin & Reason, 2005; Pascarella & Terenzini 1991, 2005; Saenz, Ngai, & Hurtado, 2007; St. John, Paulsen, & Carter, 2005). Research has consistently shown that students from traditionally underrepresented groups often face additional obstacles - compared to their majority counterparts - as they endeavor to enroll and persist in higher education due to differences in the nature and scope of social and cultural capital accumulated prior to college (Berger, 2000; Engberg & Wolniak, 2009; Teranishi & Briscoe, 2006; Wells, 2008). An equally compelling series of studies have found that minority students often experience college differently than their majority counterparts, and that these differences in experiences often uniquely influence minority students' decisions regarding the nature

of their subsequent interactions with the institution or their fellow students (Ancis, Sedlacek, & Mohr, 2000; Nora, 2004; Pascarella & Terenzini, 1991, 2005; Watson, Terrell, White, & Associates, 2002). Given this wealth of findings, it seems plausible to expect minority students to engage decisions about specifically structured educational opportunities differently based upon a host of influences that represent aspects of human, financial, social, and cultural capital that are accumulated prior to and in the midst of the college experience.

Testing the applicability of the student-choice construct and an integrated model of student college choice to student decision-making during college, Salisbury and colleagues (2009) examined the factors that influence intent to study abroad – the first decision in a series ideally leading to participation in an increasingly encouraged yet optional postsecondary educational experience. Their findings confirmed the effectiveness of this model in portraying the complex human, financial, social, and cultural capital factors that impact the likelihood of intending to study abroad. Testing its utility for identifying differential effects across one set of diverse student groups, Salisbury, Paulsen, and Pascarella (2010) successfully applied this model to unearth differences between men and women in the factors that shape intent to study abroad and provide a reasonable explanation for the longstanding gender gap in study abroad participation.

Grounded in the successful prior application of the student-choice construct and the integrated model of student college choice to examine diverse decision-making patterns among diverse student racial groups and the usefulness of these frameworks in examining the factors that influence decision-making patterns regarding study abroad

intent, the present study asserts that these constructs can be applied to better understand the factors that influence study abroad intent across diverse racial groups. The authors hypothesize that the factors found to influence study abroad intent (Salisbury et al., 2009) will affect white and minority students - including African-American, Hispanic, and Asian-American students - differently and will provide some explanation for the continued disproportion of minority study abroad participation. To the extent that these findings generate support for this hypothesis, these findings should provide important insights for a host of theoretical, practical, and policy considerations regarding college student decision-making patterns as well as the effort to increase minority participation in study abroad.

METHOD

Sample

This paper analyzes data from the Wabash National Study of Liberal Arts Education (WNS). Funded by the Center of Inquiry in the Liberal Arts at Wabash College, the WNS is a large-scale, longitudinal study of the curricular and co-curricular experiences that impact college student development across a series of cognitive, affective, and interpersonal educational outcomes traditionally associated with a liberal arts education. Because of its longitudinal design and the expansive range of pre-college and first year experience data gathered from study participants, the WNS dataset allows for a unique examination of students' intentions to participate in a broad array of curricular programs (honors programs, major choice, minor choice, etc.) and co-curricular activities (student government, athletics, interest organizations, study abroad, etc.) while controlling for a host of potentially confounding influences.

This analysis examines data from 6,828 students at 53 two-year and four-year institutions. Although institutions were invited to participate and not randomly selected for inclusion in this study, the colleges and universities participating in the WNS vary widely by geographic location, size, selectivity, public or private control, religious affiliation or lack thereof, patterns of student residence, and institutional type. Participating institutions embarked on the WNS in three consecutive years to form three separate cohorts. The first cohort began the study in the fall of 2006 and included 19 institutions. In the fall of 2007, a second cohort of eight institutions began the WNS. The third cohort began in the fall of 2008 and included 26 institutions. This study analyzes student data from all three cohorts.

The individuals participating in the WNS were first-year, full-time undergraduates at each institution in the study. Since the WNS also serves as an assessment mechanism for individual institutions, ACT and the Wabash Center of Inquiry determined the initial distribution of the sample across each of the 53 institutions to ensure that each school could arrive at statements of proportions with an error of about +/- .05 at the 95% confidence level. Therefore, at the smaller institutions the entire entering class was invited to participate. At the larger institutions first year students were randomly invited to participate. This also encouraged a more even distribution of the sample across all institutions, preventing data from the larger institutions from dominating the results. Participants in the 2006 cohort received a monetary stipend for their efforts while institutions in the 2007 and 2008 cohort provided institutionally specific remunerations to participants.

The longitudinal design of the WNS calls for data collection at three different points during the students' college experience –the beginning of the first year, the end of the first year, and the end of the fourth year. Initial data collection occurred in the early fall and lasted about 90 minutes. Students provided extensive pre-college data regarding demographic characteristics, family background, high school experiences, and educational attitudes, interests, and aspirations. Moreover, students agreed to allow institutional admissions data such as test score, high school grades, and financial aid data to be added to the dataset. Students were also asked a variety of questions intended to measure various dimensions of social, cultural, human, and financial capital. In addition, students were asked to complete a series of instruments measuring critical thinking, need for cognition, moral reasoning, intercultural effectiveness, psychological wellbeing, and leadership skills. The breadth of the resulting dataset allowed an investigation of the factors that might affect intent to study abroad in considerable detail while controlling for a host of potentially confounding influences.

The second data collection occurred at the end of the first year. Students who had participated in the first data collection were invited to provide follow up data during a single session lasting between 90 minutes and two hours. Students were asked a variety of questions about their experience during the first year using the National Survey of Student Engagement (NSSE) (Kuh, 2001) and the Wabash Student Experiences Survey (WSES). Students were also asked about their exposure to and engagement in empirically vetted good practices in undergraduate education as well as their intentions to participate in various educational experiences during the rest of their college career. One of these questions asked about their intent to study abroad and formed the dependent

variable for this study. In addition, students were also asked to complete the same measures of cognitive, affective, and interpersonal dimensions that they had completed during the initial data collection. ACT administered both the beginning and end of first year data collections.

17,504 students participated in the initial data collection, with 8,615 returning to provide data at the end of the first year. Eliminating cases due to missing data produced a final sample size of 6,828. Although the final sample was predominantly white (80%), the scope of the WNS allowed for large sample sizes across each racial group: white – 5,321, African-American – 546, Asian-American – 426, and Hispanic – 333. Not unlike undergraduate participation rates generally, Women comprised the majority of the overall sample (63%) – an imbalance duly reflected in each of the racial groups. Overall, 61% of the sample intended to study abroad. Among each racial group, 62% of whites, 52% of African-Americans, 62% of Asian-Americans, and 69% of Hispanics intended to study abroad. To adjust for the potential impact of response bias within the final sample, an algorithm was constructed based upon sex, race, and test score (ACT or equivalent) to weight up to each institution's first year population. Despite these measures, this study could not account for the potential effects of non-response bias.

Analysis

Since this study focuses on differences in the factors that influence intent to study abroad between white and minority students - including African-American, Hispanic, and Asian-American students - the sample was divided by race into four datasets. The researchers employed a slightly adjusted logistic regression model based upon the work of Salisbury and colleagues (2009) and Salisbury, Paulsen, and Pascarella (2010) to

estimate the likelihood of intent to study abroad (1=intends to study abroad, 0=does not intend to study abroad or does not know) among white, African-American, Asian-American, and Hispanic students. Since the sample of white students was the largest and white students historically make up the vast majority of study abroad participants, each minority student group's findings were statistically compared to those of their white counterparts. For any variable that produced a significant coefficient for either whites or a given racial minority group, a Wald Chi-square test was utilized to assess whether or not the difference in coefficients between whites and the given racial minority group was statistically significant and could therefore be attributed to a difference in race.

The model developed by Salisbury et al. (2009) and applied by Salisbury, Paulsen and Pascarella (2010) is adapted from an integrated model of student choice (Perna, 2006) to focus on the decision to intend to study abroad – the first in a series of decisions leading to participation in study abroad. This model includes three broad groupings of theoretically grounded potentially influential factors: aspects of human and financial capital, aspects of social and cultural capital acquired before college through one's habitus and high school context, and aspects of the higher education institutional context that might also provide social and cultural capital while in college related to the decision to study abroad. All of these variables were selected by fusing the body of research on college student decision-making with prior findings on the decision to study abroad. The means and standard deviations for each variable within each racial minority group are described in Table 1. Because this analysis includes data from three entering cohorts (2006, 2007, and 2008), two dummy control variables were introduced (1=2007, 1=2008) to account for any systemic differences between cohort years that remain unaccounted for

by the rest of the variables in the model. To simplify interpretation, all continuous variables were standardized prior to analysis.

The first group of variables includes those chosen to measure aspects of available human and financial capital that might influence student abroad intent. Human capital is represented by the variable ACT (or equivalent) test score – a measure of a student's pre-college tested academic preparation. Three dummy variables account for aspects of financial capital – receiving a federal grant (1=yes), receiving an institutional grant (1=yes), and receiving a student loan (1=yes). Although the reasons for receiving an institutional grant might vary, access to additional financial resources denotes an increase in available financial capital that might be applied toward other educational opportunities such as study abroad. Because of the explicit requirements to receive a federal grant, receiving a federal grant functions both as a measure of increased financial capital and as a proxy for socioeconomic status. Since these financial variables are culled from institutional data, an indication that a student is receiving a loan can also be viewed as a measure of socioeconomic status since the institutional data only denotes a governmentally subsidized loan for which a student qualifies based on a calculation of family financial need (as opposed to a private loan a student could acquire on the private market). However, since loans function differently than institutional or federal grants in terms of indirect costs over the long term, this variable potentially provides an insightful contrast to the ways that individuals from different groups might evaluate intent to study abroad based upon an increase in different types of financial capital.

The second group of variables accounts for various aspects of social and cultural capital accumulated through an individual's habitus and high school context. These

measures are hypothesized to assess or represent the sources, means or opportunities for students' pre-college acquisition of the social and cultural capital that might affect or influence interest in study abroad. Gender is measured by a single dummy variable (1=male). Since the four separate datasets analyzed for this study are constructed by race (white, African-American, Asian-American, Hispanic), specific variables accounting for race are not included in the model. Parent's educational attainment – often found to be an aspect of habitus that is closely related to the accumulation of social and cultural capital that places a value on increased educational attainment – is measured by a single continuous variable that is an average of mother's and father's educational attainment (if only one parent's educational attainment was indicated, the level of the remaining parent's educational attainment was used instead). In addition, a dummy variable indicating intent to earn a graduate degree is included in the model. Educational aspirations beyond an undergraduate degree indicate an additional willingness to invest in education and by extension accounts for an aspect of cultural capital representing the degree of value placed on further education.

Four scales measuring positive attitude toward literacy, involvement in high school, openness to diversity and challenge, and importance of personal and professional career success are included in the model to capture the social and cultural capital acquired prior to college that might influence the decision to intend to study abroad. The scales are described briefly below with the individual items and alpha reliabilities for each racial group noted in Table 2. Further details regarding the construction and validity of all of the scales used in the WNS are available from the first author upon request.

The positive attitude toward literacy scale includes five items, each with identical five Likert-scale response options, that ask the respondent to specify their degree of interest in reading for enjoyment and writing as a means of examining or processing one's thoughts or emotions. Literature often provides access to varying values, perspectives, and attitudes about society. Writing is often a means of reflecting on one's own attitudes in the face of conflicting beliefs. An increased score on this scale should produce an increase in acquired social and cultural capital and thereby increase the likelihood of intent to study abroad.

The high school involvement scale measures the degree of engagement in a range of social activities and networks that might influence intent to study abroad in college. The five items included in this scale each provide five possible responses – never, rarely, occasionally, often, or very often. Involvement with individuals and networks that possess knowledge about the means and mechanisms necessary to access additional educational opportunities should produce an increase in the social and cultural capital that values education. Thus, an increased score on this scale may influence study abroad intent.

The third scale utilized to measure social and cultural capital acquired before college is the openness to diversity and challenge scale. This seven-item scale assesses the degree of openness to and interest in engaging in interactive experiences during college with individuals who hold different beliefs, attitudes, values, or perspectives or are members of a different race or culture. Since one of the fundamental intended outcomes of study abroad is a deeper appreciation and understanding of differences across cultural, racial, and ethnic lines, a higher score on the openness to diversity and

challenge scale should suggest a higher level of accumulated social and cultural capital that prioritizes experiences such as study abroad, thereby increasing the likelihood of intent to study abroad.

The fourth scale employed to examine the effect of habitus and high school context measures the degree of importance placed on personal and professional career success. This scale includes five items with four available response options – not important, somewhat important, very important, and essential. Study abroad advocates have repeatedly highlighted the post-graduate job prospects and elevated starting salaries for students who study abroad (Lincoln Commission, 2005; NAFSA, 2003). In the context of this study, a higher score on this scale should increase the likelihood of intent to study abroad.

The third group of variables represents the higher education context and in-college experiences that might provide social and cultural capital related to the decision to study abroad. Three dummy variables are included in the model to account for differences in institutional type (1=research university, 1=regional institution, 1=community college). Since study abroad participation is historically associated with liberal arts colleges and participation percentages at these schools are traditionally highest among all postsecondary institutions, attending a liberal arts college serves as the reference category. Curricular demands across various majors also present a long history of disproportion in study abroad participation rates. For this reason, six dummy variables denoting intent to major in business, education, a STEM (science, technology, engineering, or mathematics) field, social sciences, other (uncategorized), or as yet undecided are included in the model. Since humanities, foreign languages, and fine arts

majors are traditionally the most likely to study abroad, intending the major in the humanities, foreign languages, or fine arts was chosen as the reference category.

Finally, the model accounts for educational experiences during the first year of college previously examined to influence study abroad intent (Salisbury et al., 2009). These experiences are represented by five scales and one single-item measuring six educational good practices that have long been found to positively affect college student involvement and engagement (Pascarella & Terenzini, 1991, 2005). These measures are hypothesized to provide opportunities for in-college acquisition of the social and cultural capital that might affect or influence interest in study abroad and include 1) quality out-of-class interaction with faculty, 2) course-related diversity experiences, 3) positive peer interactions, 4) positive diverse interactions, 5) integration of knowledge, information, and ideas, and 6) a single item measuring co-curricular involvement. The individual items and alpha reliabilities for these scales across each racial group are provided in Table 2. Slightly adapted from Chickering and Gamson's principles of good practice in undergraduate education (1987, 1991), the validity and reliability of these scales in research on undergraduate education is well documented (Pascarella & Terenzini; Seifert et al., 2008).

RESULTS

Table 3 presents the parameter estimates, standard errors, and odds ratios from the logistic regression equations estimated separately for white, African-American, Asian-American, and Hispanic students. Because logistic regression equations generate parameter estimates that can be difficult to interpret, results are presented and discussed in terms of their corresponding odds ratios using the approaches recommended by Long

(1997). As expected, analysis of each racial group produced substantially different findings across many of the variables in the model. Likewise, since a large majority of the students in the WNS are white, the findings for white students closely resemble Salisbury and his colleagues' (2009) initial research on the factors that predict intent to study abroad generally across the 2006 cohort of the WNS.

For students in each of the four racial groups examined in this study, aspects of all three variable groups in the model – human and financial capital, pre-college social and cultural capital acquired through one's habitus and high school context, and the higher education institutional context that influence the in-college acquisition of social and cultural capital related to study abroad – significantly influenced the likelihood of intent to study abroad. However, the unique combination of factors that influence study abroad intent for each racial group as well as the magnitude and direction of the coefficients suggests a wide range of differences between white and minority students.

Among white students, a majority of the variables in the model produced significant results. For those who received a federal grant, the odds of intending to study abroad decreased by a factor of .826 compared to those white students who did not receive a federal grant. Identifying as male generated an 18.7% decrease in the odds of intending to study abroad compared to females – holding all else constant. For each unit increase in parents' education, the odds of intending to study abroad increased by 19%. Aspiring to earn a graduate degree resulted in a decrease in the odds of study abroad intent by a factor of .599. For each unit increase in the openness to diversity and challenge scale, the odds of indicating intent to study abroad increased by a factor of 1.358. Similarly, each unit increase in the positive attitude toward literacy scale

increased the odds of study abroad intent by 16.4%. And, holding all other variables constant, each unit increase in the personal/professional success scale, the odds of study abroad intent grew by 28.5%.

All three institutional type variables produced a decrease in the odds of intending to study abroad among white students (at a research university: 39.7%, regional institution: 49.2%, and community college: 80.4%), compared to white students attending a liberal arts college. Five of the six intended major variables produced significant findings in comparison to intending to major in the humanities, foreign languages, or fine arts. Intending to major in education decreased the odds of study abroad intent by 24.7%. Conversely, intending to major in a STEM field, the social sciences, an uncategorized (other) major, and being undecided all increased the odds of study abroad intent by 69.8%, 52.6%, 183.4%, and 43.1%, respectively. Finally, two of the educational good practice scales significantly influences white students' likelihood of intent to study abroad. For each unit increase in the diverse experiences scale, the odds increased by 18.5%. However, for each unit increase in the integration of learning scale, the odds of intending to study abroad decreased by a factor of .914.

The model produced substantially different findings when applied to African-American students. For each unit increase in ACT score, the odds of intending to study abroad decreased by a factor of .719, holding all else constant. The odds of African-American students who aspired to earn a graduate degree intending to study abroad were 3.026 times larger than those who did not aspire to a graduate degree. For each unit increase in the positive attitude toward literacy scale, the odds of intending to study abroad increased by 38.1%. Compared to African-American students attending a liberal

arts college, attending a research university decreased the odds of study abroad intent by 66.5%, while attending a regional institution decreased those same odds by 69.1%. Compared to humanities, foreign languages, and fine arts majors, intending to major in the social sciences increased the odds of study abroad intent by a factor or 2.627. Lastly, each unit increase in co-curricular involvement increased the odds of intending to study abroad by a factor of 1.444 – holding all else constant.

The model generated equally unique findings for Asian-American students. For Asian-American students, receiving a federal grant increased the odds of intending to study abroad – compared to those who did not receive a federal grant – by a factor of 2.172. Identifying as male decreased the odds of study abroad intent by 62.4%. For each unit increase in parental education, the odds of intending to study abroad decreased by 24.7%. Aspiring to earn a graduate degree increased the odds of study abroad intent by a factor of 13.719. As the positive attitude toward literacy scale score increased by one unit, study abroad intent among Asian-American students increased by 51.1% - holding all other variables constant. Attending a regional institution reduced the odds of study abroad intent by 82.7% - compared to those attending a liberal arts college. In comparison to those intending to major in the humanities, foreign languages, and fine arts, intending to major in business increased the odds of study abroad intent by a factor of 4.526. Conversely, intending to major in a STEM field decreased the likelihood of study abroad intent by 90.1%, assuming all else remained the same. Finally, a one-unit increase in the course-related diversity experiences scale reduced the odds of study abroad intent by a factor of .660. However, a one-unit increase in the diverse experiences scale improved the odds of study abroad intent by a factor of 1.561.

For Hispanic students who receive a federal grant, the odds of intent to study abroad increased by a factor of 2.940 compared to those who receive no federal grants. Interestingly, Hispanic students who received a loan had their odds of study abroad intent reduced by 52.9%. For each unit increase in the positive attitude toward literacy scale, the odds of study abroad intent increased by 66.6%. Two intended major choices increased the odds of intending to study abroad among Hispanic students. Compared to humanities, foreign language, and fine arts majors, intending to major in a STEM field increased the odds of study abroad intent by a factor of 4.888, while being an undecided major increased the same odds by a factor of 2.872. Finally, a one-unit increase in the diverse experiences scale increased the odds of study abroad intent by 56.3%, while a similar unit increase in the integration of learning scale undercut the odds of study abroad intent by 34.9%.

For each variable that generated a significant parameter estimate for white students or one of the minority racial groups, a Wald Chi-square test was utilized to assess whether the difference between the corresponding coefficients could be attributed to racial differences. After calculating these tests, a number of significant differences between whites and one of the minority groups emerged. Significant differences between white and African-American students in the factors that influence intent to study abroad emerged for ACT score, aspiration to a graduate degree, the personal/professional career success scale, the openness to diversity and challenge scale, and co-curricular involvement. Significant differences between white and Asian-American students attributable to race appeared for receiving an institutional grant, identifying as male, parents' educational attainment, aspiring to a graduate degree, and the openness to

diversity and challenge scale. Finally, significant differences between white and Hispanic students among the factors that affect intent to study abroad included receiving a federal grant and receiving a loan.

DISCUSSION

These findings provide strong support for this study's hypothesis and demonstrate the extent to which diverse racial groups are affected differently by similar measures of human, financial, social, and cultural capital and elements of habitus when developing their aspirations to study abroad. The variables that generated significantly different effects on intent to study abroad between white and minority student groups are portrayed in Table 4. In an effort to appropriately consider the many findings of this study, this paper will first discuss each of the significant differences between white students and minority students – including African-American, Asian-American, and Hispanic students – respectively, within each of the specific categories of capital listed above – i.e., human, financial, social, and cultural capital. Then the authors will consider the multiple implications for higher education scholars, study abroad policy advocates, and future research.

The effect of an increase in human capital – as measured by ACT score – generated a significantly different effect for white and African-American students. While an increase in ACT score among white students did not influence the likelihood of study abroad intent, as ACT score increased among African-American students the likelihood of study abroad intent decreased. This is an interesting finding and may reflect a response to stereotype threat among African-American students as they consider the possibility of study abroad (Steele, 1997, 1999). Stereotype threat describes the potential

for an individual's actions to be interpreted by others through the lens of an existing negative stereotype. Awareness of this "threat" can negatively affect behavior or performance as individuals struggle under the added pressure of preconceived expectations. Extensive research has suggested that the existence of stereotype threat can help to explanation gaps in academic performance between student groups who are otherwise equally capable, if one group of students is stereotypically expected to score lower (Aronson, 2002; Smith, 2004; Steele, 1999). Similarly, this research suggests that students who are susceptible to stereotype threat often respond by adjusting behavior patterns to minimize or avoid similar situations. African-American college students are often already vulnerable to stereotype threat as minority students at predominantly white institutions – especially for high-achieving African-American students at more selective institutions (Steele, 1999).

Study abroad participation may well appear to African-American students as potential further exposure to stereotype threat and, since it is rarely required as a part of the undergraduate curriculum, they are more likely to decline the opportunity even in the presence of other incentives. Recent qualitative research examining the challenges faced by minority students who studied abroad found that these students encountered negative stereotyping as they engaged the decision to study abroad (Kasravi, 2009). Since the African-American students with the higher test scores in this study also tend to be enrolled at the smaller, selective liberal arts colleges in the WNS that have stronger traditions of study abroad participation, it seems even more plausible to suggest that stereotype threat may be a possible obstacle to increasing study abroad intent among African-American students.

Two of the financial capital variables – receiving a federal grant and receiving a loan – generated significantly different effects for white students compared with Hispanic students, while a third financial capital variable – receiving an institutional grant – produced a significantly different effect for white students compared with Asian-American students. White students who received a federal grant were less likely to intend to study abroad, but Hispanic students receiving a federal grant were more likely to study abroad than students who did not receive a federal grant. While receiving an institutional grant had no effect on white students, it significantly increased the likelihood of Asian-American intent to study abroad. Conversely, while receiving a loan had no effect on white students, it generated a significantly negative effect on the odds of intent to study abroad for Hispanic students.

These findings underscore the longstanding importance of financial capital for study abroad participation. Hispanic students seem to perceive a federal grant as an opportunity to access additional postsecondary educational experiences that would have been previously beyond their reach, despite their lower socio-economic status (and the means by which they qualified for the federal grant). By contrast, the negative effect of receiving a federal grant on white student study abroad intent suggests that, for white students the additional financial capital does not supercede their originating socioeconomic status – a barrier long understood to limit participation in study abroad (CIEE, 1988; Lincoln Commission, 2005). Interestingly, the negative effect of receiving a loan on Hispanic student study abroad intent provides an intriguing contrast to the positive effect of receiving a federal grant. This may well suggest that Hispanic students consider these two types of financial capital in very different terms and perceive the

repayment obligations of an educational loan to be a prohibitive constraint and limitation in the context of additional optional educational experiences such as study abroad. The positive effect of receiving an institutional grant on Asian-American students – while suggesting that Asian-American students may perceive this additional capital as an opportunity to consider additional educational opportunities provided by the institution – may also be attributed to psychological behaviors. Although it is not possible to ascertain whether the institutional grants these students received were based on need, merit, or other factors, because institutional grants are often offered independent of SES, this positive effect on intent to study abroad may be an indication of a pattern of increased student commitment to the institution engendered by the awarding of an institutional grant.

Two variables representing aspects of habitus produced significantly different effects on intent to study abroad for white and Asian-American students. Although male participation in study abroad has been disproportionately low for decades (IIE, 2009; Lincoln Commission, 2005), the negative effect of identifying as male was significantly larger for Asian-American men than white men. This replicates the findings of Salisbury and colleagues (2010) regarding gender differences in study abroad and further suggests that there may be differences in the ways that white and Asian-American men are conditioned to consider optional postsecondary educational experiences such as study abroad.

An increase in parents' education also generated significant opposing effects for white and Asian-American students. For white students, an increase in parents' education increased the likelihood of study abroad intent, but for Asian-American

students, a similar increase in parents' education decreased the likelihood of intent to study abroad. Parents' education has long been understood to shape the amount and type of social and cultural capital accumulated from early childhood through early adulthood, particularly in the context of the value placed on postsecondary education. However, in the context of study abroad, although the more highly educated parents of the white students in this study seem to include study abroad within the larger context of beneficial postsecondary educational opportunities, the parents of the Asian-American students in this study seem to consider study abroad to be of less importance, perhaps reflecting a more narrow view of the postsecondary experiences necessary to prepare college graduates for a successful personal and professional life.

In addition, aspiring to a graduate degree resulted in substantially different effects for whites than it did for African-American and Asian-American students. While aspirations for a graduate degree significantly reduced the likelihood of study abroad intent among white students, it had the opposite effect on African-American and Asian-American students. One possible explanation for this difference may be that white students balance the costs of future graduate schooling against the added costs of study abroad and choose to forego additional study-abroad-related expenditures during undergraduate school – anticipating that they will need those funds to pay for the costs of their graduate education. By contrast, perhaps minority students do not perceive the opportunity to participate in a wider range of educational experiences to conflict with the future additional costs of graduate school. Minority students may also see the educational experiences of study abroad and graduate school as equally beneficial rather than two options from which they might select only one. Or, minority students may

simply hold unrealistic beliefs about their ability to participate in both of these educational endeavors.

Two measures of social and cultural capital produced significantly different effects on whites compared to African-American and Asian-American minority groups - the openness to diversity and challenge scale and the co-curricular involvement scale during the first year of college. First, for white students, an increase in the openness to diversity and challenge scale increased the likelihood of study abroad intent. For African-American and Asian-American students these variables had no effect. This variable had no effect on Hispanic students either, but the results of the Wald Chi-squared test did not meet the threshold for which difference between whites and Hispanics could be solely attributed to differences in race.

This pattern of findings seems particularly noteworthy and revealing. International and higher education advocates have long promoted study abroad precisely because of the opportunity it provides for students to interact with different people and cultures. For white students typically originating in a predominantly white society, these expectations make sense. It seems intuitive that an increased interest in cross-cultural educational experiences would produce the increased interest in study abroad observed in this study. But for students who have experienced a lifetime of minority status, it seems equally intuitive that this variable would have no effect. Minority students don't need to seek out cross-cultural experiences by traveling to another country because in most cases they already regularly interact across cultural differences in their everyday lives.

Second, co-curricular involvement may offer students the chance to acquire additional social capital through increased access to information about other optional

non-classroom educational experiences as well as additional cultural capital that would prioritize the educational value of such experiences. While an increase in co-curricular involvement had no effect on white student intent to study abroad, it significantly increased the likelihood of study abroad intent among African-American students. This supports the contentions of other higher education scholars who suggest that race-conscious student engagement practices are critical to ensuring that minority students receive equal opportunities to engage in the college experiences well known to produce optimum student development (Harper & Quaye, 2009).

Finally, although this study is focused on differences between whites and minority groups, one other finding deserves special note. An increase in the positive attitude toward literacy scale generated a significant positive effect on the likelihood of study abroad intent for each of the four racial groups – white, African-American, Asian-American, and Hispanic – in this study. This was the only variable in the model to produce a significant effect on intent to study abroad for every racial group. In the context of the often noted national concerns about literacy rates and efforts to increase interest in reading in American youth, this finding suggests that the effect of increased interest in reading and writing – at least in terms of its potential effect on generating interest in future cross-cultural experiences – is uniquely important for majority and minority students alike, even after accounting for a host of confounding variables.

IMPLICATIONS

These findings hold several important implications for study abroad professionals, postsecondary policymakers, and higher education scholars. First, this study further demonstrates the diversity of decision-making patterns for diverse student groups

regarding the influences that shape intent to study abroad. Moreover, it underscores the critical importance of continuing to study distinct groups separately and in terms of their own "situated contexts" (Paulsen & St. John, 2002; St. John, Asker & Hu, 2001). Taken in conjunction with the findings of Salisbury, Paulsen, and Pascarella (2010) regarding gender differences in study abroad, it now seems even more clear that increasing study abroad interest among diverse student groups requires specifically targeted marketing messages that focus on factors relevant to each specific group. Although study abroad is often marketed as if all students should be attracted to study abroad for the same reasons, these findings suggest that some of the most widely used arguments in favor of participation – that study abroad will provide opportunities for cross-cultural skill development and improve post-graduate career opportunities – appear to have no affect on increasing study abroad intent among most minority students.

Study abroad professionals committed to increasing minority student participation must recognize the multiple dimensions of difference in the diverse populations they are trying to attract and fully explore the "situated contexts" from which these students engage the possibility of study abroad. Only through this approach can study abroad professionals fully understand the potential constraining effects of stereotype threat on African-American students, as the significant negative effect of increasing ACT score might indicate, and better construct study abroad programs to identify and reduce some of the societal constructs -- and their underlying assumptions -- that stunt participation among minority groups. Similarly, study abroad advocates need to better understand the differences between white and Asian-American habiti that substantially limit male study abroad intent and constrain interest in study abroad among children of more highly

educated Asian-American parents. Furthermore, study abroad organizations might best contribute to this effort by honestly examining whether the arguments utilized to advocate for study abroad in fact harbor hidden biases that perpetuate the very homogeneity they are trying to overcome. Maybe it isn't fear of racism abroad that limits minority participation (CIEE, 1991); maybe it's an enduring effect of bias at home.

On the other hand, this study provides important support for the longstanding assertion that increases in financial capital awarded to minorities through federal or institutional grants can improve the likelihood of study abroad intent. Asian-American and Hispanic students in this study were more likely to intend to study abroad if they received a financial grant, even as white student were less likely to intend to study abroad if they received a federal grant. In addition to reflecting the potential benefits of additional financial aid, the negative effects of receiving a loan on Hispanic student intent suggests that at least some minority students are keenly aware of important trade-offs associated with grants and loans as quite different forms of financial capital. Although student loans may assist in increasing access to higher education, it may be only through grants that additional financial aid can positively influence study abroad participation.

It is important to note, however, that the grants accounted for in this study were not study abroad scholarships. Instead, they were grants awarded to reduce the costs of broader postsecondary attendance options. While alleviating the direct costs of a study abroad program through a study abroad scholarship may be helpful, often there are additional indirect costs such as the cost of an extra semester or year of tuition necessitated by the remaining degree requirements that the student missed while studying abroad. The results of this study may reveal the greater degree to which minority

students recognize the potential indirect costs of study abroad. Thus, they are more likely to consider study abroad positively when additional financial aid is awarded at the beginning of the college career in the form of institutional or federal grants. Postsecondary policymakers might consider this increased openness to optional yet highly encouraged educational experiences such as study abroad as a supplemental benefit of increased financial aid provided in the form of grants, rather than loans.

Although this study provides new insights for recruiting minorities to study abroad, the complex differences between racial groups point to the difficulty faced by any institution's study abroad office that endeavors to effectively construct and implement multiple targeted marketing campaigns for all the different types of students on its campus. When considered in the context of the educational goals of study abroad, institutions might better serve their students by focusing first on developing growth along particular educational outcomes, such as intercultural skill and career preparation, and then investing in the programs or activities related to those outcomes that are most accessible to their students. For some institutions, this may well mean focusing their investment on short-term study abroad programs or simply study away programs that don't necessarily require overseas travel. Other institutions might more efficiently invest in their students' educational growth by de-emphasizing study abroad altogether – not because study abroad won't be beneficial to some subset of students, but rather because the "situated contexts" from which the majority of their students come makes it exceedingly difficult to convince most of them to even consider study abroad. For example, as this study shows, even after accounting for a host of demographic, educational-interest, and social and cultural capital variables, students attending a

research university, a regional institution, or a community college were substantially less likely to study abroad than those attending liberal arts colleges. Attending at least one of these non-liberal-arts-college institutional types resulted in a significant negative effect on intent to study abroad for white, African-American, and Asian-American students. Although the differences in the magnitude of the effects could not be solely attributed to race, the size of these negative effects and the significance of the findings across various racial groups emphasizes the enormity of the challenge for large institutions intent on increasing and democratizing study abroad participation.

Finally, this paper provides additional empirical support for the student-choice construct and an integrated approach to examining patterns of college student decision-making. Furthermore, this paper – like the earlier findings of Salisbury, Paulsen, and Pascarella (2010) – demonstrates the validity of the student-choice construct for explaining college student decision-making throughout the college experience. Researchers interested in explaining student patterns of residency, co-curricular involvement, or participation in other encouraged yet optional educational opportunities might benefit from the application and adaptation of this theoretical framework. In addition, this paper demonstrates the usefulness of the student-choice construct in examining diverse patterns of decision-making for diverse student groups, allowing an analysis of the factors that affect discrete groups differently. Not only could this vein of inquiry be particularly beneficial for efforts to balance participation in a variety of postsecondary experiences, it could further suggest the importance of focusing on achieving growth on educational outcomes across diverse students groups rather than merely equalizing participation across a litany of activities.

CONCLUSION

This paper further shows the value of the student-choice construct (Paulsen & St. John, 2002; St. John, Asker & Hu, 2001) in empirically explaining decision-making patterns among students across diverse racial minority groups. When presented with the opportunity to intend to study abroad, various measures of human, financial, social, and cultural capital produced significantly different effects on the likelihood of study abroad intent among white and minority students. This finding emphasized the importance of understanding the unique contexts from which students approach the postsecondary experience. Insofar as intent to study abroad predicts study abroad participation, these findings may explain the disproportionate lack of participation among minority college students.

While this paper presents potentially promising evidence for a new approach to promoting study abroad among minority students, it also unveils the degree of difficulty faced by study abroad professionals intent on democratizing study abroad. In the context of increasingly diverse undergraduate populations, this diversity in decision-making patterns may require a range of educational programs, activities, and experiences if institutions are to improve intercultural skills and career preparation for the new global economy among a larger proportion of undergraduates, both white and minority.

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Table 1. Descriptive statistics (White=5,321; African-American=546; Asian-American=426; Hispanic=333).

Variable Name	White		Black		Asian		Hispanic	
	Mean	St. D	Mean	St. D	Mean	St. D	Mean	St. D
Cohort 07	.1167	.3211	.5238	.4999	.0493	.2167	.1051	.3071
Cohort 08	.4668	.4990	.2289	.4205	.4836	.5003	.4324	.4962
Intent to study abroad	.6155	.4865	.5220	.5000	.6291	.4836	.6877	.4641
ACT score	0	1	0	1	0	1	0	1
Federal grant	.1285	.3347	.2198	.4145	.2113	.4087	.3033	.4604
Institutional grant	.5367	.4987	.3388	.4738	.4624	.4992	.5315	.4998
Loan	.5382	.4986	.7051	.4564	.4272	.4952	.5285	.4999
Male	.3710	.4831	.3736	.4842	.3873	.4877	.3333	.4721
Parental Education	0	1	0	1	0	1	0	1
Aspire to graduate degree	.7715	.4199	.8040	.3973	.8638	.3434	.8168	.3874
Attitude toward literacy scale*	0	1	0	1	0	1	0	1
HS Involvement scale*	0	1	0	1	0	1	0	1
Openness to diversity scale*	0	1	0	1	0	1	0	1
Personal/professional success scale*	0	1	0	1	0	1	0	1
Institution: Research	.2922	.4548	.1264	.3326	.2793	.4492	.2282	.4203
Institution: Regional	.1708	.3764	.5806	.4939	.1714	.3773	.2583	.4383
Institution: Community College	.0201	.1404	.0037	.0605	.0000	.0000	.0150	.1218
Major: Business	.1192	.3240	.1832	.3871	.2019	.4018	.0961	.2952
Major: Education	.0919	.2889	.0458	.2092	.0164	.1273	.0721	.2950
Major: STEM	.7204	.4489	.7454	.4360	.8263	.3793	.7207	.4493
Major: Social Sciences	.1058	.3076	.0879	.2834	.0986	.2985	.1502	.3578
Major: Undecided	.1532	.3602	.0751	.2638	.1362	.3434	.1592	.3664
Major: Other	.0090	.0946	.0311	.1738	.0282	.1657	.0120	.1091
Student-faculty interaction scale*	0	1	0	1	0	1	0	1
Course-related diversity scale*	0	1	0	1	0	1	0	1
Positive peer interactions scale*	0	1	0	1	0	1	0	1
Diverse interactions scale*	0	1	0	1	0	1	0	1
Integration of learning scale*	0	1	0	1	0	1	0	1
Co-curricular involvement	0	1	0	1	0	1	0	1

- See table 2 for individual items, response options, and Cronbach's alpha for the scale within each sample.

Table 2. Detailed description of scales used in the logistic regression model.

Attitude Toward Literacy Scale	Response options
Cronbach's Alpha: White = .743; African-American = .660; Asian-American = .683; Hispanic = .707	
• Extent to which the student agrees that he/she enjoys reading about history	strongly agree, agree, neutral, disagree, or strongly disagree
• Extent to which the student agrees that he/she enjoys reading poetry and literature	same as above
• Extent to which the student agrees that he/she enjoys expressing ideas in writing	same as above
• Extent to which the student agrees that if he/she has something good to read, the student is never bored	same as above
• Extent to which the student agrees that after writing about something, he/she sees that subject differently	same as above

High School Involvement Scale	Response options
Cronbach's Alpha: White = .597; African-American = .581; Asian-American = .601; Hispanic = .629	
• How often (during the student's last year of high school) the student used the internet for homework or research	very often, often, occasionally, rarely, or never
• How often (during the student's last year of high school) the student participated in extracurricular activities	same as above
• How often (during the student's last year of high school) the student studied with a friend	same as above
• How often (during the student's last year of high school) the student talked with teachers outside of class	same as above
• How often (during the student's last year of high school) the student participated in community service or volunteering	same as above

Openness to Diversity Scale	Response options
Cronbach's Alpha: White = .837; African-American = .812; Asian-American = .815; Hispanic = .803	
• Extent to which the student believes contact with individuals whose background (e.g., race, national origin, sexual orientation) are different from his/her own is an essential part of his/her college education	strongly agree, agree, neutral, disagree, or strongly disagree
• Extent to which student enjoys taking courses that challenge his/her beliefs and values	same as above
• Extent to which courses the student enjoys most are those that make him/her think about things from a different perspective	same as above
• Extent to which the student believes that learning about people from different cultures is a very important part of their college education	same as above
• Extent to which the student enjoys having discussions with people whose ideas and values are different from his/her own	same as above
• Extent to which the student enjoys talking with people who have values different from his/her own because it helps him/her better understand him/herself and his/her own values	same as above
• Extent to which the student agrees that the real value of a college education lies in being introduced to different values	same as above

Personal/Professional Success Scale	Response options
Cronbach's Alpha: White = .750; African-American = .644; Asian-American = .746; Hispanic = .715	
• How important is it to the student personally to obtain recognition from one's colleagues for contributions to one's field of expertise	essential, very important, somewhat important, not important
• How important is it to the student personally to have administrative responsibilities for the work of others	same as above
• How important is it to the students personally to be working in a prestigious occupation	same as above
• How important is it to the student personally to make a lot of money	same as above
• How important is it to the student personally to become successful in a business of their own	same as above

Student/Faculty Interaction Scale	Response options
Cronbach's Alpha: White = .864; African-American = .832; Asian-American = .864; Hispanic = .863	
• Extent the student agrees that non-classroom interactions with faculty have had a positive influence on personal growth, values, and attitudes	strongly agree, agree, neutral, disagree, or strongly disagree
• Extent the student agrees that non-classroom interactions with faculty have had a positive influence on intellectual growth and interest in ideas	same as above
• Extent the student agrees that non-classroom interactions with faculty have had a positive influence on career goals and aspirations	same as above
• Extent the student agrees that since coming to this institution, the student has developed a close, personal relationship with at least one faculty member	same as above
• Extent the student agrees that he/she is satisfied with the opportunities to meet and interact informally with faculty members	same as above

Course-Related Diversity Scale	Response options
Cronbach's Alpha: White = .735; African-American = .693; Asian-American = .684; Hispanic = .659	
• Number of courses taken this academic year that focus on diverse cultures and perspectives	0, 1, 2, 3, or 4 or more
• Number of courses taken this academic year that focus on women's/gender studies	same as above
• Number of courses taken this academic year that focus on issues of equality and/or social justice	same as above

Peer Interaction Scale	Response options
Cronbach's Alpha: White = .889; African-American = .848; Asian-American = .844; Hispanic = .866	
• The student has developed close personal relationship with other students	strongly agree, agree, neutral, disagree, or strongly disagree
• The student friendships developed by the student at this institution have been personally satisfying	same as above
• Interpersonal relationships with other students have had a positive influence on the student's personal growth, attitudes, and values	same as above
• Interpersonal relationships with other students have had a positive influence on the student's intellectual growth and interest in ideas	same as above
• It has been difficult for the student to make friends with other students (reverse coded)	same as above
• Few of the students the student knows would be willing to listen to and help the student with a personal problem (reverse coded)	same as above
• Describe the quality of the student's relationships with other students	7 point scale from unfriendly, unsupportive, sense of alienation to friendly, supportive, sense of belonging

Diverse Interactions Scale	Response options
Cronbach's Alpha: White = .834; African-American = .837; Asian-American = .783; Hispanic = .817	
• How often the student had serious discussions with staff whose political, social, or religious opinions were different from his/her own	very often, often, sometimes, rarely, or never
• During the current school year, how often the student has had serious conversations with students of a different race or ethnicity than the student	never, sometimes, often very often
• During the current school year, how often has the student had serious conversations with students who are very different from him/her in terms of their religious beliefs, political opinions, or personal values	same as above
• How often the student participated in a racial or cultural awareness workshop during this academic year	very often, often, sometimes, rarely, or never
• How often the student had discussions regarding inter-group relationships with diverse students while attending this college	same as above
• How often the student had meaningful and honest discussions about issues related to social justice with diverse students while attending this college	same as above
• How often the student shared personal feelings and problems with diverse students while attending this college	same as above
• How often the student made friends with a student from another country	same as above
• How often the student made friends with a student whose race is different from his/her own	same as above

Integration of Learning Scale	Response options
Cronbach's Alpha: White = .774; African-American = .744; Asian-American = .735; Hispanic = .759	
• Extent the student agrees that courses have helped him/her understand the historical, political, and social connections of past events	strongly agree, agree, neutral, disagree, or strongly disagree
• Extent the student agrees that courses have helped him/her see the connections between his/her intended career and how it affects society	same as above
• Extent the student agrees that out-of-class experiences have helped him/her connect what was learned in the classroom with life events	same as above
• Extent the student agrees that out-of-class experiences have helped him/her translate knowledge and understanding from the classroom into action	same as above
• During the current school year, how often has the student put together ideas of concepts from different courses when completing assignments or during class discussions	never, sometimes, often very often
• Amount of time the student spends synthesizing and organizing ideas, information, or experiences into new more complex interpretations and relationships	very little, some, quite a bit, very much
• Amount of time the student spends making judgments about the value of information, arguments, or methods such as examining how other gather or interpret data and assess the soundness of a conclusion	same as above

Table 3. Logistic regression results predicting the likelihood of intent to study abroad across four racial groups. (White N=5,321; African-American N=546; Asian-American N=426; Hispanic N=333).

Variables	White		African-American		Asian-American		Hispanic	
	Parameter Estimates	Odds Ratio	Parameter Estimates	Odds Ratio	Parameter Estimates	Odds Ratio	Parameter Estimates	Odds Ratio
ACT score	0.048	1.049	-0.329 *	0.719	-0.164	0.849	0.01	1.010
	(0.040)		(0.150)		(0.155)		(0.198)	
Federal grant	-0.191 *	0.782	-0.653	0.520	-0.178	0.837	1.078 *	2.940
	(0.095)		(0.374)		(0.362)		(0.444)	
Institutional grant	-0.066	0.936	0.117	1.124	0.776 *	2.172	0.217	1.242
	(0.074)		(0.461)		(0.350)		(0.512)	
Loan	0.020	1.020	-0.299	0.724	-0.014	0.986	-0.753 *	0.471
	(0.068)		(0.215)		(0.302)		(0.373)	
Male	-0.207 **	0.813	-0.054	0,948	-0.979 ***	0.376	-797 *	0.451
	(0.065)		(0.203)		(0.265)		(0.349)	
Parental Education	0.174 ***	1.190	0.002	1.002	-0.283 *	0.753	0.163	1.177
	(0.036)		(0.119)		(0.132)		(0.169)	
Aspire to graduate degree	-0.512 ***	0.599	1.107 *	3.026	2.619 **	13.719	-0.935	0.393
	(0.149)		(0.539)		(1.007)		(0.648)	
Attitude toward literacy scale	0.152 ***	1.164	0.323 **	1.381	0.413 *	1.511	0.511 **	1.666
	(0.035)		(0.123)		(0.164)		(0.197)	
HS Involvement scale	0.044	1.045	0.138	1.148	0.043	1.043	-0.009	0.991
	(0.032)		(0.105)		(0.146)		(0.179)	
Openness to diversity scale	0.306 ***	1.358	0.022	1.023	-0.260	0.771	0.208	1.231
	(0.035)		(0.117)		(0.167)		(0.213)	
Personal/professional success scale	0.251 ***	1.285	-0.155	0.857	0.058	1.060	0.045	1.046
	(0.036)		(0.123)		(0.157)		(0.194)	
Institution: Research	-0.506 ***	0.603	-1.095 **	0.335	-0.498	0.607	0.119	1.126
	(0.081)		(0.388)		(0.336)		(0.478)	
Institution: Regional	-0.676 ***	0.508	-1.174 *	0.309	-1.753 ***	0.173	0.055	1.056
	(0.099)		(0.560)		(0.453)		(0.592)	
Institution: Community College	-1.629 ***	0.196	-21.974 ***	0.000	---	---	2.919	18.520

	(0.143)		(28323.070)		(---)		(1.535)	
Major: Business	0.015	1.015	0.208	1.231	1.51 ***	4.526	0.639	1.895
	(0.094)		(0.251)		(0.335)		(0.580)	
Major: Education	-0.284 *	0.753	0.173	1.189	0.864	2.374	-0.468	0.626
	(0.116)		(0.463)		(1.325)		(0.616)	
Major: STEM	0.530 ***	1.698	-0.609	0,544	-2.316 *	0.099	1.587 **	4.888
	(0.136)		(0.489)		(0.949)		(0.574)	
Major: Social Sciences	0.423 ***	1.526	0.966 *	2.627	0.326	1.385	0.354	1.424
	(0.114)		(0.415)		(0.526)		(0.537)	
Major: Undecided	0.359 ***	1.431	0.746	2.109	0.109	1.116	1.055 *	2.872
	(0.089)		(0.435)		(0.401)		(0.505)	
Major: Other	1.042 ***	2.834	-0.173	2.371	1.056	2.874	-21.299	.000
	(0.319)		(0.435)		(0.635)		(17987.337)	
Student-faculty interaction scale	-0.021	0.979	-0.173	0.841	0.073	1.076	0.205	1.228
	(0.035)		(0.104)		(0.141)		(0.205)	
Course-related diversity scale	0.045	1.046	0.047	1.048	-0.415 *	0.660	0.047	1.049
	(0.035)		(0.111)		(0.166)		(0.182)	
Positive peer interactions scale	0.066	1.068	-0.172	0.842	-0.259	0.772	-0.124	0.884
	(0.034)		(0.119)		(0.157)		(0.209)	
Diverse interactions scale	0.170 *	1.185	0.102	1.107	0.445 *	1.561	0.447 *	1.563
	(0.037)		(0.119)		(0.191)		(0.194)	
Integration of learning scale	-0.090 *	0.914	0.152	1.164	-0.22	0.818	-0.429 *	0.651
	(0.039)		(0.122)		(0.151)		(0.208)	
Co-curricular involvement	0.049	1.050	0.367 ***	1.444	0.152	1.164	0.330	1.391
	(0.033)		(0.115)		(0.175)		(0.212)	

*** p<.05, ** p<.01, *** p<.001**
standard errors listed in parentheses

Table 4. Variables producing significant differential effects between whites and minorities in predicting likelihood of intent to study abroad.
(White N = 5,321; African-American N = 546; Asian-American N = 426; Hispanic N = 333)

Variables	White		African-American		Asian-American		Hispanic	
Human Capital								
ACT score	1.049	NS	0.719	*				
Financial Capital								
Federal grant	0.782	*					2.940	*
Institutional grant	0.936	NS			2.172	*		
Loan	1.020	NS					0.471	*
Habitus								
Male	0.813	**			0.376	***		
Parental education	1.190	***			0.753	*		
Aspire to graduate degree	-0.599	***	3.026	*	13.719	**		
Pre-college Social/Cultural Capital								
Openness to diversity scale	1.358	***	1.023	NS	0.771	NS		
Personal/professional success scale	1.285	***	0.857	NS				
In-college Social/Cultural Capital								
Co-curricular involvement	1.050	NS	1.444	***				

all effects are listed as odds ratios
* p<.05; ** p<.01; *** p<.001
NS – indicates a finding of nonsignificance and therefore should be interpreted as no different than zero