

RESEARCH ARTICLE

Hispanic students' perceptions of factors that enabled high school completion and college performance at a selective Predominately White Institution in the Southeastern United States

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The purpose of the study was to determine the demographic characteristics of Hispanic students at a predominantly White institution (PWI), and to identify factors that influenced students' high school completion and college matriculation. In the fall of 2011, an electronic survey was administered to 409 sophomores, juniors, and seniors who identified as Hispanic in institutional records. Respondents (n=145) were mostly female, first-generation-Americans of Mexican, Puerto Rican, and Cuban heritage. Additional information is detailed including demographic variables such as age and marital status along with parental education, employment status, and residential and migrant farm-labor information. Personal motivation and parental influence were predominate factors in high school graduation as well as college matriculation and performance. Career Interest and having an Associate's degree were statistically significant predictors of student's grade point average. Implications for parents, K-12 educators, and institutions of higher education are discussed.

Keywords: achievement; higher education; Latino(a); Hispanic Students; resilience; predominately White Institution

From 2011 to 2012, the percentage of Hispanic high school graduates enrolled in college surged to 49%, surpassing the number of White high school graduates (47%; Krogstad & Fry, 2014; Lopez & Fry, 2013). However, in 2014, only 15% of U.S. Hispanics graduated from college with a bachelor's degree (Krogstad, 2015; U.S. Department of Education, National Center for Education Statistics, 2015).

The educational attainment data nationally, and in the South more specifically, suggest a state of crisis in terms of high school and college degree attainment (Center for Labor Market Studies, 2009; Davis, & Bauman, 2013; Stepler & Brown, 2015). In the Southeast there are as many as 62% of Hispanics under the age of 18 (U.S. Census Bureau, 2010). While the Southeast has an overall high school dropout rate of 17.6%, the dropout rate for Hispanic students is 27.5%. The high school dropout rate for Hispanic males is 40% (Center for Labor Market Studies, 2009). In the South, in 2011, only 6% of Hispanics enrolled in postsecondary education (Davis & Bauman, 2013).

Most research on Hispanic college students is limited to Hispanic Serving Institutions (HSI), states with historically large Hispanic populations, Hispanic serving programs, and single subgroups within the diverse Hispanic population (Haro, 2004; King, 2009; Myers, 2003; Nuñez, 2009; Zalaquett, McHatton, & Cranston-Gingras, 2007). Educational research about the Hispanic population in fast-growing Southeastern states (i.e., North Carolina, South Carolina, Georgia, Florida, Alabama, Mississippi, and Louisiana; U.S. Census Bureau, 2013) remains scarce (e.g., Behnke, Gonzalez, & Cox, 2010; Glennie & Stearns, 2002; Gonzalez & Ting, 2008; Sink, Parkhill, Marshall, & Norwood, 2005; Xu, Hannaway, & D'Souza, 2009). Faced with the rapid growth of Hispanic youth in the Southeast, and limited research, the current study examined Hispanic student's perceptions of what facilitated their high school completion and their academic performance at a selective PWI in the Southeastern United States. Hispanics under the age of 18 account for over half of the 50 million Hispanics in the United States, with fast-growing states in the southeast region reporting as many 62% of Hispanics under the age of 18 (U.S. Census Bureau, 2010). Educational attainment data including enrollment, drop-out, and degree completion rates, suggest a state of crisis in the severe educational under-achievement of Hispanics as fastest growing and least educated ethnic group in the United States. The current study serves as a tool to further understand Hispanic college students and may be useful in developing strategies that foster their academic success.

CONCEPTUAL FRAMEWORK

The conceptual framework involves Tinto's (1975) conceptual schema for college dropout, Padilla's Local Student Success Model (1998) and Zalaquett's Successful Latinos/Latinas Evaluation Guide (2006). In Tinto's (1975) schema family background, individual attributes, and pre-college schooling are connected to goals and institutional commitments that interplay in the academic and social system affecting student integration and ultimately college student dropout. Tinto's (1975) excellent model is seminal and yet it does not readily address potential differences in racial/ethnic subgroups. In respect to Latinos/Latinas, Padilla's Local Student Success Model (1998) included three parameters: (a) the barriers that students overcome in order to be successful (b) the knowledge that students possess in order to overcome barriers to success, and (c) the actions taken by students in order to overcome the barriers. To complement this, Zalaquett's (2006) concentrated on the challenges Latino/Latina students may face in their quest for higher education, the elements that helped students to overcome these challenges, and positive role models that inspire Latino/Latina students to pursue higher education. Collectively, this conceptual framework addresses how personal, social, and institutional variables may affect Hispanic students in high school and in postsecondary education. Table 1 outlines personal, social, and institutional-level variables.

TABLE 1
Personal, social, and institutional level variables that influence Hispanic college student performance

Personal	Social	Institutional
Demographic characteristics (e.g., age, gender)	Desire to surpass low expectations from others	Student organizations
Personal desire to succeed* Desire to succeed in college	Parents helping with school work* Parents valuing education*	Financial help for college Feeling of belonging at this university
SAT/ACT test preparation* After-school job*	Praise and emotional support from parents* Desire to educate others about Hispanic culture	Participating in tutoring sessions Using resources at cultural center
College graduation as an expectation Desire to be a role model Desire to help parents in the future	Parents supporting emotionally* Volunteer work* Help from a mentor/professional role model*	Parents attending orientation
Setting high-school graduation as an expectation*	Playing sports*	
Personal desire to learn and discover* Access to a computer at home* Competitive nature* Honors/AP courses* Access to books at home* Having a quiet place to study at home* Family hardships* Desire to help community Motivation from family hardships Current place of residency Having strict parents*	Parents attending school events* Taking classes with friends Studying with friends Being a mentor Parents' help with admissions application	

*High school-level variable in this study. All other variables were college-level.

REVIEW OF RELEVANT LITERATURE

This literature review focuses on Hispanic student's high school and 4-year collegiate experiences. It spans personal factors (e.g., demographic and family characteristics), social factors (e.g., role of supportive family members, teachers), and institutional factors (e.g., the presence of Ethnic student organizations and cultural centers at PWIs).

Hispanics in High School

The lack of college readiness of Hispanic students is attributed to students' perceptions of being less prepared academically than their White peers. Even while enrolled in honors and advanced placement courses, high levels of poverty result in residential segregation and disparity in quality of education received at primary and secondary grades, limited number of counselors, and policies that neglect the needs of migrant or working students (Cuyjet, Howard-Hamilton, & Cooper, 2011). Insufficient parental support, negative peer pressure, lack of mentors and positive role models, poorly prepared teachers, as well as racism also continue to Latino/Latina student's educational experiences (Zalaquett, 2006). Yet, if designed for success, high schools can prepare students for employability as well as college by increasing academic skills, earning credits, and graduation (Center for Labor Market Studies, 2009).

Hispanic College Students

Zalaquett (2006) detailed how minimal adult supervision and misinformation often causes Latino/Latina students to make choices that might hinder or delay their chances to achieve a higher education degree. The analyses of 12 Latino/Latina college student's stories, at a large urban university, revealed themes such as family members providing support, the value of education, sense of responsibility toward others, community support, and friendship. In the section that follows we briefly discuss some of these topics and related research on Hispanic student's collegiate experiences (personal, social, and institutional), at four-year institutions, regardless of location in the United States. When possible we included literature from the Southeastern United States.

Personal Factors

In a nationally representative sample from the National Educational Longitudinal Study, Arbona and Nora (2007) suggest that degree attainment is related to transfer status in Hispanic students. Their findings indicate that attending a 4-year university directly following community college is more predictive of bachelor degree attainment than attending a 2-year university by Lee and Frank (1990). Additionally, a number of gender differences contribute to college adjustment in male versus female Hispanic college students (Arbona & Nora, 2007; Toews & Yazedjian, 2007). In terms of graduation, Arbona and Nora (2007) found that female Hispanic students were more likely to obtain a college degree than male Hispanic students. Generational differences (e.g., foreign born immigrants to the United States, second, and third generation) also contribute

to Hispanic student college adjustment (Tseng, 2004). Demographic characteristics aside a personal desire to succeed was also related to Hispanic college adjustment (Dennis, Phinney, & Chuateco, 2005; Zallaquett, 2006).

Social Factors

Related to college adjustment in college freshmen, self-esteem and peer support were positively correlated with college adjustment in Hispanic females. However, in Hispanic males, only self-esteem and not peer support was related to college adjustment. This pattern was not found for White males and females; self-esteem and peer support were related to college adjustment in both White males and females (Toews & Yazedjian, 2007). The findings may indicate that Hispanic females rely more on peer groups as a source of support, which aids in their adjustment to college and possibly higher rates of degree attainment.

Ong, Phinney, and Dennis (2006) suggested that Hispanic students with greater family support reach greater academic achievement. For instance, their longitudinal study of 123 Hispanic college students showed that persistent levels of parental support for education accompanied rises in GPA. Similarly, a study of 117 undergraduate Hispanic female students revealed that students who spent more time with family, experienced lower stress and higher academic achievement (Sy, 2006). Parents of successful Hispanic students at selective PWIs consistently expressed verbal support for all matters related to the education of their children, noting that an education in the United States was a tremendous opportunity for future generations (Ceballo, 2004).

Ten Hispanic college students, at Yale, emphasized the importance of their parents engraining in them the sense of urgency to study and learn (Ceballo, 2004). Students were driven by their parents' public expression of pride when they relayed accomplishments to extended family and friends. Although most students' parents were unable to help with the college admission process, they expressed support by hoping for their children's admission into the best school or their school of choice (Ceja, 2006). Results of several studies confirmed that Hispanic college students credited family members with providing support (Ceja, 2004; Hurtado-Ortiz & Gauvain, 2007; Sánchez, Reyes, & Singh, 2006; Zallaquett, 2006).

Saunders and Serna (2004) stated that when Hispanic students create, negotiate, and sustain social networks, their college experience and persistence was positively influenced. Although she interviewed 21 racial/ethnic minority students a small, predominantly White university campus in the northeastern United States, Morrison (2008) found that successful Hispanic students demonstrated coping skills such as forming support groups of Hispanic and non-Hispanic allies, and keeping close ties with family and friends as a way of developing their cultural identity and resiliency. Zallaquett (2006) expressed similar findings in that "family", "friendship," and "sense of responsibility" were among the themes.

Institutional Factors

Hispanic college students reported alienation, hostility, and lack of support (Hurtado & Ponjuan, 2005; Solorzano, Villalpando, & Oseguera, 2005), including marginalization due to the lack of Hispanic cultural representations in terms of environment, curriculum, personnel, language, and

even political power at their PWI (Harper & Hurtado, 2007). Additionally, they reported experiencing culture shock and frustration while acclimating to the PWI (Morrison, 2008). Through cultural centers and ethnic student organizations Hispanic college students built and maintained cultural identity and community with other Hispanic and non-Hispanic students, faculty, and staff (Cuyjet, Howard-Hamilton, & Cooper, 2011; Jones, Castellanos, & Cole, 2002). Members of ethnic clubs experienced lower levels of racial and ethnic tension on campus, in addition to increased commitment to the community, volunteerism, and interest in pursuing service-oriented and altruistic careers (Cuyjet, Howard-Hamilton, & Cooper, 2011; Hurtado & Carter, 1997). The experience of sharing their culture with others helped Hispanic students develop resilience, social skills and independence, extended their self-awareness and appreciation of their families, culture, faith, and values, and reinforced their ability to frame negative experiences in a positive way (Morrison, 2008; Zalaquett, 2006).

Cultural centers. Cultural centers also contributed to the academic success of Hispanic students at PWIs. Cultural centers often serve as a sign of progress toward a responsible and culturally-sensitive campus, and provide students resources in the areas of social, political, academic, and cultural development (Jones, Castellanos, & Cole, 2002). They are an institutional hub for the acknowledgement, respect, and enhancement of multiculturalism (Jones, Castellanos, & Cole, 2002; Patton, 2010). Hispanic students identified their cultural center as a venue for assistance, and as a trusted place to address personal and social issues, including identifying with their cultural roots (Jones, Castellanos, & Cole, 2002). Furthermore, programming that integrated home, community, and the university was successful in promoting a seamless education for Hispanic students (Cuyjet, Howard-Hamilton, & Cooper, 2011). Leadership development was cited as an important role of cultural centers, especially in the form of networks, and a means of empowering students to create positive changes (Patton, 2010).

Hispanic college students in the Southeastern United States

Gonzalez and Ting (2008) surveyed 109 Hispanic students about their adjustment at the predominately White institution with approximately 2% to 3% Hispanic enrollment. The findings indicated that family support and campus integration were factors contributing to the adjustment of Hispanic students at the university (Gonzalez & Ting, 2008). Parker, Segovia, & Tap (2015) reviewed the existing literature on Hispanic student academic success and proposed possible factors that may influence Hispanic students' college success. They concluded that risk factors (i.e., low SES, low GPA, teenage pregnancy and parenthood etc.), generational status, gender roles, primary spoken language, and community college attendance may negatively impact Hispanic student success.

Graunke and Woosley (2005), among other scholars (e.g., Klomegah, 2007; Salaiman & Mohezar, 2006; Soto & Sulekha, 2009; Zwick & Sklar, 2005), have demonstrated that demographic factors, previous experiences, or background are associated with students' academic performance in college. To date, most of the studies involving Hispanic students are qualitative with relatively small sample sizes (less than 30). For example, Ceballo (2004)'s research has limited generalizability as it relies on a sample of 10 Latino/Latina students. Similarly, Ceja (2006)'s qualitative study of 20 Chicana high school students also means that findings cannot be generalized. Also, the findings are not gender-neutral, as only women were

interviewed. In comparison, Hurtado and Carter (1997)'s correlational research of 272 Hispanic college students in their third year reflected on first year experiences. While the sample size is larger, earlier memories may be distorted by the passing of time. To strengthen this study data could have been gathered annually. Meanwhile, Behnke, Gonzalez, and Cox (2010) studied 501 high school students in North Carolina. They wanted to understand the reasons for Latino/Latina students dropping out, which involved personal, social, and institutional reasons. While this study focused on Hispanic high school students in one state it does not connect high school and collegiate experiences.

PURPOSE OF THE STUDY

The purpose of this study was to identify factors that influenced students' high school completion and academic performance in college at a selective PWI from a sizeable sample. This study was guided by the following questions. In the Southeastern United States:

1. What are the Hispanic students' perceptions of personal, social, and institutional factors
 - enabling their high school completion and college matriculation?
 - enabling their academic performance at the select PWI?
2. To what degree do personal, social, or institutional factors in high school and college predict college GPA at the select PWI?

METHODOLOGY

This research was part of a larger study (Segovia, 2012), conducted Spring 2011, that employed a sequential explanatory design (Creswell, 2003). For the purpose of this paper only the quantitative component of the study, and electronic survey, is detailed. This aspect of the study is descriptive and correlational.

Context of the Study

A four-year selective public university, with a Hispanic Cultural Center, in the Southeastern United States was the research site for this study. The university reports score averages of 1250 for the SAT, 25 in the ACT, and 3.8 for GPA. The university enrollment averaged 13,000 students. The racial/ethnic background of students was 84% White, 4% Black, 4% Hispanic, and 8% other racial or ethnic background. Comprised primarily of females (60%) most students were enrolled full-time and as in-state residents, 85% respectively.

Participants

Three criteria were used to determine survey participants. Criteria for inclusion were as follows: (a) participants had to self-identify and be listed as Hispanic students in the institutional records, (b) they must have completed at least one semester of course work at the PWI, and (c) they could

not be listed as international or early-college students. Based on the criterion, 409 Hispanic students were invited to complete the survey. Thirty-five percent responded ($n=145$), which is greater than the typical response rate (30%) for online surveys (Nulty, 2008; University of Texas at Austin, 2011).

Description of the Survey

The electronic survey was created by the primary researcher based on a thorough review of the literature. The 72-item survey consisted of the following items: demographics, factors impacting high school experiences (Glennie & Stearns, 2002), lifestyle during formative years (Ceja, 2006), and experiences as college students (Jones, Castellanos, & Cole, 2002; Graunke & Woosley, 2005; Kim, Newton, Downey, & Benton, 2010; Swail, Cabrera, & Lee, 2004; Zalaquett, 2006). Twenty-two items were demographic characteristics, 22 items were aligned with the first research question (regarding perceptions of factors that enabled high school completion), and 28 items were aligned with the second research question (regarding perceptions of factors that enabled college performance). The majority of questions used a four point Likert scale ranging from 1=Disagree to 4=Agree. Other questions were categorical (e.g., male or female, college GPA).

Content validity of the survey was established by consulting a panel of experts (Schutt, 2006). The panel, composed of individual experts in the areas of psychology, Hispanic populations, research methods, secondary education, and educational equity and excellence. The survey was modified using their recommendations. In order to determine if the survey was reliable, a split-half test of reliability was conducted (Fink, 1995; Litwin, 1995). Acceptable reliability measures were found for Part 1 (27 items, $\alpha = .863$) and Part 2 (26 items, $\alpha = .844$). The Spearman-Brown prophecy coefficient was 0.7 and was used to estimate full test reliability based on split-half reliability measures. A reliability of .60 or higher is acceptable for exploratory research (Litwin, 1995).

Procedures

A university-maintained, campus-wide spreadsheet used for informational distribution purposes was used to identify Hispanic students for the study. A representative of the Office of Institutional Diversity and Inclusion sent an email to 409 students, who met the criteria for the study, in the fall semester of 2011. The invitation included a brief description of the survey, the selection criteria for participation, and the expected survey completion time. In order to maximize the number of participants, two e-mail reminders were sent. Once the survey data was collected, the researcher imported the data from SurveyMonkey into the Statistical Package for the Social Science (SPSS) 19.0 for analysis.

Data Analysis

Descriptive statistics were used to describe the data. Bivariate correlations were run for personal, social, and institutional variables and college GPA. Based on the statistically significant

correlations, a multinomial logistic regression analysis (Meyers, Gamst, & Guarino, 2006) was used to predict the relationship between several independent variables (e.g., demographic characteristic, factors related to high school as well as college) and the dependent variable (student self-reported GPA using a categorical scale). The assumptions of the logistic regression model were met.

GPA was treated as a categorical variable to mimic the format for GPA on the course evaluation instrument used at the institution when the study occurred. The course evaluation instrument, known as the “Student Perception of Teaching,” asked students to rate their instructor’s teaching methods and overall effectiveness. The instrument also asked students to select a GPA category. The categories for GPA used in the current study were based on the categories for GPA on SPOTs. For the purpose of the analyses the categories were collapsed to (a) less than 3.0 and (b) 3.0 to 3.49 and (c) 3.5 to 4.0—the reference category.

RESULTS

Of the 145 survey respondents, 103 were female, 38 were male and four students did not specify. The three largest heritage representations were Mexican (34.5%), Puerto Rican (19.3%), and Cuban (9.7%). Most students first-generation Americans (40.7%), followed by second-generation Americans (36.1%). Over half of students (52.1%) reported learning English as their first language and 27.5% of students reported being former ESL students. Most students (86.6%) were between the ages of 18 and 25 years old. Twenty-two students (15.5%) reported being married and 12.8% reported having children. Over half of the students (58.6%) lived off-campus without relatives and almost two-thirds of students were employed (64.7%).

Using descriptive statistics, the results begin with the variables that contributed to high school graduation and then the variables that contributed to college performance. Using multinomial regression we conclude this section with the findings for high school and college related predictor variables and the criterion college GPA.

Factors that Contributed to High School Graduation

Students were asked to rate 20 factors that enabled their high school completion on a scale of 1 (*not at all*) to 4 (*a lot*). Table 2 shows the mean and standard deviations. The highest rated personal factors were 3.85 ($SD = 0.39$) for personal desire to succeed, 3.75 ($SD = 0.61$) for setting high school graduation as expectation, 3.74 ($SD = 0.53$) for personal desire to learn and discover.

TABLE 2
Variables that Contributed to High School Graduation

Variables	<i>M</i>	<i>SD</i>
Personal desire to succeed	3.86	0.39
Setting high-school graduation as an expectation	3.75	0.61
Personal desire to learn and discover	3.74	0.53
Parents valuing education	3.67	0.75
Parents supporting emotionally	3.47	0.89
Access to a computer at home	3.37	1.04
Competitive nature	3.36	0.81
Praise and emotional support from parents	3.36	0.90
Honors/AP courses	3.27	0.98
Access to books at home	3.23	1.04
Having a quiet place to study at home	3.12	0.98
Having strict parents	2.96	0.98
Volunteer work	2.86	1.07
SAT/ACT test preparation	2.53	1.10
Playing sports	2.52	1.23
Help from a mentor/professional role model	2.46	1.17
Family hardships	2.42	1.08
Parents helping me with school work	2.33	1.24
Parents attending school events	2.30	1.17
After-school job	2.26	1.17

Variables that Enabled College Performance

Table 3 shows the means and standard deviations for the 19 variables that enabled college performance. The highest rated were 3.74 ($SD = 0.61$) for college graduation as an expectation, 3.58 ($SD = 0.82$) for the desire to help parents in the future, 3.51 ($SD = 0.83$) for the desire to be a role model, and 3.44 ($SD = 0.80$) for the desire to help the community. Factors with lower ratings included using resources at the cultural center, parent's help with admissions application, and parents attending orientation.

Modest correlations were found between GPA and each of the following high school variables: Having an after school job ($r = .22, p < .05$) and parents helping with school work ($r = -.21, p < .05$). Marginally significant correlations were found between GPA and the following high school variables: parents valuing education ($r = -.16, p = .06$), SAT/ACT test prep ($r = .14, p = .09$), and high school graduation as an expectation ($r = .15, p = .09$). Marginally significant correlations were also found between GPA and each of the following college variables: Desire to surpass low expectations from others ($r = -.16, p = .07$), educating others about Hispanic culture ($r = .15, p = .08$), and student organizations ($r = .17, p = .06$).

Five demographic variables, seven variables related to high school completion, and six variables related to college performance were significantly predictive of the Hispanic college

students' current GPA, $\chi^2(36) = 82.25, p < .001$. The amount of variance accounted for in the model using Nagelkerke pseudo R^2 was 73%.

The odds ratio indicated that students who were first generation Americans were .12 times more likely to have a GPA of 3.0 to 3.5 than a GPA of 3.5 to 4.0. For high school variables, the odds ratio indicated that for every one-unit increase in parents helping with school, the odds of having a GPA of less than 3.0 relative to a 3.50-4.0 GPA becomes 4.39 times larger. For every one-unit increase in parents who valued education, the odds of having a GPA of 3.0 or less relative to a 3.50-4.0 becomes 3.05 times larger. Finally, for every one-unit increase in students enrolled in SAT/ACT prep courses, the odds of having a GPA of 3.0 or less to a 3.5-4.0 becomes .2 times larger.

For college variables, the odds ratio indicated that for every one-unit increase in desire to be a role model, the odds of having a GPA of 3.0-3.49 relative to a 3.5-4.0 GPA becomes .26 larger. For every one-unit increase of involvement in student organization, the odds of having a GPA of 3.0-3.49 relative to a GPA of 3.5-4.0 becomes 4.45 times larger. Finally, for every one-unit increase in desire to educate others about Hispanic culture, the odds of having a GPA of 3.0-3.49 relative to 3.5-4.0 becomes .08 times larger. Table 4 for regression summary.

TABLE 3
Variables that Contributed to College Academic Performance

Variables	<i>M</i>	<i>SD</i>
College graduation as an expectation	3.74	0.61
Desire to help parents in the future	3.58	0.82
Desire to be a role model	3.51	0.83
Desire to help community	3.44	0.80
Desire to surpass low expectations from others	3.21	1.17
Financial help for college	3.20	1.15
Motivation from family hardships	3.16	1.08
Educating others about Hispanic culture	2.84	1.09
Feeling of belonging at this university	2.84	1.08
Taking classes with friends	2.53	1.17
Studying with friends	2.51	1.15
Volunteering	2.50	1.12
Participating in student organizations	2.44	1.17
Current place of residency	2.44	1.14
Participating in tutoring sessions	2.13	1.13
Being a mentor	2.06	1.10
Using resources at cultural center	1.99	1.19
Parents' help with admissions application	1.80	1.14
Parents attending orientation	1.76	1.05

TABLE 4
 Multinomial logistic regression analysis summary of predictor variables and college GPA

	Less than 3.0			3.0 to 3.49		
	<i>b</i>	<i>SE</i>	Odds Ratio	<i>B</i>	<i>SE</i>	Odds Ratio
Gender						
Female	-1.07	1.36	0.34	-1.85	1.36	0.15
Transfer						
Yes	-2.87*	1.35	0.05	-0.08	0.9	0.91
First Generation						
Yes	0.34	1.24	1.4	-2.8	1.24	0.06
ESL						
Yes	-3.12	1.98	0.04	3.17	1.73	23.85
American Generation						
1 st Generation	2.44	1.32	11.51	-2.09*	1.45	0.12
High School Variables						
Personal Desire to Succeed	-0.31	0.46	0.73	0.07	0.38	1.08
Desire to Succeed in College	0.01	0.73	1.01	1.13	0.62	3.11
Parents helping with school	1.48*	0.73	4.39	0.44	0.47	1.56
Parents valuing education	1.11*	0.51	3.05	0.24	0.43	1.27
SAT/ACT Test Prep	-1.57*	0.75	0.2	-0.29	0.58	0.74
After-school job	-1.34	5.78	0.26	0.24	1.82	1.27
Praise and Emotional Support	0.52	0.5	1.68	0.61	0.41	1.85
College Variables						
College graduation expectation	-0.49	0.53	0.61	-0.42	0.43	0.65
Desire to be a role model	-0.81	0.6	0.44	-1.32*	0.54	0.26
Desire to help parents in the future	-0.73	0.64	0.48	-0.09	0.45	0.91
Student organizations	-0.36	0.69	0.69	1.49*	0.69	4.45
Educate others on Hispanic culture	5.6	6.17	272.58	-2.46*	1.01	0.08
Surpass low expectations	1.21	0.68	3.35	0.77	0.52	2.16
Constant	-10.42	10.17		1.63	7.79	

**p* < .05

DISCUSSION

First we discuss Hispanic students' perceptions of personal, social, and institutional variables that (a) enable their high school completion and college matriculation and (b) their performance at the select PWI. Next, we discuss the degree to which personal, social, or institutional factors perceived as important in high school and in college predict college GPA at this select PWI in the Southeastern United States.

What facilitated High School Completion?

In the current study, when focused on what enabled high school completion students indicated the desire to learn and discover, along with the motivation of parents. These were rated higher than the desire to defeat stereotypes or low expectations or to succeed as an immigrant or child thereof. Hispanic students at the selected PWI rated their own desire to succeed and learn higher than anything else. This is echoed in Zallaquett's (2006) qualitative study of Latinos/Latinas conducted at a large urban university. High self-expectations driven by family support, mirrored Chemers, Hu, and Garcia's (2001) findings linking high expectations and high goals to high achievement. In terms of parents as a motivator, Ceballos's (2004) research findings on the importance of parents valuing education are echoed in the responses of Hispanic students surveyed at this selective PWI. As an extension of parents, family in general, was the strongest source of encouragement for Hispanic students during high school years as seen in Sánchez, Reyes, and Singh's (2006) and Zallaquette's (2006) research.

What facilitated College Performance at the select PWI?

Students in this study stated that college graduation was an expectation, they wanted to help their parents in the future, and they desired to be a role model. This is consistent with other findings, particularly Zalaquett's (2006) themes of student's valuing their education, and responsibility toward others, which includes helping their parents. This highlights the value placed on education by students and their parents—as well as the role of motivation once students are admitted to a university.

How do personal, social, or institutional factors perceived as important in high school completion and in college performance predict college GPA at this select PWI?

The statistically significant predictors in the regression analyses were transfer status, 1st generation American, parents helping with school, parents valuing education, SAT/ACT preparation, desire to be a role model, participation in student organizations, and educating others about Hispanic culture. For these significant variables, in the section that follows, we discuss the multinomial logit estimate for a one unit increase in the given variable for college GPA relative to college GPA higher than 3.5 given the other variables in the model are held constant.

According to the findings, students who do not transfer are more likely to have college GPAs less than 3.0 at this 4-year institution in the Southeast. Students who transfer may be more focused and inclined to apply themselves fully to academics upon matriculation in the 4-year environment. Students who are not 1st generation American, for example those that are 2nd or 3rd American generation are more likely to have college GPAs in the 3.0 to 3.49 range. This could be due to assimilation over time and that issues that immigrants face no longer being as pressing or dissipating altogether with each additional generation. Based on the extant literature, Hispanic students with an immigrant experience or first-generation American status are positioned at a higher risk of adversities (Parker, Segovia, & Tap, 2015). For instance, they are more likely to have a limited income, working to support the family, working in order to cover college costs, especially if undocumented or out-of-state, and most commonly, having to translate for family members (Cuyjet, Howard-Hamilton, & Cooper, 2011).

Relatedly, Tseng (2004) studied various ethnic groups and reported that first generation students placed significantly greater emphasis on family obligation and spent more time on family demands than American born students. Additionally, these first generation students had significantly higher academic motivation than American born students, which was partially mediated by greater family obligation. Although there was a difference in academic motivation, there was no significant difference in academic achievement between first-generation and American born students. For first generation students, the relation between academic motivation and academic achievement was partially mediated by family demands. The greater family demands was related to less academic achievement despite greater academic motivation in first generation students. The results of this study indicate that differences in family processes between generational and American born students from all ethnic groups, including Latinos/Latinas, exist and contribute to academic adjustment.

Parents helping with school, parents valuing education, and SAT/ACT preparation were the statistically significant high school predictors for college GPA. In terms of parents helping with school and parents valuing education, the students with college GPAs less than 3.0 were more likely than those with GPAs higher than 3.5 to indicate that these variables were important in high school. This may be because these struggling students needed additional supports, aside from that offered at their high school. It can also be due to potential discrimination Hispanic high school students face while pursuing their education (discouraging messaging whether intentional or not—explicit or not).

In the multinomial regression the college related variables that were statistically significant, for student's with college GPA between 3.0 to 3.49, compared to the reference group, were the desire to be a role model, participation in student organizations, and educating others about Hispanic culture. The variables for "desire to be a role model" and "educate others about Hispanic culture" were inverse predictors of the higher reference category for college GPA. In other words if a student did not have a desire to be a role model then their college GPA has higher. This may be due to the effort college students are putting into being a role model, which facilitates their own adjustment at the PWI that may be distracting from academics. Meanwhile participation in "student organizations" is a predictor of higher college GPA. The rationale for this may be that certain student organizations may support academics by building and maintained cultural identity and community (Cuyjet, Howard-Hamilton, & Cooper, 2011). Experiencing lower levels of racial and ethnic tension on campus, in addition to increased commitment to the community, volunteerism, and interest in pursuing service-oriented and

altruistic careers (Cuyjet, Howard-Hamilton, & Cooper, 2011; Hurtado & Carter, 1997) may also impact their GPA.

Collectively, high school students who are not transfer students, who have parents that value education and help with school, who do not take SAT or ACT prep courses are likely to have lower college GPAs. This may be due to limitations derived from being first in their families to attend college. In comparison, students who are not 1st generation American, do not desire to be a role model or do not educate others about Hispanic culture, and are involved in student organizations on campus are more likely to have a higher college GPA at this select PWI in Southeastern, NC. Notably these results are from Hispanic students at an institution of higher education with a culture center, which tends to mediate alienation, hostility, and lack of support (Hurtado & Ponjuan, 2005; Solorzano, Villalpando, & Oseguera, 2005). Such centers minimize marginalization due to the lack of Hispanic cultural representations in terms of environment, curriculum, personnel, language, and even political power at their PWI (Harper & Hurtado, 2007).

In essence, this study expands upon the elements in Padilla's (1998) model and Zalaquett (2006) by connecting high school and college experiences to college GPA and by examining these components quantitatively. In doing so, we begin to see the relationships between the variables. Admittedly, certain variables can be construed in multiple categories, since variables are not all mutually exclusive. Yet, reflecting on Tinto's (1995) model these results hint at varying degrees of academic and social integration, based on personal, social, and institutional factors, which then influence college outcomes—in the case of this study—college GPA.

IMPLICATIONS FOR PRACTICE

Implications for parents, high school educators, as well as education professionals at the post-secondary levels include the following:

- The role of the parent as the strongest source of support was evident throughout this study. Parents can benefit from this study by gaining confidence on the importance of their role. The findings should be a source of reaffirmation and strength in the value and impact of parental support for the academic development of their children.
- Educators should invite parents to have a more active role in the education of their children, including, but not limited to, high school achievements and activities, academic support, college visits, college planning events, and course scheduling.
- Colleges and universities can use the results of this study to strengthen the foundation of a campus environment that supports and validates culturally diverse students, such as their Hispanic population. This support can be reinforced in various ways including: an increase in numbers of culturally-aware faculty and staff; and institutional systems in marketing, campus life, athletics, curriculum, career services, and admissions that strategically plan for the sustainment of a growing Hispanic student body. Furthermore, colleges should note the importance of nurturing the students' Hispanic heritage through cultural centers and opportunities to showcase specific heritage countries. By facilitating community support and cultivating opportunities for Hispanic students to mentor each other and younger Hispanics may help with college adjustment and provide personal and social support.

LIMITATIONS

One limitation of this study was the exclusion of first-year students, which was due to the timing of survey administration and criteria for participation. Given the importance of first-year college student performance and adjustment, first-year students might have contributed information on social support, self-esteem, and stress as predictor of success in college (Chemers, Hu, & Garcia, 2001; Friedlander, Reid, Shupak, & Cribbie, 2007; Hernandez, 2002). This study was also limited by the status of the institution and the high-achieving status of all students admitted to the selective institution. Had the study been conducted at a less selective institution, a private university, or a technical college, the results might have been different. Other limitations include socially-desirable bias (Boardman & Sundquist, 2009) and the use of self-reported data. Another limitation was not asking for high school GPA (upon graduation) and asking for college GPA as a categorical variable—this influenced the analysis. The results of this study are limited in terms of generalizability given the sampling method and the region investigated.

FUTURE RESEARCH

Given the results and the limitations of the study, and considering the fast growing rate of the Hispanic population in the Southeastern United States, and their surge in college participation, we recommend further research. For instance similar research at other institutions of higher education in southeastern United States can occur that address the limitations of this study, by including first-year students, changing the outcome variable to a scale-level, and getting student's actual GPA in high school and in college rather than self-reported data. To explore parents perceptions of institutional support for their children and knowledge of parental engagement opportunities while their kids are in high school or in college a qualitative study of parents of Hispanic students can be conducted. Another study could examine students who are not accepted into the selective PWI. Researchers can explore factors that contributed to not being offered admissions, including areas related to family, pre-college experiences, and college planning process.

CONCLUSION

Study findings may be useful in developing and implementing strategies that foster academic success among Hispanic students at similar institutions of higher education. This study may impact future research as well as inform university leaders in their examination of current institutional practices. The contribution of this manuscript is that it focuses on Hispanic/Latino students in a geographical area (Southeast US) that has not been understudied. Notably the students in this study who identified risk factors (such as first generation to attend college and coming from low income families) gained admission to the selective four-year institution in which the research was conducted.

This study is evidence that Hispanic students have long-term educational and professional goals that may impact their families, as well as their institutions of higher education, and their communities at large. For most students, their ability to excel is driven by a history of struggles and survival linked to their families' immigrant background. Given the growth of first-

generation Hispanic Americans in southeastern United States, the Southeast region is positioned for positive change if education is set as priority for this population.

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APPENDIX A

TABLE 5
Student Survey Matrix

Research Question Alignment	Question Number	Question	Justification
1. What are the demographic characteristics of Hispanic students attending a selective, predominantly White university?	1	Which country do you mostly associate your heritage with?	Variable representing ten Hispanic populations in the U. S. (Pew Hispanic Center, 2010).
	2	Were you born in the United States?	Variable that establishes U.S. born or foreign born subgroups (Pew Hispanic Center, 2011a).
	3	Which generation of American are you?	Variable influencing student success (Kim, Newton, Downey, & Benton, 2010).
	4	Where do you live?	Variable influencing student success (Kim, Newton, Downey, & Benton, 2010).
	5	What was the first language you learned?	Variable that establishes language diversity. (Pew Hispanic Center, 2011a).
	6	What language is mostly spoken by your parents?	Variable influencing family involvement on campus (Jones, Castellanos, & Cole, 2002).
	7	Were you an English as a Second Language (ESL) student in U. S. schools?	Variable influencing family involvement on campus (Jones, Castellanos, & Cole, 2002).
	8	What grade levels have you completed in the United States?	Variable influencing culture and knowledge of college (Kim, Newton, Downey, & Benton, 2010).
	9	What is your gender?	Variables influencing student success (Center for Labor Market Studies, 2009).

Research Question Alignment	Question Number	Question	Justification
1. What are the demographic characteristics of Hispanic students attending a selective, predominantly White university?	10	How old are you?	Basic demographic information.
	11	How large is your immediate family/household?	Variable influencing college information (Ceja, 2006).
	12	Are you married?	Variable in survey of successful Hispanics in college (Zalaquett, 2006).
	13	Do you have children?	Risk factor when parenting during high school years (Swail, Cabrera, & Lee, 2004).
	14	How many hours a week do you work for pay?	Variable influencing academic success of college students (Graunke & Woosley, 2005).
	15	What is your academic classification?	Variable influencing academic success of college students (Graunke & Woosley, 2005).
	16	Are you a transfer student?	Variable influencing academic access (Zarate & Burciaga, 2010).
	17	Do you have an Associate's Degree?	Variable influencing academic access (Zarate & Burciaga, 2010).
	18	What is your current Grade Point Average?	Variable influencing academic success of college students (Graunke & Woosley, 2005).
	19	What is the highest level of education completed by your mother or female guardian?	Risk factor when parents have low education level (Swail, Cabrera, & Lee, 2004).
	20	What is the highest level of education completed by your father or male guardian?	Risk factor when parents have low education level (Swail, Cabrera, & Lee, 2004).
	21	Are you the first in your family to attend college?	Variable influencing student success (Kim, Newton, Downey, & Benton, 2010).
Research Question Alignment	Question Number	Question	Justification

1. What are the demographic characteristics of Hispanic students attending a selective, predominantly White university?	22	What is your main career interest?	Variable influencing career development and academic success (Graunke & Woosley, 2005).
	26	How many credit hours are you taking now?	Variable influencing persistence in college (Arana, Castañeda-Sound, Blanchard, & Aguilar, 2011).
	29	Did your family ever work as temporary or migrant farmworkers?	Risk factor when affected by high mobility (Glennie & Stearns, 2002).
	30	How many different schools did you attend in a year?	Risk factor when affected by high mobility (Glennie & Stearns, 2002).
	31	When did you stop migrating or working in farm labor?	Risk factor when affected by high mobility (Glennie & Stearns, 2002).
2. What are the Hispanic students' perceptions of the factors that enabled their High school completion?	23	Which of the following contributed to high school graduation?	Variables influencing student success (Center for Labor Market Studies, 2009).
	24	Who helped you the most to succeed in high school?	Variable in survey of successful Hispanics in college (Zalaquett, 2006).
	32	Which of the following experiences contributed to your high school graduation?	Variable in survey of successful Hispanics in college (Zalaquett, 2006).
3. What are the Hispanic students' perceptions of the factors that enabled performance at a selective, predominantly White university?	25	Who or what motivated you to go to college?	Variable in survey of successful Hispanics in college (Zalaquett, 2006).
	27	Which of the following have contributed to you college achievement?	Variable in survey of successful Hispanics in college (Zalaquett, 2006).
	28	Who is helping you the most to succeed in college?	Variable influencing academic success of college students (Graunke & Woosley, 2005).
