The Role of High School Teachers in Hispanic Students’ Sense of Belonging in College: Implications for Family and Consumer Sciences Educators

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Although Hispanics are the fastest-growing and largest minority group in the United States, our educational system has struggled to respond to the influx of culturally diverse students in a way that significantly impacts their academic success. Hispanic students drop out of high school at a higher rate and are less likely to attend college, and/or complete degrees. Deficit-based literature only highlights the statistical nature of the educational crisis facing Latino students in the United States which simultaneously creates an occlusion for solutions to surface. In this study, high achieving female Hispanic students (N=80) in a department of Family and Consumer Sciences of a major Hispanic-serving land-grant university located near the American-Mexican border were surveyed to determine factors contributing to their academic successes. Results indicated that students’ relationship with their high school teachers played a significant role in their sense of belonging to the university. Implications for FCS educators are discussed.

In 2010, Hispanics comprised 16% of the total population of the United States, totaling 50.5 million people (Humes, Jones, & Ramirez, 2011). Between 2000 and 2010, the Hispanic population grew by 43% and currently constitutes the fastest-growing and largest ethnic or minority group in the U.S. Only Mexico has a larger Hispanic population than the United States (U.S. Census, 2010). Projections suggest that Hispanics will make up approximately one-third of the total U.S. population by 2060.

Even though 62% of Hispanics 25 and older in the U.S. have at least a high school education, the educational system is imbued with obstacles and challenges that Hispanics must overcome in order to achieve success. All ethnic, racial, and cultural groups have unique challenges; however, those faced by Latinos (which include language acquisition, familial obligations, culturally-based gender stereotypes, and acculturative stress) may exacerbate the effect of risk factors on educational attainment and success. The literature is inundated with examples of the achievement gap between Latino students and their non-Latino counterparts. For example, researchers and educators know that Hispanics are retained a grade at a rate three times higher than that of the overall population (Valenciana, Weisman, & Flores, 2006). All stakeholders including political entities are aware that the drop-out rate for Hispanics is the highest of all the minorities with approximately 30% leaving high school before graduation (Moule, 2012). The drop-out rate may be exacerbated due to the disproportionate concentration
of poverty in Latino communities and barrios, and certainly is further impacted by existing language barriers. Families with mono-lingual Spanish parents may struggle to help their children to negotiate the academic system and successfully achieve their academic goals (Bollin, 2007). For example, 76% of the Hispanic families in the U.S. speak Spanish at home. Use of the home language in the classroom allows students to feel secure and become successful (Chavez-Chavez, 1984; Cummins, 1994; Osterman, 2000) with misconceptions based on school culture less likely to occur (Fishman, 1996; Garcia, 2005). Thomas and Collier (1997) found that using the first language in the classroom contributes to academic success in the second language by the end of their school years. However, conversational language proficiency develops more easily usually within two years of exposure to the language. Academic language is more complex and cognitively demanding, and developing proficiency in the second language for school work requires much longer, up to five to seven years (Lucas, Villegas, & Freedson-Gonzalez, 2008).

The drop-out rate may also be tied to the difficulties Hispanic students face when attending school in districts where non-Latino, majority, racial, and ethnic groups permeate the culture. The cultural differences between the Hispanics and non-Hispanic Whites, in particular, create discrepancies between home and school culture for Hispanic students (Nieto, 2004). Further compounding the problem is the gap that exists between the racial and ethnic makeup of students and teachers (Nieto, 2004) currently, 87% of teachers are White in America’s schools (Bireda & Chait, 2011). Only 4% of the nation’s teachers are Hispanic, and some 40% of American schools have no teachers of color at all (National Collaborative on Diversity in the Teaching Force, 2004); overall about 13% of public school teachers are from minority populations (National Education Association, 2002).

Although teaching students within a culturally relevant context (e.g., one that bridges home and school culture) can enhance the academic success of culturally and linguistically diverse students (Christian & Bloome, 2004), the literature has well documented the practice of schools demanding that Latino students adapt to the dominate school culture created by a largely White, mono-lingual English teaching force that does not acknowledge the extent to which the curriculum reflects the White culture (Nieto, 2004; Christian & Bloome, 2005). Unfortunately, the predominantly White educators are largely unprepared to provide culturally responsive curriculum and instruction to non-white students (Nieto, 2002). Educators who do not have the same cultural perspectives of the students they teach may fail to understand or even perceive the ways that the students’ culture determine their behaviors, and structure their successes and perhaps failures as well (Moore, 2004).

Risk factors within the educational system in the U.S. continue to imperil achievement in higher education, with only 13% of Hispanics completing a four-year college degree (U.S. Census, 2010) and only 8% receiving a graduate degree (Castellanos & Gloria, 2007). The literature reports that Hispanic students face many challenges not faced by non-Hispanics in their quest for a higher education, including family responsibilities, poor academic preparation, lack of resources, and unfamiliarity with the college culture (Cavazos & Cavazos, 2010; Gandara & Contreras, 2009; Immerwahr, 2003). Additional challenges reported by Hispanic students include low expectations from their high school teachers and a lack of confidence in their ability to succeed from their high school counselors (Davison-Aviles, Guerrero, Barajas-Howarth, & Thomas, 1999; Martinez, 2003). Teachers may hold stereotypical and negative opinions of Hispanic students such as a perception of their lack of ambition or their not valuing higher education (Caudraz, 2005). Hispanic students may encounter discrimination including a lack of access to resources available to non-Hispanic students, and may feel unwelcomed at school
(Martinez, DeGarmo, & Eddy, 2004). What the literature fails to detail is what happens to achievement for Hispanics and others when supporting, mentoring teachers act as buffers to the many risk factors that exist.

While the literature paints a despairing picture of the educational culture for Latinos in the U.S., high achieving, thriving Latino students exist in the system. These seemingly resilient students represent what is possible rather than what is likely. Researchers, then, should be expected to record and analyze and interpret the many driving forces that are enabling success for these resilient students, and use this information to create interventions in an effort to close the achievement gap. The term resilience is used to describe students “who sustain high levels of achievement, motivation, and performance despite the presence of stressful events and conditions that place them at risk of doing poorly in school and ultimately dropping out of school” (Alva, 1991, p. 19). Hispanic students may experience stress based on many factors including their status as a minority, discrimination from school personnel, and attendance at schools that do not reflect their own culture, their low socio-economic status, and the inability of their parents to support their education because of language barriers or lack of understanding (Gonzalez & Padilla, 1997).

The purpose of this study is to examine what factors may be contributing to the academic resilience of a sample of Hispanic students enrolled in Family and Consumer Sciences degree programs at a major Southwestern Hispanic-serving (HSI) land-grant university located near the American-Mexican border. These students are defined as resilient based on their continued successful enrollment in, and completion of, university classes despite having several of the known risk factors that cluster epidemiologically in the population of Latino college students (Campa, 2010; Sanchez, Colon, & Esparza, 2005).

**Review of Literature**

Although colleges and universities are experiencing an increase of Hispanic students whose first language is Spanish (Eitel & Martin, 2009), research studies have been few on what this population needs to be successful. Many of these students are first generation college students and also may be first generation citizens, so challenges at college include a lack of knowledge about college and information on the culture of a college environment (United States Presidential Advisory Commission, 2003). The students may feel overwhelmed and frustrated trying to navigate the unknowns of the college process (Trujillo & Diaz, 1999), because they likely do not know anyone who has attended college (Valenciana, et al., 2006). Their English skills may put them at a disadvantage, since English is their second language. Their financial situation may be a factor, which might require them to work long hours in order to finance school and provide for their families (Fry, 2002). Unfortunately, due to lack of expectations from their high school teachers and counselors, they may not be academically prepared for college work (Campa, 2010).

Although the literature has primarily looked at Hispanic students from a deficient model, this study looks at the resilient Hispanic students who are succeeding in a large land-grant university. The study looks for indications of ways in which they are successful at navigating higher education in an attempt to provide information to other programs to replicate their successes. In particular, we were interested in the high-school-to-college transition and attempted to find any conduits that we could exploit to improve the odds of the students’ success. In addition, we had a particular interest in finding such avenues to success so that we could continue to update our teacher education curriculum and give our pre-service teachers the
necessary knowledge and tools to deal effectively with situations they will encounter in their classrooms.

For example, a sense of belonging to one’s community is a basic human need (Maslow, 1970). School belonging describes the way students feel in the school—with the optimal result that the student feels accepted, respected, and valued by peers and teachers. This feeling of belonging to the community of the school appears to contribute to the motivation and ability to achieve academically for middle and high school students. The construct has been linked to motivation and achievement in middle and high school students (Goodenow, 1993). Several other studies have linked school belonging and other school behaviors leading to success (for example, see Anderman, 2003; Brand, Felner, Shim, Seitsinger, & Dumas, 2003). One study noted that a sense of belonging was a significant predictor of academic performance for Mexican-origin high school students (Gonzalez & Padilla, 1997). Another showed that a low sense of belonging was linked to low grade achievement (Smerdon, 2002). Gender differences in sense of belonging have been found with girls reporting a greater sense of belonging in both middle and high school which may contribute to their higher academic achievement (Goodenow, 1993; Goodenow & Grady, 1993; Sanchez, et al., 2005; Smerdon, 2002).

Dewey (1958) was the first to suggest that teachers are responsible for creating a nurturing and respectful learning environment for their students—an environment that allows all students to feel that they are liked, supported, respected, and that they can achieve academic success. In Goodenow’s (1993) study of middle-school students, students reported their perceptions of the support, interest, and respect they received from their teachers was the most influential single component of belonging and support leading to effort and achievement. Goodenow found gender differences in her study, with girls reporting a greater significance in teachers’ support.

Some evidence suggested that the sense of school belonging tends to decline among students throughout their school years (Anderman, 2003), and that teachers’ influence on school belonging for students declined as well (Morrison, Cosden, O’Farrell, & Campos, 2003). A few studies have examined college populations with one study linking class belonging with motivation and achievement (Freeman, Anderman, & Jensen, 2007).

In summary, this study examined factors that may be contributing to the academic resilience of Hispanic students enrolled in Family and Consumer Sciences degree programs at a major Southwestern HSI land-grant university located near the American-Mexican border. This article continued the work of Goodenow and others, and reported on the contribution of high school teachers to these students’ feelings of school belonging in the university level.

**Methods**

Data were collected using a standard survey. The survey was distributed online and participants were solicited via email on common list serves from a Southwestern, Hispanic-serving institute (HSI). All participants were required to read an informed consent document and therefore participation was of a voluntary nature.

**Sample.** The sample consisted of 80 Hispanic female students. Age for the sample ranged from 18-58. The average age for the sample was 27.3 (8.4) years.

**Marital Status.** It was recorded and the data indicate that most students were not in a committed relationship (28%), followed by married (24%), committed relationship (21%), cohabiting (20%), divorced (3%), and widowed (3%). Therefore, a broad range of familial relationship types were represented in this sample.
Work. This was recorded as the number of hours per week that participants performed in a paying job. The average hours worked for the sample was 19 (16.7). The range of hours worked was from 0-42. This indicates that on average, the students in this sample worked half-time in an employment setting.

Income. This demographic item was found to be approximately $23,000($16,000) on average for participants. The range of income was from $0-51,000 for the sample. The average was appropriate given the average household income for the county; however, the average may be high for a traditional college sample. Respondents were asked to indicate their household income when they were in high school and had four options from which to choose. The distribution of their recollection or perception of their household income was as follows: poverty (8%), low income (38%), middle income (51%), and high income (3%). This distribution would indicate that the majority of the sample was financially well-off and this should be considered when generalizing results to other samples.

Children. Nearly 51% of the sample did not have children. For those participants who were parents, the average number of children per participant was 2 (1.4). This average indicates that the majority of parents in the sample had 1-3 children. However approximately 17% of the sample had three or more children and the figure doubles (34%) when looking at only the parents in the sample.

GPA. This item was collected as a self-report item in the survey and was recorded for high school and for current (college) performance. In terms of high school GPA, respondents reported that 19% had GPAs between 4.0-3.76, followed by 25% with GPAs between 3.75-3.5; 32% with GPAs between 3.49-3; 18% with GPAs between 2.9-2.5; 5% with GPAs between 2.49-2.0; and finally 1% reported GPAs below 2.0. College GPA was also recorded. Respondents reported that 21% had college GPAs between 4.0-3.75, followed by 14% with GPAs within the range of 3.74-3.5; 39% reported GPAs between 3.49-3.0; 16% reported GPAs between 2.9-2.6; 10% reported GPAs between 2.5-2.0 and no one reported a GPA below 2.0 (See Figure 1).

Educational aspiration. This was recorded by asking what the highest level of education respondents planned on pursuing. Figure 2 shows the results from three sources. The first is students’ own ambitions and the second are their perceptions of their parents’ wishes for their child’s academic accomplishments in terms of highest level achieved. The figure indicates that a small portion of the students believed that their parents did not desire them to achieve the level of education that they are currently pursuing. However, at the doctoral level, participants reported that more of their parents aspired for them to achieve a doctoral degree than students actually aspired to do so. A markedly smaller number of fathers than mothers were reported to have aspirations for their children to gain a master’s degree. Although numerical differences exist, the pattern of differences does not indicate any trend by parental figures, nor level of aspiration. Specifically, in some cases more students reported that mothers supported their aspirations, while in other cases students reported receiving more support from their fathers. However, differences are too small to infer meaning.
Note. Columns for Self in Certificate and Associates categories were intentionally excluded because the N for self was zero in both occasions.
Results

Survey Results

Teacher-student relationship was measured using a 12-item inventory where respondents were asked to respond to statements using a 3-point scale. Responses were coded so that “mostly false” was 0, “sometimes” was 1 and “mostly true” was 2. Therefore the possible range of scores was from 0-2. Lower scores indicated a less than desirable relationship with teacher and higher scores indicated a healthy, supportive relationship with teacher. Reliability analysis indicated that the scale had a high degree of reliability (alpha=.85) with the 12 items. Therefore, the sum of all items was used to create a scaled score. Average scores across items are listed in Table 1. The range of average item scores was from 1.12-1.84. The range of scores for the scale were from 6-24 and the average score for the summative scale was 19.47(4.49).

Table 1
Item Statistics for Teacher Scale

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>My teachers cared about me.</td>
<td>1.64</td>
<td>.607</td>
</tr>
<tr>
<td>My teachers made learning fun and interesting.</td>
<td>1.40</td>
<td>.615</td>
</tr>
<tr>
<td>My teachers helped me when I didn’t understand.</td>
<td>1.65</td>
<td>.560</td>
</tr>
<tr>
<td>My teachers really listened to what I had to say.</td>
<td>1.49</td>
<td>.645</td>
</tr>
<tr>
<td>Most of the teachers and other adults I knew at that school liked me.</td>
<td>1.20</td>
<td>.405</td>
</tr>
<tr>
<td>My teachers had extra work to do for students who wanted to learn more about something.</td>
<td>1.12</td>
<td>.788</td>
</tr>
<tr>
<td>My teachers treated me fairly.</td>
<td>1.71</td>
<td>.487</td>
</tr>
<tr>
<td>My teachers liked their work. They liked to teach.</td>
<td>1.53</td>
<td>.646</td>
</tr>
<tr>
<td>I was able to do the work my teachers asked me to do if I tried.</td>
<td>1.84</td>
<td>.369</td>
</tr>
<tr>
<td>My teachers made me feel good about myself.</td>
<td>1.65</td>
<td>.557</td>
</tr>
<tr>
<td>I could talk to my teachers about private things.</td>
<td>1.64</td>
<td>.607</td>
</tr>
<tr>
<td>My teachers believed that I could learn.</td>
<td>1.40</td>
<td>.615</td>
</tr>
</tbody>
</table>

School belonging was measured using 15 items listed in Table 2. Respondents were asked to answer using a five-point Likert-type scale from strongly disagree to strongly agree. Responses were coded so strongly agreeing yielded a higher score than disagreeing. Therefore a high scale score is indicative of a higher level of school belonging. Reliability analysis yielded results indicating a strong level of internal consistency (alpha=.828), therefore scaled scores were deemed appropriate to use in statistical analysis. The range of average item scores was from
2.75-4.29 and the possible range of scaled scores was from 15-75. Given that, the average score for the summative scale was 56.65(7.94).

Table 2
*Item Statistics for School Belonging*

<table>
<thead>
<tr>
<th>Item</th>
<th>Mean</th>
<th>Standard Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>I feel like a real part of university.</td>
<td>3.93</td>
<td>0.998</td>
</tr>
<tr>
<td>People here notice when I am good at something.</td>
<td>3.57</td>
<td>1.037</td>
</tr>
<tr>
<td>Other students at university take my opinions seriously.</td>
<td>3.39</td>
<td>0.899</td>
</tr>
<tr>
<td>Most professors at university are interested in me.</td>
<td>3.54</td>
<td>0.930</td>
</tr>
<tr>
<td>Sometimes I feel like I don’t belong here.</td>
<td>3.56</td>
<td>1.276</td>
</tr>
<tr>
<td>There’s at least one professor or other adult at this school that I can talk with if I have a problem.</td>
<td>3.84</td>
<td>1.066</td>
</tr>
<tr>
<td>People at university are friendly to me.</td>
<td>4.16</td>
<td>0.834</td>
</tr>
<tr>
<td>Professors here are not interested in people like me.</td>
<td>3.83</td>
<td>1.088</td>
</tr>
<tr>
<td>I am included in lots of activities at university.</td>
<td>2.77</td>
<td>1.258</td>
</tr>
<tr>
<td>I am treated with as much respect as other students.</td>
<td>4.24</td>
<td>0.728</td>
</tr>
<tr>
<td>I feel very different from most other students here.</td>
<td>3.24</td>
<td>1.228</td>
</tr>
<tr>
<td>The professors here respect me.</td>
<td>4.23</td>
<td>0.628</td>
</tr>
<tr>
<td>People here know I can do good work.</td>
<td>3.99</td>
<td>0.814</td>
</tr>
<tr>
<td>I feel proud of belonging to university.</td>
<td>4.30</td>
<td>0.849</td>
</tr>
<tr>
<td>Other students here like me the way I am.</td>
<td>4.13</td>
<td>0.789</td>
</tr>
</tbody>
</table>

*Note. The Name of the university was replaced with the word “university” to protect participant confidentiality*

**Prediction Model**

In order to test the hypothesis that teacher-student relationship in high school was a significant predictor of school belongingness in college, a predictive model was developed with teacher relationship as the predictor and school belongingness as the outcome. A linear regression analysis was used to accomplish this statistical task. In the analysis, teacher relationship was entered as the independent variable and school belongingness was the dependent variable. These were summative scaled scores and higher scores indicated a better relationship with teacher and better belonging at college. Figure 3 shows the relationship in a scatter plot with a linear regression line fit to the data. The analysis shows that there is positive
relationship between teacher relationship and belonging in college. The strength of the relationship is .50 and statistically significant (r=.476; p<.001). In addition, the R-Square value for the regression is .226 (p<.001) indicating that nearly one-fourth of the variance in school belonging at college is explained by the relationship with high school teacher. Although this leaves a significant proportion of the variance to be explained by other important variables, the unique contribution of relationship with students in high school from at least one important teacher appears to be a very important component of student success in college.

**Discussion**

The study extended the literature on how Hispanic students’ relationships with their high school teachers impacted their academic resilience at the university level. Although some researchers have found that school belonging tends to decline among students as they negotiate the education system (for example, Anderman, 2003; Morrison, et al., 2003), for the students in this study, the relationship with their high school teachers contributed significantly to their feeling of school belonging at the university level, which perhaps has led to their academic successes at the university.

Many implications of the results directly relate to the literature and to the practice of family and consumer sciences. Much of the literature speaks to the need for culturally competent teachers who can develop culturally responsive curriculum that allows all students to feel included and successful in the classroom (Cartledge & Koura, 2008; Richards, Brown, & Forde, 2007). One of the outcomes of this positive learning environment was evidenced in this study. Students who reported having a healthy, supportive relationship with their secondary teachers were able to transfer that feeling of belonging to the university level, perhaps contributing to their academic successes. From a systems perspective, one would assume that if feedback loops between teachers and students are present, and the environment demands that students perform well in school and are rewarded for such performance, higher levels of cooperation and positive affect are achieved for everyone involved. These unspoken norms, in turn, are the catalyst for the development of cognitive schemata about how students should act, feel, think, and respond in
academic environments. These internalizations are believed to be the underlying reason that the strong statistical relationship was found in the analysis of data in the current study. In addition, the idea is strengthened that the relationship between teacher and student may be equally important as the content of the class being taught, in terms of long-standing academic success for Latino students.

Teacher educators should educate their pre-service teachers about the benefits of a positive inclusive learning environment and how to develop such an environment in their own classrooms when they begin to teach. But as importantly, teacher educators should model for their university students how to develop and maintain such an atmosphere in the classroom. Developing the supportive relationship with students at the university level may serve to not only teach those students how to create such an environment, but could also serve to retain at-risk students in programs. Teacher educators have the opportunity to create that supportive learning environment in their own classrooms and foster the development of such a learning environment in the classrooms of the future.

All teacher educators can benefit from receiving information about dominant cultural attitudes and beliefs that can affect Mexican American students’ ways of knowing and being in academic settings. Further, teachers can learn how to develop and provide culturally responsive teaching strategies for Hispanic students so we can better serve this population. Some educators may not be aware that they are contributing to the problem by not providing culturally relevant context to their ethnically and linguistically diverse students (Taylor, 2010). Others may be aware but may be lacking proper training on how to effectively intervene. Providing meaningful multicultural education to educators which leads to a personal and professional transformation is required to adjust the current European American teaching pedagogy to accommodate diverse learners and foster their achievement and success.

Administrators must commit to develop cultural diversity in their school systems by actively recruiting faculty of cultural and ethnic diversity, providing transformative learning experience to their existing staff on the unique needs of culturally diverse students, and openly demonstrating support for students of all cultural backgrounds by creating opportunities for ethnic activities. Sensitivity training and cross-cultural training should be frequent and ongoing elements of professional development for all college personal.

In conclusion, although the research on academic resiliency for Hispanic students is still in the developing stages, certainly all avenues must be explored. This study supported using a model that examined factors contributing to academic success in the Latino population rather than utilizing a deficit-based model; understanding how some Hispanic students achieved academic success gives educators a window for shaping instruction in a fashion that supports academic resiliency in the growing Latino population. For example, one piece of this puzzle appears to be indicated by the results of this study: high school teachers, because of their development of positive learning environments for their Hispanic students, were able to foster a sense of belonging at the university level, perhaps leading to the academic resiliency of these students. This indicates the potential for the developmental canalization of academic success and points to interpersonal relationships between students and faculty as one conduit for this developmental phenomenon to be initiated.

Limitations
The findings are limited because they are based on self-report data collected at a single point of time. Students were asked to report on their perceptions of how their high school teachers perceived them and the relationships they remembered having with their high school...
teachers. They were asked to respond to statements about their experiences at the university and how they felt about their social interactions with their professors and other adults associated with the university. There may be some other effect impacting their sense of belonging which was not captured in the current data. The subjects were female. Due to the nature of sense of belonging, a gender effect is predicted. However, this gender effect was not tested by the current study. Additional research would benefit from larger samples including subjects of both genders and perhaps comparison with non-Hispanic university students.

References


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