

Social Effects of Hispanic Students Enrolled in an AP Class in Middle School

Alexandra Shiu

McLennan Community College

Todd Kettler

Coppell Independent School District

Susan K. Johnsen

Baylor University

The middle school years are a critical time in students' lives. These years lay the foundation for students to learn more about themselves, select their close friends, and form educational aspirations for the future. A sense of belonging, or how connected and accepted students feel in terms of relationships with peers and school personnel, plays a role in school engagement (as measured by attendance, participation in school activities, and effort in the learning process). This sense of belonging is either formed or not formed during the sensitive middle school years (Osterman, 2000).

Middle school students primarily cite interpersonal reasons for why they feel that they belong at school (Nichols, 2006). Reinforcing friends tend to enhance a student's perceived self-worth while positively affecting that student's sense of belonging (Shulman, 1993) and attitudes about school and academic engagement (Nichols, 2006; Osterman, 2000; Woolley, Kol, &

Waco Independent School District (WISD) initiated a project offering AP Spanish Language to Hispanic students in the eighth grade. The Hispanic students in this AP Spanish Language class and a similar comparison group answered survey questions on parental involvement, composition of peer group, sense of belonging at school, academic attitudes, and academic aspirations. Data gathered indicated that the students enrolled in the AP course made friends with peers who cared more about grades, enjoyed reading in English, and were more optimistic about their future family, future job, and their service to the community. These results suggest that Spanish-speaking skills can be viewed as a strength and can be used as a gateway, rather than a barrier, to academic success. Enrolling at-risk native Spanish-speaking students in an AP Spanish Language class during their eighth-grade year can create a peer group that honors the students' native language. This academically supportive peer group can play a role in students' decisions to enroll in higher level coursework in high school. Because beliefs about self and school are deep rooted and peer group influences are intensifying during middle school, the academic benefits of AP participation need to be extended to Spanish-speaking Hispanic students. AP Spanish Language programs such as this seems to be a feasible way to target Hispanic middle school students and create an academically supportive peer group that will positively influence students' educational aspirations.

Summary

Bowen, 2009). In fact, minority students benefit more from a sense of belonging as compared to White students (Battistich, Solomon, Watson, & Schaps, 1997). Social support serves as a “protective-stabilizing role in the relationship between socioeconomic status and academic performance of students of low socioeconomic status” (Malecki & Demaray, 2006, p. 390).

Unfortunately, perceptions of belonging often decrease sometime after sixth or seventh grade (Anderman, 2003). By the time students reach ninth grade, they feel most vulnerable to peer pressure and tend to engage in risky behavior (Boyd & Tashakkori, 1994). Moreover, Hispanic students are more likely to face structural barriers such as “low income, experiences of discrimination, and feeling unwelcome at school” (Martinez, DeGarmo, & Eddy, 2004, p. 145). For academic success to occur, students need to feel that they belong to an academic community.

Acknowledging the importance of academic development during the middle school years, the College Board has recently been extending its Advanced Placement (AP) programs beyond high school to middle school (Ezarik, 2004; Flannery, 2007; Hoff, 2002). A spokesperson for the College Board reported that focusing on the high school years is inadequate in order to prepare students for college. She stated, “by the time they’re in 10th or 11th grade, there’s no amount of acceleration that will get them ready for college” (Hoff, 2002, p. 10). Similarly, the president for the ACT assessment company education division stated that by eighth grade, students “already are accelerating on the road to college or [are] completely derailed . . . it may be that eighth grade is too late” (Flannery, 2007, p. 24). Schools clearly need to create mechanisms to engage middle school students in courses that prepare them for college-level work.

Given the importance of both social and academic factors in influencing middle school students’ success, this study examines the effects of connecting students from Hispanic backgrounds to more academically supportive peers with the ultimate goal of increasing their educational aspirations. The Middle School AP Spanish Language program considers student language diversity as an advanced talent rather than a risk factor (Kettler, Shiu, &

Johnsen, 2006a). Native Spanish-speaking students from economically disadvantaged backgrounds are offered an opportunity for intensive Spanish instruction in an AP Spanish Language class while in eighth grade. Kettler, Shiu, and Johnsen (2006b) found that offering AP Spanish Language to native Spanish speakers in middle school can provide a gateway to advanced academics for a population of students who typically face barriers to such courses (College Board, 2001; Ndura, Robinson, & Ochs, 2003).

Effects of Advanced Placement Courses

To raise educational aspirations, many schools offer AP classes for academically able high school students. These classes provide students with a more rigorous course path and predict future leadership endeavors (Curry, MacDonald, & Morgan, 1999). Moreover, AP students are twice as likely to attend graduate school, graduate with a double major, and specialize in majors with more stringent grading standards (Curry et al., 1999). Other benefits include colleges' consideration of rigorous high school courses during the admissions process (Solorzano & Ornelas, 2004) and college credit earned prior to enrollment in higher education programs, which saves high school students thousands of dollars in tuition money (Santoli, 2002).

Because research documents the academic benefits of participation in AP programs and because success in AP classes is built on a rigorous academic program, curriculum administrators now consider the pre-AP concept as an academic option during the middle school years (College Board, 2002). They believe that it is essential for students to "begin to develop college awareness and aspirations in the middle school years in order to take . . . gate-keeping courses, which then position students for high school coursework that aligns well with college enrollment requirements" (McDonough, 2004, p. 5). The Education Resources Institute (2007) even suggested that all schools

... should adopt informed policies that require a rigorous college-preparatory curriculum as the “default option” for all students. In Texas and Indiana, for example, all high school students are automatically enrolled in a college-prep curriculum unless they formally opt out with parental consent. This demonstration of high expectations, tangibly embedded in policy and practice, motivates students to achieve academically and helps create a culture of college-going within schools. (p. 2)

With minority students, research shows that Latinos who enroll in rigorous coursework both attend and persist in higher education at higher rates than their peers who follow a more general track (Martinez & Kloppot, 2005). Moreover, the language experience of native Spanish-speaking students may make them uniquely qualified to participate in AP courses much earlier than typical monolingual students who may not have the academic background to take rigorous language courses.

Factors That Influence Hispanic Students’ Educational Aspirations

Social factors of family, friends, and a sense of belonging tend to influence Hispanic students’ educational aspirations. The participation of Spanish-speaking students in advanced academics may affect their sense of belonging and these other factors that influence their educational aspirations.

Family

With the parents’ own educational levels and aspirations transferring to their children (Behnke, Piercy, & Diversi, 2004), the role of the family is particularly important in the Hispanic culture (Aspiazu, Bauer, & Spillett, 1998). In fact, family support and aspirations are the primary factors in predicting Latino students’ overall emotional and academic adjustment to college

(Schneider & Ward, 2003). On the other hand, parental involvement appears to be more advantageous for Latino students in terms of making informed academic decisions about which courses to take in high school if the parents are from higher socioeconomic backgrounds (Valadez, 2002). Parents who are immigrants or who have limited English proficiency themselves may not be familiar with how the American educational system works and may work long hours and have multiple children (Romo & Falbo, 1996). Romo and Falbo (1996) reported,

Uneducated parents had less opportunity to monitor their children . . . were unable to be an advocate for their children when their children needed help in overcoming administrative obstacles within the school. . . . These parents did not know when their advocacy was needed, they did not know how to be an advocate, and they were discouraged from doing so by their children. Many parents told us that their children begged them not to go to the schools because the students were ashamed of them. (p. 197)

When parents are not able to help their children due to language or cultural barriers or due to the lack of access to school information, other resource options, such as peer groups, become more significant in students' lives (Lewis-Charp, Yu, & Friedlaender, 2004).

Friends

Having the right peer group provides a reason to stay committed to school (Anderson, Christenson, Sinclair, & Lehr, 2004; Brown & Theobald, 1998; Gibson, Gándara, & Koyama, 2004). Being around other academically focused people tends to create a positive feedback effect and a "culture of learning" (Klopfenstein, 2004; Ndura et al., 2003). Hispanic students tend to select their closest friends from their own ethnic group, which provides a sense of community and access to a support network.

If the peer group values education, the student's friends may serve as role models for staying on track academically (Gibson et al., 2004). On the other hand, if the peer group does not value education, a student's attitudes toward academics may be negatively affected. Unfortunately, Hispanic students tend to select friends that earn lower grades, spend less time on schoolwork, and have substantially lower performance standards (Steinberg, 1996), which compounds the challenge of Hispanic students having the highest high school dropout rate in relation to other groups. Despite having a differing and/or conflicting cultural/linguistic background, it is critical for minority students to be able to engage in and access social networks at home and school to obtain important information that will encourage academic success. Successful Hispanic students are able not only to form alliances with achieving peers but also with key individuals within the school setting (Lewis-Charp et al., 2004; Saylor & Aries, 1999).

Sense of Belonging

As mentioned earlier, the sense of belonging at school affects a student's educational aspirations (Aguirre & Hernandez, 2002; Gibson et al., 2004; Romo & Falbo, 1996; Stanton-Salazar, 2001). This belonging can be enhanced by school personnel who take a particular interest in a student's academic and social well-being. Not only is the development of social relationships with teachers and school personnel crucial to ethnic minority students for effective socialization but also for the development of a "bicultural network orientation" (Stanton-Salazar, 1997, p. 25). This network facilitates the crossing of cultural borders, the overcoming of institutional barriers, and the entrance into "multiple community and institutional settings" where instrumental social relationships can be formed and "social support and funds of knowledge can be obtained" (Stanton-Salazar, 1997, p. 25). Stanton-Salazar (1997) emphasized that minority children must remain "embedded in familial and communal support systems" (p. 33) while accessing information from their friends, teachers,

and counselors from the dominant culture and from their own culture (Darder, 1991). Unfortunately, Mexican-origin students in particular are “more likely than other students to report they do not feel they belong in the schools in which they are a minority” (Gibson et al., 2004, p. 11). Therefore, schools need to create a learning atmosphere that is culturally responsive.

In summary, students can successfully adapt and achieve in life despite challenging circumstances if they have positive relationships with their family and friends (Werner & Smith, 1988); attentive, caring teachers (Coburn & Nelson, 1989; Geary, 1988; Werner & Smith, 1988); and supportive classmates (Rutter, 1984). If a school is a place that is sensitive to the minority students’ culture and fosters a safe learning environment, the students will respond with higher motivation to meet academic demands (Aguirre & Hernandez, 2002; Stanton-Salazar, 2001).

Purpose of the Study

Because AP courses tend to raise educational aspirations and provide a mechanism for connecting students to more academically supportive peers, we wanted to explore these effects with Spanish-speaking students taking an AP course earlier than typical during middle school. The questions we sought to answer included:

1. Would any native Spanish-speaking students enroll in an AP Spanish Language class in eighth grade?
2. How might they be the same or different from others who choose not to enroll?
3. Would there be differences in the students’ characteristics as identified in the literature?

Therefore, the major purpose of this study was to describe the differences in social factors between Spanish-speaking students who chose to enroll and who did not choose to enroll in an AP Spanish Language course offered for native Spanish speakers at the middle school level.

Method

Context

To address this question, the Waco Independent School District (WISD) initiated a project offering AP Spanish Language to Hispanic students in the eighth grade (AP Spanish Project). WISD is an urban school district and, at the time of data collection, had 80.8% of the 15,591 total students meeting economically disadvantaged criteria. This district contained 45.7% Hispanic, 37% African American, and 16% White students with 11.6% of students being limited English speakers (Waco Independent School District, 2005). The AP Spanish Project was made possible by the AP Incentives grant (Perkins, Kleiner, Roey, & Brown, 2004) administered by the Texas Education Agency. All AP middle school teachers attended College Board Summer Institutes and partnered with high school AP teachers in developing age-appropriate curriculum. The goal of the grant was to promote student success, develop self-confidence, and support student academic aspirations among an at-risk student population (Fierro-Treviño, Pérez, & Kettler, 2005). This study describes the third year of the implementation of the AP grant program when a total of 4 WISD middle schools offered AP Spanish Language programs.

Participants

In order to qualify for the AP Spanish Project, the WISD students had to be native Spanish speakers, economically disadvantaged, and in the eighth grade (<http://www.teamiddleschoolspanish.org>). Participation was voluntary, and WISD teachers were encouraged to recommend students based on previous performance. During the 2004–2005 school year, 16 Hispanic males and 42 Hispanic females elected to enroll in the AP Spanish Language class across the 4 participating middle schools. All of these students were included in the study. The average age of the AP students was 14.33 years ($SD = .70$).

Students gave their actual birth dates so the researchers were able to report ages in years and months as of the survey administration date (e.g., an age of 14 years and 3 months would be coded as 14.25).

A random sample of eighth-grade classes across the same 4 middle schools served as the comparison group. The comparison group included 18 male and 6 female Hispanic students who also spoke Spanish as their first language but did not take the AP course. The average age for students in this group was 14.73 years ($SD = .77$). The small number of students in the comparison group was influenced by the researchers' random selection of classrooms. This comparison sample was the one that emerged. An independent samples t test showed no significant differences on state reading achievement tests between these two groups, $t(72) = 1.13, p = .263$. Other students in these comparison classes either spoke English as their first language or were not Hispanic and were not included in this study.

Instrument

The students completed a 20-minute survey that was available in Spanish or English. The researchers adapted a survey from the U.S. Department of Educational Statistics Educational Longitudinal Study of 2002 Student Questionnaire that included 98 items (<http://nces.ed.gov/surveys/els2002>). Because the purpose of the instrument was to assess social differences, the researchers selected 28 items rated on a Likert scale that focused on the composition of peer group, sense of belonging at school, academic attitudes, and parental involvement. Wording referring to "this semester" or "this term" was replaced with "this school year." Instead of students reporting the number of hours spent on homework, the researchers created a Likert scale for the students to mark the appropriate answer. Certain items about student attitudes in the subject of math or math tests were changed to attitudes toward school tests in general. Items referring to high school competitions in vocational or technical programs, the student's job, parents' jobs, drugs, bullying, gangs, transfer-

ring schools, in-school suspension, friends' parents, access to computers, intramural sports, the school library, time spent on extracurricular activities, SAT and ACT tests, and becoming an expert in one's field were not used.

Procedures and Data Collection Methods

In May of 2005, the survey was administered to all students in the AP classes and the comparison group, which was comprised of students in 8 randomly selected eighth-grade classrooms from 4 different middle schools in the district. The survey was completed at the end of the eighth-grade year and teachers and/or researchers administered it in the students' regular classrooms during the school day. Although the instructions were read in English, the students were able to choose the Spanish or English version of the survey. The survey took approximately 20 minutes to complete and was then collected by the researcher. At the end of the AP course, the students were also administered the College Board AP Spanish Language exam. The school district paid for the students' AP exam fees to eliminate any financial barriers to participation in the program (Ndura et al., 2003).

Data Analysis

A principal component analysis among the Likert-style items was used to identify factors measured by the questionnaire. Four main factors were identified from the scree plot: (a) academic self-confidence ($\alpha = .88$)—defined as dealing with the student's perception of working hard and succeeding in school; (b) social and external influences ($\alpha = .74$)—defined as dealing with importance of grades to their best friends and their future lifestyle; (c) parental discussion ($\alpha = .84$)—defined as dealing with the student's perception of how often they discuss things with their parent(s); and (d) parental involvement ($\alpha = .71$)—defined as dealing with the student's perception of the parent having time for them and helping them with homework. A fifth factor, independence from family, was not used in the data analy-

sis due to the low reliability estimate of .47. The retained items had component values greater than .500 on one factor and less than .300 on the other factors (see Table 1 for component loading for each factor). The scores for items that were negative statements were reverse coded. The values of the items that loaded highly were summed to create an index for each factor (see Table 1 for a short descriptor of items included in each of the factors).

Results

In examining the results, differences were found between groups and between genders. Separate two-way analysis of variances conducted with AP group membership and gender as the two independent variables and each of the four factors as dependent variables revealed interaction effects between AP participation and gender, $F(1, 66) = 14.77, p < .001$, for the social external influences factor as well as the parental involvement variable, $F(1, 75) = 11.80, p = .001$. In this section, we will discuss the main effects within the context of the interactions.

Main Effect of AP Group Membership: Social and External Influences Factor

Significant differences were found in social and external influences between Hispanic students who chose to enroll in the AP class (AP) and the Hispanic students who did not enroll (non-AP). These influences included the students' perceptions toward their peer group, reading in English, and their future outlook on life. For the social and external influences factor, the analysis revealed a main effect of AP group membership, $F(1, 66) = 23.97, p < .001$ (see Table 2). The AP group reported that they had close friends who cared more about grades and felt that reading English was "more fun" as compared with the non-AP group. They also felt that having children and a happy family life, having a steady job, and helping people in the community were more important as compared with the other Hispanic group.

Table 1
Component Loadings for Each Factor

Factor and Item	Factor Loading	R^2	α
Academic Self-Confidence		12.83	.88
Can Learn	.792		
Can Remember	.789		
Test Confidence	.771		
Keep Studying	.725		
Gain Skills	.657		
Best Effort	.585		
Understand Text in Spanish	.572		
Social and External Influences		7.99	.74
Steady Future Job	.631		
Help Community	.609		
Having Children	.560		
Happy Future Family Life	.560		
Reading English Is Fun	.562		
Importance of Grades for Second Best Friend	.548		
Importance of Grades for Third Best Friend	.533		
Parental Discussion		7.30	.84
School Activities and Events	.782		
Things From Class	.748		
Grades	.714		
Going to College	.614		
Community, Nation, World	.595		
Selecting School Courses	.568		
Limit Time With Friends	.556		
Parental Involvement		4.93	.71
Homework Help	.740		
Check if Homework Done	.687		
Reward Good Grades	.662		
Have Time for Me	.609		

Table 2

Means and Standard Deviations of Factor
Indices of AP and Non-AP Groups

	<i>M</i>		<i>SD</i>		Effect Size
	AP (<i>n</i> = 58)	Non-AP (<i>n</i> = 24)	AP (<i>n</i> = 58)	Non-AP (<i>n</i> = 24)	
Factor 1: Academic Self-Confidence	20.06	20.05	4.45	4.98	0.00
Factor 2: Social and External Influences	22.88***	19.05	3.09	3.17	1.24
Factor 3: Parental Discussion	18.20	18.55	5.18	4.58	-0.07
Factor 4: Parental Involvement	11.67	12.00	2.62	2.82	-0.12

Note. *** $p < .001$.

There was a large effect size between groups (Cohen's $d = 1.24$; Cohen, 1988).

It is interesting to note that more Hispanic females chose to enroll in the AP class (72.4%) while fewer females were in the Spanish-speaking comparison group (25%). Because more Latina females chose to enroll in the AP class than in the non-AP comparison group, we studied the interactions between gender and AP group membership. Upon a closer examination of the males and females in each class (AP and non-AP separately), a large effect size difference (Cohen's $d = -0.83$) for the social and external influences factor was found for students in the AP class (see Table 3).

The main effect of AP group membership was dominated by an interaction effect, $F(1, 66) = 14.77, p < .001$. So within the AP class, the females as compared to the males were more likely to agree that it was important to (a) have close friends who cared strongly about good grades, (b) have a steady job, (c) have a happy family life, and (d) give back to the community. The opposite was found for the females versus the males in the non-AP class (see Table 4). In this case, the non-AP males were much

Table 3

Means and Standard Deviations of Factor Indices
of Males and Females in the AP Group

	<i>M</i>		<i>SD</i>		Effect Size
	Males (<i>n</i> = 16)	Females (<i>n</i> = 42)	Males (<i>n</i> = 16)	Females (<i>n</i> = 42)	
Factor 1: Academic Self-Confidence	20.06	20.05	4.54	4.48	0.00
Factor 2: Social and External Influences	20.93*	23.66	4.08	2.22	-0.83
Factor 3: Parental Discussion	16.86	18.67	5.53	5.03	-0.34
Factor 4: Parental Involvement	10.40	12.12	3.07	2.32	-0.63

Note. * $p < .05$.

Table 4

Means and Standard Deviations of Factor Indices
of Males and Females in the Non-AP Group

	<i>M</i>		<i>SD</i>		Effect Size
	Males (<i>n</i> = 18)	Females (<i>n</i> = 6)	Males (<i>n</i> = 18)	Females (<i>n</i> = 6)	
Factor 1: Academic Self-Confidence	20.21	19.67	4.41	6.62	0.10
Factor 2: Social and External Influences	20.07*	16.50	2.60	3.21	1.22
Factor 3: Parental Discussion	17.93	20.00	4.60	4.60	-0.45
Factor 4: Parental Involvement	12.82*	9.67	2.10	3.50	1.09

Note. * $p < .05$.

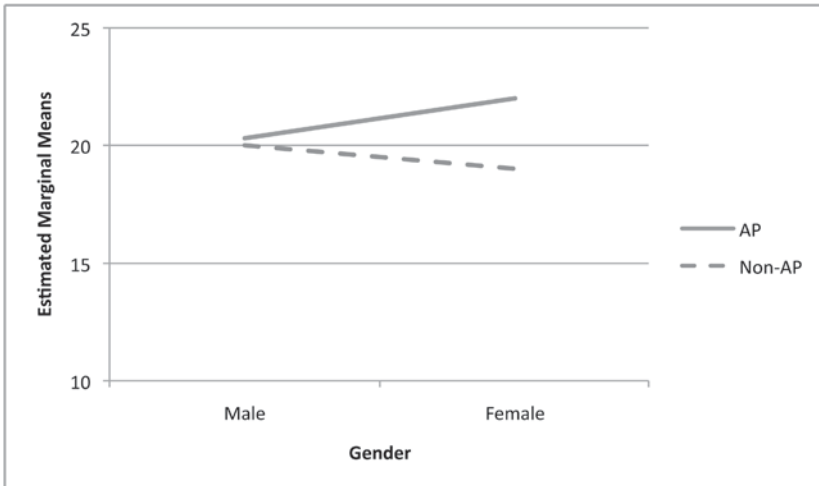


Figure 1. Plot of two-way analysis of variance on the social and external influences factor.

more likely to be influenced by social and external influences such as close friends, grades, and their future (Cohen's $d = 1.22$).

Main Effect of Gender Within Non-AP Group: Social and External Influences and Parental Involvement Factors

In the non-AP group, two factors showed statistically significant differences between males and females and also showed large effect sizes: social and external influences (Cohen's $d = 1.22$) and parental involvement (Cohen's $d = 1.09$). Interestingly, in both of these cases the males in the non-AP group reported higher mean scores, as shown in Figures 1 and 2. This finding was also evidenced by an interaction effect of group membership and gender on this variable, $F(1, 75) = 11.80, p = .001$. Thus, for the Hispanic students who did not elect to enroll in the AP course, males were more likely to be influenced by social and external influences such as their close friends caring about good grades and caring about their future jobs, families, and being able

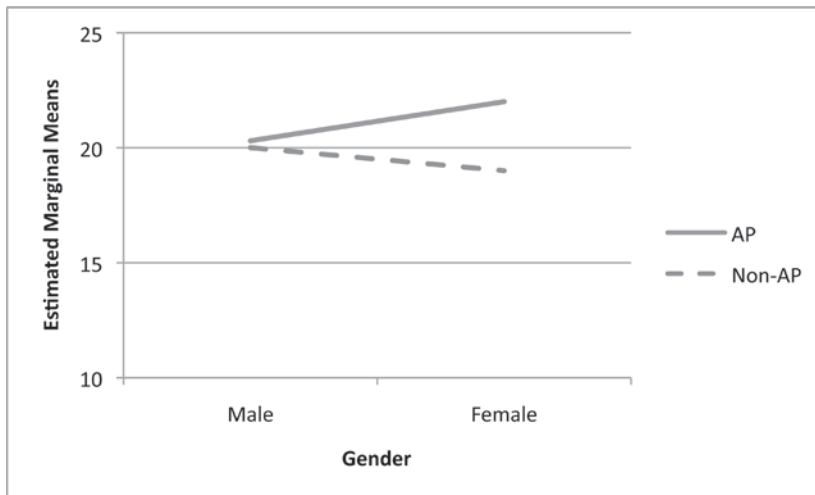


Figure 2. Plot of two-way analysis of variance on the parental involvement factor.

to give back to the community. The males who were not enrolled in the AP class were more likely to agree that their parents had time for them and spent time with them on their homework, which can be seen on Figure 2.

There were no significant differences found in the following factors between the males and females in the AP group: academic self-confidence (Cohen's $d = 0.00$); parental discussion (Cohen's $d = -0.34$); or parental involvement (Cohen's $d = -0.63$; see Table 3). There were no significant differences found in these factors between the AP and non-AP groups: academic self-confidence, parental discussions, or parental involvement (see Table 2). The academic self-confidence mean scores of the AP and non-AP group were not significant (Cohen's d effect size of 0.00). There were very small negative Cohen's d effect sizes for parental discussion ($d = -0.07$) and parental involvement ($d = -0.12$).

Discussion and Implications

The fact that more Latina females elected to enroll in the AP Spanish Language class is mirrored by a nationwide trend of females academically outperforming males. In 2000, female high school graduates earned a higher overall mean GPA as compared to male graduates (Perkins et al., 2004). Osterman (2000) did note that males were especially vulnerable at forming a sense of belonging in middle school. Recent research suggests that males starting at the elementary level would benefit from more group work and interaction with others (Benenson & Heath, 2006). These findings seem to indicate the need for more research in classroom strategies to keep young males engaged in more rigorous coursework.

The presence of external influences is not surprising, as the earlier literature mentioned peer group (Anderson et al., 2004; Brown & Theobald, 1998; Gibson et al., 2004; Lewis-Charp et al., 2004), family (Aspiazu et al., 1998; Behnke et al., 2004), and a sense of belonging (Aguirre & Hernandez, 2002; Stanton-Salazar, 2001) as influences in Hispanic students' academic aspirations. However, the influences were different and significantly more positive for the AP group. The AP students reported that their close friends were more academically supportive and more optimistic about their future. Also, the females in the AP course seem to be affected more by social and external influences as compared to the males in the AP class.

Both parental involvement (taking time to check if homework was done and helping with homework) and parental discussion (about which courses to take, world events, and grades) showed interesting findings between males and females. In both the AP and non-AP groups, the females reported higher scores for parental discussion. However, females in the AP course and males in the non-AP group reported higher levels of parental involvement—parents were more involved with their homework and had time for them. Parents actually took time to check to see if they had done their homework, helped them if needed, and rewarded them for good grades. This parent involvement

may have been more important for females in the AP class rather than just discussing grades and activities from class. On the other hand, while males in the non-AP group also reported higher parental involvement, it did not appear to counteract the influence that their peers may have on their choice of courses.

A recent follow up of the 58 original students in the AP Spanish Language class showed that these students continued taking advanced classes. As freshmen in high school, 54 out of the remaining 55 students still in Waco ISD were enrolled in at least one pre-AP or college preparatory class (98.2%). Of these 54 students, 7 students were taking one pre-AP/college preparatory class (13%), 10 students were taking two pre-AP/college prep classes (18.5%), and 37 students were taking three or more pre-AP/college prep classes (68.5%). Prior research suggests a predictive relationship between AP enrollment/success and college readiness. The “willingness of a student to enroll in an AP course and take an AP exam conveys information about that student that predicts that the student is more likely to graduate from college” (Dougherty, Mellor, & Jian, 2006, pp. 6–7). According to data collected in Texas public colleges and universities, low-income students who not only took an AP exam but also passed at least one AP exam had higher college graduate rates than non-AP students by 26 percentage points, even after controlling for school differences and students’ observed characteristics, such as prior academic achievement (Dougherty et al., p. 9). Perhaps earlier success, such as passing the AP exam, can positively affect students’ future educational aspirations.

In addition to the pre-AP classes, 18 of the 55 students in the group enrolled in AP Human Geography. This AP class is the only one offered to freshman in WISD. While 14.6% of the total freshman class (162 out of 1,110) enrolled in this course, 32.7% of the students from the group of 55 AP Spanish students enrolled (18 out of 55). Thus, the students in the original AP group were more likely than the general freshman population to take an additional AP class (Human Geography).

Although it is impossible to know if social differences were present before the students chose to enroll in the AP Spanish

Language class, these results do suggest that students who elect to take AP courses are more likely to have positive relationships with friends who have higher academic aspirations and are more likely to continue in AP courses. Future studies need to include pre- and postassessments to determine specifically which prior social and academic factors existed and contributed to the enrollment in the AP class. Did these students already have positive relationships with an academically oriented peer group? Did they have a sense of belonging? Or did the AP course act as an intervention, influencing social factors and eventual academic achievements? Would students who had not enrolled in an AP course at the middle school level enroll in as many subsequent courses at the high school level?

Tierney and Jun (2001) emphasized the importance of cultural integrity programs for successful college preparation programming that

... call upon students' racial and ethnic backgrounds in a positive manner in the development of their pedagogies and learning activities. Cultural integrity removes the problem from the child and looks on the child's background as neither a neutral nor a negative factor for learning. Instead, the adolescent's cultural background is a critical ingredient. (p. 211).

If AP can act as an intervention that honors the cultural background of students, then schools may wish to incorporate an advanced Spanish track for all Spanish-speaking students. In this way, more Spanish-speaking students may have the prerequisite language skills necessary to successfully complete the AP course in middle school. The AP course might then act as the needed gateway to academic success.

Benefits of early intervention programs that seek to raise educational aspirations include: "a doubling of the college-going rates for at-risk youth, an expansion of students' educational aspirations, an increase in students' educational and cultural capital assets, and a boost to college enrollment and graduation rates"

and these benefits are “often greatest for low-income students, who enter such programs with low college expectations and low achievement levels” (McDonough, 2004, p. iv). It is important to note that none of the AP students in this study were previously identified as gifted and all qualified as economically disadvantaged. Educators need to examine ways of creating mechanisms at the middle school level so that at-risk Spanish-speaking students have opportunities for creating or reinforcing an existing peer group that honors students’ native language, encourages academic achievement, and fosters students’ thinking about their future careers and well-being of themselves, their families, and their communities.

Limitations

A major limitation of this study is self-selection bias. This is a descriptive study of the observed differences between groups. Participation of the students in the AP class was completely voluntary. Because none of the students were given a survey prior to the AP course, it is unknown if the AP students were already motivated to succeed academically. A way to control for this bias would have been randomly assigning students to enroll and not enroll in the AP Spanish Language course in eighth grade, or to collect data through a survey prior to enrollment. In addition, the AP students’ positive social pressure may have influenced their enrollment in the AP class, making positive social pressure a preexisting factor. Future researchers should also consider conducting similar studies with larger sample sizes.

Conclusion

The AP students in this study reported having more academically supportive peers and being motivated to take additional advanced academic classes in high school. Although in the present descriptive study the researchers were unable to

determine if these characteristics existed before enrollment in the AP Spanish Language class, the results do suggest that the peer group is very important. The peer group can influence academic motivation, which may include choosing whether or not to take advantage of enrollment in rigorous curriculum such as AP Spanish Language, even at the middle school level.

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