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with Latin American Backgrounds**

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### Abstract

Disidentification with academics is sometimes cited as a factor in the underperformance of ethnic minority students, and the current study examined whether this would be evident among adolescents from Latin American backgrounds. The associations of adolescents' grade point average (GPA) and academic self-concept with their global self-esteem were examined in a longitudinal sample of 552 adolescents from Latin American, Asian, and European backgrounds. Correlational and longitudinal within-person analyses indicated that adolescents from Latin American backgrounds demonstrated levels of academic identification similar to their more highly achieving peers from other backgrounds. These findings contribute to the emerging body of evidence suggesting a strong level of motivation among students from Latin American backgrounds despite the significant challenges to their academic success.

**KEYWORDS:** Latinos, academic achievement, academic identification, academic disidentification, adolescence

Disidentification with academics is sometimes cited as a contributing factor to the underperformance of many ethnic minority students during the high school years. For example, it has been suggested that disidentification can be both a reflection and a source of the educational difficulties facing many African American students (Aronson & Steele, 2005; Steele, 1997). As defined by Osborne (1997), academic identification is “the extent to which one’s self-evaluation in a particular area (e.g., academics) affects one’s overall self-evaluation (global self-esteem)” (p. 728). Disidentification with academics, in contrast, is the de-emphasis upon academic performance as a source of one’s global self-esteem. Disidentification is thought to be a way to cope with the threat to self-esteem posed by persistent academic difficulties and being a member of an ethnic group stereotyped as low performing. In support of the disidentification hypothesis, Osborne found that the correlation between academic performance and self-esteem declined precipitously among African American males during high school, such that it was essentially zero at the 12th grade, although re-analyses of the same dataset have raised questions about the magnitude and pervasiveness of this effect (Morgan & Mehta, 2004).

We wished to examine whether adolescents from Latin American backgrounds also show evidence of disidentification during the high school years. Their educational experiences are similar to those of African American students. Students from Latin American backgrounds perform at levels significantly below those of their peers from European and Asian backgrounds and have an even higher drop out rate than African American students (Schneider, Martinez, & Owens, 2006). Adolescents from Latin American backgrounds also must contend with stereotypes about their academic potential (Matute-Bianchi, 1991). These students could be expected to show disidentification during high school because they have experienced academic difficulties and negative stereotypes throughout most of their school experience.

Disidentification could be particularly evident for boys from Latin American backgrounds, who, although perhaps not as clearly stigmatized as African American males, perform significantly worse in school and are less likely to attend college than females (Schneider et al., 2006).

On the other hand, disidentification may not be evident among adolescents from Latin American backgrounds. Despite their lower level of performance, these students consistently report educational aspirations and levels of academic motivation that are often higher than those of their peers from European backgrounds (Fuligni, 2001). Some observers have suggested that the extent to which the self-esteem of these students is contingent upon their academic success may be greater than among students from other backgrounds (Garcia & Crocker, 2007). Indeed, Osborne (1997) observed that the correlation between academic achievement and self-esteem among Hispanic students remained significant across the high school years, particularly among girls.

In the current study, we compared the academic identification of students from Latin American backgrounds to that of their peers from European and Asian backgrounds, two groups of students with higher levels of academic achievement during high school. Similar to the strategy employed by Osborne (1997), we first estimated ethnic and gender differences in the correlation between grade point average (GPA) and self-esteem across the years of high school. We also examined the correlations between academic self-concept and self-esteem. Although self-concept was not examined by Osborne, it is arguably a better measure for the estimation of academic identification which has been proposed to be the link between self-esteem and “one’s *self-evaluation* in a particular area (emphasis added)” (p. 728). Morgan & Mehta (2004) actually found that the link between academic self-concept and self-esteem among African American students was similar to the association among students from European backgrounds. Finally, we

employed multi-level modeling to examine group differences in the associations between changes in GPA, self-concept, and self-esteem *within* individual adolescents across the high school years. Such within-person, longitudinal analyses are stronger tests of identification because they essentially control for the potential confounding influence of other individual differences in the estimate of how academic performance and self-concept are associated with self-esteem.

## Method

### *Participants*

Starting in the 9th grade and continuing yearly through the 12<sup>th</sup> grade, students were recruited for this longitudinal study from three ethnically diverse public high schools in the Los Angeles area. In two of the schools, participants were recruited from the entire 9th grade for the first year of the study. At these schools, each subsequent year other students in the correct grade were invited to participate. In the third school, approximately half of the 9th grade was invited to participate because the large size of the school made it unfeasible to recruit the entire class. In this school, only students who had participated in 9th grade were followed in subsequent years. Students who returned parent consent forms and provided their own assent to participate completed a questionnaire during class time that included demographic information as well as information about their self-esteem and academic adjustment. At all three schools, students who had participated in earlier years but were not longer enrolled in the school were contacted and invited to participate by mail.

The sample used in the present analysis was the 552 participants from Latin American ( $n=204$ ), Asian ( $n=245$ ) or European ( $n=103$ ) backgrounds who had completed self-report questionnaires for at least 2 of the 4 years of the study. The Asian sample consisted primarily of

youths from Chinese descent (64%) and the Latin American sample consisted of youths primarily from Mexican descent (69%). Most of the students from Latin American and Asian backgrounds were from first (youths born outside of the U.S.) or the second (youths born in the U.S., but at least one parent was foreign-born) generation immigrant families. Most of the students from European backgrounds were third generation or more (youths born in the U.S. with no foreign-born parents). Adolescent girls (51%) and boys were equally represented in the sample.

Parents of adolescents from European backgrounds were more likely to have at least attended college than parents of adolescents from Asian backgrounds, who, in turn, were more likely to have at least received a high school degree than the parents of adolescents from Latin American backgrounds,  $F(2, 537) = 95.94, p < .01; \eta^2 = .26$ . Parents of students from European backgrounds were more likely to be employed in higher level occupations than Asian parents, who, in turn, worked in higher status occupations than Latin American parents,  $F(2, 493) = 67.27, p < .01; \eta^2 = .21$ .

### *Measures*

*Self-esteem.* Participants were asked a series of questions about how he/she felt about him/herself to assess self-esteem (Rosenberg, 1965). Participants responded to questions such as, "I feel that I have a number of good qualities," on a scale of 1 (strongly disagree) to 5 (strongly agree). These 10 items had good internal consistency across the years ( $\alpha s = .87$ -.88) and were similarly reliable for adolescents from all three ethnic backgrounds: (Latin American: .86-.89, Asian: .86-.88, European: .87-.89).

*Academic self-concept.* Students responded to two items assessing their self-concept of ability in school that were adapted from (Eccles, 1983). On a scale ranging from 1 (not at all

good) to 5 (very good), students responded to the item “How good are you at school?” On a scale ranging from 1 (worst) to 5 (best), students responded to the item “If you were to rank all the students in your grade from the worst to the best in their classes where would you put yourself?” An average of these two items was computed. These two items were highly correlated across the years ( $r = .61-.70$ ), and the correlations were similar for adolescents from all three ethnic backgrounds: (Latin American:  $.57-.71$ , Asian:  $.59-.67$ , European:  $.66-.76$ ).

*Academic achievement.* Adolescents’ course grades for each semester were obtained from their official school records and were averaged to create an index of academic performance, where 0 = F, 1 = D, 2 = C, 3 = B, and 4 = A. Adolescents took the same social studies classes and generally the same level of English and science classes (65% to 75% took the same level of courses). Although adolescents varied in their enrollment in different levels of mathematics classes, grades were not standardized within levels of mathematics classes because the students in higher level classes generally earned higher grades than those in lower level classes.

## Results

### *Participation Analyses*

The sample included adolescents who participated in at least two years of the study and most participated in all 4 years ( $M = 3.50$  years,  $SD = .70$ ). Given that some participants entered the study at different grades and had a different number of total of years that they could participate, a variable was created to indicate the percentage of possible years each adolescent participated. Overall, participants took part in the study in 93.2% ( $SD = 14.2\%$ ) of their possible years. Adolescents from Asian backgrounds participated in more years ( $M = 95.0\%$ ,  $SD = 12.6\%$ ) than adolescents from Latin American backgrounds ( $M = 91.5\%$ ,  $SD = 15.1\%$ ),  $F(2,535)$

= 3.84,  $p < .05$ . Those from European backgrounds participated for 92.0% ( $SD = 15.9\%$ ) of their possible years. There were no gender differences in the degree of participation.

Next, we examined differences in any of the time varying variables (i.e., GPA, academic self-concept, and self-esteem) as a function of participation. Hierarchical Linear Models (HLM; Bryk & Raudenbusch, 1992) were estimated using the following equations:

$$\text{GPA, Self-concept, or Self-esteem}_{ij} = b_{0j} + e_{ij} \quad [1]$$

$$b_{0j} = c_{00} + c_{01} (\text{Participation}) + u_{0j} \quad [2]$$

Equation 1 represents adolescents' scores on the time varying variables (i.e., GPA, Self-concept, Self-esteem) across the years of their participation in the study, and Equation 2 represents the prediction of the adolescents' average scores across their years of participation by their degree of participation (the percent of possible years that they took part in the study). Adolescents who had a higher percentage of participation had higher GPAs ( $b = .01$ ,  $p < .001$ ). There were no differences in self-concept and self-esteem based on degree of participation.

#### *Levels of GPA, Self-Concept, and Self-Esteem*

Before examining the associations between the variables, initial HLM models were analyzed in order to examine the levels of students' GPA, self-concept, and self-esteem across the high school years. A separate model was estimated for each construct and it consisted of the following equations:

$$\text{GPA, Self-Concept, or Self-Esteem}_{ij} = b_{0j} + b_{1j}(\text{Year in School}) + e_{ij} \quad [3]$$

$$b_{0j} = c_{00} + c_{01}(\text{European}) + c_{02}(\text{Asian}) + c_{03}(\text{Female}) + u_{0j} \quad [4]$$

$$b_{1j} = c_{10} + c_{11}(\text{European}) + c_{12}(\text{Asian}) + c_{13}(\text{Female}) + u_{1j} \quad [5]$$

Equation 3 represents adolescents' GPA, self-concept, or self-esteem on a particular year (i) for a particular individual (j) modeled as a function of the average of the dependent variable (GPA,

etc.) of the individual ( $b_{0j}$ ) and the year in school ( $b_{0j}$ ), which was coded 0 = 9th grade, 1 = 10th grade, etc. Equations 4 and 5 show how the average GPA, self-concept, or self-esteem and the changes in these variables across the years were modeled as a function of the adolescents' gender and ethnicity. Ethnicity was dummy coded with students from Latin American backgrounds as the baseline and gender was coded as males = -1, females = 1. These analyses were followed up with additional analyses in which the interaction between ethnicity and gender and the main effect of socioeconomic status (SES; the average of the standardized values of both parents' levels of education and occupation) and generational status (i.e., first, second, and third or greater) were added to Equations 4 and 5.

As shown in the first column of Table 1, students from Latin American backgrounds had significantly lower GPAs at the 9th grade (i.e., the baseline) than students from Asian and European backgrounds and females earned higher grades than males. GPA did not change for students from Latin American and Asian backgrounds across the high school years, but the slope was significantly more negative among students from European backgrounds. An additional model in which the interaction between ethnicity and gender was added to Equations 4 and 5 indicated variation in the gender difference in 9th grade GPA between students from Asian and Latin American backgrounds. Although girls received higher grades than boys among Asian students (female:  $M = 3.33$ ; male:  $M = 3.00$ ), there was little gender difference among students from Latin American backgrounds (female:  $M = 2.41$ ; male:  $M = 2.38$ ). There also was a gender by ethnicity interaction in predicting the change in GPA such that the decline in GPA for those from European backgrounds reported earlier was evident only for boys ( $b = -.10$ ,  $SE = .03$ ,  $p < .01$ ) as compared to girls ( $b = -.02$ ,  $SE = .02$ , ns). SES significantly predicted higher GPA at the 9th grade ( $b = .27$ ,  $SE = .05$ ,  $p < .001$ ) and a greater decline in GPA over the years ( $b = -.06$ ,  $SE =$

.01,  $p < .001$ ). Inclusion of SES, however, did not change the previously reported results according to ethnicity and gender. Generational status was unrelated to either the level of change in GPA.

Academic self-concept at the 9th grade was lower among students from Latin American backgrounds than among students from European backgrounds, but there was no difference as compared to those from Asian backgrounds (Table 1, Column 2). Self-concept also declined significantly across the high school years among students from all backgrounds. There were no gender differences in the level or change in self-concept, and follow-up analyses indicated no significant interactions between ethnicity and gender. SES and generational status were unrelated to either level or change in self-concept.

As shown in the third column of Table 1, students from Asian backgrounds and females had marginally lower levels of self-esteem at the 9th grade. However, there were no ethnic and gender differences in the change in self-esteem which remained stable across the high school years. Also, there were no significant interactions between ethnicity and gender in follow-up analyses. SES and generational status were unrelated to either level or change in self-esteem.

#### *Correlations of GPA and Self-Concept with Self-esteem across High School*

The correlations of GPA and self-concept with self-esteem are presented separately according to grade and ethnicity in Table 2. Self-concept was consistently associated with self-esteem across all grades and ethnic groups. GPA generally was significantly but more weakly associated with self-esteem, with a few exceptions. Only marginal associations existed for all students at the 10th grade, and GPA was unassociated with self-esteem for students from Asian backgrounds at the 9th grade and those from European backgrounds at the 9th and 12th grades. Analyses of covariance (ANCOVAs) with tests of equal slopes were conducted to determine

whether the magnitude of the associations in Table 2 differed significantly across ethnic and gender groups at each grade level, as well as whether ethnicity and gender interacted in predicting the magnitude of the associations. In only one case did a significant difference in associations emerge, where students from Latin American and Asian backgrounds showed a significantly higher association between GPA and self-esteem than their peers from European backgrounds in the 12th grade,  $F(2, 450) = 1.63, p < .05$ . Additional ANCOVAs indicated no differences in the associations according to generational status or the interaction between ethnicity and generational status.

*Within-Person Associations of Changes in GPA and Self-Concept with Changes in Self-Esteem*

In order to examine whether changes in GPA and self-concept were associated with simultaneous changes in self-esteem within individual adolescents across the high school years, a separate model was estimated for each predictor and the model included the following equation:

$$\text{Self-Esteem}_{ij} = b_{0j} + b_{1j}(\text{GPA or Self-Concept}) + b_{2j}(\text{Year in School}) + e_{ij} \quad [6]$$

Equation 6 represents self-esteem on a particular year (i) for a particular individual (j) modeled as a function of the average of the self-esteem the individual ( $b_{0j}$ ), the level of GPA or self-concept ( $b_{1j}$ ), and the year in school ( $b_{2j}$ ) which was coded 0 = 9th grade, 1 = 10th grade, etc. In addition,  $b_{0j}$  and  $b_{1j}$  were modeled at the individual level as a function of ethnicity and gender using the same equations and coding as described in Equations 4 and 5. Year in school was not modeled at the individual level. These analyses were followed up with additional analyses in which the interaction between ethnicity and gender and the main effects of SES and generational status were added to the individual level equations.

As shown in Table 3, changes in GPA and self-concept across the high school years were associated with simultaneous changes in self-esteem among students from Latin American

backgrounds. The only ethnic difference in the associations was that the association between self-concept and self-esteem was greater for those from Asian backgrounds. There were no gender differences in these within-person associations and follow-up analyses indicated no significant interactions between gender and ethnicity. Finally, additional analyses in which SES was included as a predictor suggested no substantive change in the results presented in Table 3 even though students with higher levels of SES evidenced a stronger association between changes in GPA and changes in self-esteem ( $b = .09, p < .05$ ). Generational status did not significantly predict the association between GPA and self-esteem, and SES and generational status did not significantly predict the association between self-concept and self-esteem.

### Discussion

Adolescents from Latin American backgrounds evidenced levels of academic identification equal to that of their peers from Asian and European backgrounds. Students from Latin American backgrounds who received higher grades in school reported significantly greater levels of global self-esteem throughout the high school years, consistent with what was found by Osborne (1997). In addition, our analyses went beyond the Osborne study by showing that academic self-concept also was significantly associated with global self-esteem for adolescents from all ethnic backgrounds. Arguably a better test of the process identification, measuring academic self-concept allows for a direct assessment of whether how students' feel about themselves academically is associated with their overall feelings of self-worth. Finally, changes in GPA and academic self-concept across high school within individual adolescents were associated with simultaneous changes in self-esteem, showing that the individual-level correlations were not simply due to other, unmeasured individual difference characteristics. Rather, adolescents' global self-esteem was sensitive to fluctuations in educational performance

during the high school years, and it was similarly sensitive for adolescents from Latin American, Asian, and European backgrounds.

Results from this study are consistent with an converging body of evidence that adolescents from Latin American backgrounds have educational aspirations and levels of motivation equal to or even greater than those of their peers from European backgrounds. These students maintain their academic motivation in part because of their identification with their cultural background and their desire to help their families, and despite the fact that they receive lower grades and standardized test scores throughout most of their school experience (Fuligni, 2001; Fuligni, Witkow, & Garcia, 2005). It is not that students from Latin American backgrounds are uninformed about their level of performance relative to that of other students, as shown by their significantly lower levels of academic self-concept in this study. Rather, these students have a strong desire to do well in school and persist in the educational pipeline, despite the many challenges and negative stereotypes that they face.

Although there was little evidence for any disidentification among the students in this study, adolescents from European backgrounds did have a significantly lower correlation between GPA and self-esteem at the 12th grade such that it was essentially zero. It is unclear why this was the case and it differs from the significant, albeit small correlations observed in a national sample by Osborne (1997). It is possible that because Osborne used self-reported grades as opposed to the official grades used in this study, the correlation in that study is more similar to the significant correlation between academic self-concept and self-esteem observed for the students from European backgrounds in this study. Given the correlation with self-concept and the fact that the within-person longitudinal analyses revealed changes in GPA and self-concept were associated with changes self-esteem across time among all ethnic groups, we believe that

the preponderance of the evidence from this study suggests that students from European backgrounds show similar levels of academic identification as their peers.

The lack of an African American sample prevented us from directly comparing the results for the Latin American backgrounds to those for the ethnic group mostly closely tied to the disidentification hypothesis. It would have been instructive to be able to perform the same analyses that were used in the current study, such as the inclusion of self-concept and the multi-level modeling across time, and which were not done in the Osborne (1997) study.

In conclusion, our findings suggest that the academic problems of students from Latin American backgrounds cannot be attributed to a disidentification with education. More likely sources include the dramatically lower quality schools that they attend and the students' relative lack of economic resources and knowledge about negotiating the challenges of secondary school and college attendance (Schneider et al., 2006). Many students from Latin American backgrounds have parents who did not complete a high school degree and who know little about the workings of American schools (Fuligni & Hardway, 2004). Yet the families have high goals, and the provision of additional resources and information about how to navigate the educational pipeline could better help their children to attain the level of educational success to which they aspire.

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Table 1

*Hierarchical Linear Models Predicting GPA, Self-Concept, and Self-Esteem across the High School Years*

	GPA	Self-Concept	Self-Esteem
	<i>b (SE)</i>	<i>b (SE)</i>	<i>b (SE)</i>
Intercept	2.39 (.07)***	3.57 (.07)***	3.85 (.07)***
Asian	.79 (.09) ***	.06 (.09)	-.17 (.09)+
European	.83 (.10)***	.35 (.11)**	.14 (.11)
Female	.11 (.04)**	.05 (.04)	-.07 (.04)+
Year in School	.00 (.02)	-.06 (.02)**	.03 (.02)
Asian	-.02 (.02)	.04 (.03)	-.04 (.03)
European	-.06 (.03)*	.00 (.03)	-.02 (.03)
Female	.01 (.01)	-.01 (.01)	.01 (.01)

*Note.* Ethnicity was dummy coded with adolescents from Latin American backgrounds serving as the reference group. Gender was coded males = -1, females = 1.

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 2

*Correlations of GPA and Self-Concept with Self-Esteem, according to Grade and Ethnicity*

Self Esteem	GPA			
	Grade	Latin American	Asian	European
9th	.23**	.12	.00	
10th	.14+	.13+	.18+	
11th	.18*	.16*	.26*	
12th	.22**	.24**	-.03	

  

Self Esteem	Self-concept			
	Grade	Latin American	Asian	European
9th	.30**	.30**	.36**	
10th	.29**	.38**	.40**	
11th	.31**	.29**	.40**	
12th	.34**	.47**	.22*	

+  $p < .10$ , \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

Table 3

*Hierarchical Linear Models Predicting Self-Esteem according to GPA and Self-Concept*

	Self-esteem	
	GPA	Self-Concept
	<i>b (SE)</i>	<i>b (SE)</i>
Intercept	3.94 (.06)***	3.91 (.05)***
Asian	-.34 (.06)***	-.29 (.05)***
European	.01 (.09)	-.00 (.08)
Female	-.06 (.03)*	-.05 (.02)*
GPA or Self-concept	.09 (.04)*	.16 (.04)***
Asian	.04 (.06)	.12 (.05)*
European	.01 (.10)	.12 (.07)
Female	.02 (.03)	.00 (.02)

*Note.* The first column includes results when GPA was the predictor of self-esteem and the second column includes results when self-concept was the predictor of self-esteem. Ethnicity was dummy coded with adolescents from Latin American backgrounds serving as the reference group. Gender was coded males = -1, females = 1. Year in school was included in the model as a control, but it is not presented in the table.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .