



Latino Achievement Mentoring Program: Latino Adolescent Academic and Psychosocial Functioning

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Introduction

As the diversity of the U.S. population increases, there is an urgent need for programs to address the needs of ethnically diverse youth, particularly Latinos. Latino youth are disproportionately more likely to experience academic underachievement and leave school without a high school diploma. Moreover, youth who drop-out or are 'pushed out' of school are more likely to be involved in problem behaviors. Thus, increasing Latino students' academic success promotes their healthy, emotional, and psychological growth. This poster examines the psychosocial and academic functioning of Latino adolescents after participating in a mentoring program for one year. The Latino Achievement Mentoring Program (LAMP) was designed to promote academic success by providing academic, emotional, psychological, and social support to girls and boys ages 10-18 through individual one-on-one mentoring by college students.

Method

Participants & Procedure

• 18 females and 6 males completed structured self-report surveys at 3 time points (baseline, 6-months and 12-months; see Table 1 for descriptive statistics).

Measures

• **Academic Adjustment.** English and Math self-efficacy scales (Eccles, Wigfield, Harold, & Blumfeld, 1993) assess respondents' beliefs about their academic competence (e.g., *Compared to other students how good are you at English?*). There are 4-items per scale, with items rated 1 (*not very good/one of the worst*) to 5 (*very good/one of the best*).

• **Psychosocial Adjustment.** The Behavioral Assessment System for Children (BASC; Reynolds & Kamphaus, 1992) measures the behavior and self-perceptions of children ages 4-18 years old. Items rated as true (1 point) or false (0 points) and summed to create composites. See Table 2 for subscale names and descriptions.

Table 1. Descriptive statistics for study variables

Variable	Mean (Standard Deviation)		
	Baseline	6 Months	12 months
Age	12.13 (1.7)	12.50 (1.7)	13.19 (1.6)
Anxiety	6.30 (4.0)	4.92 (4.7)	4.33 (4.6)
Attitude to teachers	1.91 (2.1)	1.67 (1.2)	1.70 (1.8)
Atypicality	3.48 (3.2)	2.46 (3.2)	2.83 (3.6)
Depression	2.30 (2.5)	2.12 (3.7)	1.58 (3.2)
English self-efficacy	3.85 (0.8)	3.85 (0.7)	3.55 (1.0)
Interpersonal relations	13.43 (3.1)	13.91 (3.0)	14.21 (2.5)
Locus of control	4.17 (3.7)	3.33 (3.3)	2.92 (3.3)
Math self-efficacy	3.81 (0.8)	4.03 (0.6)	3.85 (0.8)
Relations with parents	6.04 (2.7)	6.92 (2.0)	6.88 (1.5)
Self-esteem	5.78 (2.1)	6.38 (2.0)	6.67 (2.0)
Self-reliance	6.30 (2.1)	6.12 (2.5)	5.21 (1.6)
Sensation seeking	5.63 (3.1)	4.78 (3.3)	4.29 (3.3)
Social stress	3.09 (3.1)	2.79 (3.7)	2.46 (3.1)
Somatization	2.16 (1.7)	1.73 (1.7)	1.58 (1.6)

Results

• Linear models were estimated using SAS PROC MIXED to assess the pattern of academic and psychosocial functioning from baseline to 12 months after participating in LAMP. Restricted maximum likelihood (REML) was used in assessing model parameters (due to the small sample size of the study) with the Satterthwaite method to estimate degrees of freedom. Confidence intervals (CI) with ± 2 standard deviations were calculated for the random variation terms.

• Parameter estimates and fit statistics are displayed in Table 3; patterns of change over time are shown in Figures 1-3 (unadjusted means).

• Analyses indicate a significant decline in mentees' anxiety, depression, and somatization across the 12 months in the program (Figure 1). Atypicality also declined but the magnitude of this decline was reduced in later months, as indicated by a fixed quadratic effect of time spent in LAMP ($p < .10$). Furthermore, significant declines were seen in external locus of control, sensation seeking and self-reliance, and a significant increase in self-esteem (Figure 2). Improvements were seen in mentees' interpersonal relations and relations with parents (Figure 3). There were also significant decreases in English self-efficacy and attitude to teacher, however the magnitude of the linear decline of attitude to teacher was reduced in later months, as indicated by a fixed quadratic effect of time spent in LAMP ($p < .05$).

Figure 1. Psychological Functioning-Mental Health

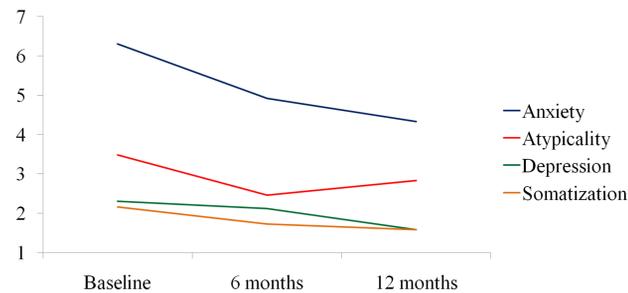


Figure 2. Psychological Functioning-Wellbeing and Risk

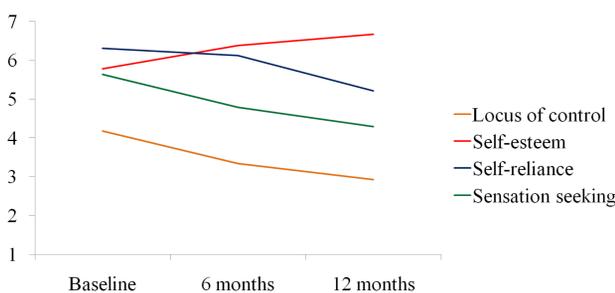


Table 2. BASC subscale descriptions

Subscale	Description
Anxiety	Feelings of nervousness, worry, and fear; tendency to be overwhelmed by problems
Attitude to teachers	Feelings of resentment, dislike of teachers; beliefs that teachers are unfair, uncaring, or overly demanding
Atypicality	Tendency toward gross mood swings, bizarre thoughts, subjective experiences or obsessive-compulsive thoughts and behaviors often considered odd
Depression	Feelings of unhappiness, sadness, and dejection; a belief that nothing goes right
Interpersonal relations	Perception of having good social relationships and friendships with peers
Locus of control	Belief that rewards and punishments are controlled by external events or other people
Relations with parents	A positive regard toward parents and a feeling of being esteemed by them
Self-esteem	Feelings of self-esteem, self-respect, and self-acceptance
Self-reliance	Confidence in one's ability to solve problems; belief in one's personal dependability and decisiveness
Sensation seeking	Tendency to take risks, to like noise, and to seek excitement
Somatization	Tendency to be overly sensitive to, experience, or complain about relatively minor physical problems and discomforts

Note. Three additional subscales were administered but did not yield significant results and are omitted to conserve space.

Acknowledgments

LAMP has been supported by major grants from the Cooper Foundation, EducationQuest Foundation, Woods Charitable Fund, Inc., and the U.S. Department of Housing and Urban Development's Community Outreach Partnership Center Initiative. Data analysis was supported by Nebraska Tobacco Settlement Biomedical Research Enhancement Funds provided by the University of Nebraska-Lincoln to Marcela Raffaelli and Gustavo Carlo. Additional funding provided to Marcela Raffaelli by the Cooperative State Research, Education and Extension Service, U.S. Department of Agriculture, Project No. 600108-793000-793323.

Figure 3. Academic and Social Functioning

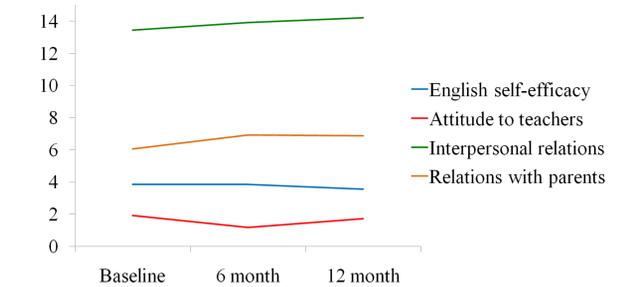


Table 3. Parameter Estimates and Model Fit Statistics for Time Spent in LAMP

Variables	Fixed Effects		Variance Components		Model Fit		
	Intercept	Linear	Residual	Intercept	REML Deviance	AIC	BIC
Anxiety	6.44**	-0.19**	5.15**	15.39**	373.10	377.10	379.50
Attitude to teachers ^a	1.93**	-0.23†	1.95**	1.05*	281.80	285.80	288.20
Atypicality ^a	3.84**	-0.38*	3.90**	8.18**	352.50	356.50	358.90
Depression	2.69**	-0.09*	3.37**	8.04**	337.80	341.80	344.10
English self-efficacy	3.90**	-0.03*	0.26**	0.49**	159.70	163.70	166.10
Interpersonal relations	13.17**	0.09*	3.34**	6.04**	333.20	337.20	339.50
Locus of control	4.23**	-0.12*	3.94**	8.05**	347.00	351.00	353.30
Relations with parents	6.18**	0.07*	2.03**	2.38**	290.60	294.60	297.00
Self-esteem	5.63**	0.09**	1.01**	3.51**	264.20	268.20	270.60
Self-reliance	6.31**	-0.08*	2.53**	2.06*	299.70	303.70	306.10
Sensation seeking	5.34**	-0.09*	2.17**	7.94**	297.40	301.40	303.80
Somatization	2.36**	-0.07**	0.18**	2.18**	218.40	222.40	224.70

Note: Fixed effects of time spent in LAMP are reported; random effects of time spent in LAMP were omitted to conserve space. † $p < 0.10$, * $p < 0.05$, ** $p < 0.01$. ^a These outcomes have a significant quadratic effect of time spent in LAMP.

Conclusions

• Results suggest that LAMP mentees experience improvement in psychosocial functioning. Further investigation is needed to determine possible reasons for the decreases found in English self-efficacy and self-reliance. For example in the case of self-reliance it is possible that after participating in LAMP mentees realized that they can rely on others for assistance and not solely on themselves.

• Additional analyses are required to see if decreases and increases in functioning can be attributed to the quality of the mentoring relationship as well as the number of mentors a mentee might have had over the course of their participation in LAMP. Furthermore, as previously mentioned, there were three BASC subscales that did not yield significant changes in functioning (attitude toward school, sense of inadequacy, and social stress). Even though significant changes were not found for these outcomes, there was no significant deterioration in these areas, which have been known to occur in adolescence.

• The growing diversity of the Latino youth population in the U.S. challenges researchers, practitioners, and policy makers to identify multiple ways of promoting the healthy development of young people. Mentoring programs offer an attractive, exciting, and effective approach to supporting positive development in all Latino youth.