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ABSTRACT

The achievement locus of control of 64 Hispanic and 87 Anglo students enrolled in grades 9-12 in 2 high schools in a large school district in the Southwest was examined with the Multidimensional-Multiattributinal Causality Scale (MMCS). Ethnic and sex differences in the attributions of academic success or failure to ability, effort, context, or luck were investigated. Context of the MMCS, which consisted of 24 causal attribution statements, included such topics as the teacher's opinion, teacher's grading scheme, and the course material. The MMCS was administered in the spring of 1982 by classroom teachers. Students were not informed of the scale's research purposes. Results indicated Hispanic students were more internal than Anglos. Hispanics attributed their achievement more to ability than did Anglos. Hispanics attributed their academic success more to effort and less to luck than did Anglos. Further, Hispanic students attributed their failure more to their lack of ability than did Anglos. Sex and interaction effects were also found. These results were interpreted within the framework of the attribution theory. (Author/NQA)

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ACHIEVEMENT LOCUS OF CONTROL OF  
HISPANIC AND ANGLO HIGH SCHOOL STUDENTS

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## ABSTRACT

The achievement locus of control of 64 Hispanic and 87 Anglo high school students was examined with the Multidimensional-Multiattributinal Causality Scale. Ethnic and sex differences in the attributions of academic success or failure to ability, effort, context, or luck were investigated. Results indicated Hispanic students were more internal than Anglos, they attributed their achievement more to ability than did Anglos, and they attributed their academic success more to effort and less to luck than did Anglos. Further, Hispanic students attributed their failure more to their lack of ability than did Anglos. Sex and interaction effects were also found. These results were interpreted within the framework of attribution theory.

Educators have long been concerned about the academic motivation of minority students. Numerous questions have been raised about ethnic group differences in achievement strivings. Further, the relationship between causal attributions for academic success and failure and achievement strivings has long been recognized (e.g., Weiner, 1980; Weiner, Frieze, Kukla, Reed, and Rosenbaum, 1971). Attribution theory--the study of perceived causation--addresses the issues of motivation and causal ascriptions.

Betancourt and Weiner (1982) noted that the guiding principle of attribution theory is that individuals search for understanding, seeking to discover why an event has occurred. The search for causality is important to the individual because knowing why one has succeeded or failed increases one's later chances of success.

Three underlying causal dimensions have been reported by Weiner (1980); locus, stability, and controllability. Locus refers to the location of a cause which may be inside the person (internal) or outside (external). Ability and effort are considered internal whereas context, task difficulty, and luck are external. The stability dimension concerns the temporality of a cause. For example, effort and luck may vary (unstable), and ability and context are often perceived as stable. The third dimension is that of controllability which refers to the degree of volitional control one has over a cause. Effort is perceived as under volitional control (controllable), and luck is not so perceived (uncontrollable).

The effect of the dimensions of causality on achievement strivings has been reported by numerous authors. Betancourt and Weiner (1982) found that attributions to internal, ego-related causes for success increase self-worth relative to external ascriptions for success. They further reported that attributions of failure to internal causes decreases self-esteem. Dweck (1975) reported that attributions to ability result in less effort to alter future patterns than do attributions to more variable internal characteristics such as effort. Andrews and Debus (1978) noted that if failure at an achievement task is perceived to be caused by stable factors such as a low level of ability, future failure will be anticipated and expectancy of success will be decreased. If failure is attributed to effort or luck (variable factors), then expectancy of success remains constant or increases.

The literature on locus of control of Hispanic populations has resulted in conflicting findings (Hui, 1982). Hispanics have been reported to be more external (Kagan, 1976; Pehazur and Wheeler, 1971), less external (Cole and Cole, 1974, 1977), and equally external (Alvarez and Pader, 1978; and Garza and Ames, 1974) in comparison with other groups. Recent research into the locus of control of Hispanic high school students has not supported the notion that they have a more external locus of control than Anglo students. Cole, Rodriguez, and Cole (1978) in a study of 246 Mexican American and Anglo high school students in Southern California found the two groups were not significantly different in their locus of control. Buriel and Rivera (1980) reported that Mexican American high school students were slightly more

internally controlled than Anglo students. In a study of 204 Hispanic, Black, and Anglo students in a large high school located in a middle-class industrial city, Gaa, Williams, and Johnson (1981) reported that Hispanic students had a more internal locus of control than Anglo or Black students.

The purpose of the present study is to investigate school achievement locus of control (internal/external) and stability (unstable/stable) dimensions. Further, components of these dimensions--attributions for academic success or failure to ability, effort, context and luck--will be examined for Hispanic and Anglo students.

### Method

#### Subjects

The subjects were 64 Hispanic students (37 males and 27 females) and 87 Anglo students (47 males and 40 females) enrolled in grades 9 - 12 in two high schools in a large school district in the Southwest. All of the Hispanic students spoke English.

#### Instrument

The Multidimensional-Multiattributitional Causality Scale (MMCS) (Lefcourt, Von Baeyer, Ware, & Cox, 1979) was developed to assess achievement locus of control. The MMCS consisted of 24 causal attribution statements. Responses were measured on a five-point Likert-type scale from 0 (disagree) to 4 (agree). Each statement in the scale concerned an academic success such as good grades or failure such as poor grades. Each item also contained an attribution for success (or failure) to

ability, effort, context, or luck. Context included such topics as the teacher's opinion, teacher's grading scheme, and the course material.

Items were combined to form eight 3-item subscales which addressed the following concerns: (1) the attributions of academic success to ability, effort, context, and good luck; and (2) the attributions of academic failure to lack of ability, lack of effort, context, and bad luck. These subscales could be combined to form 6-item subscales which indicated the attribution of achievement to ability, effort, context, and luck. The 6-item subscales could be grouped to measure internality (ability and effort), externality (context and luck), stability (ability and context) and instability (effort and luck). Internality/externality refer to the locations of a cause--inside or outside a person. Stability/instability refers to the temporal nature of a cause--relatively enduring or change from situation to situation. Lefcourt et al. (1979) have reported internal consistency reliability coefficients which ranged from .58 to .80. Power, Douglas, and Choroszy (1983) have reported evidence of the factorial validity of the MMCS.

#### Procedure

The MMCS was administered in the spring of 1982 by classroom teachers. Students were not informed of the research purposes of the scale.

#### Results

Each dependent variable was submitted to a two (Hispanic/Anglo) by two (male/female) analysis of variance (ANOVA). If a significant ethnicity by sex interaction was found, then group means were compared

using Scheffe's post hoc multiple-comparison tests at the .10 level of significance. Scheffe (Myers, 1979) suggested that the Scheffe test error rate be set at .10. This seemed reasonable because (1) this would increase the power of the Scheffe tests to detect differences, and (2) the Scheffe test family error rate is for all possible contrasts and only a finite number of contrasts would be considered in this study. The means for the group broken down by ethnicity and sex are presented in Table 1.

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Insert Table 1 about here

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The hypothesis that there is no difference between the internality of Hispanic and Anglo high school students was rejected,  $F(1,147) = 6.43, p < .012$ . Hispanic high school students appeared to attribute their academic achievement more to internal causes than did Anglo high school students. The groups were not significantly different on their externality.

A significant ethnicity by sex interaction occurred with respect to attributions of achievement to unstable causes,  $F(1,147) = 4.62, p < .033$ . Scheffe tests indicated that Hispanic females attributed their achievement less to unstable factors than did Hispanic males. There were no significant differences between groups on the stability subscale.

Group differences were examined for the attributions of academic achievement to ability, effort, context, and luck. Significant ethnic group differences were found in the attribution of achievement to



ability,  $F(1,147) = 10.35$ ,  $p < .002$ . Hispanic students appeared to attribute their achievement more to their ability than did Anglo students. When groups were compared on their attributions of achievement to effort, a significant ethnicity by sex interaction was found,  $F(1,147) = 9.58$ ,  $p < .002$ . Scheffe tests indicated that Anglo males were significantly lower than Hispanic males and Anglo females in their attributions of achievement to effort. Group comparisons on the context and luck subscales were nonsignificant.

The MMCS allowed the measurement of attributions for success or failure to ability, effort, context, and luck. Significant main effects for ethnicity,  $F(1,147) = 10.98$ ,  $p < .001$  were found with respect to the attribution of failure to one's lack of ability. Hispanic students appeared to attribute their academic failure more to their lack of ability than did Anglo students. In the attribution of success to one's effort, significant ethnic group differences were found,  $F(1,147) = 6.58$ ,  $p < .001$ . This indicated Hispanic students attributed their success more to effort than did Anglo students. A significant ethnicity by sex interaction on the attribution of failure to lack of effort,  $F(1,147) = 13.06$ ,  $p < .001$ , appeared. Scheffe tests indicated Anglo females attributed their academic failure more to lack of effort than do Hispanic female. Moreover, Anglo females were attributed their failure more to lack of effort than did Anglo males.

Significant ethnic group differences were found in the attributions of success to luck,  $F(1,147)$ ,  $p = .032$ . This indicated that Hispanic students attributed success less to luck than did Anglo students. Male

and female high school students were found to differ on their attributions of failure to bad luck,  $F(1,147) = 8.16, p = .005$ . Male students attributed failure more to bad luck than did female students.

### Discussion

The findings of this study contradicted the results of Cole et al. (1978), and supported the findings of Buriel and Rivera (1980) and Gaa et al. (1981) which found that Hispanic high school students were more internal than Anglos. However, there were important differences between the present study and previous studies of Hispanic high school students.

Previous locus of control studies have usually employed general measures of external/internal control. The present study examined school achievement locus of control--a goal specific construct. Further, the present study was able to investigate specific components of locus of control--ability, effort, context, and luck.

Major findings of this study were that Hispanic students, relative to Anglos, were more internal, they attributed their achievement more to ability than did Anglos, and they attributed their academic success more to effort and less to luck than did Anglos. Further, Hispanic students attributed their failure more to lack of ability than did Anglos.

According to the attribution framework, Hispanic high school students would be expected to have a more positive self-esteem than Anglos because they have greater attributions of achievement to internal causes.

Moreover, Hispanic students attributed their success more to effort (internal) than to luck (external). It was also found that Hispanic

students attributed their failure to lack of ability. This would be expected to decrease self-esteem. Thus, these finds suggest that the attributional pattern of the Hispanic high school student contains two opposing results which tend to decrease and to increase self-esteem.

Because of the relatively recent development of scales to measure components of causal dimensions, further research is needed in different geographical locations, and with different instruments before the generalizability of the ethnic group differences can be confirmed.

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Footnote

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Table 1  
Means for the Subscales of the MMCS  
for 151 High School Students

Attribution	Success/ Failure	Anglo			Hispanic		
		Male	Female	Total	Male	Female	Total
Ability	S	8.02	7.95	7.99	8.35	8.89	8.58
	F	5.40	4.80	5.13	6.97	6.59	6.81
Effort	S	8.70	9.45	9.05	10.24	9.70	10.02
	F	9.15	10.50	9.77	9.76	8.48	9.22
Context	S	6.38	5.93	6.17	6.49	5.04	5.88
	F	6.60	5.53	6.11	5.54	5.51	5.53
Luck	S	5.83	5.43	5.64	4.92	4.44	4.72
	F	4.60	3.15	3.93	4.49	3.52	4.08

Table 2  
Means for Causal Dimensions of the MMCS  
for 151 High School Students

Dimensions	Anglo			Hispanic		
	Male	Female	Total	Male	Female	Total
Ability	13.43	12.75	13.11	15.32	15.48	15.39
Effort	17.85	19.95	18.82	20.00	18.19	19.23
Context	12.98	11.48	12.29	12.03	10.56	11.41
Luck	10.43	8.58	9.57	9.41	7.96	8.80
Internality	31.28	32.70	31.93	35.32	33.67	34.63
Externality	23.40	20.05	21.86	21.43	18.52	20.20
Stability	26.40	24.23	25.40	27.35	26.04	26.80
Instability	28.28	28.53	28.39	29.41	26.15	28.03