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ABSTRACT

This study investigated the extent to which a stereotype of Mexicans or Chicanos as fatalistic is supported by their locus of control scores. Original data for the paper came from locus of control scores on college students in four nations (U.S.A., Mexico, Ireland, and West Germany) and from Anglo and Chicano high school students in southern California. These data show the Mexican business administration students to be more internally oriented than is true for students from each of the other nations. Chicano high school students planning to enter college are also internally oriented, and match Anglo high school students planning to attend college. Only Chicano male high school students not planning to enter college showed any tendency toward a more external locus of control. The authors also look at locus of control data collected by Garza (1974) and by Reitz and Groff (1973) and find that these also fail to portray either Chicano university students or Mexican factory workers as fatalistic in outlook. The paper concludes that to the extent that a perceived external locus of control would be indicative of a fatalistic outlook, such perception is lacking in most data on Mexican or Chicano subjects. (Author)

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Locus of Control in Mexican Students: The Case of the Missing Fatalist<sup>(1)</sup>

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Abstract

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(1) presented at Rocky Mountain Psychological Association, Phoenix, Arizona, May 1976.

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Locus of Control in Mexican Students: The Case of the Missing Fatalist<sup>(1)</sup>

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A serious problem for cross-cultural research is that of obtaining reasonable equivalence of subjects across cultures. It is difficult to argue that even persons occupying seemingly similar positions in two different societies can, in fact, justifiably be defended as "matched" on psychologically meaningful variables. The frequent use of students from different countries may overlook the possibility that societal prerequisites to student status may be quite different from one country to another, or that the implications college education has for a graduate may be different across nations.

An appropriate attempt at meeting the problem just outlined is to seek to define the subject populations from society to society rather carefully and narrowly. While this, of course, makes cross-cultural comparisons more legitimate, it casts into greater doubt the issue as to whether the results obtained within a particular culture afford any sort of basis for generalization across that culture.

The present study began as an attempt to compare locus of control scores across four national groups, by obtaining groups of students from each nation who were matched more precisely as to area of study, content of curriculum, and subsequent career expectations than is the case with the more general classification of "student" which is often used. The possibility of evaluating our data in terms of its breadth or narrowness of application within two of the nations used became possible when data appeared from other segments of those nations, during the period when our

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results were under analysis.

This paper stresses two comparisons: (1) locus of control scores between five student groups in four nations, and (2) comparisons between our findings with the students, and findings with factory workers in two of that nations, used, as the latter data have been reported by Reitz and Groff (1974). In addition, recent data collected from Anglo and Chicano high school students in the Los Angeles area will be described.

### Subjects

All of the college and university students used in this study were male. Four of these five groups were students in programs of Business Administration. Business Administration was selected because the curriculum and future job expectations were quite consistent across the four nations tested. The four groups consisted of 47 students from a university in Ireland, 54 from a West-German university, 57 from a university in central Mexico, and 38 from a Catholic university in California. A second group of 48 American male students in a liberal arts curriculum is also included, and treated separately throughout the analysis. This group was retained when results showed no differences between it and the American Business Administration group.

### Method

All subjects were administered the Rotter (1966) I/E Scale, in classroom settings. For use in the German and Mexican universities, the Rotter was translated into the appropriate language and back translated as suggested by Brislin (1970).<sup>(2)</sup> For analysis, both the total scores on the

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(2) The authors express their appreciation to Mr. Robert Chestnut, who helped obtain the German data, and began the translation of the scale into German.

F scores, and scores on each subscale as described by Schneider & Parsons (1950) were considered. For all scoring, higher scores are associated with a more external orientation to locus of control.

### Results

Table 1 and 2 show the mean overall Rotter scores for each of the five groups and the significant t tests for mean differences.

Table 3 presents the scores from the five sub-scales of the Rotter. Scores are presented in terms of the percentage of responses which indicated external locus of control, since the scales are of unequal length. Tests for significant differences in proportions were tested by z scores.

As noted, Reitz and Groff have recently presented scores from large samples of factory workers in the United States and Mexico. Their results from these two nations are compared with ours from the student groups from the same two nations in Table 4. Again, differences in proportions of external responses were tested by using z scores.

Table 1

#### Mean Locus of Control Scores

Group	U.S. Business Administration	U.S. Liberal Arts	Germany	Ireland	Mexico
N	38	48	54	47	57
Mean I/E	10.03	10.15	9.24	10.23	5.88

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F = 8.43 (p < .001)

Table 2  
Tests for Mean Differences

Comparison	t
Mexico: U.S. Business Administration	5.53 <sup>a</sup>
Mexico: U.S. Liberal Arts	5.45 <sup>a</sup>
Mexico: Germany	4.87 <sup>a</sup>
Mexico: Ireland	5.96 <sup>a</sup>

a =  $p < .001$

No other differences approach significance

Table 3  
Comparisons of Percentage External Responses by Category

	Luck	Politics	Category Respect	Academic	Leadership
Mean % External					
U.S. Bus. Adm.	41	44	57	49	30
U.S. Lib. Arts	40	40	62	46	40
Germany	38	39	39	45	43
Ireland	45	54	46	28	43
Mexico	19	38	26	20	26
z Scores of Differences in % External					
Mex.: U.S. Bus. Adm.	2.44 <sup>b</sup>	ns	3.10 <sup>a</sup>	3.02 <sup>a</sup>	ns
Mex.: U.S. Lib. Arts	2.50 <sup>b</sup>	ns	3.78 <sup>a</sup>	2.88 <sup>a</sup>	ns
Mex.: Germany	2.23 <sup>c</sup>	ns	ns	2.87 <sup>a</sup>	2.27 <sup>c</sup>
Mex.: Ireland	2.88 <sup>a</sup>	ns	2.15 <sup>c</sup>	ns	2.17 <sup>c</sup>

a:  $p < .01$

b:  $p < .02$

c:  $p < .05$

Note: Only one other comparison reached significance. U. S. Liberal Arts students scored more External on the "Respect" scale than Germans.

z = 2.34  $p < .05$ .

Table 4

Comparison of Students and Factory Workers,  
United States and Mexico

	Category <sup>1</sup>			
	Luck	Politics	Respect	Leadership
Mean % External				
Mexican factory workers	34	56	38	47
Mexican students	19	38	26	23
U.S. factory workers	42	58	43	30
U.S. Bus. Adm. students	41	44	57	30
U.S. Lib. Arts students	40	40	62	40
z Scores of Differences in % External				
Mex. students: Mex. fact. wkrs.	4.50 <sup>a</sup>	5.05 <sup>a</sup>	5.05 <sup>a</sup>	6.77 <sup>a</sup>
U.S. factory: Bus. Adm.	.34	4.79 <sup>a</sup>	4.77 <sup>a</sup>	0
U.S. factory: Lib. Arts	.62	5.53 <sup>a</sup>	5.81 <sup>a</sup>	3.31 <sup>a</sup>

a:  $p < .001$

Note 1: Factory worker data are taken from Reitz and Groff (1974) who did not report data on the "Academic" scale.

### Discussion

This study did not begin with any hypothesis as such. We sought to investigate locus of control scores between four relatively well-matched national groups, identify differences and see what could be made of them. As the Reitz and Groff data became available, we compared our results with students with their results from factory workers in the United States and Mexico, to see to what extent the findings of either study might reflect similarities and differences between compatriots in different situations in their respective societies. These interests serve as the frame of reference for the discussion which follows.

From Tables 1 and 2, it is evident that the dominant finding from

our data are the low scores obtained by our Mexican subjects. They were clearly the most internally directed of the five groups tested. This applies not only to the overall Rotter scores, but to each of the five subscales as well. In view of the large number of comparisons made, the lone remaining significant difference (that one group of Americans scored more internally on the "Respect" scale than did the German subjects) does not seem to merit attention. The consistently low scores of the Mexican subjects, reflecting a strong internal locus of control, is of considerable interest however, in that this contradicts the common stereotype of Mexicans as fatalistic. Prior to our study, many persons with whom we discussed our plans, anticipated that our Mexican subjects would be more external than Americans. Our findings, however, match related findings reported by Garza (1974), by ourselves using other Mexican subjects on a different locus of control scale (Cole and Cole, in press), and are not contradicted by Reitz and Groff. Their data, while not reporting the Mexican factory workers as consistently more internal than their other national groups, did show them most internal on the "Luck" scale, and most external on none. (See Table 4).

Comparing our data with that of Reitz and Groff, it is of interest that the rank order of the scales, by proportion of external responses is  $+ .80$  between American students and American factory workers and also  $+ .80$  between the two Mexican groups. Thus the relative emphasis on internal locus of control among the four areas represented in the scales and tested in both studies, is quite consistent within each national group, despite the considerable differences in status between factory workers and university students in each nation. Thus these results do not seem confined to a single strata of either nation, but differ between national



groups.

While there is a consistency in ranks between the two Mexican groups, the Mexican students show a more internal orientation to locus of control on each of the four subscales used in both studies, than do the Mexican factory workers. That this is so is certainly not surprising, for if one assumes that locus of control reflects the individual's sense of a capacity to effect his/her environment, one would expect such sense of efficacy to be higher among young, future oriented students than among older, economically less advantaged factory workers.

The results comparing students in the two U.S. samples with the U.S. factory workers reported by Reitz and Groff are less consistent. No differences occurred on the "Luck" scale. For one student group, locus of control was more internal on the "Leadership" scale, but this did not hold for the other group. Both student groups showed more internal orientation on the "Politics" scale, and more external orientation on the "Respect" scale.

That greater differences should occur within the Mexican than the American samples is consistent with the position the present authors have taken elsewhere (Cole and Cole), that locus of control will be most internal when the individual takes a counternormative action toward self improvement. We have argued that pursuing higher education is more counternormative in Mexico than in the United States, and so locus of control scores for Mexican students should be more at variance with Mexican non-students, than would be the case when comparing American students with non-students.

The greater internality of the American students on the "Politics" scale, when compared to the scores on that scale for the U.S. factory

workers, probably can be explained by the same rationale as is offered for the difference between the Mexican students and the Mexican factory workers. (The American sample was a "pre-Watergate" sample). On the other hand, both U.S. student groups were significantly more externally oriented on the "Respect" scale than the U.S. factory workers. This difference becomes more easily understood, however, if attention is directed to the content of the four items comprising this scale. Two of the four deal directly with the question of how much assurance one can have that one is liked and accepted by one's peers.

It is on these two items that the American students showed their strongest external orientation and thus it seems likely that the external orientation on the "Respect" scale obtained from these two American student groups reflects their status as young people still unsure of themselves in peer relationships, an insecurity much less evident in the Mexican students.

Results on the "Leadership" scale were inconsistent, one U.S. group differing from the factory workers and the other not. No explanation is offered.

It is of interest to note that the Irish and Mexican student groups share the common property of scoring most externally on the "Politics" scale, something not found in the U.S. and German samples. The political situations facing the Mexican and Irish students at the time of testing may be of considerable relevance to this finding. The students at the Mexican university were at a school where there was a high degree of political unrest and opposition to the national government and where indeed the data collection was held up several weeks during which time the school

was closed by government order due to fear of student uprisings. The Irish students were tested during a period of great tension between the political factions of Ireland, where acts of political terrorism were part of their daily experience. In light of these observations, it is hardly surprising to find these two groups showing more externality on the "Politics" scale, and indeed one may wonder that the scores were not more external than they are.

Our data, when combined with those of Reitz and Groff, demonstrate that similar profiles of subscales of locus of control are found among two differing groups of subjects, first in Mexico, and then in the United States, but that these profiles differ between the two nations. Moreover, the locus of control data from the Mexican students, show nothing of the fatalism which one might associate with an external locus of control. A further question to be asked then is whether a similar lack of "fatalism" may be found among Chicano groups in this country. To date, available data do imply such a lack. Garza, previously cited, found that Chicanos at a university in Texas, scored more internally on the Rotter scale than did Anglo students at the same school. Recently, Jacqueline Rodriguez (1976) has compared profiles on a different locus of control scale, between 12th grade Anglo and 12th grade Chicano students at high schools in the Los Angeles area. She found no significant differences between the resulting profiles. The Chicanos were not more external than their Anglo counterparts. Within the Chicano groups, males planning for college rejected control by chance or fate more so than males not planning for college. Only in this single measurement was anything akin to fatalism found in the Chicano samples studied. In summary, when looked at through locus of control measures, the fatalism sometimes ascribed to Mexicans and to Chicanos is missing.

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