## Mostafa M. Noury, Westfield State College

Foreign students' perception and attitudes toward selected aspects of the host society are major problems affecting their adjustment processes. This paper reports an empirical study done on two groups of foreign students - Indian and European students. One purpose of this study has been to examine foreign students' perception and attitudes toward selected aspects of the host society, and to consider the possible consequences of these perceptions and attitudes on their adjustment processes. To determine if differences exist between the two groups with respect to perception, attitudes and adjustment is the second objective.

The findings of this study indicate that differences do exist between the two groups and that European students have shown more favorable perception, attitudes and adjustment to the host society than Indian students. Whereas perception has been found to be significantly related to adjustment, attitudes fall short of statistical significance. Reasons and explanation for the unexpected relationships are given.

## INTRODUCTION

Today foreign students are not only a common sight on campuses and universities in the United States, but also due to the apparent increase in their numbers in recent years, the subject of foreign students in the United States has been met with concern of both educators and social scientists. As a result, efforts have been directed toward understanding the problems of adjustment resulting from their cross-cultural experiences (Smith, 1956; Barry, 1966).

The foreign students attending universities in the United States, come from very diverse social, economic and academic backgrounds. They arrive at a campus where they encounter new values and associations that are different from those in their past experience. In order to participate in the American society foreign students are required not only to accomodate but also to adjust to the host society. Because of the very diverse cultural backgrounds and systems, the foreign students find it difficult in the beginning to adapt, adjust or conform to the norms of the American society. The degree of adjustment among individuals varies according to their cultural backgrounds. Where differences are greatest between home and host culture, problems of adjustment may be expected to be more acute than when differences are slight. (Sewell, 1961).

The present study addresses itself to the adjustment of two groups of foreign

students attending Iowa State University - mainly students from India<sup>2</sup>, and students from Western Europe and Scandinavian countries<sup>3</sup>. More specifically, the main purposes of this study are:

- To investigate the relationship between selected perceptual and attitudinal variables and adjustment among the aggregate (Indian and European students combined) as well as similar relationships within the individual groups (Indian and European groups separately).
- To determine if differences exist between the two groups with respect to perception, attitudes and adjustment.

DEPENDENT AND INDEPENDENT VARIABLES

#### Adjustment

Adjustment - the dependent variable was defined as the response in behavioral patterns toward some selected aspects of the host society. In order to operationalize this variable, an index of 24 quantifiable statements of several segments<sup>4</sup> of adjustment to the host society was developed. Some statements or items were given a five-point continuum, others three-points, while others were on a two-point continuum. The adjustment of the Indian group as well as the European group was calculated by adding the scores of the 30 individuals in each group over the 24 items included in the adjustment scale. These 24 items that constituted the adjustment scale had a possible maximum score of 48 points and a possible minimum of 6 points.

## Perception

Perception as well as attitudes are usually inferred from the behavior of the individual and are not measured directly. The underlying assumption is that the individual's response to a statement with a positive or negative judgment is a type of behavior which can be taken as a measure of the perception and the attitudes the individual has in regard to the dimension of which the statement is a measure.

In this study perception was defined as the means by which people (students) form impressions of and, hopefully, understand one another (Tannenbaum et al., 1961). Four dimensions of the foreign student's perceptions of some aspects of the host society were developed. These were perception of work in the United States, education in the United States, American people, and perception of social life in America. Seven<sup>5</sup> items made up the original measure of perception. While responses to six items were based on a five-point continuum, responses to one item were based on a three-point continuum. The seven items that formed the perception scale had a possible maximum score of 14 points and a possible minimum of zero.

# Attitudes

Using Allport (1935) definition, an attitude was defined as a mental and neural state of readiness, organized through experience, exerting a direction or dynamic influence upon the individual's response to all objects and situations with which it is related. Four dimensions of the foreign students attitudes toward the host society were undertaken. These were attitudes toward: work in the United States, education in the United States, American people, and attitudes toward social life in America. The sixteen items that made up the foreign students' attitudes toward the United States in the four areas cited above were ranked on a fivepoint continuum. These sixteen items had a possible maximum score of 32 points and a possible minimum of zero.

# PROCEDURE

To achieve the study objectives, a simple correlation analysis was applied in order to determine the degree of association or relationship. The t-test for differences between the two groups was used to test the hypothesized differences between the groups of foreign students along the variables investigated.

## SAMPLE

This study was based on a total sample of size 60 male foreign graduate students attending Iowa State University. Students were selected from two cultural areas; i.e., India and West Europe. The sample was drawn from a list of the Indian students and the West European students. This list was selected from a list comprising the entire population of foreign students attending Iowa State University in the Spring Quarter of 1970. The population list was compiled from two sources. The Foreign Student Advisor's list provided the basic listing of foreign students at Iowa State. This list was supplemented from the records of the Admission's Office. The population included in the sample was drawn randomly as follows: 30 Indian students from a total group of 63, representing the developing countries, and 30 West European students out of a total of 51, representing the industrialized nations.

# FINDINGS

Tables 1, 2, and 3 present the correlation coefficients among the variables considered on the aggregate as well as the individual group level. Table 4 presents results of the t-test for differences between the two groups along the variables investigated.

As can be seen from Table 1, the correlation coefficients between favorable perception and adjustment among the aggregate group of foreign students were significant at the five per cent level of probability. Along the four dimensions of perception, only the foreign student's favorable perception of work in the United States was not related to adjustment (Table 2). On the individual group level, whereas the four dimensions of perception were not related to adjustment among Indian students, perception of social life in America was found to be related to adjustment among European students (Table 2).

With regard to the expected relationship between attitudes and adjustment among the aggregate, the computed correlation coefficients showed that no significant positive relationships existed between these two variables (Table 1). Along the four attitudinal dimensions, only favorable attitudes toward education and adjustment were significantly related (Table 3). On the individual group level, the correlation coefficients between the four attitudinal dimensions and adjustment fell short of statistical significance (Table 3).

Results of the t-test for the difference in adjustment between the means of the two groups (Table 4) revealed that significant differences existed between the two groups, indicating that European students displayed patterns of adjustment more favorable to the host society than Indian students. Significant differences also existed between the two groups along the four perceptual dimensions (Table 4). With regard to attitudes, significant differences existed between the two groups along three of the attitudinal dimensions, namely, attitudes toward work, Americans, and toward social life in America (Table 4).

# DISCUSSION AND CONCLUSIONS

The first objective of this study was to examine the relationships between selected perceptual and attitudinal variables and adjustment among the aggregate as well as similar relationships within the individual groups. As can be readily seen from the data in Table 2, three of the four dimensions of perception were found to be statistically related to adjustment for the aggregate of the two groups. However, the data did not support the expectation that the student's perception of work in the United States was related to adjustment. This might be due to the smallness of the sample size or to the trivial

relationship between perception and adjustment in the case of Indian students, which might have depressed the correlation coefficient for the aggregate of the two groups.

Although three dimensions of perception of the United States were found to be statistically related to adjustment for the aggregate of the two groups, the individual group scores fell short of statistical significance, except for the Europeans perception of social life in America which was found to be significantly related to adjustment at the one per cent level of probability. This latter relationship was expected since social life in Western Europe and Scandinavian countries is to some degree similar to that of the United States. As to the unexpected relationship between perception and adjustment with regard to work, education, and Americans, an examination of the responses of the two groups revealed that European students have scored higher than the Indian students on all of the perceptual items (Table 5). This unexpected relationship might also be due to the small sample size as in the case of perception of work, a clustering at one end of the value continuum as in the case of perception of education, or the fact that the relationship is in the same direction and is cumulative in both groups as in the case of perception of Americans.

With regard to the hypothesized relationship between attitudes and adjustment among the aggregate of the two groups, only attitudes toward education in the United States were found to be statistically supported. This might be due to the fact that since both groups were deeply involved in the American educational system, this exception might not be decisive. The fact that both groups saw it rewarding to attend Iowa State University might indicate that some degree of commonality in attitudes toward education could be expected.

In examining the relationship between attitudes and adjustment for each group separately, the four attitudinal dimensions were not statistically supported. However, the European students! attitudes toward Americans and social life in America were found to be close to the significance level (p = .36). This might be due to the cultural similarity factors, such as European students may find in the United States a niche for themselves socially and academically, and thus tend to express more favorable attitudes to the host society, Indian students find the United States culturally different socially and academically and thus tend to express patterns of attitudes toward the United States less favorable than that of the European students.

Three reasons could be stated as possible explanations for the lack of support of the hypothesized relationship between attitudes and adjustment. Firstly, the sample size was relatively small, secondly, some deficiencies in the measuring instrument might be involved such as relatively few items in certain attitudinal dimensions, and thirdly was the limitation of the study to a narrow spectrum of the student population.

The second objective of this paper was to investigate the differences in perception, attitudes, and adjustment between Indian and European students. The aggregated measure of the four dimensions of perception showed significant differences in perception between the two groups. In examining the differences between the two groups along the four attitudinal dimensions, the findings revealed that significant differences existed between the two groups in the dimensions of work, Americans, and attitudes toward social life in America. Whereas attitudes toward education were significantly related to adjustment, no significant difference in attitudes toward education between the two groups could be detected (Table 4). This apparent inconsistency could be explained methodologically. If attitudes toward education and adjustment were found to be significantly related for the aggregate of the two groups, while the individual group scores fell short of statistical significance, this was indicative of accumulative condition of this factor. In other words, attitudes toward education for both groups might be in the same direction. This explanation gained support from the data, where a clustering was found at one end of the value continuum.

With regard to differences in adjustment between the two groups, the measure of this variable showed significant differences between the means of the two groups. This was expected since Western European culture is to some degree similar to that of the United States, and hence, European students displayed patterns of adjustment more favorable to the United States than the Indian students.

On the basis of the data presented in Tables 1, 2, 3, and 4, it was concluded that differences in perception, attitudes, and adjustment existed between the two groups. The foreign students' perceptions of selected aspects of the United States were found to be not only related to their adjustment to the host society, but also European students have expressed patterns of perception more favorable, and more closely related to their adjustment than the Indian students. These conclusions were in line with several research studies conducted by Becker (1966), Morris (1960), Sewell and Davidsen (1961), and Cora du Bois (1962).

## SUMMARY

This study had two objectives. The first one was to examine the relationship between selected perceptual and attitudinal variables and adjustment among the aggregate as well as similar relationship within the individual groups. The second objective was to determine the differences in perception, attitudes, and adjustment between Indian and European students. Four dimensions of perception as well as attitudes were investigated in the study. These were the foreign students' perceptions and attitudes in the areas of work and education in the United States, of Americans, and of social life in America. Some specific segments of the foreign students' adjustment to the host society were also investigated.

A random sample of 60 foreign students, 30 Indians and 30 West European and Scandinavian students, attending Iowa State University on the Spring Quarter of 1970, were selected for the study. The hypothesized relationships between the variables were developed and tested by means of the simple correlation analysis and the t-test for the differences between the two groups.

The findings of this study revealed that while perception was found to be significantly related to adjustment, attitudes fell short of statistical significance, both on the aggregate as well as the individual group level. Apparent differences in perception, attitudes, and adjustment existed between the two groups. Along the four perceptual and attitudinal dimensions significant differences existed between the two groups, except for attitudes toward education in the United States. Reasons as well as explanations for the unexpected relationships were given in the Section on Discussion.

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- <sup>1</sup>The research reported in this paper is part of an unpublished M.S. Thesis, "The Adjustment of Selected Foreign Students at Iowa State University," Iowa State University Library, 1970.
- <sup>2</sup>The students from India will hereafter be indicated as Indian students.
- 3Students from Europe and Scandinavian countries will hereafter be referred to as European students. The reason for grouping West European and Scandinavian students under one single nationality group is that several previous investigators have considered the Europeans as a single group vis-á-vis the non-Europeans, with regard to extent of associations with Americans and other variables (Morris, 1960, Selltiz et al., 1963).
- <sup>4</sup>The segments of adjustment to the host society were adjustment to: religion, food, dress, parties, language, picnics, sports, travel, music, use of nicknames, reading a book about America, visiting American families, association with Americans, participation in campus organizations, and marrying an American girl. The degree of the foreign student involvement with his home country

was also taken as a measure of adjustment such as the number of letters written and received from home, reading news papers and magazines of native country, and celebrating native festivals in the U.S.

<sup>2</sup>The seven items developed to measure the foreign students' perception of: work, education, Americans, and American social life were three, one two, and one item, respectively.

adjustme							
Factors	Adjustment						
accors	Indians	European	Total				
Percep.	.097	. 301	. 317*				
Attitude	es .271	.306	.194				
li.e. p	erception	and attitu	des toward				
		Americans	, and				
	an social						
*Signif: confide		he .05 lev	vel of				
Table 2	. Correla	tion coeff	licient				
			icient and adjust				
between							
		on factors	and adjust				
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between	perceptic	Adjustme	and adjust				
Percep.		on factors	and adjust ent All stude				
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\*Significant at the .05 level of confidence.

\*\*Significant at the .01 level of confidence.

Table 3. Correlation coefficient between attitude factors and adjustment

		Adjustment	A11	
Attitude		European	students	
factors	students	students	(combine	
			sample)	
Toward	170	.204	. 203	
work				
Toward	.180	024	.303*	
educatio				
Toward	.318	.331	.165	
American				
Toward	.109	.334	.129	
Amer. so	cial			
life				
confiden Table 4.	ce.	e .05 level ces between		
confiden Table 4.	ce.	ces between		
confiden Table 4. groups. Factor	ce. Differen	ces between	the two	
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confiden Table 4. groups. Factor Adjustmen Att. towa Att. towa	ce. Differen t rd work rd educat:	ces between	the two value 0.678** 2.562* .334	
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\*Significant at the .05 level of confidence (t<sub>.05</sub> = 1.672).

\*\*Significant at the .01 level of confidence (t.01 = 2.30).

# Table 5. Items of perception in relation to sclected categories.

Item number		Max. range of scores		ange	Sum scores of	
				res	Indians	Europeans
		for grou			n = 30	n = 30
Work	1	θ	-	60	17	24
	2 3	0	-	60	12	8
	3	0	-	60	14	28
					43	60
Educa						
	4	0	-	60	21	44
Amer	ica	n s				
	5			60	16	25
6	0	-	60	19	30	
				35	55	
Amer		ocial	1	life		
	7	0	-	60	16	25
Tota	1				112	184