## A CONCEPTUAL MODEL OF THE EFFECTS OF AREA STUDIES TRAINING PROGRAMS AND A PRELIMINARY INVESTIGATION OF THE MODEL'S HYPOTHESIZED RELATIONSHIPS

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ABSTRACT. A quasi-experiment involving a Japan area studies training program was used to explore a conceptual model of the effects of area studies training programs on factors related to cultural adjustment. Training increased subjects' factual, conceptual and attributional knowledge. Associations were also found between knowledge changes and attitudinal change. The results suggest such programs may be a useful mechanism for building cultural awareness, but have limited effect on attitudes, behavioral intentions or perceptions of self-efficacy in the target culture.

### INTRODUCTION

One of the most intuitively appealing and widely used training methods employed in preparing personnel for international assignments is informational training, also widely known as area studies (Dunbar & Ehrlich, 1986; Runzheimer, 1984; Tung, 1981). The specified purpose of area studies training programs is "to provide the trainee with information about a particular country's sociopolitical history, geography, stage of economic development, and cultural institutions. The content is factual in nature" (Tung, 1981).

The underlying rationale for using area studies training programs is straightforward. As Campbell (1969) notes, increased knowledge and understanding is presumed to result in increased empathy by the trainee toward the target country. Increased empathy leads to changes in trainee behavior which, in turn, lead to adjustment in the target country.

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Surprisingly, reviews of empirical investigations (Black & Mendenhall, 1990; Tung, 1981) into the effectiveness of area studies training programs suggest that they have relatively limited impact on adjustment (Harrison & Hopkins, 1967; Lynton & Pareek, 1967; Textor, 1966). As Tung (1981) notes, "Although there is some indication that increased knowledge will remove some fear and aggression that tend to be aroused by the unknown, the evidence that knowledge will invariably result in increased empathy is sparse . . ." (pp. 70–71). She goes on to suggest that the range of information required on an international assignment might exceed the capacities of informational programs to deliver such knowledge. Consequently, she concludes that area studies training programs are insufficient as a means of preparing managers for international assignments.

There is a difference between insufficient and ineffective. Training in the local language, sensitivity training, and actual field experiences can obviously be of great value in helping individuals prepare for international assignments and, once they are in the country, help them adjust well to the local situation (Hays, 1971; Henry, 1965; Tung, 1982; Zeira, 1975). A more fundamental question is why area studies training is apparently ineffective in helping individuals to adjust. Is it because the training fails to provide sufficient information? Is it because the information provided is irrelevant? Or, is it because trainees are unable to change behaviors despite having received sufficient relevant information? Tung (1981) has suggested that area studies programs cannot give trainees all the information needed for the duration of an overseas assignment. Earley (1987), however, found support for a statement that suggests that area studies and sensitivity training are comparatively effective. He conducted a comparative study between area studies training (i.e., documentary approach) and sensitivity training in an attempt to test the negative conclusions that Tung (1981), Carroll, Paine, and Ivancevich (1972) and Goldstein and Sorcher (1974) have drawn regarding informational training. He specifically sought to determine the most effective approach in preparing people for overseas assignments. Using a cross factorial design with four treatment levels, he randomly assigned 80 managers to each four treatment levels: no treatment, documentary only, sensitivity only and a combination. In effect, he tested the two extremes of Tung's (1981) classification. He then measured training effectiveness through the administration of questionnaire surveys at four points in time: a) immediately following training, b) two months prior to disembarkation, c) two months into the assignment, and d) three months into the assignment, immediately prior to returning. The first three evaluations were self-assessments by the training participants. The final evaluation was conducted by the participants supervisor and carried out through a performance appraisal. Thus, he was able to validate what participants had said. Through this approach, he found that both types of training are comparably effective, and that the beneficial effects from both types of training are independent and additive.

The primary purpose of this paper is to develop a theoretical model that may explain what types of impacts area studies training programs have on their trainees. The goal is to understand what changes in participants may be expected as a result of receiving an area studies program and, therefore, its utility in preparing managers for overseas assignment. Further, we will discuss the results of an exploratory test of the model on one area studies program design. In what ways are area studies training programs effective? Specifically, does area studies training result in measurable differences in trainee's knowledge, attitudes, self efficacy and behavioral intent toward the target country?

### AREA STUDIES TRAINING AND ITS EFFECTS

Prior conceptualizations of the relationship between area studies training and behavioral change, particularly intercultural adjustment, are predicated on a "to know them is to love them" hypothesis (Campbell, 1969, Tung, 1981). The underlying argument is that greater knowledge about a target country and its people fosters an emotive change in the trainee from apathy, or possibly antipathy, to empathy. The empathy brought about through greater knowledge is presumed to lead to a variety of more appropriate adjustment behaviors in the context of the foreign culture.

The justifying assumption influencing the design of area studies programs is that throughout the training period, knowledge should be continually imparted to trainees about the foreign country. This knowledge usually has many components. One type of knowledge is factual and clarifies aspects of the country's history, politics, economy, institutions, and social conditions. Another type of knowledge is conceptual, reflecting an understanding of how the particular country views and values central concerns such as appropriate forms of behavior, individual rights, group membership and its associated obligations, and obligations to the state. Still another type of knowledge—attributional knowledge—is an increased awareness of contextually appropriate behavior. "Attributional accuracy" is implied as individuals have a greater sensitivity to local expectations concerning appropriate behavior in different everyday situations, and what different behaviors would be expected to mean.

Prior to receiving area studies training, it has been found that trainees have a tendency to rely on self-referenced attributions about target country behaviors, applying their own cultural assumptions to observed actions in an attempt to make sense of what they perceive (Mendenhall & Oddou, 1985; Wimer & Kelly, 1982). After an area studies training pro-

gram, trainees should be more inclined to reference attributions about target country behaviors to the frameworks and causal models which they have learned reflect the logic used in the target culture. Thus, they should have increased their attributional accuracy and be more likely to explain events in the foreign country in ways consistent with that country's values, beliefs, and traditional behaviors. This leads to the following hypothesis:

Hypothesis 1: Informational training increases trainee's factual and conceptual knowledge about the target country, and increases attributional accuracy concerning the contextual meaning of behaviors in the target country.

A question arises as to what consequences increased knowledge and cultural understanding of a target country may have. One possibility is that with increased knowledge, people may experience a change in their attitude toward aspects of the target country, its culture or its people. At a minimum, increased knowledge should function to reduce the threat component that tends to be associated with uncertain environments. As a result, trainees may be inclined to evaluate aspects of the country more positively after they have experienced an area training.

In this regard it is important to note that informational training can convey two different types of factual and conceptual knowledge. Information about the country—economic, political, climatic, geographic, and so forth—is primarily contextual in nature, providing the trainee with an understanding about the country. For example, it is a contextual fact that Japan is poor in natural resources. Factor endowment models of trade provide a conceptual frame for understanding the implications of how natural resource scarcity can lead to a need to trade with other countries. Similarly, information about values, mores, and customs may also be factual and conceptual, but lead to knowledge of the culture. Factual information that is cultural, for instance, might include references to communal bathing behavior. Conceptual information about patterns of interaction in collectivist societies—appropriate to understanding Japanese communal bathing customs—is cultural in nature.

Several studies focusing primarily on heterocultural training provide some insight into the effectiveness of providing trainees with cultural information. Chemers, Lekhyananda, Fiedler, and Stolurow (1966), for example, found that attitudes of American leaders in heterocultural task groups were significantly more positive toward Arabs after the Americans received heterocultural training which provided culturally relevant factual and conceptual information. The results of this study also showed that Americans, with increased positive attitudes toward their Arab co-workers, saw Arabs as more similar to Americans. Lefley (1986) studied the effects of cross-cultural training on mental health care work-

ers and found that training, which included factual and conceptual information about the cultures, led to a significant positive increase in the development of appropriate perceptions of members of the other culture.

- Hypothesis 2: Informational training generally increases a trainee's positive assessments of the people, culture, management, products, and arts of the target country.
  - a) There is a positive association between a trainee's factual knowledge about a target country and their evaluations of the people, culture, management, products, and arts of the target country;
  - b) There is a positive association between a trainee's conceptual knowledge about a target country and their evaluations of the people, culture, management, products, and arts of the target country;
  - c) There is a positive association between a trainee's attributional accuracy concerning the contextual meaning of behaviors in the target country and their evaluations of the people, culture, management, products, and arts of the target country.

Increases in knowledge may also impact the way people behave in foreign countries. As subjects are able to understand the reasons or traditions that provide an underlying logic for the characteristic behaviors observed in a foreign country, so they may be more likely to behave in ways that are adaptive to rather than resistive or avoidant of the target country's social norms.

- Hypothesis 3: Informational training generally increases a trainee's tendency to adopt adaptive rather than resistive or avoidant behaviors in terms of to the social norms of the target country.
  - a) There is a positive association between a trainee's factual knowledge about a target country and their tendency to adopt adaptive rather than resistive or avoidant behaviors in terms of the social norms of the country;
  - b) There is a positive association between a trainee's conceptual knowledge about a target country and their tendency to adopt adaptive rather than resistive or avoidant behaviors in terms of the social norms of the country;
  - c) There is a positive association between a trainee's attributional accuracy concerning the contextual meaning of behaviors that occur in the target country and their tendency to adopt adaptive rather than resistive or

avoidant behaviors in terms of the social norms of the country.

Another possible result of area training is that trainees may be more generally confident that they will be able to handle any new situations they may encounter in the target country. Thus, a function of the new knowledge may be to change a trainees' general sense of self-efficacy in the target country.

Hypothesis 4: Informational training changes a trainee's general sense of self-efficacy to deal with situations that may arise in the target country.

- a) There is a positive association between a trainee's factual knowledge about a target country and their general sense of self-efficacy to deal with situations that arise in the target country;
- b) There is a positive association between a trainee's conceptual knowledge about a target country and their general sense of self-efficacy to deal with situations that arise in the target country;
- c) There is a positive association between a trainee's attributional accuracy concerning the meaning of behaviors and their general sense of self-efficacy to deal with situations that arise in the target country.

A general sense of self-efficacy may also be directly associated with the likelihood that trainees will adopt appropriate rather than resistive or avoidant behaviors in dealing with the situations they find abroad. Black and Mendenhall (1990), for example, have suggested that individuals who display a generally high level of self-efficacy are more likely to attempt to replicate modeled behaviors. Bandura, Adams, and Beyer (1977) and Bandura, Adams, Hardy, and Howell (1980) demonstrated that self-efficacy is an excellent predictor of adaptive behavior. In addition, Bandura et al. (1980) found that improvements in coping behavior corresponded closely to increases in self-efficacy. Locke et al. (1984) also reported findings that self-efficacy was significantly and positively correlated with future performance. Finally, Maddux, Norton, and Stoltenberg (1986) found a significant positive relationship between outcome expectancy and behavioral intentions.

Hypothesis 5: Changes in self-efficacy in a target country are:

- a) positively associated with intentions to adapt personal behaviors in contextually appropriate ways;
- b) negatively associated with intentions to adopt resistive behaviors;
- c) negatively associated with intentions to adopt avoidant behaviors.

### **METHODS**

### Subjects

The sample included 43 subjects, all secondary school teachers attending summer workshops to enhance their professional knowledge and improve their teaching skills; 35 were women and 8 were men. Eighteen participants received a week-long, area studies training program focusing on Japan taught by a university professor with expertise in area studies training. Though it had not been confirmed at the time of the training, many of these participants anticipated they would be spending a sojourn in Japan and the week-long program was considered a part of the preparation for their sojourn. The remaining 25 people formed a comparison group. These participants were attending a seminar on introductory education research. They received no area studies training on Japan and they did not participate in any Japan-related activities.

This sample is representative of the population to which we would like to generalize, namely individuals preparing for sojourns overseas. The purpose of this preliminary investigation was to begin to understand what types of changes may result from receiving a short term area studies training in general, in an effort to refine our model for testing on a broader population.

Descriptive statistics on demographic characteristics for both the training and comparison groups are presented in Table 1. They show that the treatment and comparison groups are similar on the demographic characteristics measured.

Although the sizes of both the training and comparison groups are small, our review of informational training programs indicates that groups larger than 20 to 25 participants are unusual. To increase the sample size, particularly for the training group, by conducting larger training sessions was not considered a viable alternative by those sponsoring the training. Attempting to increase sample size by combining the results of groups receiving the training at different times would have introduced further problems concerning comparability in the training actually received as these might reflect variations in trainers, training materials, and the timing and sequence of training activities (Cook & Campbell, 1979; Judd & Kenny, 1981).

In the absence of a known assignment rule, it was necessary to determine how nonequivalent the treatment and comparison groups were on a number of variables believed to partially explain variance in our construct measures, specifically, the variables of age, sex, level of education, prior cross-cultural experience, and knowledge of foreign languages. Analyses of T-tests of differences between means on comparability mea-

TABLE 1

Means, Standard Deviations and T-Statistics for Treatment and Comparison
Groups on Demographic Characteristics

	Treatment Group	Comparison Group	T-Test of Differences		
Variables	Mean (SD)	Mean (SD)	Between Means		
Age	39.444	34.520	2.05		
	(6.519)	(8.574)			
Sex <sup>a</sup>	.278	.120	1.31		
	(.461)	(.332)			
Male	5	3			
Female	13	22			
Level of Education <sup>b</sup>	3.389	3.200	1.36		
	(.502)	(.408)			
Bachelor	11	20			
Master	7	5			
Cultural Experience <sup>c</sup>	.944	.560	1.82		
•	(.712)	(.639)			
Foreign Language <sup>d</sup>	.500	.560	38		
3 0 0	(.507)	(.514)			
Fluency <sup>e</sup>	.750	1.000	71		
•	(.879)	(1.283)			

Note: Both groups were comprised of approximately 80% white, 20% Afro-Americans who were native born Americans raised in the southern United States.

sures indicate that the training group and the comparison group were similar on each of the six measures. The comparability of the two groups on these background measures is assumed to be a reasonable proxy for the unknown assignment rule (Judd & Kenny, 1981). Had the groups not been comparable it would be necessary to make adjustments in the posttest scores to reflect the pretest differences.

# Study Design and Program Content

A nonrandomized pretest-posttest design was utilized for both a treatment and a comparison group. This quasi-experimental design was cho-

df = 41; Treatment: N = 18; Comparison: N = 25.

<sup>&</sup>lt;sup>a</sup>Coded as male = 1, female = 0. Frequencies are reported for categorical variables.

<sup>&</sup>lt;sup>b</sup>Coded 1 to 5, corresponding to high school, associate, bachelor, master and doctorate degrees respectively.

<sup>&</sup>lt;sup>c</sup>Coded 0 to 3, corresponding to no cross-cultural experience, spectator phase, adjustment phase, and adaptation phases respectively.

<sup>&</sup>lt;sup>d</sup>Coded 1 if able to speak a foreign language, 0 if not.

<sup>&</sup>lt;sup>6</sup>Coded 1 to 5, corresponding to a scale ranging from able to only say a few words to completely fluent.

sen as the most appropriate for maximizing the collection of interpretable data from the naturally formed treatment and comparison groups (Campbell & Stanley, 1963; Cook & Campbell, 1979; Judd & Kenny, 1981).

The treatment group received the informational training on Japan over a six day period. The average day included a morning lecture, three hours in length, and an afternoon workshop that lasted two hours. Primary topics covered in the lectures were an overview of Japanese history, an introduction to core cultural concepts and how these differ from American understandings of the same concepts, and an introduction to concepts of social organization, for example hierarchy and groups versus individual-oriented structures. In addition, specific topics discussed included Japanese art, management practices, and Japanese consumer products. Subjects were given out-of-class reading assignments to supplement lecture sessions. Evenings involved some leisure activity aimed at supplementing the daytime training and included such things as dinner at a Japanese restaurant, informal social interaction with Japanese from the local community, or viewing of Japanese films. Members of the comparison group, in contrast, were not involved in any Japaneseoriented activities.

Factual and conceptual knowledge regarding the country and culture of Japan was presented during the formal programs during the day, length of time covering approximately five hours. The additional twenty hours spent in informal activities interacting with native Japanese in the evenings provided attributional knowledge.

Though attending training programs during the same period at the same location, the treatment and comparison groups were isolated from one another. The comparison group attended a training seminar on educational curriculum development. Their out-of-class activities included study teams and informal socializing with one another. They did not have any informal social interaction with members of either the treatment group or the native Japanese working with the treatment group.

Duration of the training was the same for both groups, six days. Time in classroom instruction was also the same, five hours per day. In-class training time totaled thirty hours for each group. The treatment group received an additional twenty hours of out-of-class social interaction with native Japanese.

There was an eight-day interval between the pretests and posttests during which groups received their training. Both the treatment and comparison groups received the pretest survey instrument immediately preceding the start of their training program. Both received the posttest survey instrument the day after their training had concluded.

### Measures

Demographic Variables. Age was measured as the age reported by the subject.

Sex was coded as zero if female and one if male.

Education was measured as the highest degree received, coded one to five corresponding to high school, associate, bachelor, master and doctorate degrees respectively.

Prior Cross-cultural Experience was measured by first calculating the number of countries visited and the length of stay in each country. These two measures were combined to create a composite measure by dividing length of stay by the number of countries visited.

This measure was developed based on an assumption that individuals spending longer lengths of stay in a country would have gained different types and levels of cultural experience than individuals who spent shorter lengths of stay in a country. The authors have assumed that a major factor affecting the outcomes of the analysis is the amount of crosscultural experience subjects had outside of the treatment. The groups' pretest measured comparability on this composite is believed to further isolate the treatment effects. Using Lewis and Jungman's (1986) suggested phases of an individual's foreign experience, subjects were coded as zero to three to correspond with no cultural experience, spectator, adjustment, and adaptation phases respectively.

Foreign Language was measured as one if a subject responded that they spoke a language other than their native language and zero if they did not.

Language Fluency was measured on a 5-point scale with 5 being fluent in the language and 1 being only able to say a few words. This measure was a self-rating.

Knowledge Levels. Factual knowledge was measured by 15 items. Respondents were instructed to indicate their views of statements presented to them in one of three ways: a) they were to indicate "true" if they knew the item to be true, b) they were to indicate "false" if they knew the item to be false, and c) they were to make no response if they were unsure of the truth or falsity of the item. The score on the factual knowledge variable was calculated based on the number of appropriate responses that were made by each participant.

Conceptual knowledge was also measured in the same way, using a different set of 15 items. The conceptual knowledge score was calculated in the same way.

Knowledge concerning attributional accuracy: To measure attributional accuracy in explaining behaviors in Japan, previously validated critical incidents were utilized. All were of the type used in a cultural

assimilator, the method of self-administered cultural training developed by Stolurow (1965). A booklet containing eight critical incidents was presented to trainees along with four alternative choices for explaining the behavior of each incident. A pretest-posttest comparison of critical incident responses was used to measure the change, if any, in knowledge associated with attributional accuracy.

How cultural assimilator measures of attributional accuracy may relate to behavior is discussed by Triandis (1975) and supported by numerous empirical investigations (Landis, Day, McGrew, Thomas, & Miller, 1976; Mitchell, Dossett, Fiedler, & Triandis, 1972; O'Brien, Fiedler, & Hewett, 1970; Worchel & Mitchell, 1972) and a review (Fiedler, Mitchell, & Triandis, 1971). Triandis (1975), for example, suggests that increased attributional accuracy leads to improved behavior toward culturally-different others. Attributional accuracy, in turn, appears to improve the general understanding and adjustment of individuals to different cultures.

Attitudes. Attitudes are most commonly assessed using some form of the semantic differential technique (Osgood, 1952). In the present case, subjects were presented with five concepts—Japanese people, Japanese culture, Japanese management, Japanese products, and Japanese art. They were asked to indicate, on a seven point scale, their attitudes toward each concept. Nine differential scales were used for each of the five concepts measured, providing a total of 45 attitude measures.

Self-efficacy. Participants were asked to assess what they thought their level of self-efficacy would be in a Japanese context. Self-efficacy was measured by four questions. Following Bandura's (1977) conceptualization of self-efficacy, subjects were asked to indicate the extent to which: a) they would be able to behave in culturally appropriate ways in a Japanese setting, and b) how certain they were that they could do this.

Behavioral Intentions. Because it was not known whether or when the subjects in the treatment group would go to Japan, the behavioral effects of the training were assessed with respect to intended rather than actual behaviors. The measure of behavioral intentions, while less preferable than measuring actual behaviors, has been found to be a reasonable proxy and has been used in previous studies (e.g., Bond & Forgas, 1984; Triandis, Vassiliou, & Nassiakou, 1968). An 8-item questionnaire was developed. Each item consisted of a description of a situation in a Japanese context to which subjects were asked to indicate their likely behavioral intention. The items were evaluated by sixteen raters. Interrater reliability was .83. Responses to the items were classified as being adap-

tive, avoidant, or resistive. Below is an example of one of the behavioral intention items:

You have been invited to a restaurant with a Japanese coworker. You do not care for Japanese food. Would you:

- -Go, eat a little and say nothing. (Avoidant)
- -Suggest to your coworker that you go to a restaurant with a Western menu. (Resistive)
  - -Go, order several dishes and hope to find items you could enjoy. (Adaptive)

Use of behavioral intentions items, particularly those of the sort used here, may be susceptible to social response bias. However, such concerns are of less relevance in a quasi-experimental design such as the one used in this study. When the pretest and posttest items are identical, we can assume that the bias, if present, holds constant across measurement events. Differences between pre- and post-test scores would remain unaffected. The effect response bias would have is to inflate the level of the score. However, our interest in this study is not in the level, but in changes to the level of the score.

Pretest and Posttest Forms. The pretest and posttest forms were identical and used for both groups. Change score analysis was used to determine change due to treatment. Change score analysis has been described as equivalent to a repeated measures analysis of variance (Judd & Kenny, 1981). This method of analysis was chosen based on the following assumptions: a) stationarity, that the unknown assignment variable directly affects both the pretest and posttest and that those effects are of equal magnitude; b) that the pretest does not cause the posttest in the change model; and c) that the assignment variable causes the pretest and is not caused by it in the change model. Given these assumptions, change score analysis is viewed as the preferred method for analyzing the data (Judd & Kenny, 1981).

#### RESULTS

The first hypothesis suggested that informational training would result in increases in three types of knowledge, that is, increased factual and conceptual knowledge, and increased knowledge related to attributional accuracy. Column 2 of Table 2 compares the pretest means on the knowledge dimension of the treatment and comparison groups. These data show that prior to the training, the two groups were comparable on the variables of interest. There were no significant differences between the groups prior to training. After the respective trainings, the Japanese knowledge of the comparison group remained relatively unchanged, as

would be expected. The knowledge of the treatment group, however, increased significantly, as indicted in Table 2, column 8 and 9. Thus, the area training was effective in increasing trainees' knowledge on all three types of knowledge assessed.

Hypothesis 2 suggested that, as a result of increased knowledge, subjects would assess and evaluate things Japanese in more positive ways. The results in column 9 of Table 2, however, indicate there is, in fact, little change.

Hypothesis 3 suggested that a further consequence of information training would be a tendency, when faced with situations in a Japanese context, to choose more adaptive rather than avoidant or resistive behaviors. Column 2 of Table 2 suggests that prior to the training, there was no significant difference between the treatment and comparison groups. After the training, as indicated in column 5, the comparison group reported significantly more resistive and less adaptive behaviors, a finding that was not expected and is probably related to an unknown and unmeasured variable other than the training. In contrast, column 8 of Table 2 indicates that the treatment group reported slight decreases in the amount of resistive behavior. Because of a similar change in the comparison group, this is an uninterpretable result.

Hypothesis 4 suggested that increased knowledge of Japan would be associated with increased feelings of general self-efficacy in dealing with aspects of Japan. The last item of column 8, Table 2 suggests that, in fact, the training did not significantly change mean levels of general self-efficacy in coping with a Japanese cultural environment.

Table 3 takes the analysis a step further and examines correlations between changes in the levels of the different types of knowledge and other changes for the treatment group. The following discussion is exploratory, but suggestive. There is a positive association between changes in factual knowledge and attributional knowledge. This may indicate a complementary or mutually reinforcing relationship between factual and attributional knowledge.

Table 3 also considers how, for the treatment group, changes in knowledge may be related to changes in attitudes toward things Japanese. Changes in conceptual knowledge are negatively associated with changes in attitudes towards Japanese products, suggesting the need for further exploration into the relationship between knowledge type and attitudes.

Other significant associations of interest are the negative relationship between conceptual knowledge and self efficacy and the negative association between gender and changes in self efficacy. A further exploration of the influence of area studies training programs by gender and knowledge type should be considered in future research.

TABLE 2

Means, Standard Deviations and T-Statistics for Treatment and Comparison Groups for Between Group Differences and Within Group Differences Between T-1 and T-2

	4 5	9	7	80	6
Similarity Com	Comparison Group		Treatment Group	a	Similarity
Pretest					Posttest
T-Test of Pretest Differences	Posttest T-Test of Differences	of Pretest	Posttest	T-Test of Differences	T-Test of Differences
Between Mean Means (SD)	Mean Between (SD) Means	n Mean (SD)	Mean (SD)	Between Means	Between Means
	.64091	2.111	2.784	3.87***	6.53***
(1.810)	(1.823)	(2./84)	(2.728)		
4.480 3.	3.32 - 1.81	5.833	8.778	4.16***	5.02***
(3.602) (4.	(4.347)	(2.936)	(1.768)		
4.120 4	4.200 .30	4.222	5.722	2.82**	2.96**
(2.147) (1.	(1.893)	(2.184)	(1.274)		
33.960 32.9	32.960 -1.07	34.833	32.222	-2.75**	64
		(0.005)	(00,1.0)		
34.000 33.600	00.	33.833	32.278	-1.29	-1.10
(3.905) (2.799)	(66	(3.869)	(5.062)		
			,		
	34.840 -2.00	34.389	37.050	34	-1.01
(3.732) (3	(3.171)	(5.8563)	(2.888)		

	- 1.00		51			1.40			-2.03*			35		į	6/	
	-1.22		27			79			31			1.57			1.30	A AMAZONIA
	33.056	(0:300)	32.899	(3.708)		5.556	(1.338)		1.333	(1.029)		1.111	(.900)		16.611	(000.1)
	34.333	(5.5.5)	33.167	(5.136)		5.889	(1.451)		1.444	(1.199)		.667	(.686)		14.278	(2002)
	10		1.64			3.26**			-2.41*			1.22		ć	25	
	34.280	(0000)	33.480	(3.798)		4.920	(1.552)		2.080	(1.118)		1.000	(4.812)	•	14.04	(1.900)
	34.360	(2.0.0)	32.120	(4.381)		6.040	(1.241)		1.280	(1.208)		.680	(.802)	,	14.24	(200.1)
	02		.72			76			.44			90. –		4	90.	
Attitude:	Products		Attitude: Art		Adaptive	Intentions		Resistant	Intentions		Avoidant	Intentions			Self-Efficacy	

df = 41; Treatment: N = 18; Comparison: N = 25. \*p < .05; \*\*p < .01; \*\*\*p < .001.

TABLE 3

Pearson Correlation Results: Variable Intercorrelations

Among the Treatment Subjects

	1	2	3	4	5	6	7	8
1. Age	1.00							
2. Sex	.250	1.00						
<ol><li>Education Level</li></ol>	.052	.269	1.00					
<ol> <li>Cultural Exper.</li> </ol>	.091	.056	.071	1.00				
5. For. Langauges	263	124	342	.090	1.00			
6. Level of Flu-								
ency	231	.036	- 1.00	.079	.748	1.00		
<ol><li>ΔFactual knowl.</li></ol>	.683***	.066	014	.359	256	- 1.25	1.00	
<ol><li>ΔConcept.</li></ol>								
Knowl.	083	286	.172	.029	.324	.240	.176	1.00
<ol><li>ΔAttribtnl.</li></ol>								
Knowl.	.332	.142	078	.020	279	067	556**	187
0. ∆ Att: People	200	410*	.124	014	468°	.652**	.142	.070
<ol> <li>ΔAtt: Culture</li> </ol>	− .141	206	186	.531*	.000	131	.119	.002
2. ΔAtt: Mgmt.	.024	457*	.252	.168	356	556**	032	.214
<ol><li>ΔAtt: Products</li></ol>	206	— .103	186	.056	295	492*	216	4 <b>9</b> 9
4. ΔAtt: Art	269	046	292	172	270	283	117	187
<ol><li>ΔAdapt. Intent.</li></ol>	.105	454*	307	224	.257	113	105	.205
<ol><li>ΔResist. Intent.</li></ol>	236	.297	290	.294	150	.263	.105	219
<ol><li>ΔAvoid. Intent.</li></ol>	.101	.296	.087	.111	100	112	.067	025
<ol> <li>∆Self-Efficacy</li> </ol>	223	510*	342	240	.211	.077	046	.518

Note: N = 18.

p < .05; p < .01; p < .001; p < .001.

### DISCUSSION

The purpose of this paper was to develop a theoretical model that might explain what types of impacts area studies training programs have on their trainees. The present study provided an opportunity to explore the appropriateness of and limitations to the model with respect to one area studies program design. These exploratory results are suggestive of the ways in which one area studies training program, of the design described earlier, may be effective for participants and of the ways in which it is likely to be limited.

The results suggest that area studies training is likely to be effective in transferring and increasing participants' knowledge of a target country or region. They indicate that a variety of types of knowledge can be transferred in this way, including factual and conceptual knowledge, and ideas that can help participants make more accurate attributions as to the meaning of behavior in the particular cultural context. Generally, the results suggest that area studies training affects three types of knowledge which may, in turn, alter some attitudes.

More specifically, the results indicate that this particular area training was an effective method for increasing factual, conceptual and attributional knowledge regarding Japan. While significant increases in factual

TABL	E 3	(continued)

9 10	11	12	13	14	15	16	17	18

1.00								
.029	1.00							
092	.317	1.00						
255	435*	.105	1.00					
161	.409*	.091	.391	1.00				
026	.361	031	.132	.608**	.100			
146	.101	.108	.315	.269	.025	1.00		
205	.046	054	– .385	108	083	705*** 1.00		
.000	160	092	008	218	.047	615**010	1.00	
012	.213	.066	.190	.239	045	.350130	377	1.00

knowledge are not so surprising, the significant increases in conceptual and attributional knowledge are important because it is generally thought that changes in higher order knowledge require longer periods of exposure (Mendenhall & Oddou, 1985). The increase in higher order knowledge in this area training may be attributable to the fact that the subjects, comprising the naturally assembled treatment group, had come specifically to learn about the Japanese. Consistent with Black and Mendenhall's (1990) model of cross-cultural training, the increased knowledge may reflect participants' high levels of motivation for understanding the Japanese. Thus, motivation may be an important intervening factor in higher order knowledge acquisition. If so, this may have important financial and business implications for companies that provide area studies training for managers that are selected for international assignments, but who, given the choice, would prefer not to go.

Unfortunately, although the area training increased participants' knowledge, it had little impact on either participants' attitudes toward things Japanese or on their general feelings of self-efficacy in a Japanese cultural environment. It had no measurable impact on behavioral intentions. While behavioral intentions were not impacted, it can only be assumed that actual behavior would not be impacted. Additional re-

search will want to attempt to measure actual behavior, not unlike Earley's (1987) approach.

Generally, this exploratory study may point to the limitations of the informational model for preparing individuals for sojourns oversees. In other words, this area studies training increased participants knowledge, but the impact of this knowledge on other factors believed to be associated with cross-cultural adaptation appears limited. Consequently, these findings appear supportive of Tung's (1981) suggestions that area studies programs cannot be expected to impart all the necessary information trainees need for an overseas assignment.

There are many types of area studies programs comprised of: various levels of factual, conceptual and attributional knowledge and other components, a variety of approaches to communicating the associated information, and varying lengths in duration. As such, it should not be assumed that all area studies programs are essentially alike. With respect to knowledge components, however, it may be argued that, while some programs have as their expressed program content one type of knowledge versus another, they nonetheless indirectly incorporate elements of factual, conceptual and/or attributional knowledge. Thus, it is more likely that variation between programs may not be so much the exclusion of one type of knowledge or another, but the mix of these three. With respect to program length, it is reasonable to expect differential training effects as a result of the length of exposure to some ideas, concepts and experiences. Therefore, more controlled studies, investigating multiple types of area studies training, will also want to include program length as an experimental manipulation to rule out the time factor for explaining some of these findings.

The small sample size raises two important issues that bear directly on the interpretation of these results: a) generalizability of the findings, and b) effect size. In the first case, the small size of this sample raises issues about extending conclusions drawn to a larger population. More meaningfully, however, the smaller the sample size, the greater the effect must be in order to achieve statistical significance. As a consequence of our small sample size, weak effects may have failed to show significance even though, in reality, they exert some influence. Conversely, the small sample size results in conservative findings—only the more powerful effects demonstrate statistical significance. Thus, there is strong reason to have confidence in the effects that did emerge.

Given both the limitations of conducting this study with only one area studies program design and with a small sample, additional research will want to address these limitations in their design approaches for assessing the appropriateness of the presented model. Research is needed that will more fully explain the types and extent of the impacts area studies training programs can be expected to produce in program participants. The

presented model provides one view of what may be expected from such training. Recognizing that this is a preliminary investigation of limited generalizability, it suggests that area studies training programs, of the type described, can provide important knowledge preparation for those going overseas. However, other expectations of the value of this training may need to be revised.

### **CONCLUSION**

In summary, we consider the results of this study to be a first step toward the development of a theoretical model that might explain what types of impacts area studies training programs have on their trainees. The findings have indicated that area studies programs, of the type employed in this study, may be primarily limited to impacting trainees with respect to their acquisition of three types of knowledge. As such, the area studies program design investigated may be only a small part of what is needed for people to effectively prepare and adapt for a sojourn. Our findings should be both replicated in other settings and with other types of training programs. We recommend that the approach be expanded to include variables related to participant motivation where appropriate and where possible, to employ research designs that can assess participants actual behavior once they have gone overseas.

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