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THE EFFECTIVENESS OF INTERCULTURAL RELATIONS TRAINING FOR VIETNAM ADVISORS

Alan W. Lau, et al

Naval Personnel and Training Research Laboratory San Diego, California

June 1973

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NAVAL PERSONNEL AND TRAINING RESEARCH LABORATORY SAN DIEGO, CALIFORNIA 92152.

RESEARCH REPORT SRR 73-20

JUNE 1973

THE EFFECTIVENESS OF INTERCULTURAL RELATIONS TRAINING FOR VIETNAM ADVISORS

Alan W. Lau Ervin W. Curtis

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by

Alan W. Lau Ervin W. Curtis

June 1973

Research Report SRR 73-20

Submitted by

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Naval Personnel and Training Research Laboratory San Diego, California 92152

A LABORATORY OF THE BUREAU OF NAVAL PERSONNEL

SUMMARY AND CONCLUSIONS

Problem

The Intercultural Relations (ICR) - Vietnam (VN) program conducted at the Naval Amphibious Base, Coronado, consisted of experiential and cognitive learning in small groups and was developed to provide predeployment training to Naval personnel for duty in Vietnam. The initial problem involved the need to evaluate and improve intercultural relations training given to advisors. This interim report examines the degree to which the program was having desired effects in terms of attitudinal and long-range behavioral change.

Approach

Following the specification of course objectives, a series of objective instruments were selected for measuring relevant attitudinal change. Quantitative measures of trainee behavior such as questionnaires and behavioral checklists were also developed by the authors of this report. Baseline data were collected from trainees regarding skills in interpersonal relations, flexibility, leadership style, and level of selfactualization. This information was used as a reference in assessing skills after training. Tests were also administered to a control group and, to measure the interaction between tests and ICR-VN training, to a third group of trainees tested only after training. Pretest and posttest difference scores were tested for statistical significance. As a validity check on the attitude tests, trainees were asked at the conclusion of training to rate the other men in their class on behavioral traits such as adeptability, leadership and motivation. It was hypothesized that ICR training would have a greater impact upon attitude change than that in a comparable control group. Since the program was curtailed, in-country performance could not be measured.

Findings and Conclusions

The experimental group increased significantly more than the control group on <u>consideration</u> (a style of leadership characterized by allowing subordinates more participation in decision-making) and decreased significantly more on <u>structure</u> (a style of leadership characterized by goal attainment). Also, the experimental group changed significantly more on <u>flexibility</u> (a measure of readiness to make changes in behavior) and needs for <u>recognition</u>. On a self-report questionnaire, the experimental group reported more positive change than the control group. Several self-reported changes deserving special mention were in the areas of dealing with problems, understanding of others, being able to help others with their problems, and being a sympathetic listener. In general, there was little relationship between pretest attitude acores and peer-ratings of behavioral traits exhibited in the classroom. A parallel analysis in the post-only group, however, showed significant relationships between attitude tests and peer-ratings. It was concluded that the ICR course, as measured by objective attitude tests and self-report data, was partially effective in terms of what was regarded as critical attitudes required for successful onthe-job performance, and were compatible with behaviors outlined in the Naval Advisor Profile Report as requisites for in-country effectiveness.

Although a large number of trainees could not be evaluated before the program was curtailed, it is anticipated that on-going evaluations of other ICR programs, which themselves share a common content with the ICR-VN course, will provide further clarification. In the evaluation of these other programs, instruments measuring self-acceptance, acceptance of others, and intolerance of ambiguity have been administered, and attempts are being made to objectively measure behavioral changes that have occurred as a result of training.

REPORT US" AND EVALUATION

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TABLE OF CONTENTS

	F	age
Sum	mary and Conclusions	111
	and Evaluation Form (Authorized Tear-Out)	 v
		-
Α.	INTRODUCTION	1
	1. Course Description	1
	2. Review of the Literature	2
	3. Methodological Questions	4
	4. Previous Research on the ICR-VN Program	5
	5. The Present Effort	6
n ·	PROCEDURES	6
ø.	PROCEDURES	0
	1. Specification of Attitudinal and Behavioral Objectives .	6
	2. Selection of Tests and Development of Behavioral Scales .	7
	3. Collection of Data	8
	4. Assessment of Training Effectiveness	ğ
		-
с.	SUBJECTS	9
		-
D.	RESULTE	11
	1. Test-Measured Attitude Change	11
	2. Relationship Between Attitude Tests and Peer-Ratings	13
	3. Self-Reported Change	17
	4. Relationship Between Self-Reported Change and Test-	11
	Measured Change	17
		æ,
Ε.	SUMMARY AND DISCUSSION	20
Refe	erences	23
	tribution List	25
	TABLES	
1.	Characteristics of Trainees in the Experimental and Control	
	Groups	10
2.	Means, Standard Deviations, and Change for Experimental	
	and Control Groups	12

vii

TABLE OF CONTENTS (Cont'd)

ţ

		Page
4.	Self-Reported Positive Change for Experimental and Control Group	19
	FIGURES	
1.	Pretest and posttest scores for experimental and control group on Leadership Opinion Questionnaire	14
2.	Pretest and posttest score.' for experimental and control group on Flexibility Scale	15
3.	Pretest and posttest scores for experimental and control group on Inner-Directed Scale of the Personal Orientation Inventory	16

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THE EFFECTIVENESS OF INTERCULTURAL RELATIONS TRAINING FOR VIETNAM ADVISORS

A. Introduction

1, Course Description

The purpose of the Intercultural Relations (ICR) - Vietnam (VN) program was to provide predeployment training to Navy personnel for duty in Vietnam. Training concerned the human elements of working in the Vietnamese culture, and complemented other training that dealt with technical and language preparation for the assignment. The program was developed to provide advisor personnel with the capability to essist the Vietnamese in learning technical and management skills in conjunction with the Vietnamization program. The emphasis of the program was on skills and attitudes that would facilitate interactions with other individuals, particularly with Vietnamese counterparts. The importance of intercultural relations programs in training effective interactions and communications skills has been recognized by Admiral Zumwalt. In commenting on the Personal Response Program, a forerunner of the current program, he stated that:

> "A significant amount of the credit for the outstanding relationships between the U. S. Navy and Vietnamese Navy personnel goes to the Personal Response Program."

The fundamental elements of the ICR-VN program which was conducted at the Naval Amphibious Base, Coronado, centered on the following: (1) selfdevelopment, (2) interpersonal and group relations, (3) ideological orientation, including the American belief in the equality, freedom and dignity of man, (4) foreign policy, (5) culture general information, (6) Vietnamese culture and area information, and (7) application of training through role-playing exercises. Self-development training served two purposes in that it provided the trainee with skills that were hypothesized to make him receptive to learning during subsequent portions of the course, and also to bring about changes that were valid course objectives (e.g., breaking down defensive barriers that inhibit learning, developing skills tor giving or receiving constructive feedback, and teaching communications skills).

To implement the teaching of the above elements, various innovative materials and methods were developed. Training consisted of classroom exercises such as group discussions, role-playing where a prospective advisor might, for example, play a Vietnamese farmer and argue with a Navy advisor simulating a routine patrol, case studies, films, and other video-taped materials. The program was developed around experiential learning in small groups with active trainee participation and two-way communications. This approach was designed to create both student

involvement and opportunities to practice interpersonal skills. A more complete description of the contents of the ICR-VN program has been presented by Dow, et al (1972).

2. <u>Review of the Literature</u>

Brislin (1970), in a review and evaluation of military and Peace Corps cross-cultural training programe, provides a comparison of the various programs and suggests methods for evaluating the long-range behavioral effects of training. The primary point he makes about all intercultural relations programs is the lack of data about effectiveness and the inadequacy of the procedures for program avaluation. In some programs, no evaluation was made, and in others the evaluation was overly dependent on subjective verbal or written reports obtained from trainees. Even though the purpose of cross-cultural training is to facilitate favorable behavior, little data have been gathered on the trainees' actual in-country behavior. To date, nearly all cross-cultural training evaluations have depended on how much trainees say they like or understand others, rather than on how much favorable behavior the trainees actually engaged in. The problem here is that there may be little or no relationship between verbal attitudes and behavior. Training programs that show positive attitude change do not at the same cime indicate that more favorable behaviors toward host nationals are occurring. In short, there may be no transfer of training to the operational setting (Hoehn, 1966).

Despite the lack of evidence concerning the effects of intercultural relations training on in-country performance and the sketchy and often technically inadequate nature of the industrial research reviewed, an overall impression emerges that training can have a positive impact on attitudes and intercultural effectiveness in the foreign setting. Foster and Danielson (1966) conclude that intercultural relations training, and especially the techniques suited to such training as the T-group, roleplaying, and case study methods, are a useful adjunct to language and area training in preparing personnel for overseas duty. Haines (1964) also concludes that intercultural training is necessary for effective overseas performance. He states that success overseas depends upon the ability of military personnel to interact effectively with people in other cultures. Until recently, however, it was assumed that if the advisor was skilled in his job and in the language of the host country, and possessed the correct motivation, he could successfully accomplish his mission. However, as pointed out by Haines, the knowledge about behavior does not guarantee that the individual will carry out that behavior.

Since area studies, technical competence, and language proficiency appear to be necessary but not sufficient conditions for mediating effective overseas performance and for making a successful adjustment to another culture, the focus in intercultural relations training programs has been on the training of personnel in effective social interactions and communications. These skills are difficult to define operationally, however, and their contribution to success in a foreign environment are relatively unknown. It has been hypothesized that differences in values and assumptions are typically the basis of conflicts and misunderstandings in dealing with people from other cultures. One goal, then, of intercultural training has been to get the trainee to suspend his habitual modes of perceiving in order to gain insight into his own assumptions and behavior. Other goals of training typically include the development of an attitude of openness to new experiences, insight into American values, and a reduction in enthnocentricism and rigidity. These skills are hypothesized to minimize the possibility of culture shock.

Although conclusive data about the effectiveness of these recently conceived and innovative intercultural relations training programs is not yet available, it is clear that personnel who are sent overseas with no premaration for the culture-related aspects of their jobs except the reading of some handbooks and discussion with people who have served in similar assignments have often been found to perform in an unsatisfactory manner. Furthermore, neither traditional area studies nor cognitive informationtransmission approaches to training have proven effective in preparing persons to live and work in another culture (Wight, 1970). The experiential approach, according to Wight, helps personnel to adapt, problemsolve, cope and learn how to learn, which he claims is the most important preparation for living and working in another culture.

Since the goals of intercultural relations training end T-groups as applied to management development training appear to overlap, a few comments are made below regarding the effectiveness of T-groups. In a comprehensive review, Campbell and Dunnette (1968) investigated the degree to which and the conditions under which expressed training goals were reached. Were experimental groups significantly different from comparable control groups on specified attitudinal and behavioral criteria? The difference between training and control groups was taken as the experimental measure of the degree to which training had influenced change. The authors organized their review according to the criteria used in evaluating training programs. Internal criteria were measures linked directly to the content and processes of the training, but which had no direct linkage to actual job behavior. Some examples of these were measures of attitude change and the opinions of trainees concerning what they thought they had learned. External criteria were those linked directly with tob behavior. An example would be ratings by supervisors of the trainees' job performance before and after training. It should be noted that of 37 studies cited, 23 involved an internal criterion of effectiveness.

With respect to internal criteria, the authors found that group differences were often found which seemed to be compatible with some of the objectives of training. However, it was often difficult to specify the exact nature of the changes that had occurred. Regarding external criteria, they concluded that training in many cases had been successful in inducing performance changes that were perceived by supervisors and/or observers as increasing the trainees' job performance and/or interpersonal effectiveness. They emphasize, however, that trainees reported considerably more changes than did independent observers, and that the relationship between internal and external change criteria was low.

In summary, the conclusions drawn by Campbell and Dunnette (1968) regarding the effectiveness of T-groups and the conclusions drawn by Brislin (1970), Haines (1964), and Foster and Danielson (1966) on the effectiveness of intercultural relations training are similar. In short, groups often show a significant positive impact, but this impact is much less than that purported by participants involved in training. The same general conclusions were drawn by Lieberman, Yalom and Miles (1972) in their study of the effectiveness of encounter groups, and both Diamond (1973) and Fitzgerald (1973) report that self-awareness training had a significant effect on attitudes as measured by tests of self-actualization.

One important and relatively neglected area concerns the relative contributions of the various parameters of training to dependent change variables. One of these parameters concerns individual differences - for what kinds of trainees are particular training effects observed? For example, do personality variables such as flexibility and ego strength interact with training? Another important parameter concerns the professional background, personality, and overall competence of trainers. This variable would seem to have a strong relationship to the effectiveness of training. Once these questions are answered, it will become conceivable to validly measure the effectiveness of intercultural relations training. Finally, one finds the lack of an explicit theory of learning for use in specifying the relationship between learning experiences and learning outcomes. The change models developed by Schein and Bennis (1965) and Miles (1964) only identify broad areas of, or minimum conditions for learning. What is needed is a theoretical model which relates the experience, the conceptualizing activities, and the learning outcomes to one another.

3. Methodological Questions

T-groups are often part of a larger program which includes wele-playing exercises, case studies, group discussions, and cognitive information. While many consider the T-group to be the cornerstone, conclusions reached by an evaluation of the total program cannot be attributed solely to the Tgroup technique. There have been no conclusive studies that have compared the relative effectiveness of training without the T-group to training with T-groups. With reference to the ICR-VN training program it is also difficult to isolate the element or elements that contributed most to changed attitudes and behavior. In this report, only the total six-week program and not the contribution of each element was evaluated.

An area that needs considerable attention is the identification of critical behaviors which constitute effective advisor performance. Without this identification, it is difficult to assess the success of intercultural relations training. The Naval Advisor Profile Report (1971), which was an attempt to outline the qualities necessary to be an effective advisor in Vietnam, represented a step in this direction and Froehlich (1968) has developed some experimental techniques for assessing the willingness of advisors and counterparts to continue working together.

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However, much more information on what constitutes effective and ineffective behavior is needed. Unfortunately, research on the effectiveness of ICR training has been highly dependent on the use of verbal measures - how much trainees say they like or understand others. Furthermore, little data have been gathered on actual behaviors toward host nationals. Some information on what training should cover was recently gathered by Yellen and Hoover (1973). In an attempt to identify personal attributes that maximized positive interactions between Navy personnel and Greek hostcountry nationals, they asked Navy personnel what behaviors Americans exhibit that the Greek people have the greatest difficulty adjusting to. They found that a lack of respect for social customs, the possession of a superior attitude, and a disrespect for Greeks as individuals were mentioned by Navy personnel as contributing to poor intercultural relations. The majority of respondents also indicated the need for more information before being assigned in-country. This study, however, also involved verbal and not behavioral measures, and it is unfor mate that Greek nationals were not asked the same questions.

Sefore examining two studies where the effectiveness of the ICR-VN program was evaluated, several methodological points should be considered. It is important that research evidence in support of the claims made employ scientific standards. First, trainees must be measured before and after training. Secondly, using meaningful control groups is the only way to assure test changes observed in the experimental groups are actually the result of training and not artifactual. Thirdly, testtraining interaction is quite likely, i.e., trainees are often sensitized by pretests. One way of estimating the degree of the interaction is to provide a quasi-control group which takes part in the training but does not take the pretests. These scientific standards, however, have been applied only rarely in studies to evaluate the effects of training. Hand and Slocum (1972) report that only five management development human relations training evaluations have been done that utilized before and after measures with experimental and control groups.

4. Previous Research on the ICR-VN Program

Dow, Bedoian, and Grace (1972) evaluated the ICR-VN program (then called Human Response) and concluded that end-of-course objectives were met, and that training had a positive effect on attitudes and classroom behaviors. The authors felt that standardized instruments for measuring the types of desired change were not available, and instead relied on procedures which included direct observations, interviews, and questionnaires. Behavioral change was subjectively inferred by observers who noted such changes as increased candor, ability to administer and receive constructive feedback, and ability to establish rapport. Attainment of course objectives was measured by asking trainees whether or not objectives had been met, and attitude change by asking trainees whether or not training had influenced changes. These results are difficult to interpret since no pretest measures were collected, nor could change be compared to that which might have occurred in a comparable control group.

The Chief, Naval Advisory Group (Vietnam) also conducted a study of the effectiveness of ICR-VN training (1972). This study was done incountry through a comparison of advisors who had human response training and advisors who had not. Immediate superiors were asked to evaluate performance, and the man himself was asked to rate his performance. The survey failed to show a major difference between trained and untrained advisors in three general areas, including the ability to establish rapport with Vietnamese counterparts and the ability to have advice implemented. The survey, however, was administered to men who had only spent a maximum of three months in-country, and it is possible that the benefits of training would have shown up at a later point in the man's Vietnam tour. Of particular importance, however, was the finding that training had varying effects on advisors. That is, there were significant interactions between performance and variables such as the advisor's number of counterparts, previous Vietnam tours, level of education, and career intentions. Although the results were not based on objective measures of performance, the implications of this survey were that craining might have differential effects on effective intercultural relations skills.

5. The Present Effort

The purpose of this research was to determine whether or not the ICR-VN program was having the desired effects in terms of attitudinal and long-range behavioral change. The research design was organized according to two types of evaluative criteria - internal change such as attitudes, and external criteria which was to include in-country performance measures. The knowledge of both kinds of criteria was to be used to provide the Naval Amphibious School with an on-going feedback loop which could be used to continually review and revise the course in order to maximize the effectiveness of intercultural relations training.

Unfortunately, the ICR-VN program was curtailed and adequate sample sizes did not materialize. As a result, in-country performance could not be measured. The purpose of this report is to present the attitudinal and in-class behavioral changes that occurred during the training of 44 men.

B. Procedures

The steps in the study were as follows:

1. Specification of Attitudinal and Behavioral Objectives

The initial step involved a description of program background and an examination of training objectives. As part of this examination, the first author participated in one of the six-week programs. Discussions

with the ICR school staff and representatives of Pers-Pc3 indicated that the following objectives were part of the program: (a) increased selfinsight and self-awareness concerning own behavior and its effect upon others, (b) increased interpersonal sensitivity (empathy), (c) increased tolerance for ambiguity, (d) increased regard for the value of equality, (e) increased knowledge of Vietnamese culture, history, and political structure, and (f) reduced dogmatism and ethnocentricism.

2. Selection of Tests and Development of Behavioral Scales

This step involved the selection and construction of objective evaluative instruments that measured attitudes and behaviors specified as being program objectives. Due to the curtailment of the program, not all course objectives were tested. The research literature indicated that a number of published tests showed promine for measuring attitudes relevant to the course objectives. The instruments that were chosen have been used to measure the effects of human relations training in the industrial setting, and demonstrate acceptable levels of reliability and predictive validity. In addition, the authors of this report developed quantitative measures of trainee behavior such as questionnaires and behavioral checklists. These included the flexibility scale, the biographical/personality questionnaire, the change questionnaire, and the peer-nomination form.

The following instruments were utilized to assess changes resulting from ICR-VN training:

a. <u>Fundamental Interpersonal Relations Orientation</u> <u>Behavior (FIRO-B)</u>. This inventory measures the trainees' group behavior in the ms of attempts to influence others (control), initiate contacts (inclusion), and move toward others (affection). No hypotheses were made regarding these scales.

b. Leadership Opinion Questionnaire (LOQ). This test measures two independent dimensions of leadership style-structure and consideration. The LOQ has been used in evaluating a number of management development programs of various durations. High scores on consideration characterize leaders who allow subordinates more participation in decision-maing and encourage two-way communications. High scores on structure characterize leaders who organize and define group activities toward goal attai ment, and define roles that the leader expects each member to assume. Build upon results reported in the psychological literature, it was hypothesized that scores would increase on consideration and decrease on structure.

c. <u>Personnel Orientation Inventory (POI)</u>. This inventory provides a measure of Maslow's concept of self-actualization as it relates to personal development and the ability to develop meaningful interpersonal relationships. The POI has been used in a number of studies for the evaluation of the effects of sensitivity training and provides an assessment of the level of positive mental health in terms of self-actualization concepts. It was hypothesized that scores would increase on the innerdirected (guidance through internal motivations) and capacity for intimate contact (empathy) scales.

d. <u>Survey of Interpersonal Values (SIV)</u>. This test provides a measure of basic motivational patterns. Scores are provided for such needs as recognition, conformity, and leadership. It was hypothesized that scores on support (needs to be treated with kindness and consideration) and benevolence (needs for helping other individuals) would increase.

e. <u>Flexibility Scale (F)</u>. This test measures a variable hypothesized to be associated with resistance to attitude change. It is an experimental instrument, designed to identify individuals likely to have problems in accepting criticism, adapting to new situations, and/or in accepting the values of other people. It was hypothesized that scores on flexibility would be higher following training.

f. <u>Biographical/Personality Questionnaires</u>. This instrument asked trainees for such information as age, educational background, pay grade, and reasons for wanting advisor duty in Vietnam. The purpose of this information was to assess the influence of biographical variables upon change measures.

g. <u>Change Questionnaire</u>. This questionnaire was used to measure selfreported change resulting directly from participation in training. It was given at the conclusion of training, and trainees were asked to indicate the direction of change by checking a series of 25 bipolar adjectives, e.g., tense-relaxed, rigid in thinking - flexible in thinking, etc. If a trainee had not changed, he was to leave that item blank.

h. <u>Peer-Nomination Form</u>. Except for men in the control groups, trainees were asked to rate the other men in their class on behavioral traits such as adaptability, leadership, and motivation. Most of the traits were abstracted from the Naval Advisor Profile Report. These ratings were used to provide a validity check on the various attitude tests. For example, are trainees who earn high scores on the leadership scale of the SIV also seen by other trainees to have exhibited high leadership behavior?

3. Collection of Data

Baseline data were collected from trainees in the ICR-VN program regarding skills in interpersonal relations, flexibility, leadership style, level of self-actualization, etc. This information was used as a reference in assessing skills after ICR training.

Tests were also administered to a control group in order to insure that changes were the result of training and not the result of effects such as the mere passage of time or the low reliability of the test instruments. The control group in this study was tested before and after receiving training in the two-week Vietnam Orientation Course (VOC).

To measure the interaction between the tests and ICR training, a sample of men in the program was tested only after training (post-only). This was done to measure the degree to which trainees might have been sensitized by taking the tests before ICR training.

4. Assessment of Training Effectiveness

This step involved the measurement of attitudinal and rated behavioral change. Pretest and posttest scores on the various scales were compared and tested for statistical significance using one-tailed "t" tests (McNemar, 1960). This procedure was followed for both the control group and the ICR training group. To measure the degree of test-training interaction, scores on trainees in the post-only group were compared to scores of trainees in the experimental group. It was hypothesized that ICR training would have a significant impact upon attitudes of trainees whereas VOC training would not have this impact.

Peer-ratings were completed by trainees in the ICR course, and various scales from the peer-rating form were correlated with test scores in an effort to examine the relationship between the two measures of performance. A third measure of course effectiveness involved self-reports. In the absence of performance measures, the relationship between the three measures of effectiveness - objective attitude tests, self-reported change, and peer-ratings are considered crucial to valid evaluation of the ICR-VN program.

C. Subjects

The planned sample size could not be achieved due to the end of U. S. involvement in Vietnam and the resultant curtailment of the ICR-VN course. There were 44 men in the four ICR-VN classes who took the pretests and posttests. Another 19 men did not complete the course, and posttest information was not available for them. In the post-only group, 19 men took the tests, and in the VOC control group there were 39 trainees. The curriculum of the VOC course concerned such information as counterinsurgency, base defense, weapons familiarization, and the culture and customs of the Vietnamese. Due to absence from the classroom, some of the men in the control group did not take all of the tests.

Table 1 shows the pay grade, educational level, and age characteristics for trainees in the experimental and control groups. There were no substantial differences between men in the two groups, or with the postonly group.

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Characteristics of Trainees in the Experimental and Control Groups

			ntal Group =44)	Control Group N*39)			
	Item	N	*	N	<u>x</u>		
				,			
Prese	nt Pay Grade						
a.	E-4 or selow	10	23	13	33		
b.	E-6	7	16	4	10		
c.	E-7 to E-9	4	9	4	10		
d.	Warrant 🗉 ficer	0	0	1	3		
ε.	Officer	23	52	17	44		
Educa	tional Level						
а.	Not High School Graduate	4	9	0	0		
ь.	High School Graduate (or GED)	12	27	15	38		
Ľ.	Some College	9	20	8	21		
d.	College Graduate	16	36	10	26		
е,	Post-Gradua + Work	3	8	6	15		
Age							
a,	Under 25 Years	7	16	13	33		
b.	25-29	12	27	10	26		
c,	30-34	12	27	7	18		
d.	35-39	8	18	6	15		
e.	4049	5	12	3	8		

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D. Results

This section is organized around several research questions. First, are there significant changes on the various attitude scales from the pretest to the posttest, and are these changes significantly larger for trainees in the experimental groups (ICR-VN) than the control groups (VOC)? The second question concerns the relationship between the various test scales and peer-ratings of behaviors exhibited during training. Are the scores on the attitude scales related to how the trainees were perceived by their classmates? Thirdly, the information on self-reported change is examined. Finally, the relationship between pretest-posttest change and self-reported change is examined. Each of these questions are examined in the following sections.

1, Test-Measured Attitude Change

The first analysis centers around whether or not trainees in the experimental groups significantly differed from trainees in the control group on the pretests. It was found that the two groups of trainees significantly differed on only 1 of the 17 test scales used in the study. Therefore, it was concluded that the two groups were essentially the same before training. The secon! analysis concerns the differences between the post-only group (men in the ICR-VN course who did not take the pretests) and trainees in the experimental groups. No differences were found, and it was concluded that the various attitude tests did not interact with training.

Table 2 presents the means, standard deviations, and critical ratios between pretest and posttest scores for the experimental and control groups.¹ Men in the experimental group earned significantly higher posttest scores (p < .05) on consideration, inner-directed, capacity for intimate contact (empathy), flexibility, and recognition. Significantly lower scores were earned on <u>structure</u>. Trainees in the control group earned significantly higher posttest scores on <u>inner-directed</u> and <u>capacity for</u> intimate contact, and significantly lower scores on <u>consideration</u>. As measured by pretest and posttest attitude scales, these results indicate that both courses had an impact, with the impact being somewhat higher for trainees in the ICR course. One extreme difference between change in the two groups is that men in the control groups earned significantly lower scores on <u>consideration</u> following training whereas men in the experimental groups earned significantly higher scores.

¹Since no hypotheses were developed regarding change, Table 2 does not show the pretest and posttest scores for the six FIRO-B scales. Following training, it was found that the experimental group earned significantly lower scores on <u>expressed control</u>, a scale that measures the attempt to influence or control the group. The control group did not change on any of the FIRO-D scales. Means, Standard Devistions, and Change for Experimental and Control Groups

			XP ERIMEN	EXPERIMENTAL GROUP					CONTROL CROUP	CBORTE		
		PRETEST	ST	POSITIEST	TST	CHANGE		TSATRE		POSTTEST	TS1	3074762
SCALE	W	i×	s.D.	×	s.D.		R	114	s.D.	IX	s.D.	ALANO L
Leadership Upinion Questionnaire	set											
Consideration	42	51.7	5.6	53.7	6.8	2.0#	31	5 3.2	5.2	50.6	6.1	-2,642
\$ tructure	42	49.3	6.7	46.9	7.3	-2.4##	31	50.6	7.5	44.5	7.3	-1.1
Personnel Orientation Inventory												
I mer-Directed	43	82.7	8.2	87.3	10.0	4.64#	26	82.7	10.2	87.5	10.8	4.8**
Empathy	43	17.6	2.8	19.1	3.2	1.544	26	ž 8.2	3,5	19.2	3.8	1.0*
Survey of Interpersonal Values												
Support	8	15.3	5.9	16.2	5.5	6.0	20	13.5	5.1	14.3	5.3	0.8
Conformity	38	14.2	6.0	12.9	5.4	-1.3	20	15.5	6.6	15.2	8.6	-0.3
Recognition	8	9.2	4.2	10.5	4.8	1.3**	20	10.7	5.5	9.8	6.1	-0.9
Independence	38	18.2	7.4	18.6	6.9	0.4	20	16.2	6.0	16.5	7.9	0.3
bene vo lence	38	15.7	6.3	15.4	6.8	-0.3	50	17.4	6.4	17.8	7.1	0.4
Leade rahip	38	17.3	8.7	15.4	7.9	-0°9	50	16.8	7.3	16.6	7.9	-0.2
Flexibility Scale	36	35.4	6.0	36.7	5.7	1.3 *	74	38.6	5.3	37.6	4.7	-1.0
والمحافظ		1										

NUTE: * Significant at .05 level, one-tailed test. ** Significant at .01 level, one-tailed test. - -----

TABLE 2

The critical test of program effectiveness is a direct statistical test of the question: Did the experimental group change significantly more on any of the attitude measures than the control group? This analysis revealed that the experimental group increased significantly more on consideration (t = 4.65, p < .01), and decreased significantly more on structure (t = 1.76, p < .05) than the control group. Also, the experimental group changed significantly more on <u>flexibility</u> (a measure of readiness to make changes in behavior) than the control group (t = 5.07, p < .01). Although change as measured by the Survey of Interpersonal Values was relatively the same for both groups, it was found that the experimental group changed more on needs for recognition (t = 3.20, p < .01). This change was not predicted. It was also determined that trainces tended to score lower on conformity and expressed control than men in the control groups. Figures 1, 2, and 3 present some of these results graphically.

Several analyses were conducted in order to measure the contribution of individual differences to end-of-course attitude scores. The first analysis compared the amount of change on selected attitude scales for officer and enlisted personnel, and the second compared the amount of change by the initial pretest scores of each trainee. Although these analyses were limited by the number of trainees in the sample, several significant differences were noted with respect to the interaction between pay grade and attitude test change scores. For example, it was found that officers tended to increase more on <u>flexibility</u> than enlisted personnel, that officers decreased more on structure, and that enlisted personnel tended to increase more on consideration. An analysis of the Change Questionnaire disclosed that the course had a greater impact on enlisted personnel. With respect to change as a function of the initial pretest scores, it appeared that trainees with low scores before training tended to increase more on such attitude scales as consideration, inner-directed, and flexibility than trainees with high pretest scores.

2. Relationship Between Attitude Tests and Peer-Ratings

As a validity check on the attitude tests, men in the post-only and ICR-VN courses were asked at the conclusion of training to rate the other men in their class on behavioral traits such as adaptability, leadership, and motivation. These ratings were summed for each trainee, and compared with attitude test scores. It was hypothesized that the attitude tests would be related to specific peer-rating items, and to the overall score a man earned.

In general, there was little relationship between the precest scores and either individual or summed peer-rating items. Several exceptions, however, were noted. Scores on <u>expressed control</u> were related to peerratings of friendliness (r = .31), leadership (r = .31), and overall



FIGURE 1. Pretest and posttest scores for experimental and control group on Leadership Opinion Questionnaire.





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FIGURE 3. Pretest and posttest scores for experimental and control group on Inner-Directed Scale of the Personal Orientation Inventory.

effectiveness (r = .31); scores on <u>consideration</u> were related to peerratings of sociability (r = .45); and scores on <u>leadership</u> were related to peer-ratings of leadership (r = .32). As might be expected, pay grade was also related to peer-ratings of leadership (r = .44) and overall effectiveness (r = .32). Only two scales were significantly related to the summed peer-rating score. These were expressed control (r = .35) and <u>independence</u> (r = ..33). Table 3, in addition to showing the intercorrelations between the pretests, shows the correlations between the attitude tests and summed peer-ratings. In passing, it should be noted that a parallel analysis in the post-only 1CR group showed significant relationships between attitude tests and overall peer-ratings. For example, the wanted inclusion scale was related to peer-ratings (r = .47), as were scores on wanted affection (r = .50), and consideration (r = .69).

3. Self-Reported Change

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Table 4 shows the number and percent of trainees in both groups responding positively to the various items in the Change Questionnaire. In every case, men in the experimental group reported more positive change than the control group. The average number of positive changes in the ICR groups was 12.7; in the control groups, the average was 4.9. This difference was statistically significant (t = 4.02, p < .01).

Several changes deserving special mention are in the areas of dealing with problems, understanding of others, being able to help others with their problems, and being a sympathetic listener. The majority of trainees reported that ICR training had changed them in a positive direction. In--pection of these data reveals strong support for the hypothesis that training had a significant impact upon self-perceptions.

Another question involves the relationship between self-reports and the various attitude tests given before and after training. Significant relationships (p < .05) were found between the total number of positive reported changes and <u>wanted control</u> (r = .28), <u>benevolence</u> (r = .30), and <u>flexibility</u> (r = .31). The other scales were not significantly related to self-reported change. These results are presented in Table 3.

4. Relationship Between Self-Reported Change and Test-Measured Change

The final question concerns the relationship between attitude test change and self-reported change. In this analysis, responses on each item of the Change Questionnaire were related to change as measured by differences between pretest and posttest scores on the corresponding scale of the various attitude tests.

In general, there were modest but significant correlations between change on the attitude tests and self-reported change. On the FIRO-B, changes in <u>expressed inclusion</u> (the expression of a desire to initiate contacts with others) were related to self-reported changes in trust in Intercorrelations Among Pretests and Correlations with Self-Reported Change and Peer Matings

19	10	. JS	14	.01	.0.	10	8	6 0	23	.16	.16	33	.07	.20	24	23	10.	- 11		8
15	.18	8.	.21	.12	.28	25	03	21.	.05	03	12	15	.30	03	.11	.05	16.	1	1	
17	2	.00	10	05	18	10	ŧ	11	14	03	22	02		.03	2	.46	1			
16		19		•	-			-			-			_	. 72	8				
15		8			8.1				03			.03	01		•					
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20	8	.03	10	11	21	05	.27	.16	21	8										
6	10	45	.20	07	.24	.18	17	п.	•											
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	13	EC	3	18	HC.	ş	Consideration	Structure	Support	Conformity		Independence	Benevolence	Leadership	Inner-Directed	Empathy		Self-Reported	Change ¹	19. Peer-Ratinga
	•	2.	ń	*	*	÷	~	s i	•	10.	11.	12.	13.	14.	Ы.	16.	17.	18.		19.

NOTES: ¹Refers to positive self-reported changes.

2Summed peer-ratings for each trainee.

TABLE 3

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TAE	ILE	-4

Ites			tal Group		1 Group
		(N=4 N	13) X	(N= N	26) X
1.	Trusting in relations with coworkere	22	51	3	12
2.	Dealing with problems	29	67	6	23
3.	Trusting in gelations with friends	25	58	5	19
4.	Relaxed	22	51	5	19
5.	Other-person centered	19	44	3	12
6.	Enjoy being with others	21	49	4	15
7.	High aspirations	18	42	5	19
8.	Easy going	16	37	5	19
9.	Working well with coworkers	21	49	6	23
10.	Clear in thinking	25	58	5	19
11.	Feel good about self	25	58	4	15
12.	Working well with people in authority	18	42	5	19
13.	Sincere	18	42	5	19
14.	Liberal	14	33	3	12
15.	Decisive	14	33	6	23
16.	Understanding of others	38	88	9	35
17.	Much self-control	18	42	6	23
18.	Self-assured	18	42	6	23
19.	Able to help other with their problems	28	65	5	19
20.	Energetic	14	33	4	15
21.	Optimistic toward the future	18	42	7	27
22.	Independent	15	35	3	12
23.	Unshakable	9	21	2	8
24.	Flexible in thinking	22	51	7	27
25.	Sympathetic listener	29	67	7	27

Self-Reported Positive Change for Experimental and Control Group

relations with coworkers (r = .28), and understanding of others (r = .29); changes in wanted affection were related to self-reported change in being other-person centered (r = .32), enjoyment of being with others (r = .36), and flexibility in thinking (r = .30). Attitude change scores on consideration were related to self-reports of change on working well with coworkers (r = .32), flexibility in thinking (r = .44), and being a sympathetic listener (r = .33). On the POI, changes on the <u>inner-directed</u> scale were related to self-reported changes toward being more liberal (r = .43), and attitude changes on <u>empathy</u> were related to reports of change on clearness of thinking (r = .33). Changes on the <u>flexibility</u> test were generally negatively correlated with self-reported change.

Although these correlations are low, the results indicate that the attitude tests are measuring the same kinds of change that are reported by trainees on the Change Questionnaire.

E. Summary and Discussion

This study provided an objective assessment of the effects of ICR training for prospective Navy advisors for Vietnam duty as evidenced by changes on attitude scales selected and developed to measure aspects relevant to the objectives of the course. As measured by pretestposttest change, it was found that trainees reported somewhat more attitude change than men in a comparable control group. It is evident, however, that VOC training, which involved both discussion groups and cognitive information, had an impact on attitudes. When self-report measures are considered, it was found that trainces reported significantly more positive attitude changes as a result of training than the control group. To a limited degree, these self-reported changes were related to attitude tests.

Following training, it was found that trainees earned significantly higher scores on both the <u>inner-directed</u> and <u>capacity for intimate con-</u> <u>tact (empathy)</u> scales of the POI. The <u>inner-directed</u> scale, which purports to measure self-actualization, indicates that trainees (as well as men in the control group) increased both in personal autonomy and guidance being mediated by internal motivations rather than through external influences.² Consistent findings were noted on the <u>conformity</u> (doing what is socially correct, following regulations closely) scale of the SIV, and the <u>expressed control</u> (attempts to influence or control the group) scale

² It is noteworthy that trainees represented a highly select group in terms of pretest scores on the <u>inner-directed</u> scale. Compared to college freshmen, the average score of ICR trainees reached the 82nd percentile.

of the FIRO-B. Positive changes in <u>empathy</u>, a scale which purports to measure the ability to develop meaningful relationships with other individuals, indicates that trainees significantly changed on that varicble. These results are consistent with others reported in the psychological literature (Alperson, Alperson, and Levine, 1971; Diamond, 1973; Fitzgerald, 1973).

On the Leadership Opinion Questionnaire, trainees earned significantly higher scores on consideration, and tended to earn lower scores on structure, than men in the control group. This would indicate that trainees have moved in the direction of a greater concern for the human relationship in the work environment and toward decreased concern for the task, per se. Trainees indicate that they would pay less of an active role in directing group activities through planning, criticism, and scheduling. it should be noted that in a literature review, no empirical studies show that low consideration scores are related to high performance (e.g., low employee turnover, favorable employee attitudes, or high proficiency ratings). The general conclusion has been that low consideration scores more often indicate an undesirable situation, and that the results with structure depend more on the situation (Korman, 1966; Oaklander and Fleisiman, 1964; Parker, 1963). The high structure/low consideration supervisor is more likely to show more turnover, grievances, and stress among his subordinates. There is also evidence that supervisors high in consideration can be higher in structure without these adverse effects (Fleishman and Harris, 1962), and are more likely to influence workers under them than to accept higher levels of structure. A high structure/ high consideration pattern is most likely to optimize a variety of different effectiveness criteria, and the results reported for the ICR-VN program are interpreted to indicate a favorable course outcome only in terms of consideration scores.³ Another look at the training content of the ICR course might indicate that more material on planning and organizing was needed and could have resulted in both higher structure and consideration scores following training. It is clear that there is a need for clearer objectives as to what outcomes were desired as a result of training.

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Scores on the <u>flexibility</u> inventory indicated that trainees changed significantly more than men in the control group in the direction of openness and the acceptance of the values of other people. Although these changes were modest, this is also interpreted as being favorable in terms of the objectives of the course.

³As reported in the LOQ Manual (1969), it was noted that scores on consideration were considerably higher (about one standard deviation) than Navy officer candidates. This indicates that trainees represent a highly select group in terms of pretest consideration scores. It is concluded that the ICR course, as measured by objective attitude tests and self-report data, was partially effective in terms of what was regarded as the prerequisites for adequate performance on-the-job. As stated in the Naval Advisor Profile Report (1971), an effective advisor must not be tied to the "book" or conventional methods of dealing with problems; and that to be succesful, he must establish sound and constructive interpersonal relationships with the Vietnamese and sense the way the Vietnamese sees things. Further, in his position of leadership with his counterpart he must lead and organize and employ more subtle techniques of leadership without military authority or the power to command. In terms of objectvely measured attitudinal changes, it is felt that the changes toward increased <u>flexibility</u>, <u>self-actualization</u>, <u>empathy</u>, and <u>consideration</u> following training are, to a great degree, compacible with the behaviors required for effectiveness as a Naval advisor.

With the exception of self-report information, the results regarding course effectiveness are not as favorable as reported by Dow, Bedoian, and Grace (1972). In contrast to their study, the present one employed objective measurements and sound scientific principles and methodology in using pretest and posttest measures on experimental and control groups.

It is unfortunate that a larger number of trainees could not be evaluated before the program was curtailed. The effect of trainees knowing that they might not be deployed to Vietnam probably decreased the amount of attitudinal change. Another limitation of the present study concerns the inability to obtain measures of post-training on-the-job performance, and the lack of opportunities to measure long-term attitudinal and behavioral change. It is anticipated that the on-going evaluation of other "people" programs including ICR and Human Resources Development Center (HRDC) training, which themselves share a common content with the ICR-VN course, will provide further clarification. In the evaluation of these other programs, instruments measuring course objectives such as selfesteem, self-acceptance, acceptance of others, and intolerance of ambiguity have been developed, and will be utilized to measure change. It is also anticipated that scales will be developed to objectively measure behavioral and cognitive changes that have occurred over training. Those newer techniques will be collated with those attitude tests found to be effective change measures employed in the present study.

REFERENCES

- Alperson, B. L., Alperson, E. D., & Levine, R. Growth effects of high school marathons. <u>Experimental Publication System</u>, 1971, <u>10</u>, Ms No. 369 56.
- Brislin, R. W. <u>The content and evaluation of cross-cultural training</u> programs. Institute for Defense Analyses, IDA Research Paper P-671, November 1970.
- Campbell, J. P., & Dunnette, M. D. Effectiveness of T- group experiences in managerial training and development. <u>Psychological Bulletin</u>, 1968, <u>70</u>, 73-104.
- Diamond, J. J., & Shapiro, J. L. <u>Toward the long-term scientific</u> study of encounter group phenomena: <u>I. Methodological considera-</u> <u>tions</u>, paper read at the meeting of the Western Psychological Association, April 1973.
- 5. Dow, D. S., Bedoian, J., & Grace, C. L. <u>Evaluation of the human</u> response segment of the naval advisor course System Development Corporation, TM-4869/000/00, April 1972.
- Evaluation of effectiveness of advisors who are human response graduates. U. S. Navy, Chief, Naval Advisory Group, U. S. Military Assistance Command, Vietnam, Letter No. 1500, 12 April 1972.
- 7. Fitzgerald, R. Encounter group change measured by POI and CPS. EITS Research and Developments, 1, 8, 1973.
- Fleishman, E. A., & Harris, E. F. Patterns of leadership behavior related to employee grievances and turnover. <u>Personnel Psychology</u>, 1962, <u>15</u>, 43-56.
- 9. Fleishman, E. A. <u>Manual for Leadership Opinion Questionnaire</u>. Chicago: Science Research Associates, 1969.
- Foster, R. J., & Danielian, J. <u>An analysis of human relations train-</u> ing and its implications for overseas performance. HumRRO Technical Report 66-15, August 1966.
- Froehlich, D. K. <u>An experimental criterion of cross-cultural inter-action effectiveness: A study of military advisors and counterparts.</u> HumRRO professional paper 38-68, December 1968.
- Haines, D. B. <u>Training for culture-contact and interaction skills</u>. Air Force Systems Command, Wright-Patterson Air Force Base, AD 611022, December 1964.

- Handbook of in-country experiences: The naval advisor in Vietnam. Washington, D. C.: Naval Personnel Research and Development Laboratory, 1971.
- 14. Hand, H. H., & Slocum, J. W., Jr. A longitudinal study of the effects of a human relations training program on managerial effectiveness. Journal of Applied Psychology, 1972, 56, 412-417.
- 15. Hoehn, A. J. The design of cross-cultural training for military advisors. HumRRO professional paper 12-66, December 1966.
- 16. Korman, A. Consideration, initiating structure, and organizational criteria: A review. <u>Personnel Psychology</u>, 1966, <u>19</u>, 349-363.
- Lieberman, M. A., Yalom, I. D., & Miles, M. B. The impact of encounter groups on participants: Some preliminary findings. Journa' of Applied Behavioral Sciences, 1972, 8, 29-50.
- McNemar, Q. Psychological Statistics. New York John Wiley & Sons, 1960.
- 19. Miles, M. B. Learning processes and outcomes in human relations training: A clinical-experimental study, paper read at the meeting of the Eastern Psychological Association, April 1964.
- 20. Oaklander, H., & Fleishman, E. Patterns of leadership related to organizational stress in hospital setting. <u>Administrative Service</u> <u>Quarterly</u>, 1964, <u>8</u>, 520-532.
- Parker, T. Relationship among measures of supervisory behavior, group behavior, and situational characteristics. <u>Personnel</u> Psychology, 1963, 16, 319-334.
- 22. Schein, E. H., & Bennis, W. C. <u>Personal and Organizational Change</u> Through Group Methods. New York: John Wiley and Sone, Inc., 1965.
- 23. Wight, A. R. Experimental cross-cultural training. Estes Park, Colorado: Center for Research and Education, 1970.
- 24. Yellen, T., & Hoover, M. W. In country experiences: Navy personnel stationed in Greece. Washington, D. C.: U. S. Naval Personnel Research and Development Laboratory, February 1973. (Special Report 20374).