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RESEARCH BRANCH REPORT 10-73

AN EVALUATION OF A RACE RELATIONS SEMINAR

April 1973



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A six group experimental design was used that provided for testing prior to the seminar, testing at the end of the one week seminar, and at a three month interval with appropriate control groups.

Results indicated that the seminar changed racial attitudes significantly in an equalitarian direction, at the one week and three month testing inter-

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Evaluation of Race Relations Seminar

In the past two years increased emphasis has been placed on improved race relations in the Naval service. This study is an experimental evaluation of a program that was set up at NATTC (Naval Air Technical Training Center) Memphis, to accomplish better understanding between majority and minority groups. This and programs established at other commands were started at a time when a great deal of attention was being focused on these areas by the highest levels of management.

The program at NATTC Memphis was organized to meet the requirements set forth in SECNAVINST 5350.6A which stated that the Navy's goal was "...to assure the same treatment for all members of the Navy and Marine Corps while recognizing the special problems of the Negro". Commanding Officers were tasked to "Insure that relevant educational and training programs in human relations are provided at all levels for military personnel."

In Z-GRAM 66, the Chief of Naval Operations recognized that minority group problems were of major concern to the Navy. He stated, "That there are two keys to the problem. First, we must open up new avenues of communication Second, all of us in the Navy must develop a far greater sensitivity to the problems of all our minority groups so that we may more effectively solve them."

The program was an interracial dialogue in the form of a seminar. The seminar had 16 members, officers, chief petty officers, petty officers, non-rated personnel and civilian employees who sat down, out of uniform, to discuss contemporary racial issues in and out of the Navy, in an open fashion. The sessions were eight hours a day for five days. Each group had

two facilitators, one black and one white, whose job was to keep the group moving, keep people dealing with issues, and to prevent personalities from becoming the main topic. The main thrust of the program was to create an awareness among white middle management personnel as to how their attitudes and feelings toward racial issues could be interpreted by the black serviceman and affect his performance and behavior. The secondary aim was to make the black serviceman aware that every white supervisor was not a racist.

The objectives of the seminar are to improve black/white relations by increasing awareness, understanding, and communication. Social psychologists say that if awareness, understanding, and communication are changed then there will also be a change in attitudes. These attitudes to a large extent determine how we behave in our day to day interpersonal relations. If we have a positive attitude toward an individual or group then we will behave in a positive fashion toward that individual or group.

The main hypothesis was that there would be an attitude change as a result of the seminar as measured by the attitude scale. The secondary hypothesis was that there would be an attitude change due to the seminar, as measured by the scale, after a three-month waiting period.

METHOD

Treatment. The race relations seminar schedule is presented in Table 1, but is flexible in that the group or the facilitators can continue a discussion or exercise that is going well or stop or change one that is not working. Monday morning is designed to introduce people to the seminar technique in a gradual fashion. The afternoon session starts off with a film of an actual encounter-sensitivity session in East St. Louis, between local government and blacks in a racially tense situation. This continues

to ease the individual into the seminar environment (Bandura describes this as "vicarious desensitization" (Bandura, 1969)). This is followed by a group task such as discussing the film and role playing parts of individuals in the film. Tuesday begins with an exercise designed to increase self awareness followed by lecture information and then a film. The afternoon session is devoted to more cognitive information on black history. Wednesday starts with a group exercise that is selected by the facilitators and then cognitive material and discussions on current social issues. The afternoon content is much the same. Thursday morning is devoted to lecture and discussion of social issues and the afternoon is devoted to discussions of how social change can occur in each individual's sphere of influence in the military and what could be done on a larger scale. The Friday morning session is devoted to discussing the weeks experience, writing a comment sheet for feedback purposes and course graduation.

TABLE 1

RACE RELATIONS SEMINAR SCHEDULE DURING EVALUATION

	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY
AM	<p>Introduction to RR Seminar</p> <p>Participant Introductions</p> <p>Human Awareness Activities</p>	<p>Johari Window Exercise</p> <p>Races, Racism and Discrimination</p> <p>Film - THE EYE OF THE STORM</p>	<p>Group Task Exercise</p> <p>Current Social Issues</p>	<p>Current Social Issues</p>	<p>Reflection on Week and Personal Expression of Impressions</p> <p>Fill out Comment Sheets</p> <p>Graduation</p>
PM	<p>Film - THE BATTLE OF EAST ST. LOUIS</p> <p>Group Task Exercise</p> <p>Goals and Objectives for this Seminar</p> <p>Summary of Today's Activities</p>	<p>History</p> <p>Film - HERITAGE IN BLACK</p> <p>Summary of Today's Session</p>	<p>Group Task Exercise</p> <p>Reconsideration of Group's Goals and How to Improve Group Progress</p> <p>Summary of Today's Session</p>	<p>Development of Strategy for "Planned Social Change"</p> <p>Summary of Today's Session</p>	

The personnel selected to run these seminar groups were all volunteers, selected on the basis of interest and ability to cope with the personal problems that might be encountered working in such a controversial area. They had no formal training on how to facilitate groups except that four of the facilitators had been through a similar program at Great Lakes.

A total of eight facilitators, four facilitator pairs, participated in the seminars during the evaluation. Each seminar had two facilitators, one black and one white. Each seminar group was assigned a pair of facilitators in a counter-balanced fashion to avoid a possible facilitator effect in the study.

The instrument. In order to avoid spending the long time periods required by attitude scale development and validation, available attitude scales were studied for suitability. The Multifactor Racial Attitude Inventory, developed by Woodmansee (1967), was selected. This scale was chosen because it had been successfully used and had been validated by the method of behaviorally identifiable populations. The scale has also demonstrated high reliability.

The Multifactor Racial Attitude Inventory is composed of ten subscales, nine of which are undisguised measures of different aspects of attitude toward Negroes. The tenth scale is included as a potential measure of the tendency to appear falsely equalitarian. The subscales are:

INSE (Integration-Segregation Policy). The respondent's position on the propriety of racial segregation and integration. "The Negro should be afforded equal rights through integration."

SDIS (Acceptance in Close Personal Relationships). Personal willingness to recognize, live near, or be associated with Negroes. "I would not take a Negro to eat with me in a restaurant where I was well known."

NINF (Negro Inferiority). Assertions which imply or directly state that Negroes are inferior to whites in terms of motivation, character, personal goals, and social traits. "Many Negroes should receive a better education than they are now getting, but the emphasis should be on training them for jobs rather than preparing them for college."

DENA (Ease in Interracial Contacts). Social ease in interracial situations in which a majority of whites probably would feel self-conscious or uncomfortable. "I would probably feel somewhat self-conscious dancing with a Negro in a public place."

SUBB (Subtle Derogatory Beliefs). The items reflecting this dimension are of two types. One says that Negroes are backward in a social, moral or educational sense, e.g., "Although social equality of the races may be the democratic way, a good many Negroes are not yet ready to practice the self-control that goes with it." The other disapproves Negro social behavior in relation to whites, e.g., "Some Negroes are so touchy about getting their rights that it is difficult to get along with them." Both types of items characterize at least some Negroes as being prone to a variety of relatively minor shortcomings. The items, for the most part, are essentially true and reasonable statements of everyday fact, but in tone they may be taken as subtly degrading and derogatory judgments against all Negroes.

AUTH (Local Autonomy). Pitting the policy-making prerogatives of local collectives against the prerogatives of those outside the collective, e. g., "Even though we all adopt racial integration sooner or later, the people of each community should be allowed to decide when they are ready for it."

STRT (Acceptance in Status - Superior Relationships). The respondent's acceptance of Negroes in positions where they are in authority or are socially superior to whites, e.g., "If I were being interviewed for a job, I would not mind at all being evaluated by a Negro personnel director."

GRAD (Gradualism). How rapidly the process of integration should take place, e.g., "Gradual desegregation is a mistake because it just gives people a chance to cause further delay."

OVER (Negro superiority). The tenth subscale, Negro Superiority, is not considered an attitudinal measure; rather a potential measure of the tendency to present oneself in a favorable light, i.e., as an equalitarian. In this subscale one may attribute to Negroes personal characteristics which make them superior to whites, e.g., "I think that the Negroes have a kind of quiet courage which few whites have."

The test has 100 items that are scored "agree - disagree".

Subjects. The subjects that had the seminar were all non-volunteers in that the Commanding Officer assigns a quota to individual activities. The subjects that did not go through the seminar but served as controls were also not volunteers in that the Commanding Officer made participation mandatory.

The seminar subjects were Ships Company personnel and the non-seminar subjects were predominantly students. Since this was a long range study only those personnel that were in long courses or permanently assigned participated. A total of 342 participated in the experiment, 83 of those went through the seminar and were the experimental group. The other subjects were assigned to one of four control groups.

Although the experimental and control groups were not a matched sample the ratio of male to female, the ratio of military to civilian personnel, average rate and pay grade, and average educational levels were approximately the same. The average age of the two groups differed somewhat with the experimental or seminar group being 32.5 as opposed to 25.5 for the control or non-seminar group. However, since initial pretesting between the two groups showed no significant differences it appears that the age difference was not important.

Design. Studies designed to measure attitude over any time period are always susceptible to errors, in that they can inadvertently have attitudes changed by any number of effects besides the experimental treatment. To avoid this problem a six group experimental design was used that would control for calendar effects or changes in the social climate that could have an impact on attitudes. Examples of the type events that could cause such effects would be race riots, busing orders, and other racial or potentially volatile issues. Another item that has to be controlled in an attitude measurement study is the pre-test by treatment interaction. Studies in the literature often report a sensitizing effect due to pre-testing and if this were not controlled for no definitive statements could be made about the results. The experiment's design is presented in Table 2.

TABLE 2**Race Relations Evaluation
Experimental Design**

Group #	Attitude Measure/ Monday	Treatment	Attitude Measure/ Friday	Attitude Measure/ 3 Months
1	X	Seminar	X	X
2	X	None	X	X
3	None	Seminar	X	X
4	None	None	X	X
5	X	None	None	X
6	None	None	None	X

Procedure. On the first day of the seminar the subjects were divided into two groups that proceeded independently through the entire week. One of these groups was not given the pre-test and the other was. The pre-test was administered by personnel who were not involved with the race relations program and the fact that it was an experimental evaluation being done by an outside command was explained. The subjects were read; the instructions are as follows:

"Here is a questionnaire which calls for your personal judgments in a wide variety of issues involving Negro-White relations. You will see that it focuses on many current issues in race relations about which there is considerable disagreement these days. On some items you may have difficulty deciding which alternative is best, especially if you do not fully agree (or disagree) with either choice. In that case choose the one which is the more acceptable of the two.

Additionally, each subject was asked to fill out a cover sheet containing spaces for information such as name, social security number, sex, race, education, pay grade, and military or civilian. This information was to be used only for experimental purposes such as comparing group demographics, and most importantly, to identify subjects so that their subsequent responses to the questionnaire could be compared during the data analysis phase.

At this point a major problem arose. The subjects objected to filling out the questionnaire and some refused to do so if they were to put their names on them. This was probably because they were in an unknown environ-

ment and perceived the questionnaire as being threatening. Many also resented being ordered to describe their racial attitudes. The experimenters at this point asked them to fill out the cover sheet and separate it from the questionnaire thus assuring anonymity. This seemed to reassure the subjects and they filled out the questionnaire but some reluctance was still expressed.

At the same time the control subjects who were predominantly students, were being tested in their classrooms. That experimenter encountered the same opposition and also told the subjects to fill out the cover sheet and separate it from the questionnaire.

After the seminar had finished on Friday the questionnaire was again given to the experimental and control groups. This, and all subsequent testing was also done anonymously.

This same procedure was repeated for four weeks until a total of 83 subjects had been through the seminar. This was followed by a waiting period of three months used to assess long term effects of the seminar.

The subjects who had participated in the seminar conditions were called back to the race relations seminar building on a Friday three months after they had completed the seminar. At the same time the appropriate control groups were tested. This same procedure was repeated each Friday for four weeks until all subjects had filled out the questionnaire.

RESULTS

The analysis of the data took the form of comparisons between seminar groups and control groups at each of the testing points. This technique was chosen due to the anonymity of each subject's response. Groups were

maintained across testing points, although individuals within groups could not be recognized. In addition, over the four month period there was a loss of 30 percent of the data due to transfers, leave taking, and similar occurrences. It was believed that having 70 percent of the data returned would be sufficient for a valid group comparison analysis. Table 3 presents means, standard deviations, and numbers of subjects for each group in the study. The results will be presented as responses to specific questions that could be asked of the data.

Were there any initial differences between groups on the first testing prior to any treatment? To answer this question an ANOVA (Analysis of Variance) was performed comparing groups 1, 2, 4, 5, and 6 of this design. This eliminated group 3, which attended the seminar prior to any testing. Table 4 presents the results of this analysis, which indicated that no initial differences beyond those expected by chance were apparent. Comparison of group 4, which received its first test on Friday after the initiation of the study, to the other groups indicated that no differences, as measured by the scale, had occurred due to short term calendar events. In addition, group 6 did not differ from the other group which indicated that no difference occurred over the four month period which could be attributed to calendar events.

Since no initial differences between groups and no changes due to calendar events were found, were there any short term differences found between groups because of attendance at the seminar or because of the previous testing? To examine the effect of seminar and testing a 2 x 2 ANOVA was performed on the Friday test data after completion of the seminar. Table 5 presents the results of this ANOVA. The results in-

TABLE 3

Mean (M), standard deviation (SD), and number of subjects (N) for each seminar and no-seminar group at each testing point.

Group #	Treatment	Pretest			Fri. Retest			3 mo. Retest		
		M	SD	N	M	SD	N	M	SD	N
1	Pretest - Seminar - Fri. Retest- 3 mo. Retest	50.93	13.32	44	54.15	17.25	40	48.13	18.75	30
2	Pretest - No seminar- Fri. Retest- 3 mo. Retest	47.14	15.81	74	45.23	16.39	69	37.57	18.31	51
3	No Pretest - Seminar - Fri. Retest- 3 mo. Retest				57.74	14.49	39	50.33	15.69	27
4	No Pretest - No Seminar - Fri. Retest- 3 mo. Retest				53.81	15.86	74	45.89	17.34	53
5	Pretest - No Seminar - No Retest - 3 mo. Retest	53.30	15.61	71				45.16	18.92	50
6	No Pretest - No Seminar - No Fri. Retest- 3 mo. Retest							50.15	13.78	40

TABLE 4

Analysis of variance (ANOVA) summary table for comparison of initial differences, prior to any treatment, between groups.

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Between groups	2085.72	4	521.43	2.26*
Within groups	68692.68	298	230.51	
<hr/>	<hr/>	<hr/>		
TOTAL	70778.40	302		

* Not significantly different from chance expectancy.

TABLE 5

2 x 2 analysis of variance (ANOVA) summary table for short term (Fri. Retest data) between seminar, no seminar, and pretest, no pretest groups.

<u>SUMMARY OF ANOVA</u>				
<u>SOURCE OF VARIATION</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Pretesting	1883.98	1	1883.98	7.31 *
Seminar	2099.82	1	2099.82	8.14 *
Pretesting x Seminar	316.01	1	316.01	1.23
Within Cell	56206.18	218	257.83	
<hr/>	<hr/>	<hr/>		
TOTAL	60505.99	221		

* $p < .01$

dicade that significant differences occurred due to the seminar and due to the testing, but no interaction between seminar and testing was found. The groups which attended the seminar responded to the questionnaire in a significantly ($p < 0.1$) more equalitarian manner than the groups which did not attend the seminar. In addition, these groups which had been pretested responded in a significantly ($p < 0.1$) less equalitarian manner than the groups which were not pretested.

The next questions to be examined were whether there were any long-term differences, three months after the completion of the seminar, between seminar or no seminar groups, and whether the number of pretests (one or two) had any effect on the response to the scale? Again a 2×2 ANOVA was performed, except on the three month retest data. Table 6 presents the results of this ANOVA, which indicates that a significant difference ($p < 0.05$) was found between the seminar and no seminar groups. Examining the data indicated that the groups which attended the seminar responded to the scale in a more equalitarian manner than did the groups which had not attended the seminar. Neither differences between groups on the number of pretests, nor the interaction between number of pretests and seminar could be accepted as having occurred beyond chance expectancy.

To note changes over the testing periods, two comparable groups, one having the seminar treatment, the other not, could be compared over the three testing periods. This analysis could be performed since no interaction between pretest and seminar treatment was found. However, due to the anonymous nature of our sample which would not allow the analysis to be performed on individual subjects, such an analysis was performed cautiously. Rather than being able to treat the groups as two groups with three repeated measures on each group, it was necessary to treat them as

TABLE 6

2 x 2 analysis of variance (ANOVA) summary table for long term (3 mo. Retest data) differences between seminar, no seminar, and number of pretests (1 or 2) groups.

SUMMARY OF ANOVA

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Number of Pretests	1016.41	1	1016.41	3.26
Seminar	2070.24	1	2070.24	6.63 *
Number of Pretests x Seminar	343.90	1	343.90	1.10
Within cell	49009.30	157	312.16	
<hr/>	<hr/>	<hr/>		
TOTAL	52439.85	160		

* $p < .05$

six independent groups in a 2 x 3 ANOVA. This format increases the probability of accepting that no differences exist, when actually differences are present (Type II error). However, if significant differences do occur, then rejecting the null hypothesis of no differences could be done without reservation. Table 7 presents the results of this 2 x 3 ANOVA performed on the seminar (Group 1) versus no seminar (Group 2) groups across the Monday, Friday, and three month testing periods. The results indicate that the seminar group differed significantly ($p < .01$) from the no-seminar group and that the testing days differed significantly ($p < .01$) from each other. However, no interaction between seminar and testing day was apparent. The difference between testing days was analyzed further. Duncan's New Multiple Range Test was used to examine which days differed from each other. It was found that the responses on the three month retest, regardless of whether or not the group received the seminar treatment, was significantly ($p < .05$) less equalitarian than the responses on either the Monday or Friday testings. Whereas the hypothesis of no difference between the Monday and Friday testings could not be rejected.

The final question to be examined was; does attending the seminar differentially effect responses to the subscales of the MRAI across time? A 3 x 10 ANOVA was performed on the Group 1 (Seminar) subscale data at the three testing points. Table 8 shows the results of this analysis. Differences between times were significant ($p < .01$) and differences between subscales were significant ($p < .01$). However, the differential effect on each of the subscales across time was not apparent since no signifi-

TABLE 7

2 x 3 analysis of variance (ANOVA) summary table for differences between Group 1 (seminar) versus Group 2 (no-seminar) across time (3 testing points).

SUMMARY OF ANOVA

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Seminar	4211.67	1	4211.67	15.38 *
Time	2656.02	2	1328.01	4.85 *
Seminar x Time	580.89	2	290.45	1.06
Within cell	82718.81	302	273.90	
<hr/> TOTAL	<hr/> 90167.39	<hr/> 307		

* $p < .01$

TABLE 8

3 x 10 analysis of variance (ANOVA) for differences on the subscales of the MRAI across time in (3 testing points) Group 1 (seminar).

SUMMARY OF ANOVA

<u>Source of Variation</u>	<u>SS</u>	<u>df</u>	<u>MS</u>	<u>F</u>
Time	81.37	2	40.69	6.29 *
Subscales	6939.18	9	771.02	119.22 *
Time x Subscales	56.06	18	3.11	.48
Within Cell	7198.24	1113	6.47	
<hr/>	<hr/>	<hr/>		
TOTAL	14274.85	1142		

* $p < .01$

cant interaction occurred. The differences across time had been previously examined, thus Duncan's New Multiple Range Test was utilized to examine subscale differences. At all three testing points, seminar subjects responded in a significantly more equalitarian manner on the STRT, INSE, SDIS, and NINF subscale, than on the GRAD, SUBB, DENA, PRRT, and AUTH subscales.

Discussion:

The overall results of the study clearly indicate that the group that attended the seminar responded in a more equalitarian fashion than did those groups that did not attend the seminar. Although there was a decrease in attitude scores from the one week to the three month testing, there was still a significant difference between the seminar and the no seminar group. Such a decline over a three month period is to be expected since the subjects have returned to the environment that had fostered their attitudes for a number of years. That a significant difference does appear after this time period, indicates that the attitudinal changes adopted during the seminar persist in time.

The fact that there is no significant interaction between the treatment and sub-scales indicate that the seminar facilitates an attitudinal change in a general rather than a specific fashion. There is no one dimension of racial attitude that becomes more equalitarian as a result of the seminar.

The fact that these attitudinal changes were achieved using lay personnel as facilitators is important to note. That changes in attitude are adopted using lay personnel instead of having long training periods or hiring professional facilitators is an important consideration when the costs of implementation are considered.

Although the results of the study are positive, the extent to which the results can be generalized to other programs are limited by the similarity of these other programs to the one evaluated.

For example, programs of differing length, content, or subject demographics are not directly comparable. The degree to which the programs resemble one another is roughly the extent to which the results of this study would apply to other programs.

Recommendation:

It is recommended that the seminar format described in this study be adopted for race relations training.

REFERENCES

Bandura, A., Principles of Behavior Modification, Holt, Rinehart and Winston, New York, 1969.

Winer, B. J., Statistical Principles in Experimental Design, McGraw-Hill, New York, 1962.

Woodmansee, J. J. and Cook, S. W., Dimensions of Verbal Racial Attitudes: Their Identification and Measurement, Personality and Social Psychology, 1967, 7(3), 240-250.

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