

DOCUMENT RESUME

ED 083 332

UD 013 852

AUTHOR Rissman, A. Kent; Jaccard, James J.
TITLE Oral vs. Written Presentations of Industrial
Acculturation Materials to Unemployed Black Males.
Illinois Studies of the Economically Disadvantaged,
Technical Report Number 19, August, 1973.
INSTITUTION Illinois Univ., Urbana. Dept. of Psychology.
SPONS AGENCY Social and Rehabilitation Service (DHEW), Washington,
D.C.
REPORT NO ISED-TR-19
PUB DATE Aug 73
NOTE 35p.

EDRS PRICE MF-\$0.65 HC-\$3.29
DESCRIPTORS *Acculturation; Critical Incidents Method; Industrial
Personnel; *Negroes; Oral Communication; Race
Relations; Reading Level; Reading Skills; Tape
Recordings; *Teaching Methods; *Unemployed; Urban
Population; Written Language; *Young Adults
IDENTIFIERS Illinois

ABSTRACT

The purpose of this study was to test whether it would be preferable to present acculturation materials to "chronically unemployed" blacks orally or visually (written). Two hypotheses were tested: (1) blacks with low reading skills who receive an oral version of acculturation materials will perform significantly better than similar blacks who receive a written version; and (2) blacks with high reading skills who receive an oral version of the acculturation materials will perform at a level equivalent to similar blacks who receive a written version. The respondents were 39 unemployed black males from the community of Champaign-Urbana, Illinois. The respondents' ages ranged from 18 to 29, with a mean of 21.5. A set of 20 "critical" incident items was selected for use from a larger pool of items which constitutes the Culture Assimilator: For Interaction with White People. For individuals in the written condition, each item consisted of a "booklet" of six pages. Respondents in the oral condition were presented the same material in the same order over a tape recorder. It was felt that the purpose of the present investigation was not simply to test an oral versus version of the culture assimilator, but rather to see if performance of blacks with low reading ability could be bettered through the addition of oral stimuli. As such, what is labeled in this study as an oral condition may actually be viewed as an oral presentation with a supplementary written presentations, should the respondent be able to make use of it. (Author/JM)

1
2
3
4
5
6
7
8
9
10

Department of Psychology
University of Illinois
at Urbana-Champaign
Champaign, Illinois 61820

**Illinois Studies
of the Economically Disadvantaged**

**Oral vs. Written Presentations
of Industrial Acculturation Materials
to Unemployed Black Males**

**A. Kent Rissman
and
James J. Jaccard
University of Illinois**

Technical Report No. 19
August, 1973

U.S. DEPARTMENT OF HEALTH,
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
1200 K STREET, N.W.
WASHINGTON, D.C. 20004



Research Grant No. 15-P-55175/5
Social and Rehabilitation Service
Department of Health, Education and Welfare
Washington, D.C., 20201

Harry C. Triandis, Principal Investigator

Urbana-Champaign

DEPARTMENT OF PSYCHOLOGY
UNIVERSITY OF ILLINOIS AT URBANA-CHAMPAIGN
CHAMPAIGN, ILLINOIS 61820

Illinois Studies of the Economically Disadvantaged

ORAL VS. WRITTEN PRESENTATIONS OF INDUSTRIAL ACCULTURATION

MATERIALS TO UNEMPLOYED BLACK MALES

A. Kent Rissman

and

James J. Jaccard

University of Illinois

Technical Report No. 19

August, 1973

This investigation was supported, in part, by Research Grant No. 15-P-55175/5
from the Social and Rehabilitation Service
Department of Health, Education and Welfare
Washington, D. C., 20201

Harry C. Triandis
Principal Investigator

Preface

This report is part of a series which is concerned with the economically disadvantaged. We have shown in previous reports that economic disadvantages create characteristic ways of perceiving and thinking about the social environment. These ways differ from the mainstream views of the social environment and create barriers to cooperation between disadvantaged employees and their supervisors. Such barriers make it difficult for such employees to hold jobs.

To improve the chances of a disadvantaged employee staying on a job, we have developed two kinds of training materials. One set of materials, which we call "culture assimilators" for interaction with the economically disadvantaged, is designed for the training of supervisors. The other culture assimilator, designed for the training of black ghetto residents, is of particular concern in the present report. We have examined here the possibility that an oral presentation of these training materials to persons having low level reading skills may be more desirable than the usual written presentation.

The present paper examined the relative advantages of oral vs written presentations of the training materials with unemployed black males. It shows that there is no difference in the effectiveness of the two modes of presentation. This finding appears to hold over a wide range of reading skills. Since the written presentation is more economical, we conclude that there is no reason to modify the training approach which we have used with other groups, in the case of the particular samples of trainees we have studied in the present study.

Harry C. Triandis

ORAL VS. WRITTEN PRESENTATIONS OF INDUSTRIAL ACCULTURATION

MATERIALS TO UNEMPLOYED BLACK MALES¹

A. Kent Rissman and James J. Jaccard

University of Illinois

Introduction

"Subjective culture" refers to a cultural group's characteristic way of perceiving the man-made part of its environment. To date, there is considerable evidence that cultural groups differ in subjective culture. For example, Triandis, Malpass and Davidson (1973) have reviewed a number of studies which are directly applicable to the analysis of social perception in different cultures. Similarly, Triandis, Vassiliou, Vassiliou, Tanaka and Shanmugam (1972) have posited a theoretical framework necessary for the scientific analysis of subjective cultures.

Given that differences do exist in the perceptions and actions of cultural groups, it may often be desirable to teach members of one culture the kind of perceptions and expectations that persons of another culture are most likely to possess. This would be particularly true when members of the two cultural groups must interact with each other in a task-oriented situation.

Recently, Fiedler, Mitchell and Triandis (1971) have developed a method of instruction designed to sensitize individuals to cultures unfamiliar to them or of which they have little knowledge. Briefly, the method utilizes a

¹The study reported in this report was supported by Research Grant No. 15-P-55175/5 from the Social and Rehabilitation Service, Department of Health, Education and Welfare (Harry C. Triandis, Principal Investigator).

programmed learning format in which "critical incidents" (Flanagan, 1954) are presented to the individual. Each incident describes an event which a person from the individual's own cultural background has experienced when interacting with members of another culture. The event is such that members of the individual's own culture are most likely to make inappropriate inferences or responses with respect to the host culture. Four alternative explanations are provided for an actor's behavior in the incident, and the individual is asked to select the most appropriate explanation. Feedback is given regarding the answers chosen by the individuals and a rationale for the appropriate choice is provided.

Originally, this "culture assimilator" technique was developed to facilitate interaction between foreign visitors and members of a given culture. However, it seems evident that the method described might also be useful in facilitating interaction between subgroups of a larger culture, such as blacks and whites within the United States. Thus, the present ongoing project is concerned with applying the culture assimilator technique to black and white interaction in the job setting. In this context, as Malpass and Salancik (1972) note,

"...white trainees will be placed in a responsive environment to interact with members of a different culture, black persons, who share part of the cultural background of the trainees but who also differ in specific behaviors and in their perceptions of the appropriateness of similar behaviors. The individual who receives assimilator training in this case must be able to interpret correctly the meaning of a situation which is initiated by the behavior of a person with cultural experience different from his own. He must develop predictions about the other, develop intentions concerning the interaction outcomes that are most valuable, and do that behavior which will attain some set of outcomes (pp. 2-3)."

Two types of assimilators would seem useful in facilitating interaction between blacks and whites in job settings: One designed to sensitize whites

to the culture of the black worker, and the other to sensitize blacks to the culture of the white worker and the "world of work." A major goal of any training technique, such as the assimilator, should, of course, be flexibility; that is, the technique should be applicable in a variety of situations with different individuals. In the present project, one type of individual of particular interest has been the white "first-line" supervisor (see Slobodin, Collins, Crayton, Feldman, Jaccard, Rissman, & Weldon, 1973). Another type of individual of interest has been the "chronically unemployed" black (see Clay, Crayton, Rissman, Carlston, Slobodin, & Weldon, 1973). It is felt that many of these latter individuals could benefit from learning the kinds of expectations white employers usually have with respect to their employees, and why employers have these expectations. Similarly, many chronically unemployed blacks could benefit from learning effective ways of dealing with employers so that their work would be more satisfying to themselves as well as to others.

One major problem in attempting to reach chronically unemployed blacks is that they often have low reading abilities. As such, a written manual requiring even a moderate level of reading ability might be of little value to them. Rather, it may be necessary to employ an oral version of the manual in order to insure adequate comprehension of the materials presented. The present study is an attempt to test whether it would be preferable to use an oral version or written version of the industrial acculturation materials.

Several studies have compared comprehension materials presented visually (written) and orally. In the most relevant of these, Webb and Wallon (1956) tested comprehension of mythological stories which were presented to college-level servicemen. They found that listening to material with the option of simultaneously reading along resulted in comprehension equivalent to that achieved by reading and studying the material for the same length of time.

Both of the above modes of presentation were superior to either reading the materials once (no rereading of sentences allowed) or listening to the materials once. The latter two modes did not differ from each other. From the Webb and Wallon study, we would expect no difference in comprehension between the oral and written conditions for high reading ability subjects. Although no studies of visual vs. oral presentations appear to have varied reading ability, Goldstein (1940) did test a cross-section of adults varying in intelligence. Goldstein found that listening comprehension was slightly superior to visual comprehension, particularly with subjects of low intelligence and especially for easy materials. From this we might expect low reading ability subjects in the present study to do better with an oral version of the assimilator. However, this deduction is very tentative since, unlike the present study's written condition, Goldstein's visual condition did not allow rereading. Similarly, the critical incidents in the present study may not constitute "easy materials." For difficult materials, Goldstein found no difference between listening and reading comprehension.

The present study tested the following hypotheses:

(1) Blacks with low reading skills who receive an oral version of acculturation materials will perform significantly better than similar blacks who receive a written version.

(2) Blacks with high reading skills who receive an oral version of the acculturation materials will perform at a level equivalent to similar blacks who receive a written version.

Method

Respondents

The respondents were 39 unemployed black males from the community of Champaign-Urbana, Illinois.² The respondents' ages ranged from 18 to 29, with a mean of 21.5. Ten respondents were obtained through the local office of the Illinois State Employment Service. The remainder were obtained by the experimenters from a local pool hall and from the office of a community organization, the Black Coalition. Each respondent was paid \$5.00 for his participation.

Materials

A set of twenty "critical incident" items was selected for use from a larger pool of items which constitutes the Culture Assimilator: For Interaction with White People (Clay et al., 1973). Each individual item consisted of three parts: (1) a statement of a problem, (2) a presentation of four possible causes of the problem, and (3) feedback regarding the validity of each of these possible causes. For individuals in the written condition, each item consisted of a "booklet" of six pages. On page one was a brief description of a "critical incident" which involved some type of interpersonal conflict or misperception in a work setting. On page two, the problem was formally stated and the four possible causes of the problem listed. Pages three through six listed each possible cause on a separate page and presented feedback regarding the validity of the respective alternatives (for further details see Malpass & Salancik, 1972). After reading the incident, the statement of the problem and the four possible causes, each respondent was asked to rate each cause on a five-point rating scale from

²Data from two respondents were not used in the analyses. One respondent was found to be a college student; the other was unable to understand and follow the instructions.

"definitely correct" to "definitely incorrect." The respondent was then instructed to read the remaining four pages which provided feedback on his responses. Finally, after reading these pages, the respondent was instructed to reread the incident (page one) keeping in mind the feedback he had just received.³

Respondents in the oral condition were presented the same material in the same order over a tape recorder. Each critical incident item had been previously read onto a tape by a local black radio announcer. After hearing the incident, the statement of the problem, and the four possible causes, each cause was reread to the respondent at which time he rated its correctness on the scale previously described. Respondents then listened to the feedback regarding each of the alternatives, after which they again heard the critical incident. (In addition to hearing the recordings, respondents in the oral condition were also given the first two pages of each item as described in the written condition. It was felt that the purpose of the present investigation was not simply to test an oral versus written version of the culture assimilator, but rather to see if performance of blacks with low reading ability could be bettered through the addition of oral stimuli. As such, what is labeled in this study as an oral condition may actually be viewed as an oral presentation with a supplementary written presentation, should the respondent be able to make use of it.)

The twenty items of the assimilator were divided into two sets, each with ten items. Nine respondents in the written condition received items 1 through 10 before receiving items 11 through 20. Eight other respondents in the written condition received items 11 through 20 before receiving items 1

³This procedure utilized a "linear" form of the assimilator. For further discussion of this procedure as well as an alternative "branching" one, see Malpass and Salancik (1972).

through 10. Due to an assignment error by one of the experimenters, all subjects in the oral condition received items 1 through 10 before receiving items 11 through 20. Therefore, it was possible to investigate effects of item order only within the written condition.

Dependent Measures

Two major dependent measures were utilized. The first consisted of the number of assimilator items solved out of 20. An item was considered solved if the "correct"⁴ alternative was rated higher than the other three. If one, two or three of the "incorrect" alternatives were rated as high as the "correct" alternative but not higher, credit of 1/2, 1/3 or 1/4 was given, respectively. If any one of the incorrect alternatives was rated higher than the correct one, no credit was given. The second dependent measure was a recognition task administered to respondents at the completion of the experimental task. Ten sentences previously presented to respondents in the feedback phase of the critical incident items, and ten sentences generated from an independent set of critical incident items were presented to respondents in random order. Respondents were then asked to indicate which sentences they had read/heard and which ones they had not. Scores could range from 1 to 20, with 20 indicating completely correct identification of which sentences they had read/heard and which they had not read/heard. A score of 10 would be expected by chance. (See Appendix A for a copy of the Recognition Test.)

Independent Measures

The major independent measure was reading ability, as measured by the Comprehension Test from the Gates-MacGinitie Reading Tests (Gates &

⁴The feedback clearly indicated which alternative was "correct" or "best." Final decisions as to which answers were best were made by the project staff after obtaining the opinions of approximately 15 to 20 non-student blacks and whites.

MacGinitie, 1965, Survey E [for grades 7-9]). The Comprehension Test was designed to measure "ability to read complete prose passages with understanding." It was developed from data on 40,000 students in 38 communities across the nation. The Comprehension Test has been found to correlate approximately .80 with intelligence. In addition, reliability coefficients have generally ranged from the high .80's to low .90's. The Comprehension Test was used to divide respondents into high and low reading ability groups.

In addition to the above dependent and independent measures, data were also gathered on (a) interest in the culture assimilator and (b) perceived usefulness of the culture assimilator.

Procedure

Each session was conducted by one of two black experimenters, one of whom was male and the other female. There were from one to seven respondents at each session. At the beginning of the session, each respondent was given a copy of the instructions (see Appendix B), a simple example of a critical incident in a story, and an answer booklet. As the instructions were read aloud, respondents could follow along with their copy, if they so desired. Respondents were informed that they were being given a "training program" in order to "see how easy it is to learn." They were assured that the information they gave us would be "used only to help us improve the training program." The example, which had an obviously correct answer, was then shown to the respondents. Respondents in the written condition read silently the critical incident and the four possible causes of the problem. Respondents in the oral condition heard a tape recording of the incident and the four possible causes. Then all respondents rated the correctness of each possible cause, read or heard feedback on the correctness of each possible cause, and finally read/listened again to the critical incident. Respondents were told that it was very important to carefully read/listen to the feedback.

After the experimenter had answered any questions, the respondents began work on the 20-item assimilator. About an hour and a half later, when all respondents had finished, they were given a copy of the previously discussed recognition test (Appendix A). The experimenter read each sentence aloud, and respondents indicated whether or not it had been in the training program. Respondents then completed a short questionnaire on how interesting and useful the "training program" had been. The final task was the Gates-MacGinitie Reading Comprehension Test. After completing the Comprehension Test, respondents were given an opportunity to ask questions, thanked for their help, paid, and dismissed. Total time for each experimental session was approximately two and one-half hours.

Results

Respondents were assigned to high or low reading ability groups, based on a median split of Comprehension Test scores. For the high reading ability group the mean Comprehension score was 46.4 correct--equivalent to the reading ability of students in grade 12.6. For the low reading ability group, the mean score was 18.3 correct--equivalent to the reading ability of students in grade 3.5.

Number of Assimilator Items Solved

A 2 x 2 x 2 analysis of variance (oral vs. written presentation; high vs. low reading ability; first vs. second 10 items received) was performed on the number of assimilator items solved per 10 items. A significant mode of presentation x reading ability interaction had been expected such that in the low reading ability group there would be more solutions in the oral than in the written condition, while in the high reading ability group there would be no difference between the oral and written conditions. As can be seen in Table 1, however, this hypothesis received no support. The mean number of

Table 1
Mean Number of Solutions Per Ten Assimilator Items

<u>Reading Ability</u>	<u>Mode of Presentation</u>				<u>Row Mean</u>	<u>Total N</u>
	<u>Oral</u>		<u>Written</u>			
	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>		
High	5.57	12	7.75	6	6.66	18
Low	3.67	8	4.15	11	3.91	19
Column Mean	4.62	20	5.95	17	5.29	37

solutions was significantly greater in the written condition than in the oral condition ($F=6.44$, $df=1/33$, $p < .02$). Similarly, the mean number of solutions was significantly greater in the high reading ability condition than in the low reading ability condition ($F=27.57$, $df=1/33$, $p < .0001$). From Table 1 it appears that the difference between the oral and written conditions may be greater among high reading ability subjects than among low reading ability subjects. However, the mode of presentation x reading ability interaction was not significant ($p < .12$). Therefore, it must be concluded that, regardless of reading ability, subjects obtained more solutions to assimilator items in the written condition than in the oral condition.⁵ In all conditions the mean number of solutions was significantly ($p < .05$) above chance (2.5 correct per 10 items).

(It should be noted that subjects obtained no more solutions on the second ten items than on the first 10. From this, one might conclude that no learning over trials occurred. However, the 20 items were quite diverse in content so that lessons learned in the first set of 10 items may not have provided much assistance in attempting to answer the second set of 10 items.)

Within the written condition, it was possible to analyze the effects of order of presentation of items on number of solutions. Item order had no significant effect on number of solutions.

Recognition Test

A 2 x 2 (oral vs. written; high vs. low reading ability) analysis of variance was performed on the second major dependent variable, recognition test score. A significant mode of presentation x reading ability interaction

⁵In the preceding analysis of number of solutions, some responses were given partial credit (see method section). An alternate scoring system, in which each item was scored as either correct or incorrect, yielded results very similar to those reported above. The same pattern of findings was also obtained when the dependent variable was perceived probability of correctness of the one alternative per item which has been designated as "correct."

was also expected on this variable. Specifically, among low reading ability respondents, a higher recognition score was expected in the oral condition than in the written condition, while no difference between the oral and written conditions was expected among high reading ability respondents. This hypothesis received only partial confirmation. As can be seen in Table 2, low reading ability respondents did seem to have higher recognition scores in the oral condition than in the written condition, while the difference between the oral and written conditions was much less among high reading ability respondents. However, the mode of presentation x reading level interaction was non-significant. There was no significant main effect for reading level and the mode of presentation main effect was also non-significant ($F=3.88$, $df=1/33$, $p < .06$).

Ninety-five percent confidence limits were calculated for each of the cell means of the mode of presentation x reading level interaction (see Table 2). In three of the cells, the probability was greater than .95 that the mean represented better than chance performance. However, in the written-low reading ability cell, the 95 percent confidence limits included 10 correct, which is the score obtainable by chance. Thus, the recognition score for the average low reading ability respondent in the written condition was not significantly above chance.

Questionnaire

A 2 x 2 (oral vs. written; high vs. low reading ability) analysis of variance was performed on each of the two questionnaire items--interest in and usefulness of the training program. Specifically, respondents were to answer the first question "How interesting was the training program?" on a five-point scale ranging from "very interesting" (5) to "very dull" (1).

The mean response was 3.86 which indicated that, on the average, respondents did find the acculturation materials somewhat interesting. There were no significant between-group differences.

Table 2
Recognition Test¹, Cell Means and 95 Percent
Confidence Limits for Cell Means

<u>Cell</u>	<u>N</u>	<u>Mean</u>	<u>Recognition Test Scores</u>
			<u>95% Confidence Limits</u>
Oral - High reading ability	12	13.75	12.40 to 15.13*
Oral - Low reading ability	8	14.00	12.50 to 15.50*
Written - High reading ability	6	13.33	11.38 to 15.30*
Written - Low reading ability	11	11.36	9.50 to 13.22

¹Recognition Test scores could range from 0 to 20 correct, with a score of 10 obtainable by chance.

*The probability is .95 that the mean for this cell represents better than chance (10 right) performance.

Respondents answered the second question, "How useful to you was the information given in the training program?" on a four-point scale ranging from "very useful" (4) to "not at all useful" (1). The mean response was 3.01, which indicated that respondents felt that the acculturation materials were moderately useful to them. Neither main effect in the analysis of variance was significant, but there was a significant mode of presentation x reading ability interaction ($F=4.87$, $df=1/33$, $p < .04$) which accounted for 9.9 percent of the variance (see Table 3).

This is probably a weak finding since none of the simple main effects were significant. It should be noted that low reading ability respondents rated the assimilator as slightly, although non-significantly, less useful in the oral condition than in the written condition. The "usefulness" measure therefore fails to support the use of an oral version of the assimilator for low reading ability respondents.

Multivariate Analysis of Covariance

The intercorrelations among the major dependent variables (recognition test score, interest in assimilator, perceived usefulness of assimilator and number of assimilator items solved) are shown in Table 4. The two crucial dependent variables in the preceding analyses, recognition test score and number of items solved, were significantly correlated ($r = .39$). The two questionnaire measures, interest in and perceived usefulness of the assimilator, were also highly correlated with each other, and interest in the assimilator was significantly correlated with one of the main dependent variables--number of items solved. That is, respondents who were more interested in the assimilator also obtained more correct solutions.

Since the two major dependent variables were significantly correlated with each other, and since one of these dependent variables (number of items

Table 3

Perceived Usefulness¹ of Acculturation Materials

Reading Ability	<u>Mode of Presentation</u>				Row Mean	Total N
	Oral		Written			
	<u>Mean</u>	<u>N</u>	<u>Mean</u>	<u>N</u>		
High	3.33	12	2.50	6	2.92	18
Low	2.75	8	3.45	11	3.10	19
Column Mean	3.04	20	2.98	17	3.01	37

¹As measured on a four-point scale which ranged from "very useful" (4) to "not at all useful" (1).

Table 4

Intercorrelations among the Four Dependent Variables

	1	2	3	4
1. Recognition test score	1.00			
2. Interest in assimilator	.14	1.00		
3. Perceived usefulness of assimilator	-.06	.74 ^a	1.00	
4. Number of assimilator items solved	.39 ^a	.41 ^a	.16	1.00

^ap < .05, for 35 degrees of freedom

solved) was significantly correlated with one of the questionnaire measures (interest), a multivariate analysis of covariance was performed on number of items solved and recognition score. Interest in and perceived usefulness of the assimilator were used as covariates. With these two covariates removed, the correlation between the two main dependent variables, number of items solved and recognition score, increased from .39 to .53. The adjusted means for number of correct solutions and recognition test scores, after the removal of the two covariates, are shown in Table 5.

A multivariate analysis of covariance (MANOCA) was performed on the means shown in Table 5. The F ratios from the MANOCA are shown in Table 6. The overall MANOCA showed significant main effects for both mode of presentation (oral vs. written) and reading ability (high vs. low), but no significant interaction.

The univariate analysis of number of items solved revealed significant main effects for both mode of presentation and reading ability. More solutions were obtained in the written condition than in the oral condition, and more solutions were obtained by high reading ability respondents than by low reading ability respondents. The mode of presentation x reading ability interaction was not significant. The preceding univariate F ratios for number of items solved were calculated before the univariate F ratios for recognition scores because the former variable was considered a somewhat more crucial test of the hypotheses than the latter.

The univariate analysis of recognition scores revealed no significant effects. However, there was a significant mode of presentation step down F ratio. That is, when variance attributable to number of items solved is removed, then the recognition scores were significantly better in the oral condition than in the written condition. There were no other significant effects in the analyses of recognition scores.

Table 5

Adjusted Means for Number of Assimilator Items Solved and Recognition Test Scores after Two Covariates¹ were Removed

<u>Condition</u>	<u>Dependent Variable</u>	
	<u>Number of Items Solved</u>	<u>Recognition Score</u>
Oral - High reading ability	4.62	13.28
Oral - Low reading ability	1.39	13.58
Written - High reading ability	9.80	12.94
Written - Low reading ability	3.36	10.99

¹The covariates were reported interest in and perceived usefulness of the assimilator.

Table 6

F Values Associated with Multivariate Analysis of Covariance¹ (MANOCA)

Source	MANOCA	Univariate F		Step Down F	
		Number of Items Solved	Recognition Score	Recognition Score	Recognition Score
Mode of Presentation (A)	10.48**	6.27*	3.93	12.39**	
Reading Ability (B)	14.71**	26.09**	.94	2.26	
A x B	.81	.94	1.53	.68	
df	2/30	1/31	1/31	1/31	

¹The covariates removed were reported interest in and perceived usefulness of the assimilator.

* p < .05

** p < .01

Discussion

It had been anticipated that an oral presentation of industrial acculturation materials to low reading ability respondents would lead to higher comprehension and therefore to better performance than a written presentation. However, this hypothesis was not supported; in fact, both high and low reading ability respondents in the written condition solved significantly more assimilator items than did similar respondents in the oral condition. A number of factors may be related to this finding.

First, an oral presentation of assimilator items and feedback may be too demanding of respondents. The assimilator materials require a high degree of attention and the analysis of subtle cues within the critical incident. The incident may simply contain too much information for the respondent to retain, analyse, and respond to in a single oral presentation. Although an attempt was made to reduce such strain by providing respondents in the oral condition with written copies of the incidents, the task was probably just too demanding.

Second, the written presentation is self-paced in that one could read a sentence several times, if necessary, to gain full understanding of it. In contrast, the oral presentation allowed little opportunity for self pacing. In a review of a number of studies comparing visual and auditory comprehension, Mowbray (1953) has suggested that the self-paced nature of visual (written) presentations was a key factor in superior performance of this mode of presentation as compared with auditory presentations.

Finally, an oral presentation may be viewed as being more passive than a written presentation. It is relatively easy to only half attend to an oral presentation, thereby losing many important cues. A written presentation requires much more active participation from the respondent and may thereby increase attention to the incidents.

It should be noted that reading ability was a much more potent influence on number of items solved than was mode of presentation. This may in part be simply due to greater comprehension of the incidents by high reading ability respondents. However, the high and low reading ability blacks in our sample may also have varied on other dimensions--including not only intelligence and test taking ability, but also familiarity with white industrial culture. Thus, in part, high reading ability respondents may have solved more items because they already had a greater ability to make correct attributions as to the causes of behavior in an industrial setting. Knowledge of industrial culture would have been of much less value, however, in answering the recognition test. In fact, the high reading ability respondents did obtain only slightly and nonsignificantly higher recognition test scores than low reading ability respondents. Hence, high reading ability blacks may have solved more assimilator items not only because they read better or had more test taking experience, but also because their greater familiarity with whites and with industrial culture enabled them to make more correct attributions.

While the above results on number of assimilator items solved clearly indicated the superiority of a written presentation, the results from the recognition test rather tentatively suggested that an oral presentation might have some advantages. As initially expected, mean recognition test scores were somewhat higher in the oral than in the written condition, particularly for low reading ability respondents. However, the predicted mode of presentation x reading ability interaction was nonsignificant as was the mode of presentation main effect. This latter effect was statistically significant in a step-down F ratio after the removal of variance common with number of assimilator items solved.

Since the two major dependent variables in the present study yielded somewhat different results, it may be concluded that different constructs were being measured. This can particularly be seen from the fact that recognition test scores were significantly higher in the oral condition only after variance due to number of assimilator items solved was removed. One difference between the two dependent variables was that recognition test scores were a function of remembering the feedback section of the assimilator while number of assimilator items solved was more a function of attention to and comprehension of the incidents themselves. Also, the recognition task was relatively simple, requiring only the identification of which sentences had appeared in the assimilator. To "solve" assimilator items, however, required more cognitive work--namely, considering the plausibility of four causal attributions.

One possible reason why respondents obtained better recognition scores in the oral than in the written condition is that many respondents in the written condition may have skimmed over the feedback sections of the assimilator. Respondents in the oral condition, on the other hand, had little choice but to listen to the feedback--they couldn't skip over any of it. If this explanation is correct, it suggests that when a written version of the assimilator is used, the importance of carefully reading the feedback must be stressed.

In summary, the results of the recognition test do not provide strong evidence for the use of an oral version of the culture assimilator. The between-group differences were not large and in the univariate analysis of variance not even statistically significant.

Conclusion

This study suggests that a written version of the culture assimilator is likely to be as satisfactory, if not more satisfactory, than an oral version for presentation to unemployed blacks. This finding appears to hold over a wide range of reading skills. Since the written presentation is also more economical, there is little reason to employ an oral version of the culture assimilator.

References

- Clay, G., Crayton, J. L., Rissman, K., Carlston, D. E., Slobodin, L. F., & Weldon, D. E. Culture assimilator: For interaction with white people. Vol. 1-3, SRS No. 15-P-55175/5. Champaign, Ill.: Department of Psychology, University of Illinois, 1973.
- Fiedler, F. E., Mitchell, T., & Triandis, H. C. The culture assimilator: An approach to cross-cultural training. Journal of Applied Psychology, 1971, 55, 95-102.
- Flanagan, J. C. The critical incident technique. Psychological Bulletin, 1954, 51, 327-358.
- Gates, A. I., & MacGinitie, W. H. Gates-MacGinitie reading tests: Survey E. New York: Teachers College Press, Columbia University, 1965.
- Goldstein, H. Reading and listening comprehension at various controlled rates. In Contributions to Education. New York: Teachers College, Columbia University, 1940, No. 821.
- Malpass, R. S., & Salancik, J. R. Linear vs. branching structures in the presentation of acculturative materials. Technical Report No. 18, SRS No. 15-P-55175/5. Champaign, Ill.: Department of Psychology, University of Illinois, 1972.
- Mowbray, G. H. Simultaneous vision and audition: The comprehension of prose passages with varying levels of difficulty. Journal of Experimental Psychology, 1953, 46, 365-372.
- Slobodin, L. F., Collins, M. I., Crayton, J. L., Feldman, J. M., Jaccard, J. J., Rissman, K., & Weldon, D. E. Culture assimilator: For interaction with the economically disadvantaged. Vol. 1-5, SRS 15-P-55175/5. Champaign, Ill.: Department of Psychology, University of Illinois, 1972.

Triandis, H. C., Malpass, R. S., & Davidson, A. R. Psychology and culture.

Annual Review of Psychology, 1973, 24, 355-378.

Triandis, H. C., Vassiliou, V., Vassiliou, G., Tanaka, Y., & Shanmugam, A.

The analysis of subjective culture. New York: Wiley, 1972.

Webb, W. B., & Wallon, E. J. Comprehension by reading versus hearing.

Journal of Applied Psychology, 1956, 40, 237-240.

APPENDIX A
Recognition Test

I N S T R U C T I O N S

Listed on the next page is a set of twenty sentences. We would like to know if you can remember whether or not these sentences appeared in one of the incidents you have just read/heard. If you think the sentence did appear in one of the incidents, check the space for "Yes" in the column to the right of that sentence. If you think the sentence did not appear in one of the incidents, check the space "No."

Was the sentence
in the training
program?

1. Whites see a good job as one in which one enjoys ones work. ___ Yes ___ No
2. It is not uncommon for a stranger to feel uncomfortable among a group of people who are familiar with one another. ___ Yes ___ No
3. White working class people tend to see respect from others as related to having regular employment. ___ Yes ___ No
4. If a foreman gives general instructions, it would be best to ask him to be more specific to avoid any misunderstandings later. ___ Yes ___ No
5. Although some whites refer to all black males as "boys," there are other whites who are simply in the habit of referring to all males younger than themselves as "boys." ___ Yes ___ No
6. Foremen think that one can be friends with and still take orders from a supervisor. ___ Yes ___ No
7. Whites assume automatically that they will get paid for the work they have done. ___ Yes ___ No
8. Supervisors need to know if an employee is going to be absent in order to organize the day's work. ___ Yes ___ No
9. Some whites intend criticism as a constructive way of changing a situation. ___ Yes ___ No
10. White or black, we often fail to understand another person because we fail to see how the other person is different from ourselves. ___ Yes ___ No
11. Many interviewers feel that people who dress a certain way will make better employees. ___ Yes ___ No
12. Typically, the foreman will not show appreciation to his workers for getting the job done. ___ Yes ___ No
13. White foremen expect their workers to talk and be friendly towards them. ___ Yes ___ No
14. A foreman can't allow drunkenness on the job. ___ Yes ___ No
15. White employers, especially, evaluate workers on how they present themselves at job interviews, whether they are on time, on their attitude toward the job and their coworkers, as well as on how skilled they are. ___ Yes ___ No

Was the sentence
in the training
program?

16. Employers expect their employees to give notice before quitting so that they can find a replacement. Yes No
17. Some whites feel that the government pressure on business to employ more blacks is a threat to their own jobs. Yes No
18. Foremen expect workers to report to them when they've finished an assignment to get another assignment. Yes No
19. Some employers expect their workers to show an interest in getting ahead by asking for a promotion. Yes No
20. Foremen, especially white foremen, evaluate a worker on how well he gets along with the other men. Yes No

APPENDIX B

Instructions for Industrial Acculturation Materials

Introduction

Our research group has been developing a training program to help blacks and whites get along better together in job settings. The training program was also designed to let people know what to expect in work situations and how to succeed in a job with a minimum of problems. Many people, particularly those with little experience in the work force, should find this information useful. We would like your help in testing out this program in order that we may better evaluate and improve on it.

We would like you to read a number of incidents describing interaction between blacks and whites in job settings. Following each incident will be a set of conclusions or explanations about the behavior of the people in the incident. We would like you to read each conclusion and then on the answer sheet that follows, indicate how much you think that particular conclusion is correct. At the top of the answer sheet five categories are given: definitely correct, probably correct, neither correct nor incorrect, probably incorrect, definitely incorrect. For each conclusion you are judging, find the category that best represents how correct you feel the conclusion is and put a check in the column under that category. For example, if in incident number 1 you thought conclusions 1, 2 were definitely incorrect, conclusion 3 was probably correct, and conclusion 4 was definitely correct, you would place your marks as follows:

Incident Number <u>1</u>	<u>Definitely Correct</u>	<u>Probably Correct</u>	<u>Neither Correct Nor Incorrect</u>	<u>Probably Incorrect</u>	<u>Definitely Incorrect</u>
Conclusion 1	_____	_____	_____	_____	<u> X </u>
Conclusion 2	_____	_____	_____	_____	<u> X </u>
Conclusion 3	_____	<u> X </u>	_____	_____	_____
Conclusion 4	<u> X </u>	_____	_____	_____	_____

Please make a judgment for each conclusion in an incident. After making your judgments, you should go on and read each of the next four pages of the incident. In these pages, we will discuss each possible conclusion in more detail and give you some feedback on your responses. Before beginning we will go through an example.

Thank you for your cooperation.