R E P O R T R E S U M E S

ED 011 102 AC 000 153

THE REDUCTION OF PREJUDICE THROUGH LABORATORY TRAINING.

BY- RUBIN, IRWIN

PUB DATE MAR 67

EDRS PRICE MF-$0.09 HC-$1.00 25P.

DESCRIPTORS- *RACIAL ATTITUDES, *SELF CONCEPT, *SENSITIVITY TRAINING, *T GROUPS, *TRAINING LABORATORIES, MORAL VALUES, GROUP DYNAMICS, PERSONALITY, RESEARCH, NEGROES,

AN EXPERIMENT TESTED THE HYPOTHESIS THAT INCREASES IN SELF-ACCEPTANCE RESULTING FROM SENSITIVITY TRAINING HAVE THE THEORETICALLY PREDICTABLE BUT INDIRECT EFFECT OF REDUCING RACE PREJUDICE. THERE WERE 50 VOLUNTEERS, AGED FROM 23 TO 59, 8 OF WHOM WERE NEGROES. MOST HAD AT LEAST A B.S. DEGREE. THEY LIVED TOGETHER FOR 2 WEEKS MEETING IN FIVE T GROUPS, EACH INCLUDING AT LEAST ONE NEGRO. THE PERSONALITY VARIABLE INVESTIGATED WAS PSYCHOLOGICAL ANOMY, A FEELING OF MORAL EMPTINESS. THE TOTAL GROUP WAS RANDOMLY DIVIDED INTO 2 SECTIONS. THE SMALL GROUP WAS TESTED VIA MAIL QUESTIONNAIRES 2 WEEKS BEFORE ARRIVAL. THE ENTIRE GROUP WAS TESTED UPON ARRIVAL AND AGAIN AT THE END OF THE LABORATORY. EACH T-GROUP TRAINER RATED EACH PARTICIPANT ON THE QUESTIONS--(1) TO WHAT EXTENT DID THE PERSON EXPLICITLY DISCUSS RACE RELATIONS, AND (2) WHAT WAS THE NATURE OF THE INDIVIDUAL'S FOCUS DURING THE T GROUP. THE RESULTS OF THIS STUDY SUGGESTED THAT SENSITIVITY TRAINING MAY BE A POWERFUL TECHNIQUE IN THE REDUCTION OF RACE PREJUDICE, HOWEVER A CERTAIN AMOUNT OF EDUCATION SEEMS TO BE A PREREQUISITE TO LEARNING BY THIS METHOD. THERE WERE SUGGESTIONS FOR FURTHER STUDY AND LIST OF REFERENCES. THIS ARTICLE IS PUBLISHED IN THE "JOURNAL OF APPLIED BEHAVIORAL SCIENCE," VOLUME 3, NUMBER 1, 1967. (AJ)

The Reduction of Prejudice Through Laboratory Training[1,2]

IRWIN RUBIN
Alfred P. Sloan School of Management
Massachusetts Institute of Technology

An experiment was conducted to test the hypothesis that increases in self-acceptance, resulting from sensitivity training, have the theoretically predictable but indirect effect of reducing an individual's level of ethnic prejudice. The role of an individual's level of psychological anomy,[3] hypothesized to condition the influences of sensitivity training, was also examined. The results suggest that sensitivity training may well be a powerful technique in the reduction of ethnic prejudice, particularly among those who are low in psychological anomy.

INTRODUCTION

Robert Kahn has stated (1963, p. 14), "The theory of T Groups implies that reduction in prejudice should be one of the results of a general increase in sensitivity to the needs of others and insight into one's own motives and behavior as it affects others. No research is available, however, to test this prediction."

Prior research (Bunker, 1963, 1965; Gordon, 1950) has shown that one of the effects of sensitivity training is an increased level of self-acceptance among the participants. In addition, it has been demonstrated that the way a person feels about himself is positively related to the way he feels about others (e.g., Stock, 1949; Sheerer, 1949). These two factors, when combined, suggest the following question:

1. This research was supported by a Ford Foundation Dissertation Fellowship in Business Administration.
2. The author is grateful to Professors Edgar Schein and William McKelvey and to David Meredith, all of M.I.T., for their many helpful comments on various drafts of this paper.
3. For the definition of this term, see p. 34.

THE JOURNAL OF
Applied Behavioral Science

Volume 3, Number 1

January / February / March 1967

CONTENTS

Does raising a person's level of self-acceptance have the theoretically predictable but indirect effect of raising his level of acceptance-of-others?

The crux of this experiment is not that sensitivity training per se can be demonstrated to increase acceptance-of-others. The salient point to be tested is that demonstrated changes in a theoretically related variable (self-acceptance) produce this effect.

A second area of interest concerns the factors that might condition the kinds of learning an individual experiences as a result of sensitivity training. Certain personality types may be more susceptible than others to the influences of sensitivity training (Miles, 1960; Steele, 1965). The personality variable chosen for investigation in this study was psychological anomy. The rationale for this choice will be discussed in detail later.

HYPOTHESES

The following specific hypotheses were tested:

1. As a result of sensitivity training, an individual's level of self-acceptance will increase.
   a. An individual's focus during the T-Group sessions (as determined by trainer ratings), leaning toward more personal areas, will be associated with increased self-acceptance.
2. As a result of sensitivity training, an individual's level of acceptance-of-others will increase.
3. Those low in anomy will increase more in self-acceptance and acceptance-of-others than those high in anomy.
   a. An individual's level of anomy will be unaffected by sensitivity training.
4. Those who increase in self-acceptance will increase more in acceptance-of-others than those who do not change or decrease in self-acceptance.
5. Changes in self-acceptance *will lead to* changes in acceptance-of-others.

DEFINITION OF VARIABLES

Sensitivity Training

The major independent variable in this study is what has come to be known as sensitivity training or laboratory training.[4] In a broad sense, it can be defined as . . .

4. For a complete discussion of all that is involved in a sensitivity training experience, see Schein and Bennis (1965).

an educational strategy which is based primarily on the experiences generated in various social encounters by the learners themselves and aims to influence attitudes and develop competencies toward learning about human interactions (Schein & Bennis, 1965, p. 4).

Many phenomena occur within the T Group, and it is not within the scope of this study to examine the differential impact of each of these upon the variables of "self-acceptance" and "acceptance-of-others." An attempt, however, was made to control for the effect of two specific aspects of all that occurred within the T Group. The trainers involved were asked to provide *for each individual*—at the end of the laboratory—the following information: (1) To what extent did the person explicitly discuss the topic of race relations (on a scale from "not at all" to "very much," i.e., 50 per cent of the time)? (2) What was the nature of the individual's focus during the T Group (on a 7-point scale from Group Process = 1 to Personal Development = 7)?

Self-Acceptance

The term "self-acceptance," as it is used in this paper, involves a willingness to confront ego-alien as well as ego-syntonic aspects of the self and to accept rather than deny their existence. Implicitly, it connotes some sense of rationality or "realistic acceptance" as opposed to, for example, a person's claim, "I am superman. I accept myself as superman. Therefore all of you are underlings!"

The Dorris, Levinson, Hanfmann Sentence Completion Test (S.C.T.) (Dorris, R. J., Levinson, D., & Hanfmann, E., 1954) was used to measure the effect of sensitivity training upon an individual's level of self-acceptance. The S.C.T. includes 50 sentence stems. Half the stems use first-person pronouns and half, a third-person pronoun or proper name.[5] The first- and third-person items are matched in content;[6] e.g.,

5. First- and third-person items randomly distributed rather than appearing sequentially.

6. The person is instructed to complete each of the stems as quickly as he can, using more than one word. After finishing all the items, he is asked to go back, reread his responses, and place a (+) sign next to those sentences that he feels refer to some personal experience or that reflect the way he might feel or act under the specified circumstances. If a sentence has no personal relevance, a (—) sign is used. In introducing the self-reference technique, the authors assumed that the denial of self-reference may be indicative of the subject's lack of awareness of the personal tendency expressed in the completion.

When he gets angry he

When I get angry I

The measure of self-acceptance used in this study was derived in the following manner: Individual stem completions were coded[7] for ego-threatening content.[8] The term, "ego-threatening," was defined as follows: "Any item which states or strongly implies any attitude, feelings, or action, which if accepted by[9] ———————— as *applying to oneself*, would involve confronting at least a mild degree of psychological pain." For example, expression of fears, socially unacceptable responses, admission of inferiority or incompetence, extreme hostility or aggression, and so on were coded as threatening.

The assumption was then made that the more willing a person is to admit the personal relevance of ego-threatening material, the greater his level of self-acceptance. Therefore, the number of ego-threatening responses next to which the respondent placed a (+), divided by the total number of ego-threatening responses (#ET), yields the measure of self-acceptance (ETA)[10] used in this study.

It is important to note that, by this definition, self-acceptance (ETA) can increase because the numerator increases or the denominator decreases. To clarify this point, it is hypoth-

7. Each pair of items was copied on separate pieces of paper. The respondent's identification number was placed on the *reverse side*. This procedure made it impossible for the coders to know whether the response was "pre" or "post." It also eliminated the halo effect that might have been created by reading an individual's total record.

8. The correlation coefficient between two independently coded samples was 0.89. (See Johnson, 1949, p. 97, for the formula used to compute this coefficient.) The author gratefully acknowledges the assistance provided by his colleague, Tim Hall, in this phase of the study.

9. For the females, the phrase, "the majority of women associated with the nursing profession," was inserted because virtually all the females in the experimental population fell into that category. For the males, who were more heterogeneous, the phrase, "the average male in our culture," was inserted. Two forms of the scale—male and female—were used for this research.

10. Throughout the remainder of this paper, the following symbols will be used:
1. ET means ego-threatening.
2. #ET means absolute number of sentences scored as ego-threatening.
3. ETA means self-acceptance as defined above.

esized that the absolute number of statements coded as being ego-threatening will *not* change as a result of sensitivity training. The rationale here is that sensitivity training will not rid a person of his basic conflicts and anxieties nor does it attempt to help him make light of his times of crises. Instead, in some ideal sense, sensitivity training may help a person to find in himself the natural tools that enable him to effectively cope with these things. This will result, for example, from positive, nonevaluative feedback, the opportunity to test ideas and beliefs (increased "reality testing" about oneself), and a high level of trust and openness resulting in greater authenticity. An environment is created within which there should be a reduction of an individual's need to use projective defense mechanisms which act to distort his perception of himself and others.

Acceptance-of-Others

Harding and Schuman (1961) conceptualize prejudice as the departure from or failure to adhere to three ideal norms of behavior: the norm of rationality, the norm of justice, and the norm of human-heartedness. In this experiment it was decided to focus upon the norm of human-heartedness (HH)[11] which enjoins a person's emotional *acceptance-of-others* in terms of their common humanity, no matter how different they may seem from oneself. The major dependent variable in this study, in other words, is not prejudice per se but only the affective component of the individual's attitude.

The scale is made up of 15 items[12] of the following type:

> The white school board in a community builds two new schools and fixes the school lines so that almost all the Negro children go to one new school and all the white children to the other new school. How do you suppose most of the Negroes in the community would react to this?
>
> ——a. While there are some exceptions, many Negroes are mainly concerned with getting money for food, rent, and other things, and so do not have too much interest in the matter of schools one way or the other.
>
> ——b. Every community is different, and it is almost impos-

11. Throughout the remainder of this paper, the symbol HH is used to represent an index of a person's level of acceptance-of-others.

12. In addition, four control items are included to check on the extent to which response set is operating.

sible for someone not living in it to know enough about the situation to judge.

——c. The average Negro parent would not like what the school board has done about drawing school lines.

——d. The average Negro parent would simply be pleased to have a new school for his children, especially if it were equal to the white school in every way.

The measure of human-heartedness used in this study was derived in this manner: The respondent was asked to rank each of the four choices following an item from 1 ("most likely reaction") to 4 ("least likely reaction"). Each respondent's series of ranks was then compared with a theoretically ideal set of ranks[13] and the absolute difference between ranks was computed. The sum of these differences across the 15 experimental items yielded the respondent's human-heartedness score (HH). This score could range from 0–120 (i.e., 15 items times a maximum difference of 8 points for any item).

Psychological Anomy

The personality variable chosen for investigation in this research was psychological anomy,[14] defined as a sense of normlessness, "the feeling that the world and oneself are adrift, wandering, lacking in clear rules and stable moorings . . . a feeling of moral emptiness" (McClosky & Schaar, 1965, p. 14). This definition is analogous to Seeman's second major usage of the alienation concept—*meaninglessness* wherein "the individual is unclear as to what he ought to believe—when the individual's minimal standards for clarity in decision making are not met" (Coser & Rosenberg, 1964, p. 530).

McClosky and Schaar (1965) present evidence to suggest that anomic responses are powerfully governed by cognitive and personality factors independent of or in combination with social influences. They conclude that anomy "results from im-

13. Howard Schuman and the writer *independently* ranked all items as to how the "most human-hearted person" would assign his ranks. We agreed on 100 per cent of the first and second ranks and 88 per cent of the third and fourth ranks, yielding an overall per cent agreement of 94 per cent.

14. The scale used to measure this variable is a nine-item Guttman scale developed by McClosky and Schaar (1965). The items are of the following form:

a. People were better off in the old days when everyone knew just how he was expected to act.

b. It seems to me that other people find it easier to decide what is right than I do.

pediments to interaction, communication, and learning, and is a sign of impaired socialization." In other words, given that anomic feelings result from a lack of learning, "whatever interferes with one's ability to learn a community's norms, or weakens one's socialization into its central patterns of belief, must be considered among the determinants of anomy" (p. 20).

In a real sense, the T Group represents for its members a new community or society with a set of norms unlike those to which the members have become accustomed. The individual participant, if he is to benefit from sensitivity training, must be able to see and understand the norms of this new culture. Only then will he be able to decide rationally[15] whether they are personally relevant and functional and if so, to truly internalize these new learnings.

The highly anomic person might experience difficulty in understanding and internalizing the dominant norms of the T Group. Furthermore, due to the relatively short duration (two weeks) of the experiment and the here-and-now focus of the T Group, no change was expected in a person's level of anomy.

THE STUDY

Subjects

The laboratory population studied in this research were the participants in the Osgood Hill[16] 1965 summer program in sensitivity training. The program was two weeks in length (June 25-July 7), and the participants "lived in" in the sense that they slept on the premises and ate virtually all their meals together.

There were 50 participants—30 females and 20 males. They ranged in age from 23 to 59, with a mean age of 33 years. The majority had at least a B.S. degree and a few had advanced degrees. The majority came from the New England area, but several came from Miami, Cleveland, and Chicago. There were eight Negroes in the population, and the trainers made certain

15. Bennis, W. G., Schein, E. H., Berlew, D. E., & Steele, F. I. (1964) discuss this point in terms of a possible meta-goal of sensitivity training—"expanded consciousness and sense of choice."

16. Osgood Hill is in Andover, Massachusetts. It is owned and operated by Boston University. The author wishes to acknowledge the cooperation and assistance provided by the entire staff group of Osgood Hill in the successful completion of this study.

that each of the five T Groups[17] that were formed had at least one Negro and an even proportion of males and females.

Occupationally, the males were a relatively heterogeneous group that included several businessmen, teachers, policemen, clerics, graduate students, government employees, a male nurse, and a dentist. The females were much more homogeneous, the majority of them being associated with the nursing profession (students, teachers, practicing nurses, and nursing supervisors).

Experimental Design and Procedure

One of the problems facing the researcher interested in evaluating the effects of sensitivity training is that of finding a relevant control group. The participants in a laboratory are, in one sense, a self-selected group—a circumstance which negates the relevance, for control purposes, of just any group of warm bodies.

Thus the experimental design utilized in this study was one in which the subjects served as their own controls. Herbert Hyman (Hyman, H., Wright, C. R., & Hopkins, T. K., 1962, p. 42) utilized this approach in his evaluation of the effects of citizenship camps, as did Carl Rogers in his attempts to evaluate the effects of psychotherapy. As Hyman points out:

> With such a procedure, matching of experimental subjects and controls presents no difficulty, for the same persons constitute both groups. By determining how much instability there is in the group's attitudes, opinions, or other characteristics *during a normal period of time* we could then estimate how much of the change manifested during the experimental period exceeds the normal change resulting from other factors.

Within this design, the total available experimental group (N = 50) was randomly split into two groups of unequal size. The smaller group (N = 14) was tested (O_{10}) via mail questionnaires two weeks prior to their arrival at Osgood Hill. The entire group was then tested (for controls: O_{20} and for experimentals: O_{1E}) upon their arrival, but before the first T-Group session. The final "after" measures (for controls: O_{30} and for experimentals: O_{2E}) were obtained the morning of

17. Two of the trainers were females—one of whom was a Negro—and the remaining four were males. (One group had two trainers.)

the next-to-last day of the laboratory.[18] This timing was necessary in order to provide a feedback session to all participants prior to their departure at the end of the laboratory.

This design can be depicted in the following manner:[19]

June 11	*June 25*	*July 5*
O_{10} controls, 2 weeks (N = 11)	O_{20} controls, T Group	O_{30}
	O_{1E} experimentals, T Group (N = 30)	O_{2E}

RESULTS

Control Group

Table 1 presents the test-retest scores for the control group (O_{10}, O_{20}) and the initial test scores for the experimental group (O_{1E}). A series of t tests were performed that compared scores for O_{1E} versus O_{10} and O_{20} in order to determine empirically the degree of similarity between experimentals and controls. None of the resulting t's reached statistical significance, with p's being greater than 0.50. On the basis of these results, it is assumed that the members of the control group represent a population comparable with the experimentals on the major variables.

It can also be seen from Table 1 that among the members of the control group $\overline{Ap}$ increased slightly, $\overline{\#ET}$ increased slightly, and $\overline{ETA}$ and $\overline{HH}$ both decreased slightly. In using a t test for dependent samples (Blalock, 1960), it was observed that none of the resulting t's reached the 0.60 level of significance. On the basis of these results, it is assumed that the controls do not change significantly from O_{10} to O_{20} on any of the major variables. It is assumed, therefore, that any changes found among experimentals cannot be attributable to the main effects of instrument instability and/or practice.

Experimental Group

It was hypothesized that $\overline{Ap}$ and $\overline{\#ET}$ would not change as a result of sensitivity training. Examination of Table 2 reveals

18. All administrations, other than O_{10}, were conducted by the author on a group basis.

19. Of the available control group of 14, two persons never arrived and one returned an unusable questionnaire, leaving a final control group of 11. Of the available experimental group of 36, one missed the pretest and five returned unusable questionnaires, leaving 30 for the final experimental group.

that $\overline{Ap}$ and $\overline{\#ET}$ decreased slightly over this two-week period. Using a t test for dependent samples, it was found that for Δ Ap (change in $\overline{Ap}$), $t = 0.84$ with an associated $p < 0.40$ two-tail ($N = 30$); and for Δ #ET (change in #ET), $t = 0.70$ with an associated $p < 0.45$ two-tail ($N = 30$). We are unable to reject the null hypothesis of no difference and can therefore assume that sensitivity training had no appreciable effect upon an individual's level of anomy (Ap) or upon the absolute number of ego-threatening statements generated by an individual on our sentence completion test.

The next major hypothesis concerns Δ ETA[20] (change in

TABLE 1. *Before-After Scores for Control Group (O_{1C}, O_{2C}) and Before Scores for Experimental Group (O_{1E})*

O_{1C} (N = 11)	O_{2C}[21]	O_{1E}[21] (N = 30)
(a)		
$\overline{Ap} = 5.5$	$\overline{Ap} = 5.8$	$\overline{Ap} = 6.5$
(b)		
$\overline{\#ET} = 11.0$	$\overline{\#ET} = 12.0$	$\overline{\#ET} = 13.5$
(c)		
$\overline{ETA} = 66.0$	$\overline{ETA} = 65.0$	$\overline{ETA} = 55.0$
(d)		
$\overline{HH} = 46.5$	$\overline{HH} = 47.5$	$\overline{HH} = 46.2$

(a) $\overline{Ap}$ represents mean level of anomy. Scores ranged from 1-10, with a low score representing a low level of anomy.

(b) $\overline{\#ET}$ represents the mean absolute number of statements scored as being ego-threatening, with the range from 5 to 23.

(c) $\overline{ETA}$ represents mean level of self-acceptance, i.e., the number of ego-threatening statements accepted divided by absolute number of ego-threatening statements. Scores ranged from 0 to 100 per cent, with a low score indicating a low level of self-acceptance.

(d) $\overline{HH}$ represents mean level of human-heartedness. Scores ranged from a low of 18 to a high of 80. The lower the score, the closer the respondent's set of ranks was to the theoretically perfect set of ranks and, therefore, the higher his level of human-heartedness.

20. Δ ETA refers to change in self-acceptance score—ETA score after the laboratory, minus ETA score before the laboratory.

21. $O_{2C} + O_{1E}$ were gathered at the same point in time, just prior to the first T-Group session.

self-acceptance). The prediction here was that self-acceptance would increase as a result of sensitivity training. Examination of Table 2 reveals that ETA went from a mean of 55.0 per cent to a mean of 67.0 per cent. The differences between these means (t test for dependent samples) is significant at the 0.01 level one-tail ($N = 30$, $t = 2.58$, $p < 0.01$). It is therefore concluded that as a result of sensitivity training, an individual exhibits a greater willingness to accept the personal relevance of ego-threatening material; i.e., his ETA increases.

With respect to Δ HH[22] (change in human-heartedness), it was predicted that an individual's level of human-heartedness would increase. Operationally, this means that his "after" HH score should be lower than his "before" HH score. Table 2 reveals that HH decreased from 47.2 to 42.0. The difference between these means (t test for dependent samples) is significant at the 0.01 level one-tail ($N = 30$, $t = 2.54$, $p < 0.01$). In other words, the rankings an individual assigned after the laboratory corresponded more closely with expert rankings than those he assigned before the laboratory—he was found to be more human-hearted.[23]

TABLE 2. *Before-After Scores for Experimental Group ($N = 30$)*

O_{1E}	T Group (2 weeks)	O_{2E}
$\overline{Ap} = 6.5$		$\overline{Ap} = 5.9$
$\overline{PET} = 13.5$		$\overline{PET} = 13.2$
$\overline{ETA} = 55.0$		$\overline{ETA} = 67.0$
$\overline{HH} = 47.2$		$\overline{HH} = 42.0$

22. Δ HH refers to change in human-heartedness score—HH score after the laboratory minus HH score before the laboratory.

23. The critical test here is whether Δ ETA and Δ HH among the experimentals differ from Δ ETA and Δ HH among the controls. A Mann-Whitney U-Test (Siegel, 1956, pp. 116-127) was therefore performed on the difference between the changes. This analysis yielded a $Z = 1.76$ for the Δ ETA's ($N_1 = 11$, $N_2 = 30$, $p < .05$ one-tail) and a $Z = 1.76$ for the Δ HH's ($N_1 = 11$, $N_2 = 30$, $p < .04$ one-tail). In other words, *not only* do the experimentals change while the controls do not, but the *experimentals also change significantly more* than the controls.

Conditioning Influence of Anomy

We turn now to an examination of the conditioning influence of anomy with respect to the observed changes in ETA and HH. It was predicted that those E's low in anomy (Ap) would change more on ETA and HH than those high in anomy (Ap). The skewed nature of the distribution of Ap scores (the majority of respondents scored either 1 or 8, 9, 10, with virtually no scores in the middle) suggested that the most relevant test of these hypotheses would be to split the group at the median Ap score and to compare the magnitude and direction of ETA and HH differences among groups.

Utilizing the Mann-Whitney U-Test, it is observed that those below the median in Ap increased significantly more on ETA than those above the median in Ap ($N_1 = 19$, $N_2 = 19$,[24] $Z = 1.77$, $p < .04$ one-tail). A similar trend was found with respect to HH scores ($N_1 = 19$, $N_2 = 19$, $Z = 1.56$, $p < .06$ one-tail). In absolute terms, those low in Ap increased 17 per cent on the average. With respect to HH, those low in Ap decreased six points on the average, while the high Ap's decreased only two points. In summary, strong support is provided for the hypothesized conditioning influence of Ap on changes in self-acceptance (ETA), and marginal support is provided with respect to changes in human-heartedness (HH).

Central Hypotheses

In the light of the results of these preliminary analyses, we are now in a position to examine the central hypotheses of this study:

1. Those who increase in self-acceptance will increase more in human-heartedness than those who either do not change or decrease in self-acceptance.[25]
2. Changes in self-acceptance will lead to change in human-heartedness.

With respect to the first, of the 38 members of the total experimental group, 23 increased on ETA, six did not change,

24. For the purposes of this and the following analyses, the eight of 11 control group members who returned usable responses after the laboratory (o_{80}) were added to the 30 experimentals. These eight persons changed as much (percentage-wise) in ETA and HH after the laboratory as did the experimentals. In addition, like the experimentals, they did not change in Ap or #ET. This raises our available population from $N = 30$ to $N = 38$.

25. The *initial* correlation between ETA versus HH was $R = -0.32$ ($N = 42$, $p < .05$ one-tail). The minus sign is explained by the fact that a high level of HH is represented by a low score.

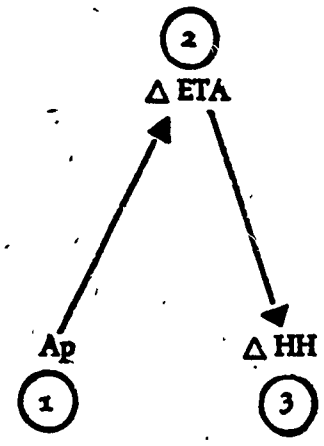
and nine decreased in ETA. The sample was therefore split into $+\Delta$ ETA (positive changers in self-acceptance, $N = 23$) and $o\Delta$ ETA (zero or negative changers in self-acceptance, $N = 15$). On the average, the $+\Delta$ ETA group decreased five points in HH, a result which is statistically significant at the $p < .01$ level one-tail ($N = 23$, $t = 2.80$). The $o\,\Delta$ ETA group also decreased in HH an average of three points, but this change does not reach significance ($N = 15$, $t = 1.03$, $p < 0.20$ one-tail). However, the difference between these changes is *not* significant (Mann-Whitney U-Test, $N_1 = 15$, $N_2 = 23$, $Z = 1.0$, $p < .16$ one-tail). The hypothesis in its present form cannot be unequivocally supported.

In order to shed some light on the reasons for this result, individual change scores on ETA were examined more closely. There appeared to be a sharp discontinuity in the distribution of scores. Several persons increased a moderate amount in ETA (8 to 14 per cent), but then the next highest change was 21 per cent. There were 13 persons who increased 21 per cent or more in self-acceptance. When we examined this group of high $+\Delta$ ETA's versus the remainder of the sample, the following results emerged: The high $+\Delta$ ETA group decreased an average of 8.0 points on HH ($N = 13$, $t = 3.0$, $p < .01$ one-tail), while the remainder of the sample decreased an average of 2.0 points on HH ($N = 25$, $t = 1.3$, $p < .12$ one-tail). A Mann-Whitney U-Test on the difference between these differences yielded a $Z = 1.76$ ($N_1 = 13$, $N_2 = 25$, $p < .04$ one-tail). In other words, those who increase a great deal in self-acceptance (Δ ETA > 21 per cent) will increase significantly more in human-heartedness than those who decrease in self-acceptance or increase only a moderate amount.

One way to test the hypothesis that changes in self-acceptance lead to changes in human-heartedness is to utilize the method of partial correlation.[26] The three-variable[27] model to be tested can be depicted in the following manner:

26. The utilization of partial correlations to infer causality rests upon several assumptions. In addition, all other possible models must be eliminated. A complete discussion of these assumptions and the methods for eliminating irrelevant models can be found in Simon (1954) and Blalock (1960).

27. Anomy (AP) was chosen as the third variable because, as discussed earlier, it was unaffected by the training experience but was related both to



Within the framework of this research, we should like to know the direction of the causal arrow in the relationship between Δ ETA and Δ HH. In order to infer that Δ ETA is causing Δ HH, the following mathematical condition must be satisfied[28] (Simon, 1954; Blalock, 1960):

The correlation of Ap versus Δ HH with the effect of Δ ETA removed should be less than the zero order correlation of Ap versus Δ HH; i.e., $R_{13.2} < R_{13}$.

Table 3 presents the data from which the required zero order correlations are computed. The dichotomous nature of the Ap scores suggested that a tetrachoric correlation method would be most appropriate. Under appropriate conditions (Guilford, 1956), this method "gives a coefficient that is numerically equivalent to a Pearson r and may be regarded as an approximation to it." In every case, the high versus low split was based upon those above and below the median.[29]

Substitution of the zero order correlations into the partial correlation formula (Blalock, 1960) yields an $R_{13.2} = +0.09$ and the mathematical condition stated above is therefore satis-

---

changes in self-acceptance and changes in human-heartedness. Other ways exist to prove causality but, for these, different experimental designs are required.

28. Numerical subscripts are used for simplicity.
    1 = Ap
    2 = Δ ETA
    3 = Δ HH
29. Median Ap = 5.0.
    Median ETA = + 8; i.e., 8 per cent increase in self-acceptance.
    Median HH = 2.0; i.e., 2-point decrease in HH score.

fied.[30] It is important to note that this analysis does not enable one to rule out a direct effect of sensitivity training on HH. Nor does it eliminate the possibility that sensitivity training influences another variable which may be termed "feelings-orientation" which, in turn, influences ETA and HH. All it suggests is that some change in HH does result from a change in ETA.[31]

Trainer Ratings Trainers were asked, at the end of the laboratory, to characterize the nature of each individual's participation during the T-Group session on a scale from 1 (Group Process Orientation) to 7 (Personal Development). In addition, the trainers rated, for each individual, the "Salience of the Topic of Race Relations" (i.e., per cent of time spent discussing the Topic).

It was hypothesized that changes in self-acceptance

TABLE 3. *Contingency Tables Necessary To Compute Tetrachoric Correlations Between Ap, Δ HH, and Δ ETA*

A.

	Low Ap	*High Ap*
High Δ HH	13	10
Low Δ HH	6	9

^{T}Ap, Δ HH = −0.255 (R_{13})

B.

	Low Ap	*High Ap*
High Δ ETA	13	6
Low Δ ETA	6	13

^{T}Ap, Δ ETA = −0.550 (R_{12})

C.

	High ETA	*Low ETA*
High Δ HH	15	8
Low Δ HH	4	11

^{T}Δ ETA, Δ HH = 0.575 (R_{23})

30. A more conservative approach here is to split the total sample at the median Δ ETA score and compute the tetrachoric correlation between Ap versus Δ HH within each subsample. The split was made, and the results are almost identical with those obtained when the partial correlation formula was used.

31. A Kruskall-Wallis one-way analysis of variance (Siegel, 1956, pp. 184-193) among the five T Groups on all major variables was performed, and none of the resulting HH's reached the 0.50 level of significance two-tail. From this result, it can be assumed that there was no significant trainer effect, nor can the observed changes be attributed to some other factor unique to any one of the T Groups.

(Δ ETA) would be associated with an "individual orientation" leaning toward Personal Development. Again, this hypothesis is supported only when we compare the high + Δ ETA group with the remainder of the sample. The average trainer rating for the high +Δ ETA's was 5.2 (i.e., leaning toward Personal Development), as compared with 3.8 (i.e., leaning toward Group Process) for the remainder of the sample. This difference is significant ($N^{32} = 30$, $t = 2.16$, $p < .02$ one-tail).

No directional hypotheses were made concerning the effect of "Salience of the Topic" on an individual's change in human-heartedness. The 20 persons for whom these ratings were available were split into two groups—high (20 to 50 per cent of time) versus low (0 to 20 per cent) salience, and changes in HH within the two groups were examined. The low-salience group decreases an average of eight points in HH, while the high-salience group decreases an average of only one point in HH ($N_1 = 10$, $N_2 = 10$, $Z = 1.65$, $p < .10$ two-tail, Mann-Whitney U-Test). In other words, there appears to be somewhat of a negative relationship between the amount of time spent discussing the topic of race relations and the change in human-heartedness.[33]

DISCUSSION

Generalizability of Results

One question which comes up immediately is the extent to which the findings of this study are generalizable. It was pointed out earlier that the members of the experimental population all shared a certain level of "motivation to attend a laboratory." It is not yet known what personality variables, for example, differentiate those who are "motivated to attend" from those who are not. Even if knowledge of these parameters did exist, it would then have to be demonstrated that they have relevance in terms of differential learnings resulting from training. This broad issue is beyond the scope of this study. However, several related sub-issues are manageable.

Concerning the distribution of initial self-acceptance scores, a reasonably normal distribution of scores with a mean value close to 50 per cent was observed. Unfortunately, no norms

32. The sample is reduced here because one set of trainer-rating forms was never returned to the researcher.

33. The correlation between "Salience of Topic" and initial HH score was zero, as was the correlation between "Individual Orientation" and the initial ETA score.

exist to indicate what the expected average score might be. Two comparison samples, however, are available: The average ETA score among the college sophomore group studied by Dorris, et al. (1954) was 53 per cent, and among a pretest group of 30 Sloan Fellows at M.I.T. (with a simplified index of self-acceptance being used), the mean score was 50 per cent. In addition, the results of the present study suggest that even some of those who were initially very low in self-acceptance could be "reached" by sensitivity training.

Concerning human-heartedness scores, Schuman and Harding (1963) found in their main standardization sample that the average HH score (with a simplified measure being used) leaned toward the "unhuman-hearted" end of the scale. The distribution of initial scores observed in this study was skewed in the other direction—toward the human-hearted end of the scale. The atypical[34] educational level of the Osgood Hill sample, with the majority having at least a bachelor's degree, helps to explain this difference. It may be that a certain level of education is a necessary prerequisite to learning via sensitivity training. This proposition is as yet untested empirically.

What Kind of Sensitivity Training

Another question of importance deals with the impact of different emphases in sensitivity training.[35] The results of this study highlight the importance of a "personal development" as opposed to a "group process" orientation. The greatest increasers in self-acceptance and, consequently, in human-heartedness were those whose predominant focus during the T-Group sessions was in more personal areas.

From a pragmatic viewpoint, if one wishes to use sensitivity training as a means to reduce ethnic prejudice, then, within the Schein and Bennis (1965) framework, the individual should be viewed as the client, and learning about self and others should be stressed at the levels of awareness and

34. The terms "typical" and "atypical," used in this section, have as their frame of reference "a random sample of adults drawn from the general population."

35. Schein and Bennis (1965) present a three-dimensional schema for classifying the goals of a laboratory in these terms: What is the learning about? Who is the ultimate client? What is the level of learning?

changed attitudes.[36] Furthermore, given the specific goal of prejudice reduction and a personal focus, a shorter laboratory might be feasible. Much research is needed to determine the optimal mix of group process versus personal development orientation, the relative impacts of various kinds of supplementary cognitive inputs, and the effect of laboratory duration on the amount of change observed.

One of the most interesting findings in this study involved the strong conditioning influence of anomy with respect to changes in self-acceptance. The success of sensitivity training as an educational strategy rests upon an individual's ability to see and understand the dominant norms of self-exposure, openness, and feedback which develop within the T Group. What remains to be demonstrated by future research is the role of anomy as a conditioning variable for learning criteria other than increased self-acceptance.

The roles played by discussion of the topic of race relations and the presence of Negroes in the T Group are still unclear. Pure discussion does not help those who are doing the talking. This situation does not mean that the observed changes in human-heartedness could have occurred without any such discussion. The nontalkers[37] may have benefited immensely from listening to the more vocal members of the group. On the other hand, the talkers may have been "intellectualizing"—a technique commonly employed in T Groups to keep the discussion on a less threatening level. This negative effect of participation has been observed by other researchers,[38] and further research is necessary to better understand the dynamics of the relationship between participation (amount and content) and change.

36. For an excellent description of this form of sensitivity training, see Irving R. Weschler, Fred Massarik, and Robert Tannenbaum, The self in process: A sensitivity training emphasis, in *Issues in human relations training*, No. 5 in NTL's Selected Readings Series. Washington, D. C.: National Training Laboratories, 1962. Pp. 33-46.

37. "Nontalker" does not mean "silent member," but refers instead only to the substance or content of an individual's discussion. The most vocal member, in terms of total participation, may never have mentioned the topic of race relations.

38. Personal communication from David Kolb of M.I.T. concerning some research he is conducting on individual change within T Groups. 1965.

Concerning the effect of racially mixed groups, it may be that for a majority of the white participants the T-Group experience was the first opportunity they ever had to meaningfully interact with a Negro. During the T-Group discussions, many insights may have occurred that served to highlight a feeling of "oneness" or common humanity. For example, "He [a Negro] has feelings and emotions just the same as I!" Research is needed to examine in greater detail the specific patterns of interaction (e.g., Negro to white) and discussion content within a mixed T Group and their effects on the attitudes people have toward one another, as well as the effects of an all-white group.

Change in Self-Acceptance Versus Change in Human-Heartedness

One of the central hypotheses in this study was that those who increase in self-acceptance will increase more in human-heartedness than those who decrease or do not change in self-acceptance. The data suggest that this hypothesis, in its original form, was too broad. It appears instead that some minimum increase in self-acceptance (20 per cent in this study) is necessary in order for any significant change in human-heartedness to be immediately observable.[39] Perhaps, where sensitivity training really "took" (in the sense of great increase in self-acceptance), those involved may have been better able to immediately make the mental transfer from self-acceptance to human-heartedness. The others may have needed some period of incubation in order for this transfer to occur.

Support for this interpretation is provided by Katz (Katz, D., Sarnoff, I., & McClintock, C. M., 1956, 1957) who found that as a result of a self-insight manipulation no changes in prejudice were observed immediately after the experimental induction, but that highly significant shifts occurred several weeks afterwards. In other words, a "sleeper effect" appeared to be operating. The written case study utilized by Katz, et al. (1956) to increase self-insight is certainly less intensive than a two-

39. The risk of maximizing change variations by examining a small subgroup of the total population is reduced considerably by the findings concerning individual focus during the T-Group sessions. The great changers in self-acceptance were also those whose focus during the T Group was in more personal areas.

week sensitivity training laboratory and may well be less powerful. It is possible, therefore, that changes in human-heartedness will persist after the laboratory and, in fact, may become more marked among the group who experienced only moderate increases in self-acceptance.[40] This hypothesis could not be tested because it was necessary to provide a full feedback session[41] for the laboratory participants prior to their departure.

Finally, the reader has undoubtedly noticed that by changing a few words, e.g., "T Group" to "therapy group" and "trainer" to "therapist," this study could have been concerned with the effect of client-centered psychotherapy upon prejudiced attitudes. Both the T Group and the therapy group provide the elements of psychological safety, support, and opportunities for reality testing assumed necessary to effect an increase in an individual's level of self-acceptance and consequently, by our model, to decrease one's level of ethnic prejudice. To the extent that future research and practical experience substantiate the conclusions drawn from the present study, a step has been taken toward solving a problem posed by Adorno (Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N., 1950, p. 976) some 17 years ago.

> Although it cannot be claimed that psychological insight (self-insight) is any guarantee of insight into society, there is ample evidence that people who have the greatest difficulty in facing themselves are the least able to see the way the world is made. Resistance to self-insights and resistance to social facts are contrived, most essentially, of the same stuff. It is here that psychology may play its most important role. Techniques for overcoming resistance, developed mainly in the field of individual psychotherapy, can be improved and adapted for use with groups and even for use on a mass scale.

REFERENCES

Adorno, T. W., Frenkel-Brunswick, E., Levinson, D. J., & Sanford, R. N. *The authoritarian personality*. New York: Harper & Row, 1950.

40. The Bunker studies (1963, 1965) discussed earlier suggest that many of the learnings derived from sensitivity training *do* remain with an individual over a long period of time.

41. The reason for this was only partially based upon ethical considerations. Of equal importance was the fact that the data which were fed back to the participants became topics for discussion in the few remaining T-Group sessions and therefore, hopefully, enhanced the learning value of their training experience.

Bennis, W. G., Schein, E. H., Berlew, D. E., & Steele, F. I. *Interpersonal dynamics.* Chicago: Dorsey, 1964.

Blalock, H. M. *Social statistics.* New York: McGraw-Hill, 1960.

Bunker, D. The effect of laboratory education upon individual behavior. *Proc. of the 16th Annual Meeting,* Industrial Relat. Res. Ass., December 1963. Pp. 1-13.

Bunker, D. Individual applications of laboratory training. *J. appl. Behav. Sci.,* 1965, 1 (2), 131-148.

Coser, L. A., & Rosenberg, B. (Eds.) *Sociological theory—A book of readings.* New York: Macmillan, 1964.

Dorris, R. J., Levinson, D., & Hanfmann, E. Authoritarian personality studied by a new variation of the sentence completion technique. *J. abnorm. soc. Psychol.,* 1954, 49, 99-108.

Gordon, T. What is gained by group participation? *Educ. Leadership,* January 1950, 220-226.

Guilford, J. P. *Fundamental statistics in psychology and education.* New York: McGraw-Hill, 1956.

Harding, J., & Schuman, H. An approach to the definition and measurement of prejudice. Unpublished manuscript, Harvard Univer., January 1961.

Hyman, H., Wright, C. R., & Hopkins, T. K. *Application of methods of evaluation.* Los Angeles: Univer. of California Press, 1962.

Johnson, P. C. *Statistical methods in research.* New York: Prentice-Hall, 1949.

Kahn, R. Aspiration and fulfillment: Themes for studies of group relations. Unpublished manuscript, Univer. of Michigan, 1963.

Katz, D., Sarnoff, I., & McClintock, C. M. Ego defense and attitude change. *Human Relat.,* 1956, 9, 27-45.

Katz, D., Sarnoff, I., & McClintock, C. M. The measurement of ego defense as related to attitude change. *J. Pers.,* 1957, 25, 465-474.

McClosky, H., & Schaar, J. H. Psychological dimensions of anomy. *Amer. soc. Rev.,* 1965, 30 (1), 14-40.

Miles, M. B. Human relations training: Processes and outcomes. *J. counsel. Psychol.,* 1960, 7 (4), 301-306.

Schein, E. H., & Bennis, W. G. *Personal and organizational change through group methods: The laboratory approach.* New York: Wiley, 1965.

Schuman, H., & Harding, J. Sympathetic identification with the underdog. *Pub. Opin. Quart.,* Summer 1963, 230-241.

Sheerer, E. T. The relationship between acceptance of self and acceptance of others. *J. consult. Psychol.,* 1949, 13, 169-175.

Siegel, S. *Nonparametric statistics for the behavioral sciences.* New York: McGraw-Hill, 1956.

Simon, H. A. Spurious correlation: A causal interpretation. *J. Amer. Stat. Ass.,* 1954, 49, 467-479.

CONTINUING EDUCATION

Steele, F. I. The relationships of personality to changes in interpersonal values effected by laboratory training. Unpublished doctoral dissertation, Massachusetts Institute of Technology, 1965.

Stock, D. An investigation into the interrelations between the self-concept and feelings directed toward other persons and groups. *J. consult. Psychol.*, 1949, 13.

ENCORE

This is the problem of any theology of history, and it holds even more true for a theology of politics. How can we pick out the narrow passageway between fanaticism and irrelevance, between proclaiming a divine program to which all men must be subjected, and pronouncing the political order devoid of any theological significance whatever? A theology of politics must draw man into purposeful participation in the political process without tethering him to some overarching meaning to which he must comply. Can we fashion such a theology for our day?

Perhaps the symbol of the secular city provides the starting point for such a theology of rapid social change.

Why should the secular city provide a key to understanding social change that avoids the two classic errors? First, it is the secular city. When we look at history as a process of secularization, it becomes for us at the same time meaningful and open-ended. It suggests that history has a significance for man, but it does not impose a meaning on him. In fact, it topples inherited metaphysical and religious meanings and turns man loose to compose new ones. It also suggests, as we shall see later, a whole range of images—growing up, assuming the responsibilities of an heir, executing an accountable stewardship—which appear throughout the New Testament.

Second, it is a secular city. Urbanization is included, and this brings to the symbol the enrichment of an impressive heritage of "city" symbols from the New Jerusalem and the City of God to the New Creation as Metropolis, as it was defended so skillfully by Professor Gibson Winter in his 1963 book. It also suggests a long tradition of social utopias in Western thought including Erewhon and Atlantis. There is no reason why Christians cannot make use of the aspirations set forth in these fictional cities. As an interpretive model, the city usefully complements the freedom and liberation of secularity with the idea of reciprocity and interdependence. But the city too is an open-ended image. No street plan is provided. Every utopia which does prescribe specific remedies quickly becomes an impediment to change rather than a spur. The emerging city signifies a purposeful process, not an achieved goal. The pattern of the secular city is not revealed from on high. It must be painfully worked out by man himself.

Continued on page 101