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LABORATORY TRAINING IN HUMAN RELATIONS AND ORGANIZATIONAL BEHAVIOR.

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A SERIES OF STUDIES WERE MADE ON THE EFFECTS OF LABORATORY TRAINING IN HUMAN RELATIONS ON THE ORGANIZATIONAL BEHAVIOR OF "MIDDLE" MANAGERS. THROUGH REPEATED FACTOR ANALYSIS, THE ORGANIZATIONAL BEHAVIOR DESCRIBER SURVEY (OBDS) WAS DEVELOPED BY WHICH A MANAGER AND HIS ASSOCIATES COULD DESCRIBE HIS BEHAVIOR. THE OBDS PERMITTED RATINGS ON RATIONAL-TECHNICAL COMPETENCE, VERBAL DOMINANCE, CONSIDERATION, AND EMOTIONAL EXPRESSIVENESS. STUDIES OF 357 MANAGERS IN FOUR POPULATIONS SHOWED NO SIGNIFICANT CHANGES IN ORGANIZATIONAL BEHAVIOR FOLLOWING TRAINING. THERE WERE, HOWEVER, POSITIVE RELATIONSHIPS BETWEEN INVOLVEMENT IN THE LABORATORY AND INCREASES ON THE CONSIDERATION SCALE. THERE WERE SMALL CORRELATIONS BETWEEN BEHAVIOR IN THE ORGANIZATION AND IN THE TRAINING LABORATORY. DETERMINANTS OF ORGANIZATIONAL BEHAVIOR SEEMED TO BE SITUATIONAL, AND INDICATIONS WERE THAT STRONG BARRIERS TO THE TRANSFER OF ATTITUDES FROM THE TRAINING LABORATORY TO THE ORGANIZATION MAY EXIST. THE FINDINGS ALSO SUGGESTED THAT TRAINING MAY LEAD TO MULTIDIMENSIONAL AND MULTIDIRECTIONAL CHANGES. THE DOCUMENT INCLUDED SAMPLE QUESTIONS, TABLES OF CORRELATIONS, AND 13 REFERENCES. (AJ)

Laboratory Training in Human Relations and Organizational Behavior[1]

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Laboratory Training In Human Relations and Organizational Behavior

Summary

A series of studies was undertaken to investigate the effects of laboratory training in human relations on the organizational behavior of middle managers. Through repeated factor analysis, an instrument was developed on which a manager and his associates could describe his behavior. In its final form this instrument, the Organizational Behavior Describer Survey, permitted ratings on Rational-Technical Competence, Verbal Dominance, Consideration, and Emotional Expressiveness.

The following hypotheses were investigated: 1) increases in Consideration and Emotional Expressiveness following training; 2) no change in Rational-Technical Competence; 3) positive relationships between ratings of active and productive involvement in training, and amount of change in (1), above; 4) positive relationships between rated behavior in the organization and in the training laboratory.

In studies of 357 managers in four populations, no significant overall changes in organizational behavior were found following training. However, there were positive relationships between involvement in the laboratory and increases on the Consideration scale. The hypothesis regarding congruence between organizational behavior and behavior in the training laboratory was also confirmed, though the correlations were small.

Additional findings from this and other studies suggest that determinants of organizational behavior are strongly situational, and that there may exist strong barriers to the transfer of attitudes and values from the human relations training laboratory to the organization. Evidence is also reviewed suggesting that laboratory training may lead to multidimensional and multidirectional change, rather than the unidirectional changes on a few dimensions measured in the current studies.

Laboratory Training in Human Relations and Organizational Behavior[1]

The research reported in this paper was undertaken at a time when there was a great deal of debate in industrial and academic training circles regarding the impact on managers' organizational behavior of laboratory training in human relations (sometimes called "sensitivity training"). Writings by Argyris (1962) and Odiorne (1963) are typical of that debate. Odiorne charged that even if laboratory training had an impact on managers at all, it very likely was a negative one, in that managers were likely to become weak and indecisive and over-concerned about the reactions of others to their behavior. Argyris stressed values of "interpersonal competence" and "authenticity". The present study was conceived as an attempt to measure, in terms which would be directly referrable to such debates, the impact of laboratory training on organizational behavior of managers and administrators. We set ourselves the task of trying to answer the kinds of questions a personnel manager might ask when deciding whether to provide laboratory training for his organization on a large-scale basis: will the participants become more or less hard-driving? considerate? authentic?

In addition to these questions, we posed two others having to do with the training process itself. We asked whether the kind and amount of behavior change relates to the quality of participation in the training experience. And lastly, we undertook to answer a question which is at the basis of the philosophy of the training laboratory: to what extent does the individual's style of relating to others in the laboratory situation reflect or recapitulate his behavior on the job in the organization?

Argyris has presented a rationale for the use of laboratory training in human relations to increase managers' effectiveness in the area he calls Interpersonal Competence (Argyris, 1962).

Interpersonal Competence refers to the individual's concern for and ability to deal with the needs, feelings, and interpersonal relationships of others and himself in the work setting. This includes the ability to behave in a way which is congruent with one's inner needs, feelings, and perceptions. Such an ability to behave authentically is considered to be an extremely important aspect of Interpersonal Competence.

Argyris feels that the norms and values emphasized in most organizations inhibit the development and exercise of Interpersonal Competence. Managers are encouraged to suppress their own and others' feelings and to be task-oriented at the expense of concern for the human relationships in the work setting. Organizational life fosters growth in what Argyris calls Rational-Technical Competence (work orientation), but blocks the development of Interpersonal Competence and an orientation towards people.

Rational-Technical Competence refers to the ability to meet job requirements for intellectual knowledge, technical skill, and aggressive

persuasiveness. A manager with high Rational-Technical Competence is an effective problem-solver and is knowledgable and articulate in his presentation of ideas. He is concerned with "getting the job done" with a minimum of distraction by issues and concerns which are not directly task-related.

In the training laboratory we create a temporary culture in which Rational-Technical Competence is devalued and Interpersonal Competence becomes a center of attention and a source of satisfaction and rewards. Growth in Interpersonal Competence takes place through the exposure of one's customary ways of relating to others and the giving and receiving of "feedback" about the impact of one's behavior on the others in the T (for training) Group (Argyris, 1962; Bradford, et al., 1965).

If the human relations training laboratory is general education for Interpersonal Competence, then it seems reasonable to advance the following hypotheses, each of which was investigated in the present study.

1. Participants in a laboratory in human relations will be seen by themselves and others as increasing the overt expression of their own feelings and perceptions.

2. They will also be seen as increasing their receptivity to and interest in the feelings and ideas of others.

3. The extent of perceived change in (1) and (2) above will be positively related to the degree to which the participant is seen as actively and productively involved in the T group.

4. Positive relationships will be found between the descriptions of a participant's behavior by organizational associates and by his fellow T-group members.

Method

In order to measure the interpersonal behavior of managers in the organization, a new instrument was constructed, the Organizational Behavior Describer Survey (OBDS). The OBDS was developed deductively from Argyris' theory of interpersonal behavior in organizations (Argyris, 1962). The objective was to operationalize Argyris' concepts of Rational-Technical Competence and Interpersonal Competence.

Argyris' theory is similar to other two-factor theories of organizational behavior, notably Fleishman's (1953) Initiating Structure and Consideration, Blake's (1964) Managerial Grid, and McGregor's (1960) Theory X and Theory Y. Both Fleishman and Blake have constructed instruments for assessing managerial behavior, but neither was considered suitable for this study. Fleishman's Supervisory Behavior Questionnaire focuses on the supervisor-subordinate relationship and was primarily designed for use at the first line level of supervision. Blake's Managerial Grid is more general in its relationship reference, but Blake's attempt to obtain a score for each of several managerial types or "styles" introduces some metric difficulties which it was desired to avoid.

In constructing the OBDS, it was desired to produce a general measure of interpersonal behavior in organizations, not only downwards in the organization, but laterally and upwards as well. In addition, by

constructing the items deductively from Argyris' theory and then factor analyzing them, evidence could be obtained as to the correspondence between Argyris' theory and the actual interpersonal behavior of managers as observed by themselves and their associates.

The first version of the OBDS consisted of 20 deductively constructed items, 10 representing Rational-Technical aspects of organizational behavior, and 10 describing Interpersonal Competence as defined by Argyris. This initial version was factor analyzed, and the results were used to develop a scoring key (OBDS I). The instrument was then revised and lengthened. The new version was also factor analyzed, and scales were developed on the basis of item factor loadings (OBDS II). The two instruments were similar in content and factor structure and the data from both are treated as equivalent in reporting the results below.

It was predicted that managers participating in a laboratory in human relations would increase their Interpersonal Competence as measured by their ratings on the OBDS by themselves and their associates, but that their scores on Rational-Technical Competence would not change with the training.

An instrument named the Group Perception Questionnaire (GPQ) was used to assess differences in interpersonal style, involvement, learning and effectiveness in the human relations training laboratory. The instrument presents 10 descriptions of behavior, each covering a different aspect of participation in the laboratory. Each member of a T group divides the other members into high, middle, and low groups on each of the items. A person's score on each item is the sum of the ratings he

receives from the other members. The items in the GPQ are listed in Table 1.

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Insert Table 1 about here

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The GPQ was used to collect data for Hypotheses 3 and 4, above, on the relationship between organizational behavior and behavior in the T group, and on the relationship between active involvement in the laboratory and changes in organizational behavior.

To measure change, descriptions of organizational behavior were obtained from self, supervisors, peers, and/or subordinates, before and after exposure to laboratory training. In the case of one of the groups studied, it was possible to compare a group of previously trained managers with a comparable group about to undergo training. This was the only case in which a control group was used. With the other populations a test-retest design was used, as no control group was available. The following populations were studied:

1. Participants in a two week residential training laboratory for middle managers conducted by the National Training Laboratories (N = 75).

2. Middle managers in a company engaged in the design and production of aircraft engines (N = 67).

3. Top and middle managers in the research and engineering subsidiary of a petroleum company (N = 75).

4. Middle managers in area, state, and local YMCA's ($N_1 = 100$, $N_2 = 90$)[2]

The latter three groups were trained in one week residential laboratories conducted especially for their organizations. Managers were assigned to groups in such a way as to avoid placing supervisor-subordinate pairs together.

The training designs varied substantially between groups and, in some cases, between the several training laboratories which took place within a given sample. However, each of the laboratories was designed around the T group as the basic and major learning setting. All of the T groups were conducted by a trainer experienced in T group methods, often working with a co-trainer of lesser experience. In general, the design and rationale of the training followed that described in Bradford, et al. (1965).

The procedure for data collection varied according to the population studied. The usual procedure was to contact the laboratory participants by mail in advance of the training, asking each to fill out the OBDS on himself and to ask his supervisor and two subordinates also to describe his behavior on the OBDS as they saw it. These descriptions by others were forwarded directly to the researcher by the describers. With a minority of the groups studied, the OBDS was administered to participants in a group session instead of by mail.

During the training laboratory, the Group Perception Questionnaire was administered in the next-to-last session of the T group. The training staff were enjoined against using the Group Perception Questionnaire in the training design as a device for "feedback," so that it would not be contaminated by this use.

It was desired to assess changes in organizational behavior over a relatively short period of time. We wanted to allow sufficient time to elapse after the laboratory for the individual's behavior patterns to stabilize, if indeed they had changed at all, but not enough for the behavioral effects to have undergone severe dilution because of the passage of time, changes in job and relationships. Although it might have been desirable to measure change over a longer period of time, it is generally impractical to obtain before and after measures from the same associates over a much longer period than three to six months.

In fact, the elapsed time between pre-training and post-training descriptions varied from about eight weeks to six months because many participants had to be contacted more than once before they completed the follow-up administration. The rate of questionnaire return on the follow-up averaged about 60 percent.

Development of the OBDS

Although we attempted to formulate our hypotheses in relatively straightforward terms, the outcomes did not produce simple answers to the original questions. The complications began with the early factor analyses conducted on the items of the OBDS.

The first form of the OBDS was used in the aircraft engine manufacturing concern, and a factor analysis was conducted of 321 descriptions of managers by self, supervisor, peer and subordinate. Instead of the two factors from Argyris' theory, three important dimensions emerged from the

analysis. These were named Rational-Technical Competence (24 percent of the variance); Consideration (22 percent of the variance); and Emotional Expressiveness (11 percent of the variance). The items constructed to measure Interpersonal Competence split between the two latter factors. The items dealing with concern and interest in others' ideas and feelings had high loadings on the Consideration factor, and those referring to openness in the expression of one's own inner needs and feelings represented the Emotional Expressiveness factor. Our respondents did not see the expressive aspects of Interpersonal Competence as closely related to the receptivity component. Additional information about the structure of this instrument is given by the correlations in Table 2 between OBDS I factor scores and scores on Fleishman's Supervisory Behavior Questionnaire.

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Insert Table 2 about here.

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These data show a reasonably close correspondence between the instruments derived from the quite similar two-factor theories of Fleishman and Argyris. However, the findings regarding our third factor, Emotional Expressiveness, indicate that it is far from being closely related to the openness and receptivity of the Consideration scale and, instead, seems to have more in common with the aggressive directiveness of Fleishman's Initiating Structure.

These findings led to a revision of the OBDS. Two further factor analyses were conducted. The first used 189 descriptions of middle managers by their subordinates; the second was based on the twice repeated descriptions by one another of 50 participants in a human relations training laboratory. Essentially similar factor structures were found to emerge from the descriptions collected in these two quite different settings, one on the job and one in an artificially created learning environment.

The factors obtained from these analyses confirmed the pattern of three independent factors found previously. The 36 items of the OBDS fall into four distinct clusters based on similarity of item factor loadings: Rational-Technical Competence, Verbal Dominance, Emotional Expressiveness, and Consideration. The items which are grouped together for each scale are shown in Table 3. The Verbal Dominance and Rational-Technical Competence clusters are closely related factorially and in their patterns of relationships with other variables. They are scored separately in the OBDS II because they are connotatively different and because the characteristic patterns of item factor loadings clearly define two clusters of items.

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Insert Table 3 about here

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The median inter-correlations of the scales defined by each cluster in the OBDS II are shown in Table 4, together with the median Spearman-Brown reliabilities, and the correlations of pre- and post-training scale scores. The latter may be thought of as placing an absolute lower bound on the test-retest reliability, since the intervening experience was intended to change behavior measured by the OBDS II.

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Insert Table 4 about here

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Table 4 shows that the Rational-Technical and Verbal Dominance scales are closely related. Each had low positive correlations with the Consideration scale and negligible relationships with Emotional Expressiveness. The latter, in turn, showed low negative correlations with Consideration.

The results suggest a three factor structure for the perception of interpersonal behavior in the human relations training laboratory and in the organization. Taken together, the Rational-Technical Competence, Verbal Dominance and Consideration scales appear to represent the dominant values of the "modern middle manager." The Emotional Expressiveness scale, on the other hand, represents a controversial value in organizational life and in our culture generally, and its low correlations with the other scales are consistent with the ambivalence with which we generally regard openness about feelings and needs.

Practitioners of laboratory training generally regard increases in both Consideration and Emotional Expressiveness as compatible objectives of laboratory training. Our results suggest that participants and their associates see these characteristics as mildly imcompatible.

The median inter-describer correlations are given for each of the OBDS II scales in Table 5.

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Insert Table 5 about here

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These correlations are undesirably low, expecially when compared with the respectable reliability figures reported in Table 4. The data indicate considerable inconsistency in descriptions of personal style.

The correlations between the descriptions by two subordinates of the same supervisor, are, on all scales, higher than the median of correlations between descriptions based on different roles. This suggests that some of the unreliability between raters is due to role relationships which influence behavior. For example, the prescribed behavior of a man to his supervisor on the Verbal Dominance scale may be, in an authoritarian organization, the opposite of that which he is expected to show to his subordinates.

Even within the same role, however, the inter-describer relations leave a great deal to be desired. One may question whether these

findings reflect some deficiency in the metric characteristics of the OBDS II. Some evidence is available from a comparison of inter-describer correlations of the OBDS II with those obtained from Fleishman's Supervisory Behavior Questionnaire. In the aircraft engine company we obtained descriptions on Fleishman's instrument from self, supervisor, peer, and subordinate. The median inter-describer correlations were .39 for Initiating Structure, and .16 for Consideration. The OBDS II and the Supervisory Behavior Questionnaire compare favorably on Consideration. Fleishman's instrument, however, gives better results on Initiating Structure than the OBDS does on Verbal Dominance and Rational-Technical Competence, the closest OBDS scales in content. The comparison results do not offer hope that inter-describer consistency can be easily achieved by selection of another instrument.

The low inter-describer correlations led us to abandon the original plan to combine the OBDS scores for each individual. The scores from each describer category were treated separately. Each was considered to be an independently obtained description of organizational behavior from the point of view of a role relationship (self-to-self, supervisor-to-self, etc.). Each of the mean changes and correlations predicted in the hypotheses was calculated for each describer category. For each hypothesis to be tested we thus had several replications, one from each describer category in each population from which relevant data had been obtained.

To answer the questions posed by our hypothetical personnel manager, it was necessary to combine these replications into some overall evaluation of each hypothesis. Since the available facilities and funding did not permit the development of an analysis of variance program to accomplish this task, a less powerful test was applied. For each hypothesis, we tested the deviation from zero of the distribution of values (mean changes or correlations) obtained from the several replications. For example, in testing for a significant change on an OBDS scale, the mean change was computed for each describer category from each population. Then the distribution of mean changes was tested against the null hypothesis of zero mean change by application of the t test with N = number of obtained means (populations x describer categories).

This method was applied only after the values making up each distribution were scrutinized for interaction among describer categories, populations, and main effects. No interaction effects were observed. All available data were included in the test of each overall hypothesis. This required some scale changes in OBDS I to make it comparable with OBDS II. The differences between previously trained and untrained YMCA managers were included as mean changes, along with the pre- versus post-training means which were all that were available for the other populations.

Results

Table 6 gives the summary results regarding change on each of the OBDS scales.

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Insert Table 6 about here

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The results in Table 6 show no significant overall changes in organizational behavior on any of the dimensions measured by the OBDS. Although the changes on Consideration and Emotional Expressiveness are in the predicted direction, they are small in absolute size and only the changes on the Emotional Expressiveness scale approach significance. Hypotheses 1 and 2 were not confirmed.

Neither is there evidence of the increases in "softness" which critics of laboratory training sometimes predict. The obtained changes on Verbal Dominance were as great as those on the more "people-oriented" scales, and only the purely intellectual Rational-Technical Competence scale showed no change at all.

Though significant overall changes cannot be demonstrated, Hypothesis 3 can still be tested. There remains the possibility of regular differences in participant responsiveness to laboratory training which are associated with the amount and direction of change in later organizational behavior. Hypothesis 3 predicts a positive relationship between ratings of active and productive involvement in the learning process, on the one hand, and increases on Consideration and Emotional Expressiveness, on the other. Five of the Group Perception Questionnaire ratings were considered relevant to this hypothesis: 5) Involvement, 6) Experimentation, 7) Understanding, 8) Receptivity to Feedback, and 10) Increased Effectiveness.

Correlations between the OBDS scales and each of these GPQ questions were calculated for both pre-training and post-training OBDS administrations. If the correlations of an OBDS scale with a GPQ question increased from before to after the laboratory, it indicates a positive association between the GPQ rating and pre-post change in the OBDS scale score. If the GPQ correlation with the post-training OBDS scale is significantly lower than it is with the pre-training scores then it means that ratings on the GPQ item are associated with decreases in the observed organizational behavior. As before, each correlation from each describer category in each population sample was treated as one observation. We then compared the distribution of pre-training OBDS-GPQ correlations with the post-training distribution by application of the Wilcoxon Matched-Pairs Signed Ranks Test to determine whether, as a whole, the correlations had tended to increase or decrease with training.

The mean pre- and post- correlations are shown in Table 7.

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Insert Table 7 about here

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The changes in correlation of GPQ questions with the Consideration and Emotional Expressiveness scales were all in the hypothesized direction. The pre- versus post-training correlations are significantly different for the relationships of the Consideration scale and GPQ questions 5) Involvement, 6) Understanding, and 10) Receptivity to Feedback.

The data in Table 7 thus support Hypothesis 3, that active and productive involvement in the T group is associated with increases in Consideration and Emotional Expressiveness. Our data also suggest that Verbal Dominance may decrease as a function of active involvement in the training. However, only one of the comparisons that suggest this trend is statistically significant.

Table 8 presents the results for Hypothesis 4, that descriptions of organizational behavior are positively related to ratings of behavior in the laboratory. Table 8 gives the mean correlations between pre-training OBDS scores and GPQ Questions 1) Control, 2) Dependence, 3) Fight, 4) Support, and 9) Effectiveness. As before, each correlation was treated as a sample observation, and the distribution of correlations was tested for significant difference from zero by application of the t test.

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Insert Table 8 about here

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The correlations in Table 8 support Hypothesis 4. By and large, descriptions of personal style in the organization are positively correlated with descriptions of similar dimensions of behavior in the human relations training laboratory. The mean correlations, while quite small, are respectable in size when the low inter-describer correlations obtained for the OBDS are considered.

It is of interest that the correlations of the GPQ with the OBDS Consideration and Emotional Expressiveness scales tend to be opposite in sign. This again suggests some incompatibility between these two behavioral dimensions.

Discussion

Our findings provide little support for a position at either extreme of the T-group training debate. We were unable to find large or significant overall changes in organizational behavior, either in the direction of "managers going soft" or in the direction of their showing increases in concern, receptivity, or emotional expressiveness towards organizational associates, or in the direction of increased authenticity about inner needs and feelings. It does not appear that laboratory training in human relations produces permanent unidirectional changes in overt organizational behavior on the dimensions we studied. In short, we can not say to the Personnel Manager that if he sends a manager to a human relations training laboratory we can predict with a high degree of probability that the manager will be seen by his associates as changing in the direction of becoming more democratic, considerate, or authentic. Neither can we say that he will become weak, soft, or over-sensitive. As far as it goes, this is our answer to the question we posed at the beginning of the series of studies reported here.

However, the actual findings proved to be more complicated than the original questions. There are several lines of evidence which must be considered in arriving at an evaluation and interpretation of these results.

1. Laboratory training practitioners consistently report dramatic group and individual changes in directions consistent with laboratory values of concern, openness, and authenticity.

2. Recent studies by a number of authors (among them Bunker, 1965; Harrison, 1966; Miles, 1965; and Valiquet, 1967) have shown significant behavioral and cognitive changes as a function of participation in laboratory training in human relations.

3. Those managers in our study who were seen in a laboratory as most involved, comprehending, and receptive to feedback were the ones who were reported as most changed in the organization on the OBDS Consideration scale.

4. The low inter-describer correlations obtained for the OBDS II and the Supervisory Behavior Questionnaire suggest that a great deal of the overt organizational behavior of a manager may be determined by role requirements and by the behavior in the relationship of the other person(s).

5. Interviews with managerial participants in human relations training laboratories conducted by the National Training Laboratories, months or years after the initial training experience, frequently elicit variations on the following theme: "The laboratory had a significant and lasting impact on my relationships with my family and friends. For some reason, it has had very little effect on my relationships with associates at work."[3]

These lines of evidence suggest that substantial changes, some of them lasting, may be produced in the human relations training laboratory. At the same time, the overt style of interpersonal behavior expressed in a relationship may be strongly influenced by both the role requirements and the other(s) in the relationship.

If the dominant values and norms of the organization run counter to the expression of concern for others and of one's own needs, then the attitudes and behavior learned in the human relations training laboratory will be suppressed. By contrast, one's family may provide a facilitating climate for such expression. Families tend to have norms of caring and concern, while many organizations value rationality and emotionally neutral impartiality.

If overt behavior is strongly role- and other-determined, and if organizational norms tend to suppress the expression of concerns and emotionality, then participants in training may change their values without being able to act upon the change. To the extent that a person acts one way and believes another, he is in conflict, and the dissonance thus produced is likely to be resolved, over time, in favor of the organizational norms and values.

According to this point of view, laboratory training in human relations may produce a desire and readiness for greater concern, openness and authenticity. Whether or not this readiness develops into changed behavior depends on organizational support for change. Our data suggest, as did Fleishman's (1953), that it is unrealistic simply to

assume the support exists or that one-shot training can overcome its lack unaided.

In this connection it is significant that thoughtful practitioners of laboratory training have increasingly tended to see the ordinary human relations training laboratory as essentially a personal "unfreezing" experience which is not in itself sufficient to induce significant change in patterns of organizational behavior. For the latter objective, these practitioners rely upon "team development laboratories" in which members of a working group participate with a staff person in a T-group setting to examine their day-to-day working relationships. If a team working together in a T group can change its norms and expectations about how members will deal with one another, then the very strong group forces which are generated in the laboratory will not be dissipated with the end of the laboratory but will be maintained intact as the individuals continue to work together.

This approach avoids the pluralistic ignorance and mutual fear of risk which managers have reported even in organizations in which a number of colleagues have been separately trained in "stranger" T groups. These persons frequently report that even though they all realize that they must separately have gone through similar experiences, each is afraid to take the first step towards changing organizational norms and expectations and moving towards more concerned, open, and authentic relationships. In short, it appears that it is not enough to train individuals; to induce changes in organizational behavior, we may have to work directly with functional organizational units.

A second question is raised by the lines of evidence referred to above. It concerns the dimensionality and direction of change to be expected from laboratory training in human relations. The present study was designed within the framework of the debate between proponents and opponents of such training. Both our findings and recent reports by others now suggest the need for a less simplistic conceptualization of the learning-change process.

In the present study, we found differential change as a function of involvement in the training. At the same time, we were unable to demonstrate significant overall change in organizational behavior on the behavioral dimensions we studied.

There are, however, a number of other studies which have shown significant changes (Bunker, 1965; Harrison, 1966; Miles, 1965; and Valiquet, 1967). Each of these studies casts a very broad net in looking for change. Each permitted some kind of free response on the part of the laboratory participant or his describers, and then categorized the free responses according to an inductively derived scheme. Such a method permits changes to emerge and be counted which are irrelevant or ambiguous with respect to the central laboratory values of concern, openness, and authenticity. For example, Harrison's (1966) study showed that participants tended to become more aware of the interpersonal-expressive characteristics of others. There was no test of how or whether they were expressing this increased awareness in the organization.

Bunker found increases in self control, which might be considered almost antipathetic to "authenticity." Other of his findings, such as increases in "comfort" and "insight into self and role" are ambiguous with respect to changes in interpersonal behavior (Bunker, 1965). The picture is further complicated by Smith's (1964) finding regarding the balance between behavior expressed towards others and wanted from others on the dimensions of control and intimacy. Smith found that participants in laboratory training were more likely than controls to change towards a closer balance between "wanted" and "expressed" scores on modified FIRO scales, That is, laboratory training tended to induce a moderation of extremes, or a regression towards the mean.

All of these studies provide evidence that a simplistic, normative conceptualization of training outcomes is inadequate. They suggest that the actual changes may not only be multidimensional, but multidirectional as well. They point towards the need for methods of outcome measurement which are broadly inclusive, rather than restrictive with regard to the kinds and directions of change which are measurable.

A broadened conception of training goals and outcomes is consistent with the increasing focus on individual growth which has characterized the practice of laboratory training during the past decade (see Argyris, 1967, for a discussion of this trend). T-group laboratories focus less on the techniques of working with groups and more on the establishment by each individual of mutually satisfying and productive interpersonal relationships. This learning and change takes place when an individual exposes his ways of relating and responding to others in the T group, and

is encouraged to seek and attend to the "feedback" of their feelings, perceptions and reactions to his behavior. The objective is for each person to choose his own dimensions and directions for change, although as Harrison (1965) has pointed out, the structure of the T group does tend to focus attention on some aspects of interpersonal behavior to the neglect of others.

The present study was designed to investigate more limited questions than those proposed above for future research. Within this framework, however, our data permit us to arrive at several conclusions regarding both research methods and laboratory training outcomes.

1. Our studies of inter-describer correlations suggest that interpersonal behavior in organizations may be much more situationally determined than trainers and researchers would like to believe. At the same time, there is a very modest amount of consistency between the individual's organizational behavior and his behavior as seen in the training laboratory.

2. On the dimensions we studied, there is no evidence that residential laboratory training in human relations had a lasting <u>overall</u> directional effect on the organizational behavior of participants as observed by themselves and their associates.

3. There is evidence that the laboratory training had <u>differential</u> effects on the organizational behavior of participants. A positive relationship was found between increases in rated Consideration in the organization, and ratings of active and productive involvement in the T group.

It is unlikely that the debate which inspired the studies reported in this paper can be resolved in the terms used by proponents and opponents of laboratory training. Nor will the client receive simple behavioral answers to his reasonable question: exactly what can I expect people to do differently as a result of the training?

It is in the nature of most of us to ask the simple questions first. It is the hope of the authors that our inability to obtain simple answers to our first question will encourage deeper probes into the learning processes we have studied.

Footnotes

1. The studies reported in this paper were conducted while the senior author was at Yale University. Cooperation in data collection and/or financial assistance were provided by Boston University Human Relations Center, Esso Research and Engineering Corporation, the Ford Foundation, the Small Aircraft Engine Department of the General Electric Company, the National Training Laboratories, and the National Council of YMCA's. The authors also wish to express their appreciation to Miss Roslyn Gill of Yale University for her substantial contributions to the data analysis.

2. A group of 100 YMCA managers trained from one to five years previously was compared with a control group of 90 untrained managers. The latter then became an experimental group, as they were trained and tested again.

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Table 1

Items in the Group Perception Questionnaire (GPQ)

1. He has worked hard to influence others towards his point of view.

2. He has usually been willing to go along with what others want to do.

3. He is aware of and can express his feelings (for example, when he is irritated, angry or upset).

4. He has been warm and supportive toward other group members.

5. He has seemed interested and involved in the group's activities.

6. He has been willing to consider and try out new ideas and ways of doing things.

7. He has helped clarify and make more understandable to others the events and processes in the group.

8. His <u>overall effectiveness</u> as a member has contributed significantly to the group's progress.

9. He has seemed to understand and learn from the reactions of others to his ideas and actions in the group.

10. As time has gone on, his overall effectiveness as a group member has increased.

Table 2

Median Correlations Between the Organizational Behavior Describer Survey (OBDS) I Scores and Scores on the Supervisory Behavior Questionnaire[a]

	Initiating Structure	Consideration
Rational-Technical Competence	.49	.25
Consideration	.11	.62
Emotional Expressiveness	.46	.05

a Each reported r is the median of those obtained from supervisors, peers and subordinates.

Table 3

Sample Items in the Organizational Behavior Describer Survey (OBDS) II

I. Rational-Technical Competence

1. He shows intelligence.
2. He thinks quickly.
3. He demonstrates high technical or professional competence. He "knows his stuff."
4. He comes up with good ideas.
5. He tries out new ideas.
6. He offers effective solutions to problems.

II. Verbal Dominance.

1. He is competitive. He likes to win and hates to lose.
2. He is persuasive, a "seller of ideas."
3. He is able to get the attention of others.
4. He presents his ideas convincingly.
5. He talks in a way that others listen.
6. He expresses ideas clearly and concisely.

III. Emotional Expressiveness

1. He is angry or upset when things do not go his way.
2. He tends to be emotional.
3. He expresses his own feelings (for example, when he is angry, impatient, ignored).
4. You can tell quickly when he likes or dislikes what others do or say.

Table 3, continued

5. His feelings are transparent. He doesn't have a "poker face" front.

IV. Consideration

1. He listens and tries to use the ideas raised by others in the group.
2. He encourages others to express their ideas before he acts.
3. He tries to understand the feelings (anger, impatience, rejection) which others in the group express.
4. He is tolerant and accepting of other people's feelings.
5. He tries to help when others become angry or upset.
6. If others in the group become angry or upset, he listens with understanding.
7. He sympathizes with others when they have difficulties.
8. He is warm and friendly with those with whom he works.

Table 4

Median Interscale Correlations and Reliability Estimates of OBDS II Scales

	Rational-Technical Competence	Verbal Dominance	Consideration	Emotional Expressiveness
I. Rational-Technical Competence	.73 (pre-post) .83 (split half)	.69	.36	-.03
II. Verbal Dominance	.69	.71 (pre-post) .84 (split half)	.23	.13
III. Consideration	.36	.23	.70 (pre-post) .92 (split half)	-.29
IV. Emotional Expressiveness	-.03	.13	-.29	.70 (pre-post) .89 (split half)

Interscale correlations are based on 12 samples with median N, per sample, = 51.

Pre-post correlations are with intervening training experience and are based on 11 samples with Median N = 49.

Spearman-Brown split-half reliabilities are based on four samples, Median N = 80.

Table 5

Median Inter-Describer Correlations, OBDS II Scales

	Correlations Based on Different Roles (13 samples)		Correlations Based on Same Role (Subordinate) (2 samples)	
	Median r	Range	r	N
I. Rational-Technical Competence	.14	-.03 to .27	.39	70
II. Verbal Dominance	.20	-.05 to .47	.24 .28	28 61
III. Consideration	.14	-.07 to .40	.40 .15	22 69
IV. Emotional Expressiveness	.30	.09 to .56	.45 .50 .56	26 66 29

Note: Median N = 53; range of N's: 15 to 66.

Table 6

Summary Means of Mean OBDS Scale Changes
From Before to After Laboratory Training

	Summary Mean	Range of Means	Number of Means	t
Rational-Technical Competence	0.09	-1.60 to 1.11	19	0.49
Verbal Dominance	0.33	-1.00 to 1.70	16	1.98*
Consideration	0.30	-1.21 to 1.25	19	0.94
Emotiotional Expressiveness	0.38	-1.00 to 1.57	19	1.83*

Note: Total number of observations per summary mean ≈ 470.

*$p < 0.10$, 1-tailed; $p < 0.20$, 2 tailed.

Table 7

Mean Correlations, Pre- and Post-Laboratory OBDS and GPQ Scores

	Involvement		Experimentation		Understanding		Receptivity to Feedback		Increased Effectiveness	
	$\bar{r}_{pre}$	$\bar{r}_{post}$	$\bar{r}_{pre}$	$\bar{r}_{post}$	$\bar{r}_{pre}$	$\bar{r}_{post}$	$\bar{r}_{pre}$	$\bar{r}_{post}$	$\bar{r}_{pre}$	$\bar{r}_{post}$
Rational-Technical Competence	+0.02	+0.07	+0.03	+0.05	+0.05	+0.12	+0.06	+0.06	+0.08	+0.13
Verbal Dominance	+0.09	+0.04	+0.08	+0.00*	+0.11	+0.07	+0.04	+0.00	+0.09	+0.04
Consideration	+0.07	+0.15*	+0.11	+0.14	+0.06	+0.17*	+0.01	+0.15*	+0.15	+0.22
Emotional Expressiveness	-0.02	+0.04	-0.05	0.00	-0.02	+0.03	-0.02	+0.04	-0.10	-0.05

*$p_{change} < 0.05$, 2-tailed

Table 8

Mean Correlations, Pre-Laboratory OBDS Scores and T-Group Ratings (GPQ)

	Rational-Technical Competence			Verbal Dominance			Consideration			Emotional Expressiveness		
	r	N_r	t	r	N_r	t	r	N_r	t	r	N_r	t
Control	.09	11	3.75**	.22	8	7.47***	.05	11	0.93	.10	11	2.67*
Dependence	-.08	11	0.91	-.16	8	3.48**	.15	11	3.79*	.19	11	4.23**
Fight	.11	11	3.74**	.22	8	6.27***	-.22	11	2.32*	.20	11	4.36**
Support	-.03	11	0.97	-.06	8	1.60	.22	11	7.22***	-.14	11	4.23
Effectiveness	.10	11	2.83*	.15	8	2.82*	.04	11	0.89	.03	11	0.75

* $p < .05$, 2-tailed
** $p < .01$, 2-tailed
*** $p < .001$, 2-tailed