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ABSTRACT

This study investigated congruence in ego stage and group relevant aspects of teachers' and learners' personalities, and between their preferences for and perceptions of group work and emotionality behaviors, as related to learners' learning achievement and to teacher and student satisfaction with learning group membership. Subjects (130 learners and seven teachers) were given the Ideal Group and Self-Description questionnaires, and measures of perception and satisfaction; each teacher also constructed a test of terminal student proficiency. Overall evidence from analysis of the ego-stage dyadic congruency, the group-relevant congruency, and the preference and perception congruency variables in association with teacher and learner satisfaction and learning achievement, did not form any assumptions as to their predictive relationships. The data did reveal some strength by the ego-stage dyadic congruency variable, especially in association with the dependent variables of learner achievement. Supplemental analysis of the eight ego stages indicated that teacher-learner dyadic congruency was not significantly related to learner satisfaction. Reasons for the findings were suggested, along with wider implications. Thesis is available from University Microfilms. (LY)

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**ABSTRACT OF A THESIS**

**THE PREDICTIVE ASSOCIATION BETWEEN THE  
EGO-STAGE AND GROUP-RELEVANT ASPECTS OF  
PERSONALITY AND LEARNER SATISFACTION AND  
LEARNING ACHIEVEMENT ON THE BASIS OF THE  
DEGREE OF CONGRUENCE IN TEACHER-LEARNER  
DYADS IN ADULT LEARNING GROUPS**

**By**

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**A thesis submitted in partial fulfillment of the  
requirement for the degree of**

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## I. INTRODUCTION

### The Problem

The Focus of Past Research.--Historically, much research into the nature of the teaching-learning transaction has concentrated upon the illumination of those qualities which make teachers effective and, additionally, has endeavored to establish the kinds of patterns of interaction found in the classroom which affect the quality of learning. In this kind of inquiry, rating methods have been employed to distinguish the effective teacher from the ineffective ones; the attitudes which teachers may hold toward learners and the act of teaching have been analyzed; the inner motivations and personality adjustment needs of teachers have been investigated; the personality traits of teachers have been inventoried; emotional climates operating in classrooms have been identified and classified and, finally, different kinds of teaching "styles" with their resultant effect upon learner's behaviors have been pinpointed.

The result from these investigations has been that of providing few firm results which would begin to demonstrate how to predict and shape the teaching-learning transaction for maximum effectiveness. This research investigation, benefitting from past accomplishments, focuses its attention, not upon the single powers of the teacher as the qualifier of effectiveness in the teaching-learning transaction, but, rather, upon the teacher and learners in the learning group who, together, have significant emotional needs which are to be met transactionally. This investigation differed from other inquiries in that it was assumed that both teachers and learners possess personalities with particular and attendant characteristics and that the basic question is simply that of determining whether or not characteristics which are alike or unlike between the teacher and each learner will affect the behaviors of both as the teaching-learning transaction proceeds.

Development of the Research Problem.--Contemporary thought from the field of personality theory views man's personality as inseparable from the context of his living.<sup>1</sup> This view finds support in formulations from other fields of psychological inquiry. Contemporary psychoanalytic thought<sup>2</sup> holds that personality is formed in successive stages of ego development as the individual lives, simultaneously, in the physiological, psychological and socio-cultural fields which constitute his existence. Contemporary thought from group dynamics views personality not only in terms of the characteristics of the actor, but also in terms of the interaction between the actor and his surrounding environment.<sup>3</sup>

From these concepts, it is possible to postulate that the learning group is a social system which operates in an exchange relationship with individual sub-systems in which the group life is characterized by the stresses which arise out of the efforts of the group to exert control over the drive patterns

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<sup>1</sup>Gordon W. Allport, Personality and Social Encounter (Boston: Beacon Press, 1960), p. 47.

<sup>2</sup>Erik H. Erikson, Childhood and Society (New York: Norton and Company, Inc., 1950).

<sup>3</sup>Dorothy Stock and Herbert A. Thelen, Emotional Dynamics and Group Cultures (New York: New York University Press, 1958), p. 9.

of the individual members. Given this systematic view, a two dimensional concept of personality may be posited. One dimension consists of the individual's system of psychological needs which predisposes him to certain kinds of stress. In specific terms, this dimension can be called the ego-stage aspects of personality. The other dimension consists of the predispositions by which the individual deals with the stress confronting him during group interaction. In specific terms, this dimension can be called the group-relevant aspect of personality.

As the individual and the group operate in an exchange relationship in group interaction, an input-output flow develops in which each member of the learning group may be faced with the problem of adapting to the essential characteristics of the group life if he is to satisfy the needs arising within the ego-stage and group-relevant aspects of his personality. That this adaptation process will develop well or badly for certain individuals may be a condition of how closely the group as a whole, and certain others in particular, complement the two aspects of personality which each individual in the learning group possesses.

The General Problem Underlying the Study.--In this investigation, these concepts have been applied, in field research, to the study of the interaction of teachers' and learners' personality characteristics in adult learning groups. The following were held to be assumptions germane to the study:

1. That teachers and learners in adult learning groups may differ in the ego-stage aspects of their personalities.
2. That teachers and learners in adult learning groups may differ in the group-relevant aspects of their personalities.
3. That teachers and learners, in the ego-stage aspects of their personalities, may be predisposed to certain kinds of psychological stress.
4. That teachers and learners, in the group-relevant aspects of their personalities, may be predisposed to certain behaviors for dealing with stress in group interaction.
5. That teachers and learners in adult learning groups have perceptions of particular kinds of behaviors which occur in the interaction in which they are participants.
6. That in the adult learning group a dyadic relationship exists between the teacher and each learner which may be qualified by the degree of congruence between them in the ego-stage and group-relevant aspects of their personalities.
7. That teachers and learners in adult learning groups may perceive, in terms of the group-relevant aspects of their personalities, the interactional behaviors occurring in their learning groups to be different from those which they prefer by virtue of their established predispositions.

The problem underlying this study was stated in the form of the following questions:

1. In adult learning groups, to what extent does the degree of congruence in the teacher-learner dyad in the matter of the ego-stage and group-relevant aspects of personality affect the learner's satisfaction with his learning group membership and the quality of his learning achievement?
2. In adult learning groups, to what extent does the degree of congruence between a learner's predispositions for certain kinds of group interactional behaviors and his perceptions of the interaction-behaviors of his learning group affect his satisfaction with his learning group and his learning achievement?
3. In adult learning groups, to what extent does the degree of congruence between a teacher's predispositions for certain kinds of group interactional behaviors and his perception of the interactional behaviors of his learning group affect his satisfaction with his learning group membership?

Data for this investigation were collected from adult learning groups pursuing specific courses of study containing different contents and learning objectives.

#### The Conceptual Approach Employed in the Study

The major contributions from the fields of theoretical formulations and research employed in this study come from the work of Bion in the analysis of the component factors of group interaction;<sup>1</sup> the work of Erikson in the field of ego psychology and psychoanalytic thought,<sup>2</sup> and the work of Thelen in expanding Bion's fundamental concepts into workable constructs for the analysis of group interaction.<sup>3</sup>

Bion approached the study of group life from a therapeutic frame of reference and in his work with groups he came to postulate that the interaction of individuals in groups will inevitably create a particular group "mentality" and a specific group "culture" which he identified as:

Group mentality in the unanimous expression of the will of the group contributed to by the individual in ways of which he is unaware, influencing him disagreeably whenever he thinks or behaves in a manner at variance with the basic assumptions.... Group culture is a function of the conflict between the individual's desires and the group mentality.<sup>4</sup>

As Bion examined groups at work, he came to see that there are rapidly forming and changing emotional states in which some affective need is

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<sup>1</sup>W. R. Bion, Experiences In Groups (New York: Basic Books Inc., 1961).

<sup>2</sup>Erikson.

<sup>3</sup>Stock and Thelen.

<sup>4</sup>Bion, pp. 65-66.

inextricably associated with the work the group is trying to accomplish. He identified these emotional states as "basic assumption cultures" which grow out of a need which the group must attempt to satisfy. From these observations Bion developed the concepts of "work" and "emotionality" in interaction in group life and held that group life can only be understood within their context. According to Bion, "work" is the conscious and rational effort of the group members to resolve the tasks facing the group, and "emotionality" is non-purposive and instinctual and not under conscious control by the individuals in the group. These modalities, Bion postulated, are a part of the life of every group and the task accomplishments of individuals and groups are affected by the kinds of work and emotionality cultures the group brings into being.

Following Bion's formulations, Thelen<sup>1</sup> and his associates, in their work with laboratory training groups, expanded upon Bion's original concepts of work and emotionality and developed an observational approach to the analysis of group interaction. In the Thelen approach, the group is seen to be an interesting social system which employs adaptive measures called "work", affective measures called "emotionality", and coordinative systems called "emotional control". Thelen holds that the concepts of group culture:

Provides a means for the understanding of such problems as climate, group developments and overt and covert aspects of group functioning. It illuminates aspects of group operation that refer to the group as a whole rather than those involving the individual member.<sup>2</sup>

Thelen further holds that individuals have a tendency to prefer certain kinds of work and emotionality behaviors in group life and that this predisposition may be called the "valency" of the individual.

As a source of collateral support for examining the behavior of individuals in groups, the theoretical formulations of Erikson provide an additional means to the investigation of the individual's predispositions to factors of stress affecting his behaviors in group interaction. Erikson has postulated that ego development occurs according to specific stages in the human growth cycle and that all growth transpires in a social milieu: According to Erikson:

The emerging ego identity, then, bridges the early childhood stages, when the body, ego, and the parent images were given their specific meanings, and the later stages when a variety of social roles became available and increasingly coercive.<sup>3</sup>

Erikson holds that there are eight ego-stages in the human growth cycle; Infancy: Trust vs. Mistrust; Early Childhood: Autonomy vs. Shame and Doubt; Play Age: Initiative vs. Guilt; School Age: Industry vs. Inferiority; Adolescence; Identity vs. Identity Diffusion; Young Adulthood; Intimacy vs.

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<sup>1</sup>Herbert A. Thelen, "Work and Emotionality Theory of the Groups As Organism," Psychology: A Study of Science, Sigmund Kock, ed., (New York: McGraw-Hill Book Co. Inc., 1959), III, pp. 544-608.

<sup>2</sup>Stock and Thelen, pp. 14-15.

<sup>3</sup>Erikson, p. 218.

Isolation; Adulthood: Generativity vs. Self-Absorption; Senescence: Integrity vs. Disgust. Each of these stages, for every individual, represents a time of conflict resolution with the outcome, either the positive or negative resolution, having an irreversible effect upon the development of the total personality.

Additional important impetus for this study came from the work of Boyd<sup>1</sup> who has built on the works of Bion, Thelen and Erikson in his development of a three channel model for the analysis of group interaction which consists of, a) motivation, b) delivery and, c) knowledge. In this model, Boyd has employed the theoretical formulations of Erikson for the classifying of motives leading to types of preferred behaviors in group interaction.

#### The Statement of the Problem

The study proposed to determine if the degree of congruence in the teacher's and learner's ego-stage and group-relevant aspects of personality, and if the degree of congruence between the preferences for and perceptions of group work and emotionality behaviors, as held by both teachers and learners, are directly associated with teacher and learner satisfaction with their learning group membership, and learner's learning achievement.

The theoretical definitions employed by the study are as follows:

Personality is the summation of the characteristics possessed by an individual which predisposes him to behave in certain ways. The ego-stage aspects of personality is a conceptual system which defines the emergence of the individual's ego-identity as occurring in a series of epigenetic stages each of which poses a crises resolution between alternative attitudes. The resolution of the crises will determine the ultimate nature of the adult personality. Work and Emotionality are concepts which define the kinds of pre-disposed behaviors individual's manifest in group interaction. Work is defined as the individual's capacity for purposive, goal-seeking inquiry. Emotionality is defined as the individual's capacity for affective behaviors which are non-purposive instinctual and unconsciously expressed. The group relevant aspects of personality is a conceptual system whereby it is possible to define the work and emotionality behaviors to which every individual is predisposed. Satisfaction is defined as individual's response to an instrumental inquiry into the degree of tension felt by the individual growing out of his efforts to adapt his preference for work and emotionality behaviors to the group's desires to express its collective need for certain work and emotionality behaviors. Learning achievement is defined as learner's learning score as derived from his responses to tests of cognitive knowledge given prior to the onset of instruction and at the termination of instruction.

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<sup>1</sup>Robert D. Boyd, "An Interaction Model Applied To Supervision," The Supervisor: Agent for Change In Teaching. Edited by James Raths and Robert R. Leeper, Washington: Association for Supervision and Curriculum Development, NEA, 1966.

## II. THE DESIGN AND PROCEDURES OF THE STUDY

### The General Hypothesis

It can be hypothesized that in adult learning groups the satisfaction obtained by teachers and learners from their group membership and the learning achievement of learners is directly predictable from:

- A. The congruence between the learner's and teacher's ego-stage and group-relevant aspect of personality.
- B. The congruence between the learner's preferences for work and emotionality in group life and his perceptions of the actual work and emotionality behaviors in his learning group.
- C. The congruence between the teacher's preferences for work and emotionality behaviors in group life and his perceptions of the actual work and emotionality behaviors in his learning group.

### The Subsidiary Hypotheses

- I. In teacher-learner dyads, the congruence in the ego-stage aspects of their personalities is positively associated with:
  - A. The learner's satisfaction with his learning group membership.
  - B. The learner's learning achievement.
- II. In teacher-learner dyads, the congruence in the group-relevant aspects of their personalities is positively associated with:
  - A. The learner's satisfaction with his learning group membership.
  - B. The learner's learning achievement.
- III. For learners, the congruence between their preferences for work and emotionality behaviors in group life and their perceptions of actual work and emotionality behaviors in their learning groups is positively associated with:
  - A. The learner's satisfaction with his learning group membership.
  - B. The learner's learning achievement.
- IV. High learner congruency on the two personality variables of the teacher-learner ego-stage dyad and the group-relevant dyad and, additionally, higher learner congruence in the preference-perception difference will, in combination, provide a better measure of association than any of the three variables taken singly for the prediction of:
  - A. The learner's satisfaction with his learning group membership.
  - B. The learner's learning achievement.
- V. Low learner congruency on the two personality variables of the teacher-learner ego-stage dyad and the group-relevant dyad and, additionally, low learner congruence in the preference-perception difference will, in combination, provide a better measure of association than any of the three variables taken singly for the prediction of:
  - A. The learner's satisfaction with his learning group membership.
  - B. The learner's learning achievement.

- VI. For teachers, the congruence between their preferences for work and emotionality behaviors in group life and their perceptions of actual work and emotionality behaviors in their learning groups is positively associated with their satisfaction with their learning group membership.

#### Selection of the Subjects

Seven university adult education classes carrying graduate-undergraduate classes were randomly selected to provide the population for the sample. The seven learning groups provided an N of 130 learners and seven teachers. While the subjects were not selected at random, the random selection of the classes provided the researcher with the assumption of a reasonably normal distribution of the population under study.

Prior to the selection a larger number of available classes was taken as the universe for the selection. All potentially involved teachers were consulted beforehand as to their willingness to participate. Only those courses providing for a maximum of teacher-learner interaction were included in the universe for the random selection.

#### The Research Procedures

Already equipped with the teacher's willingness to participate, the researcher, after the selection of the seven learning groups, introduced each class, at its first meeting, to the research procedures to be employed. All research administration was carried on by the investigator alone. During the first meeting of each class, instruments for the gathering of data on the ego-stage and group-relevant aspects of the subjects were administered. At the second meeting of each class, two forms of a test of cognitive knowledge, prepared by the instructor in advance, were administered by the teacher to each learner. The learners were lead to believe that the tests were part of the teacher's instructional design. Approximately one-half of the class received each of the two forms of the test. Later, at the conclusion of the course of study, the test was administered again with one-half of each class receiving the other form of the test. The test presented items at the level of difficulty at the course termination. During the intervening sixteen-weeks of instruction, the researcher returned to each class three times to administer a forced choice Q Sort test designed to obtain the subject's perceptions of the on-going work and emotionality behaviors of their learning groups. At the next to the last meeting of each class, the subjects responded to an instrument which recorded their satisfaction with the degree to which the learning group's work and emotionality behaviors had approximated the subject's preferences for work and emotionality behaviors as indicated in the group-relevant personality test administered the first class meeting.

#### The Data Gathering Instruments

The Self-Description Questionnaire.--The Self Description Questionnaire<sup>1</sup> is designed to gather data on the subject's perceptions of his ego-stage behavior patterns. The instrument consists of 160 items, eighty each, which refer to the history of the subject's positive and negative resolutions of the eight ego-stages as postulated by Erikson. In responding to the instrument, the subject marks ten positive and negative statements for each ego-stage on a six-category "like-unlike" scale.

<sup>1</sup>Robt. D. Boyd and Robert Koskela, A Report on the History and Test Criteria Measurements of the Self Description Questionnaire (Madison, Wis., The University of Wisconsin, Adult Education Laboratory, 1968) (Mimeographed).

The Ideal Group Questionnaire.--The Ideal Group Questionnaire<sup>1</sup> as an instrument designed to gather data on the subject's perception of his behavior patterns in terms of his preferences for work and emotionality behaviors. The questionnaire requires responses about particular kinds of behavior which is exemplified by four levels of work and six levels of emotionality. These 24 distinct categories contain 3 test items each for a total of 72 responses. The subject responds to each item on a seven point scale ranging from "not at all like me" to, "very much like me."

The Group Work and Emotionality Perception Q-Sort.--The Group Work and Emotionality Q-Sort<sup>2</sup> was devised to gather data on the subject's perceptions of the work and emotionality behaviors of his learning group. The Q-Sort consisted of 24 items each representative of and derived from the 24 work and emotionality categories described above in The Ideal Group Questionnaire. The items differ only in the tense employed and the phrasing. The subjects respond to the Q-Sort by manually sorting the 24 work and emotionality perception statements into seven different "piles" in which a symmetrical distribution is forced by distributing the 24 responses into ascending and descending curves of equal proportions. The value range for the seven "piles" is for the judgments of "most like" to "least like" with a neutral position of the middle (fourth) pile. The responses provide individual reactions to specific stimuli which take the form of the variance of the subject's perception about the mean for the object of his attention, namely, the group's work and emotionality behavior patterns.

The Satisfaction Instrument.--The Measurement of the subjects' satisfaction with the work and emotionality behavior patterns of his learning group was made by eliciting his responses to the question of how well the group's behavior patterns matched his idealized preferences for group work and emotionality as he previously recorded them in the execution of The Ideal Group Questionnaire. The subject responded to five selected statements of his preferences on a Likert-type summated scale.<sup>3</sup> Each subject indicated, for each of the five statements, his degree of satisfaction which ranged from "high satisfaction" to "high dissatisfaction".

The Test of Learning Achievement.--Each teacher constructed a test which was appropriate to terminal proficiency. The test was then cast into two forms and administered to each half of the class at the beginning of instruction and at the conclusion of instruction. The learners were not aware that these tests were a part of the research investigation. Six of the seven tests of learning achievement were reliable at the .05 level of significance when item-analyzed employing the Kuder-Richardson Formula 20.

#### Statistical Treatment of the Data

The statistical treatment of the data consisted of, a) the determination of congruency scores for the teacher-learner dyad in the ego-stage and group-relevant aspects of their personalities, b) the congruency scores for teachers

<sup>1</sup>Robert D. Boyd, The Ideal Group Questionnaire (Madison, Wis., The University of Wisconsin, Adult Education Laboratory, 1968) (Unpublished. For Experimental Purposes Only).

<sup>2</sup>Eugene R. Watson, Dynamics of Expectations and Adaptation of Adult Learning Group Cultures (Madison: The University of Wisconsin, Ph.D Dissertation, 1964), Unpublished.

<sup>3</sup>Claire Sellitz et al, Research Methods In Social Relations (New York: Holt, Rinehart and Winston, Inc., 1949), pp. 366-70.

and learners in their work and emotionality preference-perception differences, c) the scoring of the instruments of satisfaction and learning achievement and, d) the application of specific statistical procedures for the testing of hypotheses.

Teacher-Learner Dyadic Congruency.--This score was determined by calculating the absolute difference between the numerical scores for the teacher and each learner on the 160 items of The Self Description Questionnaire and the 72 items of The Ideal Group Questionnaire. Absolute congruency was zero. Incongruency in the dyad increased as the differential score grew larger.

Congruency for the Subjects' Preference-Perception Difference.--The subjects responses to The Ideal Group Questionnaire were compared to his responses to the Work and Emotionality Perception Q-Sort. The absolute difference between the numerical scores on each of the items was taken as the index of congruence. Absolute congruency was zero. Incongruency in the preference-perception difference increased as the differential score grew larger.

The Instrument of Felt Satisfaction.--This instrument was scored on a seven-point scale which ranged from seven for high satisfaction to one for high dissatisfaction. Since there were five items of inquiry, the range of scoring was from 35 to 5 for any one subject.

The Instrument of Learning Achievement.--Each learner responded to two tests. One was administered prior to the onset of instruction. The other at the termination of instruction. The gain or loss differential between the two tests was taken as the index of learning achievement.

The Statistical Procedures Employed for Hypotheses Testing.--The learning groups were examined, for purposes of hypotheses testing, as intact groups and as combined groups. In the case of the intact groups, the parametric statistical techniques of the Pearson Product Moment Coefficient of Correlation, and Multiple Correlation Analysis were employed. For the small group of teachers, the hypothesis was tested with the use of the non-parametric Spearman Rank Order Coefficient of Correlation. Data analysis supplemental to the hypotheses employed the non-statistical technique of the Mann-Whitney U Test of Rank Differences. This was done since the supplemental analysis of data dealt with small, select groupings of learner performance and congruency.

Since it was deemed necessary to combine all of the subjects of the seven learning groups for the purpose of achieving a larger N from which select groupings could be made, the learning achievement scores were normalized by the application of the T-Scale process.

For the purpose of hypothesis testing, the negative sign was interpreted as a positive association between the variables since there was an inverse relationship between the numerical scores obtained for the congruency determinations and the numerical scores obtained subject satisfaction and learning achievement.

### III. ANALYSIS OF THE DATA

#### Results of Hypotheses Testing

Hypothesis I.--In teacher-learner dyads, the congruence in the ego-stage aspects of their personalities is positively associated with:

- A. The learner's satisfaction with his learning group membership.
- B. The learner's learning achievement.

The Findings.--The application of the Pearson Product Moment Coefficient of Correlation revealed that of the seven learning groups only two achieved coefficients in the hypothesized direction for the association with the variable of learner satisfaction which were significant at the specified level of .05. One coefficient was significant in the opposed direction. For the variable of learner learning achievement, all coefficients were in the hypothesized direction of which only one was significant at the .05 level. For the fourteen possible instances of association, ten were in the hypothesized direction. While these data do not permit the supporting of the hypothesis, it is to be noted that the binomial distribution formula provides a probability estimate of this occurrence at 6%. The hypothesis was not supported by the data.

Hypothesis II.--In teacher-learner dyads, the congruency in the group-relevant aspects of their personalities is positively associated with:

- A. The learner's satisfaction with his learning group membership.
- B. The learner's learning achievement.

The Findings.--The application of the Pearson Product Moment Coefficient of Correlation revealed that for the seven learning groups, none achieved the level of significance in either direction for the variable of learner satisfaction. For the variable of learner learning achievement, only one coefficient was significant at the specified level in the hypothesized direction. Out of fourteen possible instances of association, eight were in the hypothesized direction. The data did not support the hypothesis.

Hypothesis III.--For learners, the congruence between their preferences for work and emotionality behaviors in group life and their perceptions of actual work and emotionality behaviors in their learning groups is positively associated with:

- A. The learner's satisfaction with his learning group membership.
- B. The learner's learning achievement.

The Findings.--The application of the Pearson Product Moment Coefficient of Correlation revealed that for the seven learning groups there were no coefficients in the level of significance for the variable of learner satisfaction. For the variable of learner learning achievement, there were two coefficients at the specified level, one of which was in the hypothesized direction and the other in the opposed. Out of fourteen possible instances of association only six coefficients were in the hypothesized direction. The data did not support the hypothesis.

Hypothesis IV.--High learner congruency on the two personality variables of the teacher-learner ego-stage dyad and the group-relevant dyad and, additionally, high learner congruence in the preference-perception difference will, in combination, provide a better measure of association than any of the three variables taken singly for the prediction of:

- A. The learner's satisfaction with his learning group membership.
- B. The learner's learning achievement.

The Findings.--A Multiple Correlation Analysis of the combined effect of the three independent variables acting upon the variables of learner satisfaction and learning achievement revealed that little of the variance in the satisfaction and learning achievement scores was explained by high learner congruency on all three independent variables. While the multiple regression analysis revealed low inter-correlations among the independent variables, there were only significant coefficients obtained in the hypothesized direction for the association between the ego-stage dyadic congruency variable and the variables of learner satisfaction and learning achievement. The low coefficients obtained for the association of the group-relevant dyadic congruency variables and the preference-perception congruency variable indicated that the strength of the multiple correlation was, for the most part, explained by the strength of the ego-stage variable rather than the combined effect of all three independent variables. The data did not support the hypothesis.

Hypothesis V.--Low learner congruency on the two personality variables of the teacher-learner ego-stage dyad and the group-relevant dyad and, additionally, low learner congruence in the preference-perception difference will, in combination, provide a better measure of association than any of the three variables taken singly for the prediction of:

- A. The learner's satisfaction with his learning group membership.
- B. The learner's learning achievement.

The Findings.--A Multiple Correlation Analysis of the combined effect of the three independent variables acting upon the variables of learner satisfaction and learning achievement revealed that little of the variance in the satisfaction and learning achievement scores was explained by low learner congruency on all three independent variables. The multiple correlation coefficient for the variable of learner satisfaction was not significant at the specified level. The multiple correlation coefficient for the variable of learner learning achievement was significant at the .05 level, but its strength was due to the fairly high and significant zero order correlation obtained for the association between the variables of dyadic congruency in the group-relevant aspects of personality and learning achievement. This coefficient was not in the hypothesized direction. The partial coefficient for this variable revealed an increase in strength when the other two variables were controlled. This provided additional evidence that the variable of the group-relevant dyadic congruency variable was explaining the strength of the multiple correlation. The data did not support the hypothesis.

Hypothesis VI.--For the teachers, the congruence between their preferences for work and emotionality behaviors in group life and their perceptions of actual work and emotionality behaviors in their learning groups is positively associated with their learning group membership.

The Findings.--The application of the Spearman Coefficient of Correlation revealed that there was no significant association between the two variables. Teacher satisfaction with learning group membership was not associated with their congruence in the preference-perception difference.

General Summary of the Findings for the Hypotheses.--The overall evidence from the analysis of the ego-stage dyadic congruency, the group-relevant congruency, and the preference-perception congruency variables in association with teacher and learner satisfaction and learner learning achievement, did not favor any assumptions regarding their predictive relationships. The data failed to support the hypotheses and it may be inferred that the three independent variables do not have a positive association with the dependent variables. The data revealed that there was a measure of strength demonstrated by the ego-stage dyadic congruency variable, especially in its association with the dependent variables of learner learning achievement. The ego-stage variable obtained the greatest number of significant coefficients and the largest of number of coefficients which were in the hypothesized direction. This interesting performance of the variable led the researcher to the decision to undertake, for the purpose of supplemental data analysis outside the framework of any hypotheses, an in-depth analysis of the eight ego-stages which constituted the component elements of the construct.

#### Supplemental Analysis of the Eight Ego-Stages

In approaching this aspect of the data analysis, it was deemed desirable to study select groups derived from the total combined sample of 130 learner subjects. The rationale employed was that of segregating learners who were high in and low in their satisfaction responses and in their learning achievement. This contrast, it was felt, offered the fullest opportunity for the study of the eight ego-stages under conditions most challenging to the theoretical formulations upon which the investigation was based. The segregated groups were constituted as being those learners above the 90th percentile and below the 10th percentile in satisfaction responses and learning achievement. The analysis undertook to study the teacher-learner dyadic congruency for the positive and negative valencies of each of the eight ego-stages in relation to the specified levels of learner's performance in satisfaction responses and learning achievement.

Due to the size of the samples resulting from this rigorous selection criteria and due, also, to the independent nature of the data, the assumption of normality was not held for this data analysis. Accordingly, the non-parametric Mann-Whitney U Test was employed as the statistic of choice as being more suitable to the nature of the data.

The Findings.--An examination of the data revealed that for the learner satisfaction response there were no significant differences between the high and low groups in their dyadic congruency for any of the eight ego stages. For the positive valency, ego-stages IV, VI and VII demonstrated the greatest difference between the two groups. Since ego-stage VI was not in the expected direction, it was concluded that some degree of incongruency in the teacher-learner dyad was related to high learner satisfaction. For the negative valency, only ego-stages IV and VII indicated some small differences between the two groups, which, however, while in the expected direction were not

significant. It was concluded that the data indicated clearly that teacher-learner dyadic congruency in the eight ego-stages was not significantly related to the level of learner satisfaction response.

For learner learning achievement, an examination of the data revealed slightly greater differences between the high and low groups in their dyadic congruency when differentiated on the basis of learning scores. For the positive valency, ego-stages V and VI were significant in the expected direction and for the negative valency, ego-stages IV and V obtained significant differences between the two groups. These results indicated, once again, as in the matter of the ego-stage data previously delineated under the hypotheses discussion, that there is a tendency for this variable to be related to learner learning achievement. While none of the findings are sufficiently significant, for the drawing of firm conclusions, the consistent performance of this variable in relation to learning achievement leads this researcher to the conclusion that further research investigation is warranted.

#### IV. SUMMARY AND DISCUSSION Summary Conclusions

While the hypotheses testing and the subsequent supplemental data analysis did not reveal sufficient findings of a significant nature to justify the drawing of firm conclusions regarding the predictive association of the variables, nevertheless, the persistent performance of the ego-stage dyadic congruency variable in terms of the largest number of significant findings and the frequency of expected direction prompts the researcher to conclude that this variable merits further study.

A careful examination of the data led the researcher to the further conclusion that the failure of the data to support any of the hypotheses regarding learner satisfaction was due to the following:

1. That the learners, due to previous experience, were already acclimated to the instructional processes employed in university classes and, therefore, by selection processes, possessed those personality characteristics which permitted them to adjust to the instructional procedures and group interaction. The subjects were, in fact, highly homogenous.
2. The investigation revealed that for the majority of the teacher-learner dyads, the congruency scores were relatively low indicating that, basically, teachers and learners were much alike in their predispositions for stress and their predispositions for work and emotionality behaviors.
3. Since the satisfaction instrument was administered near the end of the instructional period, the subjects might well have recorded their satisfaction with the knowledge, skills, and, perhaps, the personal relationships they engaged in.

4. As is frequently encountered in this kind of research, the failure of the subjects to maintain or exhibit high commitment to the investigation prevented the obtaining of accurate responses.

In the matter of congruency in the independent variables in their association with learner learning achievement, the data of most interest is presented by the ego-stage dyadic congruency variable. In this regard, it is conceptually interesting to note that the learner's perception of his learning group in terms of his ideal work and emotionality behaviors is of less importance to him than is the dyadic relationship with his teacher in the matter of their predispositions for stress. This tended to point toward the unconscious nature of the relationship between teachers and learners and supports the conclusion of other researchers that interaction is more rewarding when it takes place between two individuals who like each other.

#### Implications for Further Research

While there is general satisfaction with the design of the research the following modifications would strengthen the investigation:

1. The selection of the sample from learning groups providing greater heterogeneity. This will be necessary to determine if the variation in learner behaviors can be significantly associated with congruency in the ego-stage and group-relevant teacher-learner dyads and, also, associated with the degree of congruence in the learner's preference-perception difference.
2. The establishment of greater control over the teaching of the course content so that procedures for testing learning achievement will be fully related to the content coverage and the teaching methodology.
3. The use of achievement tests which may be evaluated against standard criteria.
4. The employment of techniques for the measurement of subject satisfaction which possess greater precision of validity and reliability.

#### Implications for Adult Education

It has generally been assumed by adult educators that adults are not likely to achieve desired outcomes, much less remain in the learning group, when the learning situation is not satisfactory. The following are intended to be specific in their implications for adult education.

1. The investigation has provided some limited evidence that the teacher in an adult group will function as the most significant other in the learner's interactional relationships.

2. The investigation suggests that greater homogeneity among the members of an adult learning group tends to produce higher levels of member satisfaction with the work and emotionality behaviors of the learning group.
3. That, in general, the fact that the learner may perceive the learning group to be different from his idealized preferences for learning group work and emotionality behaviors does not cause interference with either his satisfaction or his learning achievement.

