TO INVESTIGATE HOW ATTITUDES TOWARDS EDUCATION INFLUENCE PERCEPTION OF DESIRABLE TEACHER BEHAVIORS, AN EDUCATIONAL ATTITUDES INSTRUMENT (KERLINGER'S ES-VII) AND AN 80-ITEM TEACHER BEHAVIORS Q-SORT WERE ADMINISTERED TO 80 ELEMENTARY AND SECONDARY SCHOOL TEACHERS. THIRTY-TWO TEACHERS WERE RATED AS "PROGRESSIVE," 32 "TRADITIONALIST," AND 16 AS "INTERMEDIATE" ON ES-VII. FORTY RANDOMLY SELECTED SUBJECTS SORTED BEHAVIORS AS IMPORTANT FOR ELEMENTARY SCHOOL TEACHERS, AND 40 FOR SECONDARY SCHOOL TEACHERS. THE TWO RESULTING 40 BY 40 MATRICES WERE FACTOR ANALYZED, AND FOUR FACTORS WERE EXTRACTED FROM EACH. CORRELATIONS FOUND BETWEEN ELEMENTARY AND SECONDARY BEHAVIORS FOR (1) CONCERN FOR PUPILS (AS BY PROVIDING INDIVIDUALIZED MATERIALS AND SHOWING CONCERN FOR PUPILS' PERSONAL PROBLEMS), AND (2) STRUCTURE AND SUBJECT MATTER (PRESENTING WELL PLANNED LESSONS AND ADMINISTERING DISCIPLINE CONSISTENTLY). GENERALLY, PROGRESSIVES LOADED ON CONCERN FOR TEACHERS WHILE TRADITIONALISTS LOADED ON STRUCTURE AND SUBJECT MATTER. THUS, THE AUTHOR CONCLUDED THAT THE PROGRESSIVISM-TRADITIONALISM DICHOTOMY UNDERLIES PERCEPTION OF TEACHER BEHAVIORS. THIS PAPER WAS PRESENTED AT THE AMERICAN EDUCATIONAL RESEARCH ASSOCIATION ANNUAL MEETING (NEW YORK, FEBRUARY 1967). (LC)
ATTITUDES TOWARD EDUCATION AND PERCEPTION
OF DESIRABLE TEACHER BEHAVIORS: A Q STUDY

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Paper Read at the 1967 Annual Convention of the American Educational Research Association
Evaluation of teachers through classroom observations is a prevailing practice in most modern school systems. Despite the prevalence of this practice, there is reason to question its validity as an assessment procedure. As pointed out by Barr, if a group of supervisors were simultaneously to observe the same teacher, their judgments "may vary so much that some observers may rate a particular teacher as among the very best they have observed and others among the very worst they have observed". This study represents an attempt to investigate the role of attitudes in the perception of teacher behaviors.

Although specific formulations vary, the influence of internal personality factors on social perception is recognized by most theorists. Postman, Bruner, Sherif and Sherif, Klein and Nevid have all addressed themselves to the relation between attitudes and perception. In an educational setting, one might expect that the attitudes that influence perception are attitudes toward education.

Studies carried out by Kerlinger and his students showed that two relatively orthogonal factors "progressivism and traditionalism" underlie attitudes toward education. Other studies by Wheeler and Klein confirm this finding. In the area of teacher behaviors, however, fewer factor analytic studies exist. The work of Ryans and Wandt, Smalzride and Remmers and Gibb suggests that the factor structure of behaviors might be similar to those of attitudes toward education.

The basic problem being investigated in this study is: How do attitudes toward education influence perception of desirable elementary and secondary school teacher behaviors. The specific hypothesis tested is that the two major persons factors, progressivism and traditionalism, that underlie attitudes toward education will emerge in the perception of teacher behaviors.

The two instruments employed in this study were an Educational Attitudes Instrument (ES-VII) and a Teachers Behaviors Q-sort. ES-VII is the latest in a series of instruments developed by Kerlinger. It was employed to measure the independent variable in this study. It presumably measures two basic dimensions of educational attitudes: progressivism and traditionalism. Alpha reliabilities for these dimensions were .82 and .83 respectively with virtually no correlation between the two dimensions.

An 80 item Q sort was used to measure perceptions of desirable teacher behaviors, the dependent variable in this study. The items in the sort were short concise statements that reflect teacher classroom behaviors in the following areas: teaching-subject matter; interpersonal relations; authority discipline and normative-social. The areas were those used in an earlier study by Kerlinger. They were chosen because they represent a logical classification for the behaviors that are presumably most pertinent to educational attitudes.
That is, the subject-matter and authority-discipline areas are most often associated with traditionalism and the interpersonal relations and normative social areas are most often associated with progressivism. Twenty items in each category were selected on the basis of judges' agreement on their clarity and membership in one of the four categories.

A total of 80 subjects all chosen on the bases of the Educational Attitudes Scale were employed in this study. These included 32 progressives, 32 traditionalists and 16 persons whose attitudes were not clearly progressive or traditional. Half the subjects in each category had experience teaching on the high school level and half were experienced on the elementary school level.

The behaviors Q sort was administered to each subject selected. Half the subjects sorted the behaviors according to their importance for elementary school teachers and half according to their importance for high school teachers. The particular directions given each subject (high school or elementary) was randomly determined. The behaviors were sorted into a quasi-normal distribution.

The Q sorts of the 40 subjects who were administered each form were intercorrelated using the Pearson-product moment correlation formula. This yielded two matrices as follows: A 40 by 40 matrix of intercorrelations of all subjects exposed to the elementary school sort, and a 40 by 40 matrix of intercorrelations of all subjects exposed to the high school sort.

Each matrix was factor analyzed with the principal axes method and varimax orthogonal rotations.

After completion of the factor analyses, factor arrays were computed separately for each factor of the high school and elementary school analyses. The arrays served two purposes. First they were employed to help define the meaning of the factors and second, they helped to compare results from the two different solutions (high school and elementary).

Four factors emerged from the elementary school analyses. The first factor was named "concern for pupils" and seemed to be related to progressivism. Of the 16 progressives, 15 had significant loadings on this factor as opposed to only two of the traditionalists. The behaviors that rated highest on the array for this factor were:

- Provides individualized material for pupils as required;
- Shows sincere concern when confronted with personal problems of pupils.

The second factor was called "structure and subject matter". Nine traditionalists and only four progressives loaded on this factor. Items such as "presents well planned lessons", and "is consistent in administering discipline" were considered most important to the persons who loaded on this factor.
Two additional minor factors appeared. One was named "Stimulating Teaching" and the other "Self-Control in teaching".

Four factors also emerged from the factor analysis of the high school sort. The first factor was called "General Subject Matter". It seemed to indicate a concern for subject matter taking into account, individual needs. The fact that 28 of the 40 subjects had significant loadings on it may indicate that this was a general factor. Most of the subjects who loaded on it also loaded on at least one other factor.

The second factor in the high school analysis was named "Concern for Students" and was similar in content to the elementary school factor by the same name. 16 progressives loaded on this factor as opposed to only three traditionalists. The content of the array for this factor was similar to that of the elementary school factor that was similarly named.

The third factor resembled the elementary school factor that was associated with traditionalism and it was called "Structure and Subject Matter".

A fourth and minor factor emerged which involved behaviors relating to "Norms and Rules".

As indicated above, four elementary and four high school factors emerged from the two analyses. The question that now remains is, "how similar are the elementary and high school factors"?

The extent of agreement between the factors derived from the two analyses was determined by intercorrelating the factor arrays that emerged from the two analyses. The Pearson-product-moment correlation coefficient was employed for this purpose. It was expected that the factors that would emerge from the two analyses would be positively correlated.

The elementary factors, emphasizing "Concern for Students" and identified as progressive were substantially correlated ($r=.77$). Similarly the two major traditional factors which were named "Structure and Subject Matter" also showed a substantial correlation ($r=.70$). The high school factor which was called "General Subject Matter", correlated significantly with all other factors. The correlations ranged from .35 to .65. Almost all the intercorrelations between the factors were positive and statistically significant. This showed the existence of a common basis of agreement in the Q sorts of most individuals. This was caused by the low status of the normative-social category. 59 subjects had assigned the lowest ratings to the items in this category.

From the results reported above it is clear that the hypothesis was supported. The two major persons factors, progressivism and traditionalism did emerge in the perception of teacher behaviors.
The behavioral correlates of these attitudes were "concern for pupils" and "structure and subject matter". These factors were reflected in both the elementary and high school analysis. One difference in the two analyses is notable. A general subject matter factor which emerged in the high school analysis, accounted for 46 percent of the common factor variance. This seems to indicate that high school and elementary school teacher behaviors are perceived somewhat differently. In the perception of school behaviors for elementary school teachers very few progressives loaded on a subject matter factor. On the high school level, however, the progressives did load on such a factor.

The work reported here was extended to a larger cross-sectional analysis, employing R methodology. Although time does not allow a full presentation of these results I might point out that similar teacher behavior factors were found.