As part of a larger study dealing with the beginning teacher's adjustment to teaching, the relationship between beginning teacher's personal-social and problem-solving characteristics and the teaching problems experienced by them was examined. Data was gathered through the analysis of results of the Teacher Characteristics Schedule (TCS, administered as they began teaching), interviews with the elementary supervisor, the director of elementary education or the superintendent, and a questionnaire filled out by the principal of each teacher. From the responses 8 categories of school problems were isolated. Scores of teachers in a problem category were then compared by analysis of variance with those of the no problem group on the 10 teacher characteristics of the TCS. Among the findings were--(A) teachers with subject matter problems did not differ significantly on any characteristic from those having no problems. (B) Those with management problems had less favorable attitudes towards the school staff than those with no problems. (C) Teachers with discipline problems differed significantly on six characteristics--(1) warm, understanding, (factor X), (2) organized, businesslike, (factor Y), (3) attitude towards school staff, (factor Q), (4) stimulating, imaginative, (factor Z), (5) traditional vs. permissive, (factor B), and (6) problem solving performance.
The research presented in this paper is a fragment of a substantially larger study (5) examining related personal-social and problem-solving characteristics of beginning teachers in relation to their adjustment to teaching in a variety of elementary school settings. The subordiniite aspect of this larger study on which the present paper focuses is the association between these characteristics and the types of problems or difficulties experienced by beginning teachers. To fit the fragment into its proper context, a brief overview of the procedure in the larger study is germane.

For two successive years, beginning non-experienced teachers of grades 1-6 in thirteen Indiana school systems with population bases ranging from 8,000 to 110,000 were assessed on three instruments as they began teaching: 1. The Teacher Characteristics Schedule (TCS) (2). 2. Mathematics Teaching Tasks (MTT) (4), and 3. Teaching Tasks in Reading (TTR) (1). A response of over 97 percent was obtained to the two task instruments, which were administered face to face, but a response of only about 80% was obtained to the TCS, which was sent home with each teacher to be returned by mail.

Two years later for the first sample and one year later for the second sample, the beginning teachers who were still in the system in which they started were again tested on the MTT and the TTR but not on the TCS. Thus, pre and posttest data were available on the MTT and TTR, but only pretest data on the TCS.

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The present paper utilizes only the pre-test data from these instruments since the associations examined are wholly of a predictive nature.

On the re-testing day in each system, the elementary supervisor, the director of elementary education, or in the event there were no supervisory personnel, the superintendent, was interviewed concerning each teacher still in his system. During the interview the interviewee was asked to respond to the following questions among others: "What kinds of teaching problems do you feel this teacher performs well? What kinds do you feel she performed poorly?" The responses of the interviewee were then noted and he was asked to elaborate them as appropriate.

Approximately one month after these interviews were held a questionnaire was sent to the principal of each teacher in the study. Two items on this questionnaire are germane to the present paper. First, each principal was asked to state the average number of supervisory contacts per month he had with each beginning teacher, and the average time per contact. Second, he was asked to respond to the following questions: "Thinking back over your supervision of this teacher, in what areas of teaching did you feel that he or she most needed to improve?"

Out of the total set of procedures in the larger study, those specific to the present paper deal first with the categorization of the responses given by supervisors and principals to the questions above, and second, with the specification of the nature of the predictor variables derived from the TCS and the MTT and TTP.
The responses of supervisors and principals concerning the problems experienced by each of their beginning teachers were sorted into nine categories. Not all of these categories, however, were independent. Several teachers had more than one type of problem, thus appearing in more than one category. The categories are as follows:

**No Problems** - Into this group went all teachers who were perceived as experiencing no notable problems. Virtually all of the 45 teachers appearing in this group were reported to be highly successful by both principals and supervisors.

**Discipline** - The 18 teachers in this group were reported to have "discipline" or "control" problems or problems "handling students".

**Management** - The 26 teachers in this group were reported to have "organization" or "management" or "planning" problems. This group does not overlap the group with discipline problems. If a teacher had discipline and organization or discipline and management or discipline and planning problems, he appeared only in the discipline group.

**Reading** - The 18 teachers in this group had problems in teaching reading or language arts. Many of these problems were reported to involve ability to form and instruct small reading groups.

**Subject matter** - The 26 teachers in this group had difficulties with arithmetic, social studies or science. A number of teachers had problems in more than one of these areas, e.g., arithmetic and social studies.

**Social-emotional** - The 15 teachers in this group experienced a rather diverse set of problems. The most frequent group were reported to have difficulties with "self-confidence". The next most frequent group suffered from "tensions" problems.
Expectancy. - The 17 teachers included in this group also had a relatively diverse set of problems, interpreted by the investigator to be difficulties with expectancy. Part of the group was reported to "over-expect" of the pupils, part "under-expect". Another part of the group was reported to have difficulty adjusting instruction to individual differences. Still another part had problems getting the correct level of instruction for the grade they were teaching.

Residual. - Of the nine teachers appearing in this group, six had difficulties with varying techniques of instruction or showing ingenuity, and three had difficulty with fine arts or music.

Of the ten factors or characteristics appearing in the Teacher Characteristics Schedule, nine were used as predictors. The tenth factor, Factor V, the Validity of Response Scale, was not used since the validity of this scale is questionable (3). The factors employed, scored on Elementary Teacher Score Key 111 for TCS form E54, are shown to the left side of Figure 1. The remaining variable used as a predictor was the combined Z score from the MTT and the TTR. This variable represents the total problem solving performance of teachers in the skill areas, focusing on ability to diagnose pupil difficulties and ability to organize materials. It is, however, considerably more relevant to teaching in the intermediate grades than to teaching in the primary grades. Since primary and intermediate teachers were not separated in categorizing teacher problems, the associations this variable holds to the categories must be interpreted with some caution.

The statistical analysis was conducted by comparing the scores of teachers in a problem category to those of the No Problem group on each of the teacher
characteristics via analysis of variance for two groups. Of the seven original problem groups, those involving social-emotion problems, and the residual problems group were dropped since too few cases in each group had TCS scores.

Of the five problem groups compared to the No Problems group, those having subject matter problems did not differ significantly on any characteristic from those having no problems. Teachers having management problems differed from those having no problems on only one characteristic, Factor Q, Attitude Toward School Staff (F = 4.27, 1, 51 df, p<.05) with the Management problem group having less favorable attitudes than the No Problem group. Each of the remaining problem groups differed significantly from the "No Problems" group on several characteristics. The pattern of characteristics for each of these groups is shown in profile form in Figure 1. These profiles were derived by translating the raw score means into Z scores, which had a mean of 50 and a standard deviation of 10. *

As may be observed in Figure 1, the group of teachers experiencing discipline problems differ significantly from those experiencing no problems on six characteristics: Factor X (F = 4.46, 1, 49 df, p<.05); Factor Q. (F = 6.87, 1, 49 df, p<.05); Factor Y. (F = 16.15, 1, 49 df, p<.001); Factor Z (F = 4.53, 1, 49 df, p<.05); Factor B (F = 4.57, 1, 49 df, p<.05) and problem solving performance (F = 4.23, 1, 57 df, p<.01). The pattern of characteristics of teachers with discipline problems is quite clear. Such teachers are characterized as distinctly disorganized and unbusiness like, relatively cool and aloof, somewhat "subject centered" in viewpoint, relatively routine in approach, and weak in dealing with

* Z score distributions were based on the scores of the teachers beginning in the first of the two successive years sampled.
the skill areas. They have a relatively unfavorable attitude toward the school staff, but their attitudes toward pupils, their emotional adjustment and their verbal understanding are not markedly different from teachers with no problems.

The group of teachers with problems in teaching reading show a slightly different pattern of characteristics than teachers with discipline problems when compared to the no problem group. These teachers were significantly lower on Factor X (F = 5.96, 1, 61 df, p < .025); Factor Q, (F = 5.23, 1, 51 df, p < .05); Factor Y, (F = 7.66, 1, 51 df, p < .01); Factor Z, (F = 4.52, 1, 51 df, p < .05); and Factor R, (F = 5.25, 1, 51 df, p < .05) than the No Problems group. As well as appearing to be relatively disorganized, teachers with problems in teaching reading also seem to lack warmth or friendliness, a high level of imaginative behavior, and a favorable attitude toward democratic pupil practices. Like both the discipline problems and the management problems groups, they have a relatively unfavorable attitude toward school staff personnel. A factor of interest with respect to the group with problems in teaching reading is that they do not differ from the No Problems group in ability to solve problems in the skill areas. Indeed, when their scores on Teaching Tasks in Reading were examined separately, they were found not to differ significantly on this variable from the scores of the no problems groups. In the present sample at least, difficulties in teaching reading seem more closely identified with the personal social characteristics of the teacher than with her problem-solving characteristics.

The group of teachers with expectancy problems differed from the No Problems group on three factors: Factor X (F = 5.14, 1, 50 df, p < .05); Factor B, (F = 7.85, 1, 50 df, p < .01) and problem solving performance in the skill areas (F = 5.39,
1. 60 df, p < .025). This set of differences suggests that the teacher with expectancy problems is relatively cool, and somewhat subject centered, but nonetheless lacking in adequate problem solving ability in the skill subjects.

While there appear to be some differences in the pattern of characteristics associated with each type of problem, as discussed above, it is also true that certain characteristics tend to recur as significantly related to more than one problem area. These latter characteristics are important in that they suggest, but do not conclusively establish, the kinds of beginning teacher behaviors out of which difficulties develop. Certainly important among these characteristics are Factor X, warmth and understanding, and Factor Q, attitude toward school staff. The importance of these factors as antecedents to teacher difficulties may rest on two somewhat different grounds. First, a teacher having low scores on these factors may indeed have uneasy or disturbed relationships, which creates a fertile personal-social context within which other problems may flourish. Second, a beginning teacher with poor relationships to other teachers may come to the attention of supervisory personnel more easily than teachers with better relationships. Once a beginning teacher comes under close attention from a supervisor or principal, the latter may find that the beginner has more problems than they supposed. Thus, supervisory personnel may simply be more apt to report problems for the teacher who has relatively unfavorable attitudes toward other teachers.

A third factor that appears as an important antecedent to teacher problems is Factor Y, business-like behavior. Low scores on this characteristic are
sufficiently predictive of teacher difficulties with discipline and reading to suggest that relatively disorganized teacher behavior is a key factor in the occurrence of these problems. It is of interest to note in this respect that Factor Y was one of the few variables in the larger study which predicted who would leave their position after the first or second year of experience. Certainly there is much to suggest that low scores on Factor Y, coupled with poor attitudes toward other teachers and a distant relationship to pupils portends ill for the beginning elementary teacher.

A fourth factor appearing as an antecedent to teacher difficulties is problem solving performance in the skill areas. This factor probably does not operate directly; if it did, it could appear as a predictor of difficulties in reading or in "subject matter". Rather, its operation seems to be interactive. The person with discipline problems is not only disorganized, he also has poor control over teaching in the skill areas, which perhaps compounds his problem. Similarly a person with expectancy problems is relatively cool and subject-centered, with poor control of subject matter in the skill areas. A cool, subject-centered approach, which probably can be successful, perhaps leads to difficulties unless the teacher is highly competent in teaching the basic skill areas.

While it would be unwise on the basis of the present data to contend that one can predict with any degree of certainty the kinds of problems beginning elementary teachers will have, there is none the less much to suggest that with some refinement a set of measuring devices could be put together which would be of distinct help to supervisory personnel. Help in the sense that the potential problems of particular beginning teachers could be identified and proper steps taken through supervisory counseling and in service work to resolve or reduce the severity of these problems to the benefit of beginning teachers, their pupils, and to the employing school system.
Figure 1. Mean Z-scores for problem groups. **Solid line**, No Problem group; **x-line**, Expectancy Problems group; **broken line**, Reading Problems group; 0-0 line, Discipline Problems group. Means falling on or to the left of the double solid lines differ at $p = 0.05$ or less from the means of the No Problems group.
References


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