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THE RELATIONSHIP OF PERSONALITY
TO TEACHING EFFECTIVENESS

A TERM PAPER

Presented to

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by

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INTRODUCTION

STATEMENT OF THE PROBLEM

It was the purpose of this study to determine the degree of usefulness of personality tests in predicting the effectiveness of a teacher's performance.

IMPORTANCE OF THE STUDY

Few people would deny the notion that personality is one of the crucial factors in the learning situation. However, it has never been quite clear just what the relationship between these two things really is.

The literature is filled with reports of studies on the subject. With few exceptions, the results have been very poor. A basic problem in most of the research has been the failure to develop an adequate approach to the problem.

Warnings and recommendations have been made by visionaries in the field of teacher competence research. In a very few cases they have been heeded. All too often, however, the warnings and recommendations have been overlooked, misunderstood, or simply ignored.

There is a need to pull together the good thinking and good results, sparse though they may be, that have been done in this area so that a clear perspective can be developed for the future.

PART I

Teaching Effectiveness: Wanted, Acceptable Criteria

Barr (1955) stated the basic issue in the measurement of teacher effectiveness. He found that there was no unity on the criteria for effectiveness. There are two primary reasons for this lack of unity. First, "good" is a value judgment. The good or the effective teacher can be defined only in reference to some set of values. Secondly, teaching is a behavior that must be defined in a specific context. Dixon and Morse (1961) stated the problem another way.

The fundamental fact is that opinions differ on what is good and what is poor. Sophisticated judges differ in educational philosophy, for one thing, and then too the same teacher act might objectively be good in one context and poor in another. We lack any constant criterion in appraising teaching. The second major difficulty is the tendency to consider teaching as a global phenomenon. A single global assessment runs counter to current psychological appreciation of a complex task.

p. 322

Dugan (1961) says, "Most likely, the answer to the effective teacher will be in the discovery of certain patterns of personality factors coupled with certain professional factors that best suit a teacher for a specific job." This supports the idea that both personality and the job situation can be thought of as differentiated, and that certain combinations will give special results.

Another reason for lack of unity on criteria is that many researchers look for a personality configuration which is best for a job when it may be that more than one pattern will work. Dugan (1961, p. 336) makes

this point too.

There were as many egocentric teachers doing an effective job (as judged by their supervisors on the Critical Behavior of Teachers Rating Scale designed and validated by members of the Teacher Characteristics Study under the direction of Dr. David G. Ryans.) as there were mentally objective teachers.

One of the best discussions published dealing with the establishment of criteria for teacher effectiveness is that by Ryans (1957). In addition to describing a conceptual framework for defining a criterion, he makes the point that investigators should look for multiple criteria. He outlines the steps for establishing these criteria. In a practical situation, the criteria might follow the pattern suggested by Hellfritsch's (1945) factor analysis of 20 tests of teacher ability. He found factors of general knowledge and mental ability, teacher rating scale, personal emotional adjustment, and a eulogizing attitude toward teaching. However, since one only gets out of a factor analysis what was put into it, other behavioral criteria for the teacher might be explored. Some method for assessing pupil growth in areas in addition to the academic would have to be created as criteria for effectiveness.

The most frequently used criterion of success has been ratings by administrators, supervisors or principals. The objections to this approach have already been voiced. The impatience of the sophisticated researcher at the use of these ratings is demonstrated by the vicious criticism of Calabria (1960) by Guba (1960). Among other criticisms, Guba accuses Calabria of failure to describe his population, drawing unwarranted assump-

tions and conclusions, and his ^{mis}use of the criterion of administrators ratings. The article really serves the purpose of putting research in teacher effectiveness on firmer ground by summarizing the objections to the Criteria criterion in question. In so doing he actually establishes a set of criteria for criteria.

Historically, research dealing with teacher effectiveness has asked the wrong questions. Three examples will serve to illustrate this point. First, Ryans (1960) changed the name of his study from, "What Makes a Good Teacher," to simply, "Characteristics of Teachers." He did so because he could find no general agreement as to what a "good" teacher was. Each person answers from his own frame of reference. Secondly, Ryans (1961) reported another study in which he used his Teacher Characteristics Schedule to estimate such things as teacher warmth, friendliness, responsibility, and favorable opinion of pupils. The thing of interest here is that in attempting to correlate scores on the Schedule with observed assessments of teachers classroom behavior, he got variation in correlations because of teaching level and area. This suggests that the gross definition of teaching effectiveness is not sensitive enough for the kind of predictions one would want to make. Finally Heil and Washburne (1961) reached a peak in the integration of the basic considerations in the measurement of teacher effectiveness. They were able to divide teachers into personality categories of "turbulent," "self-controlled," and "fearful." Pupils were divided into categories of "conformers," "opposers," "waiverers," and "strivers. They were observed in arithmetic, science and social science

classes. The criterion of teacher success was a high score by the pupils on the Stanford Achievement Tests. Heil and Washburne found that, depending upon the class, (arithmetic, science, social science) there were successful personality combinations of pupils and teachers! These fine comparisons told much more than the gross. An example of the findings is the following. Turbulent teachers with opposing students was the best combination for science classes as measured by the Stanford Achievement Test.

It would seem that the right quest is the attempt to identify and combine specific behaviors and conditions for the maximum in effectiveness, as measured by a criterion or criteria stated in behavioral terms.

PART II

Personality: Wanted, Acceptable Measures

Tyler (1960, p. 429) states, "Successful teachers are little less than paragons if one is to judge from recent discussions and from reports of empirical observations and experimental research dealing with teachers' personalities." The long list of positive adjectives has been extended so far that it has little meaning. It is the same list that one would make up for almost any occupation or, good person. So one problem is to get at behaviors first and then qualities.

A second problem is that the source of ideas about the needed personal qualities is open to question.

A review of literature on teacher effectiveness done by the School of Education, Stanford University, showed that from the time of Meriam's pioneer study, no single factor has been found to be significantly predictive of teaching competence. ... The greatest proportion of studies on teacher effectiveness has been concerned with the collection of subjective opinions from experts in teacher education, administrators, teachers, laymen, and pupils as to the characteristics in teachers who are judged to be doing a good job. (Dugan, 1961, p. 335)

Probably the better thing to do would be to use the various tests of personality as a starting point. Then communication is possible about personality in a behavioral sense.

A third problem in the assessment of personality is that the more differentiation that one can make in measurement, the more useful the information about personality will be. Cattell (1948, pp. 718-9) was

alert to this problem.

It is now no novelty to suggest that the selection of teachers, like any other act of vocational selection, should be carried out through the estimation by tests, for each individual of a number of independent personality factors.

I have been interested for years in the description, measurement, and evaluation of personality factors. On the basis of this work I would suggest that experimental designs now being planned in teacher personnel research should include measures of at least six of the ten or twelve personality factors we already find to be reasonably confirmed by two or more researchers. These factors are the general emotional, general intelligence, cyclothyme-schizothyme, surgency-desurgency, dominance-submission, and character integration.

Ryans and Wandy (1952) used the Ryans Classroom Observation Scale with trained observers on 249 secondary teachers in mathematics, science, English, and social studies. A factor analysis of these observed behaviors gave him six oblique factors; A was a sociableness and understanding factor, B was a business-like and responsible factor, C was a pupil participation and discipline factor, D was a teacher stability factor, E was an openmindedness factor, and F was a personal qualities factor. Ryans concluded that behavior in the classroom is multidimensional. More specifically, in terms of personality measurement, Cook et. al. () used the Edwards Personal Preference Schedule and the Guilford Zimmerman Temperament Survey on a sample of 196 sophomores in educational psychology at Purdue. Both were found to be reliable and factorially valid. A Thurstone centroid analysis was done on the two tests. Six orthogonal factors were extracted and rotated to simple structure. They were docility, dependency, authoritarianism, compulsive-conformity, introversion-extroversion, and

*Good
ll
Cattell!
Any evidence
to substantiate
this?*

*How
factorially
pure
were
they
be?*

avoidance. This kind of analysis permits further comparisons based upon relatively discrete traits.

Any extension criteria widely
used and helpful
factorial work?

PART III

The Success and/or Failure of Specific Tests

The following tests were selected for comments because each had been used in studies relating to the prediction of teacher effectiveness.

California Psychological Inventory.

Hill (1960) used the California Psychological Inventory to predict teaching success. His criterion was the grade earned in student teaching. Finding that grades in student teaching rarely went below B, he found that discriminant function analysis would be a better statistical tool than correlation. The results were negative. He could not predict the letter grade from California Psychological Inventory scores. Grades as the criterion was a poor choice even though they are easiest to get. They are worse than administrators judgements since only a single judgement is obvious through the mark, while ratings show more than one judgement.

Edwards Personal Preference Schedule.

Jackson and Guba (1957) found that the EPPS pattern for teachers was different from the standard group. Also it was found that the variables of deference and heterosexuality discriminated between the various levels in teaching. Some writers such as Gowan (1960), see the Edwards as the best of the inventories. The fact that it employs a forced-choice technique and an attempt has been made to control for social desirability led Gowan to a favorable report on it. Corah (1958) presents the other side of the coin.

He found that the social desirability of the items was judged before they

*However, how does this relate
to success in selecting
teachers?*

were paired. He also found a high correlation of the pairs to social desirability responses. In general the EPPS seems to have the blessings of the professionals with some small reservations. Sheldon (1959) found that the EPPS could discriminate between high and low groups in terms of teacher warmth. The warmth criteria were the K, Hostility, Pharisaic, and Teacher Prognosis scales of the Minnesota Teacher Attitude Inventory and the Minnesota Multiphasic Personality Inventory. Warm teachers were found to have more need for affiliation, less need for succorance, higher need for dominance, lower need for aggression, all indicated by the EPPS.

Group Rorschach.

*Affiliation
in the classroom*

Cole (1961) used ratings by a trained observer employing the Ryans Classroom Observation Scale. This was a five year study. The Group Rorschach was given in the senior year to students at Occidental College. It predicted success on the rating criterion with a validity coefficient of .65 and a probable error of .03. The predicting scale was the M score and the FC:CF balance. The prediction based on the Group Rorschach was better than lower division grades, ACE Q, ACE L, ACE T, faculty ratings, or a composite of all of these. Faculty ratings were next in power with a .26. The failure of these latter to predict well was probably due to the fact that after a certain minimum in each had been reached, success was probably due to other factors.

Guilford Zimmerman Temperament Survey

Jones (1956) used five of the ten GZTS sub scales; general activity, ascendancy, sociability, and emotional stability. She used practice teaching

placement bureau rating, and principal's ratings as criterial of success.

She found no significant correlations. The best correlation was on the general activity variable.

Minnesota Teacher Attitude Inventory.

Downie and Bell (1953) found that the MTAI correlated well with interest in teaching, prior experience with children, over-all grade point average, the ACE Psychological Examination, and with ratings by professors. Medley (1961) used pupil-teacher rapport (as measured by pupil responses to certain questions) as the criterion. He found a high correlation between the MTAI and pupil-teacher rapport. However, he was worried about the influence of social desirability of the MTAI.

Apparently the teacher who knows how to get along with pupils also knows how to get along on personality tests, as long as they are not too subtle. Findings like this are disturbing because they suggest that you cannot really find out anything about teacher personality from personality tests since you can't believe the answers teachers give, especially good teachers. (p. 154)

Medley also found a .76 correlation between the EPPS and pupil-teacher rapport, on one scale. Riccio (1960) found that the MTAI predicts the types of classroom atmosphere a teacher will maintain as well as intelligence tests predict college grades. Rabinowitz and Rosenbaum (1958) used the MTAI, the California F Scale, The Draw-a-Teacher Technique, the Sims SCI Occupational Rating Scale, the Strong, the Inventory IV-Satisfaction score, and found no significant correlations from any of the 63 test variables when compared to pupil-teacher rapport. Even a multiple correlation was only .496 and was not significant. Popham and Tremble used administrators

ratings as the criterion. They found that the MTAI was useful in predicting general teacher effectiveness!

Thematic Apperception Test.

The Sheldon study mentioned under the EPPS discussion also had something to say about the TAT. The TAT showed that warm teachers were higher in aggression and lower in dominance. This is just the opposite of the EPPS finding. Dixon and Morse used the Teachers TAT to define empathic potential.

Strong Vocational Interest Blank.

Tanner used a group designated by professors ratings in combination with the MTAI as the successful teachers. The Interest-Maturity scale on the SVIB did differentiate between the effective and non-effective.

Minnesota Multiphasic Personality Inventory.

Cole (1961) found that the MMPI schizotypal scale discriminated between teachers in the five year study who were rated by a trained observer at the end of the five year period. Elevation on that scale correlated with low ratings by the trained observer. Nelson () found a very low correlation between the MMPI and success as determined by a composite rating of the teacher by pupils, supervisors, and college observers. The sample was 217 NY State high school teachers at the end of the first year. Tanner (1954) found that the K scale on the MMPI did discriminate between the criterion groups. The criterion groups were determined by professor's ratings and by MTAI scores.

How good are these?

Very Good

CONCLUSION

The remaining comments represent generalizations that seem to be warranted in light of the previous findings.

It is hard to imagine a normal personality pattern that would not be considered an asset in a given teaching situation. The refinement of measures of personality should help a great deal in finding the right position for a given personality. The Heil and Washburne study suggests specifically what can be done.

Teaching is not a single ability. It is complex. Each teaching position may call for a different set of these complex abilities. The recognition of this notion should lead to more realistic experimental designs.

Since intelligence tests, ratings, and other techniques are low in predicting teaching performance, partial answers may be found in the use of personality instruments for these purposes.

An approach in the construction of standardized tests that might prove fruitful is to seek highly reliable measures initially, then the correlations between them may suggest the valid use of those instruments.

The crying need in personality testing now is for constants, instruments that measure reliably. *and validly*

All of the tests discussed in this paper could very well be good predictors of teacher performance. In one sense, the results of experiments is shaky grounds for comparing the validity of the tests, unless, the experimental design is the same in each case. The failure of one researcher using

the MTAI may be due to the improper definition of the criterion. The success of another researcher using the MMPI may be due to the proper definition of the criterion. This says nothing, in and of itself, about the relative merits of the two tests.

The factor analyzed GZTS, the social desirability "controlled" EPPS, the "valid" MTAI, and the well standardized MMPI have all contributed something unique to the assessment of personality. Each seems to have possibilities for the prediction of teaching performance.

References

- ✓ Barr, A. S., Eustice, D. E. & Noe, E. J. The measurement and prediction of teacher efficiency. Rev. Educ. Res., 1955, 25, 261-269
- ✓ Cattell, Raymond B. Clinical versus statistical measures of teaching ability. J. Educ. Res., 1948, 41, 718-719
- ✓ Calabria, F. M. Characteristics of effective teachers. Educ. Res. Bul., 1960, 39, 92-100
- Cook, D. L., Linden, J. D., & McKay, H. E. A factor analysis of teacher trainee responses to selected personality inventories. Source?
- Cole, D. L. The prediction of teaching performance. J. Educ. Res., 1961, 54, 345-348 (We, the people?)
- ✓ Corah, N. L., Feldman, M. J., Cohen, I. S., Greun, W., Meadow, A., & Ringwall, E. A. Social desirability as a variable in the EPPS. J. Consult. Psychol., 1958, 22, 70-72
- Dixon, W. R. & Morse, W. C. The prediction of teaching performance: empathic potential. J. Teacher Educ., 1961, 12, 322-329
- Downie, N. M. & Bell, C. R. The MTAI as an aid in the selection of teachers. J. Educ. Res., 1953, 46, 699-704
- ✓ Dugan, R. R. Personality and the effective teacher. J. Teacher Educ., 1961, 12, 335-337
- Gowan, J. C. Self-report tests in the prediction of teaching effectiveness. School Rev., 1960, 68, 409-419
- The use of the adjective check list in screening teaching candidates. J. Educ. Res., 49, 663-672, 1956
- Guba, E. G. Editorial Comment. Educ. Res. Bul., 1960, 39, 157-159
- Hellfritzs, A. G. A factor analysis of teacher abilities. J. Exp. Educ., 1945, 14, 166-199
- ✓ Heil, L. M. & Washburne, C. Characteristics of teachers related to children's progress. J. Teacher Educ., 1961, 12, 401-406
- Hill, R. E. Dichotomous prediction of student teaching excellence employing selected CPI scales. J. Educ. Res., 1960, 53

- ✓ Jackson, P. W. & Guba, E. G. The need structure of in-service teachers: an occupational analysis. School Rev., 1957, 65, 176-192
- Jones, M. L. Analysis of certain aspects of teaching ability. J. Exp. Educ., 1956, 25, 153-180
- Medley, D. M. Teacher personality and teacher-pupil rapport. J. Teacher Educ., 1961, 12, 152-156
- Nelson, Kenneth G. Use of the MMPI as a predictor of high school teacher effectiveness. *Source?*
- Ohlsen, M. M. & Schulz, R. E. Projective test response patterns for best and poorest student teachers. Educ. Psychol. Meas., 1955, 15, 18-27
- Popham, W. J. & Tremble, R. R. The Minnesota Teacher Attitude Inventory as an index of general teaching competence. Educ. Psychol. Meas., 1960, 20, 509-512
- Rabinowitz, W. & Rosenbaum, I. A failure in the prediction of pupil-teacher rapport. J. Educ. Psychol., 1958, 49, 93-98
- Ricwic, A. C. & Herman, J. P. The Study of Values and the Minnesota Teacher Attitude Inventory. Educ. Res. Bul., 1960, 39, 101-103
- Ryans, D. G. & Wandt, E. A factor analysis of observed teacher behaviors in the secondary school: a study of criterion data. Educ. Psychol. Meas., 1952, 12, 574-586
- Ryans, D. G. Characteristics of teachers. Washington D. C.: American Council on Education, 1960
- Inventory Estimated teacher characteristics as covariants of observed assessed pupil behavior. J. Educ. Psychol., 1961, 52, 91-97
- Notes on the criterion problem in research with special reference to the study of teacher characteristics. J. Gen. Psychol., 1957, 91, 33-61
- Sheldon, M. S., Coale, J. M. & Copple, R. Concurrent validity of the "warm teacher scales." J. Educ. Psychol., 1959, 50, 37-40
- ✓ Stern, G. G. & Masling, J. M. Unconscious Factors in Career Motivation for Teaching. Syracuse: Univ. Syracuse, 1958 *Is this a book?*
- Tanner, W. C. Jr. Personality bases in teacher selection. Phi Delta Kappan, 1954, 35, 271-277
- Tyler, F. T. Teachers personalities and teaching competencies. School Rev., 1960, 68, 429-449