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**A comparison of the perceptual organizations
of outstanding and randomly selected teachers
in "open" and "traditional" classrooms.**

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A COMPARISON OF THE PERCEPTUAL ORGANIZATIONS OF OUTSTANDING
AND RANDOMLY SELECTED TEACHERS IN
"OPEN" AND "TRADITIONAL" CLASSROOMS

A Dissertation Presented

by

Roberta G. Koffman

Submitted to the Graduate School of the
University of Massachusetts in partial
fulfillment of the requirements for the degree of
DOCTOR OF EDUCATION

February, 1975

Major Subject: Education

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To Michael and Kate who graciously gave me
the time in which to complete this work.

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Roberta G. Koffman

February, 1975

Directed by Dr. Harry Schumer

The present research sought to determine whether outstanding teachers could be distinguished from randomly selected teachers on the basis of characteristic perceptual organizations. It also sought to determine whether there were differences in perceptual organization between teachers who espouse differing methods and techniques in teaching. "Open" and "traditional" teachers were selected for this purpose.

A single school system in New England was selected for the research site. The sample was confined to regular classroom teachers in grades K - 4. Participation was voluntary. The returns were from 70.2% of the possible total number of teachers (239); usable returns were from 57.7%.

Beginning with the basic hypothesis that outstanding teachers would have characteristic perceptions of themselves and others, regardless of their methodologies or techniques, a group of eleven perceptual dimensions expressed as continua were established. These continua were used to rate teachers' reactions to critical incidents in teaching by two raters who were given intensive training in making perceptual inferences. These perceptual continua were:

Teachers' Perceptions of Self:

Identified.....Apart
Adequate.....Inadequate
Trustworthy.....Untrustworthy
Wanted.....Unwanted
Worthy.....Unworthy

Teachers' Perceptions of Others:

Able.....Unable
Worthy.....Unworthy
Helpful.....Hindering
Friendly.....Unfriendly
Internally Motivated....Externally Motivated
Dependable.....Undependable

Four groups of teachers were involved in the research. These groups included "outstanding-open", "outstanding-traditional", "control-open" and "control-traditional". Control teachers were selected at random.

Perceptual inferences were then made by the raters for each of the eleven perceptual dimensions on the basis of each teacher's responses to a critical incidents questionnaire. This questionnaire consisted of three questions which requested the teachers' response to situations which could possibly arise in their schools. Responses to two of these questions were used in the analysis.

The ratings of the subjects' perceptual organizations on the series of eleven perceptual continua as inferred by the raters, were then subjected to a multiple analysis of variance.

The results showed that there were no differences between "open" and "traditional" teachers on the perceptual variables measured,

but that outstanding teachers had significantly more positive perceptions than control teachers. This was true for all eleven variables regardless of whether they were "open" or "traditional".

Gooding (1964) compared effective teachers with ineffective teachers without regard to the vast range of teachers in the middle ground who are neither effective nor ineffective. Thus the question remained whether these perceptual characteristics were uniquely related to effectiveness in teaching or whether they were related to all but ineffective teaching. By comparing outstanding teachers with randomly selected teachers, this study shows these characteristics to be more uniquely related to outstanding teaching. Therefore they can be viewed with more confidence as critical factors or important contributors to effectiveness in teaching.

This study strengthens the theory that in teaching as well as in psychotherapy (Fiedler, 1950), there is a kind of good basic human interrelationship toward which successful practitioners tend, no matter what their original methodological training.

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C H A P T E R I

STATEMENT OF THE PROBLEM AND REVIEW OF THE LITERATURE

Introduction

For many years educators have been concerned with the problem of what makes an outstanding teacher. This question has been of such concern that literally hundreds of studies have been carried out in an effort to identify criteria which could be used as indicators of good teaching. Recent work, reported by Combs (1969) has shown that teachers' perceptual characteristics may in part help to provide such criteria. The present research was designed to compare the perceptual characteristics of "outstanding" and randomly selected teachers in both "open" and "traditional" classrooms.

In this chapter the following will be discussed: (a) the teacher as a critical variable in the education process, (b) the importance of studying the teacher from a theoretical viewpoint, (c) perceptual theory and the production of Combs' hypotheses, (d) research findings generated by Combs' hypotheses, and (e) the relationship of the present research to Combs' hypotheses and research findings.

The Teacher as a Critical Variable in the Education Process

Education is a major preoccupation of this nation. More than a quarter of our total population is annually enrolled in school (Davies, 1970). The average child, aged 6-17, spends six hours per day or 1,080 hours per year in school. Philip Jackson (1968) states that:

Aside from sleeping, and perhaps playing, there is no other activity that occupies as much of a child's time as that involved in attending school.

From the age of six onward he is a more familiar sight to his teacher than to his father, and possibly even to his mother (p. 6).

This phenomenon called education or schooling is a vastly complex activity which involves interactions among four major variables: teacher, students, curriculum and social setting. A teacher must teach a given body of material (curriculum) to a specific group of students while maintaining the social and academic norms of the school system or building in which he is teaching. There are also a host of other variables involved in schooling which include, among others, learning and teaching strategies, class size, socio-economic background of both teachers and students, age of both teachers and students, general intelligence of both, size of school, age of building, classroom size, teacher-pupil ratio, per pupil expenditure, textbooks, teaching materials, number of volumes in the school library, classroom atmosphere, availability of support staff, etc.

All of these variables have an influence on learning or student outcomes. Knowing this, the researcher is faced with a plethora of variables among which he must choose in order to answer questions about the successes and failures of schooling. Many researchers are coming to believe that the teacher is a critical variable.

After a comprehensive study of school effectiveness research, Don Davies (1970) concludes:

The research reported in this publication leads us to believe that, contrary to some earlier indications, schools can and do make a difference in the development of youth. Beyond this, it is clear that teachers are the single most important element in the school -- more important than the quality of facilities, the quantity of equipment and materials, or the level of financing (p. iv).

David Ryans (1960) in his study of teacher characteristics concludes that the teacher is a critical variable:

Both the lay public and professional educators generally agree that the 'goodness' of an education program is determined to a large extent by the teaching. The identification of qualified and able teaching personnel, therefore, constitutes one of the most important of all educational concerns. Obtaining capable teachers is an intrinsic interest and obligation of education. If competent teachers can be obtained, the likelihood of attaining desirable educational outcomes is substantial. On the other hand, although schools may have excellent material resources in the form of equipment, buildings, textbooks, and although curricula may be appropriately adapted to community requirements, if the teachers are misfits, or are indifferent to their responsibilities, the whole program is likely to be ineffective and largely wasted (p.).

Indeed, instinct and intuition often lead to the identical conclusion, that the teacher is a critical variable. It is probably the

experience of nearly everyone who has spent any time visiting schools that in walking from one classroom to another the impression is distinctly clear, that the "school" or education going on in one classroom is radically different from that going on in another classroom, in spite of the fact that the curriculum and materials, the per pupil expenditure and availability of equipment and support staff are the same. In fact, the size and shape of the classrooms and the furnishings are often identical.

The critical importance of the teacher is not surprising when one considers that the teacher is the one variable which in fact controls many of the other variables. It is the teacher in the conventional classroom who gathers and arranges the material, interprets the curriculum chooses a particular method or style of presentation, structures the use of support staff, structures the verbal and social interaction, and sets the tone for classroom atmosphere.

Research on Teacher Effectiveness and the Need for a Theoretical Construct

Precisely because the teacher is considered a critical variable in education, research on teacher personality and teacher characteristics has been prolific. Domas and Tiedeman (1950) published a bibliography containing over 1,000 entries. Between 1950 and 1963, Getzels and Jackson (1963) collected an additional 800 studies.

From 1963 until 1970 even more research has been undertaken as a result of expanded financial support, particularly at the federal level.

The vast bulk of this research has sought to deal with the question of teacher competence or effectiveness through study of the teacher's traits or modes of behavior. The earliest works concentrated mostly upon traits or personality variables. More recent work has tended to deal with teacher behavior. When Getzels and Jackson (1963) reviewed the literature, they reported that they found the studies so atheoretical as to defy classification. They finally settled on the following seven headings:

1. Attitudes
2. Values, Interests, Favored Activities
3. Adjustment, Needs
4. Personality Factors
5. Projective Techniques
6. The Teacher Characteristics Study
7. Cognitive Abilities

Except for the Teacher Characteristics, which will be discussed later, it is obvious from these seven headings that the majority of the studies during the thirteen year period from 1950 to 1963 were not based on any particular psychological, sociological or pedagogical theory, but were developed to make use of instruments which

were available. The two instruments used most often were the MTAI (Minnesota Multiphasic Personality Inventory) which was classified under the "Attitudes" category and the MMPI (Minnesota Multiphasic Personality Inventory), which was classified under the "Adjustment, Needs" category. Although useful information was derived from studies utilizing both of these instruments, the results were to a large extent either contradictory or inconclusive.

Two researchers, Michulis (1954) and Tyler (1954) have intensively examined the problem of predicting effective teaching from the results of MMPI scores. Both were forced to conclude that there was no evidence to indicate that MMPI scores can be used to predict success in teaching. Results using other instruments were similarly inconclusive.

During this period there was one study that by itself was worthy of note because it departed from the pattern of building research around existing instruments. The Teacher Characteristics Study conducted by Ryans (1960) pointed in a new direction for the study of teacher characteristics. Instead of beginning with an instrument and attempting to relate scores from the instrument to effective teaching, Ryans began by direct observation of teachers, and after a year and a half produced a new instrument, based on actual classroom behavior, entitled the Classroom Observation Record. This included dimensions of teacher behavior derived

from empirical evidence of actual teacher classroom behavior. These dimensions of teacher behavior were then correlated to measures from other instruments such as the MMPI, the Allport-Vernon-Lindsey Study of Values and the Thurstone Temperament Schedule, and to other dimensions such as age and experience, sex, marital status, academic achievement, size of community, etc.

The findings from Ryans' work were the first to give educators an actual description of what teachers are like, at least across the ten dimensions defined by the Classroom Observation Record. These findings do not particularly apply to the problem of predicting teacher effectiveness however. The findings that participation in schoollike activities during childhood and adolescence were significantly related to positive scores on a majority of the ten teacher rating scales, or that teachers in large schools scored higher than teachers in small schools or that married teachers scored higher than single teachers on all scales are interesting findings, but they don't point the way to understanding the effective teacher any better.

After reviewing the results of the research of this period, Getzels and Jackson (1963) concluded that:

Despite the critical importance of the problem and a half-century of prodigious research effort, very little is known for certain about the nature and measurement of teacher personality, or about

the relation between teacher personality and teaching effectiveness. The regrettable fact is that many of the studies so far have not produced significant results. Many others have produced only pedestrian findings. For example it is said after the usual inventory tabulation that good teachers are friendly, cheerful, sympathetic, and morally virtuous rather than cruel, depressed, unsympathetic, and morally depraved. But when this has been said, not very much that is especially useful has been revealed (p. 574).

The period of the next ten years from 1963 to 1973 was characterized by a different kind of research. Following Ryans' and Flanders' lead, researchers began to chart and classify actual classroom behavior. Again, research activity was prodigious to the extent that 92 separate instruments were developed for systematically observing and classifying classroom behavior (Simon and Boyer, 1967). All of this activity has been most helpful in terms of describing what actually happens in classrooms. As a result, it is now possible to fairly well describe classroom activities in relation to verbal interaction (Flanders, 1970), non-verbal functioning (Galloway, 1968), levels of cognitive functioning (Bloom, 1956), and social interaction (Bales, 1950).

There are two major shortcomings of this type of research. First, it is by no means certain that the items observed most accurately are the ones most likely to prove valid or important. Secondly, these systems, developed for coding classroom behavior,

assume that certain variables and certain ways of coding classroom interactions relate to student growth, or at least to ratings of teacher effectiveness. Unfortunately, these assumptions or hypotheses remain largely untested. When Rosenshine and Furst (1973) reviewed the research from which these instruments were derived, they found only 2 out of the 92 (Spaulding, 1965; and Davidoff, 1970) were based on research in school settings. They identified only 7 which had subsequently been used for research in school settings, and only one of these (Flanders, 1965) had been used for research by anyone other than its author.

Under such circumstances, it is not surprising that the correlations found in these studies relative to the amount of time, money and energy spent, have been disappointing. Rosenshine and Furst (1973) were led to conclude that:

Until the reward system in American research circles changes, until regional education laboratories engage in testing their assumptions about the mirrors of behavior instead of publishing 17 volumes of them, until educators concern themselves with improving rather than proving their hypotheses, and until we stop getting letters from colleagues who indicate more interest in statistics than students when they say '...it is more fruitful for us to sharpen our categories and make the coding reliable than to try to explore the subtleties of what makes one or two teachers outstanding' we shall not learn the answers (p.

The research efforts which have culminated in the develop-

ment of a plethora of instruments over the last ten years have not, in the final analysis, led us much closer to the understanding of effective teaching than the earlier studies on teacher traits. Getzels and Jackson (1963) have commented on the failure of research to produce significant findings in this area.

The single most general reason for these conceptual and experimental limitations on research on teacher personality as well as on teacher effectiveness...is simply that research in this field is conducted in a theoretical vacuum. When studies are not engaged in merely 'trying out a test,' they are busy seeking ad-hoc solutions to immediate problems, without regard to the theoretical meaning or long-range fruitfulness of the findings. Hypotheses are based upon an oversimplification of teacher personality and the teaching situation, leading both to inadequate methodology and to conclusions which make neither psychological nor sociological nor common sense. The Committee on the Criteria of Teacher Effectiveness of the AERA, 1952-1953 concluded that only by working within the context of sound theory can one hope for useful, relevant, and widely applicable findings. They suggested that any teacher characteristic involved in a research study should be submitted to the question: 'On what grounds in learning theory, or social-psychological theory (or any other body of theory) can we justify hypothesizing that this characteristic of teachers is related to a given effect' (p. 576).

This comment by Jackson and Getzels should not be construed to mean however that education lacks theory or theorists. The problem is simply that teacher effectiveness research has not been theory based. There are many theories and theorists including

"conditioning theories" (Mowrer, 1960; and Skinner, 1968), "identification theories" (Bandura, 1962), "cognitive theories" (Bruner, 1966 and Luchins, 1961), and "developmental theories" (Piaget, 1970). However it is often the case that theorists and practitioners do not meet. This is largely because the bulk of these theories are learning theories, not teaching theories. They represent how the learner goes about learning but not necessarily how the teacher goes about teaching. Gage (1960) notes this situation in an argument for the need to develop theories of teaching.

Theories of learning deal with what the learner does. But changes in education depend in large part on what the teacher does. That is, changes in how learners go about their business of learning occur in response to the behavior of their teachers or others in the educational establishment (p.162)

What is needed then, Gage (1960) argues, is the kind of theory which places the teacher in the position of being the independent variable so that student learning is explained as a function of teacher behavior. In other words, theories of teaching should be concerned with explaining, predicting, and controlling the ways in which teacher behavior affects the learning of pupils.

It is highly likely that these kinds of theories will be forthcoming as a result of the tremendous amount of work, mentioned pre-

viously, which has been done in the area of observing and classifying teacher behavior.

In the meantime, the teacher remains a critical variable of serious concern to the researcher.

Perceptual Theory and the Production of Combs' Hypotheses

Arthur Combs and his associates (1969) have taken a body of theory known as perceptual psychology and from it have derived a set of research hypotheses which concern the teacher.

Perceptual psychology as interpreted by Combs is a humanistic, phenomenological, existential view of behavior, which sees man engaged in a continuous process of being and becoming (Combs, 1965). Specifically, perceptual psychology as interpreted by Combs is a field theory of which the primary principle is that all behavior, without exception, is a function of the behavior's perceptual field at the moment of behaving. Combs uses the term perception in its broadest sense, as almost synonymous with "meaning." Thus, behavior is seen not as a function of stimuli or events, but as a function of the meaning of those stimuli or events to the individual. Most simply, Combs holds that people behave not according to any objective criteria of how things are, but according to how things seem to them. Therefore, in order to understand behavior, one must understand the perceptual field, or the meaning of events to the behavior. For this reason, Combs and

his followers attempt to understand behavior from an internal rather than an external frame of reference, or from the individual's viewpoint rather than from the observer's viewpoint. All of Combs' research on the helping professions has assumed an internal rather than an external frame of reference.

A second major principle of perceptual psychology, as interpreted by Combs, is that at the heart of an individual's perceptual or phenomenal field is his perception of himself, or his self-concept. Combs uses the term self-concept to mean all of those aspects of the perceptual field to which a person refers when he uses the pronouns "me" or "I" (Combs, 1965). In describing the role of the self-concept Combs (1965) states:

The more we study the self-concept, the more it becomes apparent how crucial it is to the understanding of behavior. It is at the very center of the individual's personal organization and the frame of reference for his every act.

It is both product and process.

The self concept is the product of past experience but, once established, exerts its influence on the behavior of its possessor ever after (p. 120).

Since the self-concept is so powerful, and its role so crucial, behavior is seen as the function of two kinds of perceptions: the individual's perceptions about the situation he is in, and his

perceptions about about himself or his self-concept.

Combs' research hypotheses were derived from these two central principles of perceptual theory. Theorizing that a person's ability to behave effectively in a given situation will depend upon how he is perceiving at the time, Combs began to explore the perceptual patterns of effective helpers. Specifically his research hypotheses were designed to explore questions about professional helpers' perceptions about themselves, others, and their perceptions about certain aspects of their professional situations.

A further influence on the development of Combs' research hypotheses were the research findings of Fiedler (1950) and a theoretical paper by Rogers (1958) entitled "The Characteristics of a Helping Relationship." Fiedler used a Q-sort in order to study therapists' perceptions about the therapeutic relationship. From this research, he determined that expert therapists tended to have similar perceptions regarding the nature of a good therapeutic relationship. This was true of expert therapists regardless of the school of thought from which they had begun. In fact, expert therapists from different schools of thought were found to be in more agreement about the nature of the therapeutic relationship than beginners and experts from the same school. Another finding of Fiedler's research was that the man on the street could describe a good therapeutic relationship about as well as the expert (Fiedler, 1950).

These findings suggested to Combs that there is probably "some sort of ideal therapeutic relationship toward which good practitioners drift no matter what their beginning frame of reference. It would seem to imply the existence of a fundamental approach to helping people (Combs, 1969, p. 4)." This thinking was further encouraged by Rogers' paper on "The Characteristics of a Helping Relationship" (1958), in which he theorized that the success of a therapeutic relationship was dependent more upon the therapist's attitudes and the client's perceptions of the therapist's attitudes than upon anything in particular which the therapist did.

In a later book Rogers (1971) summarizes his views by stating,

I have long had the strong conviction...that the therapeutic relationship is only a special instance of interpersonal relationships in general, and that the same lawfulness governs all such relationships (p. 2).

From Fiedler's research and Rogers' earlier paper, Combs (1971b) concluded that,

While the various forms of the helping professions including teaching differ with respect to their purposes, clientele, and techniques, nevertheless, they are basically alike in the psychology through which they operate. It seemed to us that the crux of the problem of 'helping' lay not in some mysterious special technique. Rather the various helping

professions seem really to be expressions of a kind of basic good human interrelationship (p. 290).

Curiosity about the nature of this basic good human interrelationship sparked a series of studies over the next ten years. Combs' predisposition as a perceptual psychologist to believe that the success of a helping relationship would be strongly influenced by the helper's characteristic perceptual organization, was further encouraged by an observation he and his colleagues made about the existence of a commonality among all of the helping professions. This commonality is that all of the helping professions are characterized by a need for instantaneous response to the patient or client or student from the helper.

When a child or a patient asks a question the teacher or nurse or physician or therapist must answer instantaneously (Combs, 1969). This would seem to be particularly true of teaching where a research finding by Jackson (1960) has yielded the astonishing information that elementary school teachers often engage in as many as 1,000 interpersonal interactions per day, or an average of 166 interactions per hour in a six hour day.

Since the helper must respond instantaneously, this means that he cannot take time to worry about theory or method, but must respond in relation to how things seem to him at the moment. He must respond in terms of his own perceptual organizations or beliefs.

To Combs (1971) this meant that "helpers must be thinking, problem-solving people; the primary tool with which they work is themselves (p. 5)." This idea later came to be called by Combs and his colleagues the "self as instrument concept."

Consequently, Combs (1969) hypothesized that persons who had learned to use themselves as effective instruments in the production of helping relationships could be distinguished from those who are ineffective on the basis of their characteristic perceptual organizations. Specifically, he hypothesized that successful helpers could be distinguished from non-successful helpers on the basis of their characteristic ways of perceiving:

- A. Generally - Their Frames of Reference
- B. Other People and Their Behavior
- C. The Helper's Self
- D. The Helping Task and Its Problems
- E. Appropriate Methods for Helping

Research Findings Generated by Combs' Hypotheses

On the basis of the above hypotheses, six separate studies were carried out. In all six studies, effective helpers were found to have characteristic perceptual organizations which distinguished them from less successful helpers.

In the first study Combs and Soper (1962) repeated Fiedler's

Q-sort study utilizing effective teachers instead of psychotherapists. They found that good teachers and good therapists had highly similar perceptions of a good helping relationship. The correlation between the teachers' Q-sort and Fiedler's therapists was .809.

The remaining studies dealt with hypotheses utilizing the following twenty perceptual continua:

A. The general frame of reference of effective helpers tends to be one which emphasizes:

1. An internal rather than an external frame of reference.
2. Concern with people rather than things.
3. Concern with perceptual meanings rather than facts and events.
4. An immediate rather than a historical view of causes of behavior.

B. Effective helpers tend to perceive other people and their behavior as:

1. Able rather than unable.
2. Friendly rather than unfriendly.
3. Worthy rather than unworthy.
4. Internally rather than externally motivated.
5. Dependable rather than undependable.
6. Helpful rather than hindering.

C. Effective helpers tend to perceive themselves as:

1. With people rather than apart from people.
2. Able rather than unable.
3. Dependable rather than undependable.
4. Worthy rather than unworthy.
5. Wanted rather than unwanted.

D. Effective helpers tend to perceive the teaching task as:

1. Freeing rather than controlling.

2. Larger rather than smaller.
3. Revealing rather than concealing.
4. Involved rather than uninvolved.
5. Encouraging process rather than achieving goals.

In the first of these studies Combs and Soper (1963) found significant differences between effective and ineffective counselors on twelve of these dimensions. In similar studies Benton (1964) found significant differences between effective and ineffective Episcopal priests on five of these perceptual dimensions. Usher found significant relationships between student ratings of college professors as effective and five of these perceptual dimensions, and Gooding (1964) found significant differences between effective and ineffective teachers on twenty of these dimensions. Dickman (1967) was unable to find significant differences between "person oriented" and "task oriented" student nurses utilizing three of these dimensions, although the trends were toward the positive. In all instances, the subjects were rated along the perceptual continua by means of perceptual inference. Trained raters made these inferences on the basis of observed behavior, interviews or the subjects' responses to projective techniques.

The results of these studies are combined in Tables 1 through 4 below.

Table 1. Frame of Reference Categories Showing Significant Differences in Three Studies

Category	Counselors	Teachers	Priests
People - things	S ^a	S	S
Internal - external	S	S	NM
Perceptual - facts	NM ^b	S	NM
Immediate - historical	NM	S	NM

a. S=Significant difference.

b. NM=not measured (Combs, et al., 1969, p. 72).

From this table it is apparent that effective helpers including teachers tended to be concerned with people rather than with things, and further, their concern with people tended to be from an internal or perceptual frame of reference.

Table 12. Perceptions of Others Categories Showing Significant Differences in Four Studies

Category	Counselors	Teachers	Priests	Professors ^a
Able - unable	S ^b	S	S	S
Dependable- Undependable	S	S	NM	S
Friendly-unfriendly	S	S	NM	NM
Worthy-unworthy	S	S	NM	S
Internally motivated- not	NM ^c	S	NM	S
Helpful-hindering	NM	S	NM	NM

a. Effectiveness determined from student ratings only.

b. S=Significant difference.

c. NM=not measured (Combs, et al., 1969, p. 73).

From this table it is apparent that effective helpers and in particular, effective teachers were found to be characterized by a generally positive view of their subjects. They tended to see the people they worked with in essentially positive ways as dependable, friendly and worthy.

Table 3. Perceptions of Self Categories Showing Significant Differences in Four Studies

Category	Counselors	Teachers	Priests	Professors ^a
Identified- Unidentified	S ^b	S	S	NS ^d
Enough-not enough	S	S	NM	NS
Dependable- Undependable	NM ^c	S	NM	NM
Worthy-unworthy	NM	S	NM	NS
Wanted-unwanted	NM	S	NM	S

a. Effectiveness determined from student ratings only.

b. S=Significant difference.

c. NM=not measured.

d. NS=not significant (Combs, et al., 1969, p. 73).

Table 3 shows that effective helpers were found to have essentially positive attitudes toward themselves. They tended to see themselves as capable people who are likeable and worthy of respect.

Table 4. Perceptions of Purpose Categories Showing Significant Difference in Three Studies

Category	Counselors	Teachers	Priests
Self revealing - self concealing	S ^a	S	NM
Freeing - controlling	S	S	S
Altruistic - narcissistic	S	NM	NM
Larger - smaller	S	S	NM
Involved-uninvolved	NM ^b	S	S
Process - goals	NM	S	NM

a. S=Significant difference.

b. NM=not measured (Combs, et al., 1969, p.74).

Table 4 shows that effective helpers were found to see their tasks as freeing, involving larger issues and processes, and as generally involving.

One of the more interesting things about these tables is that they indicate a high degree of similarity in perceptions for four different groups of professional helpers: counselors, priests, teachers and college professors. This similarity supports Combs' hypothesis that there is a kind of basic good human interrelationship toward which professional helpers tend to drift.

Purpose of the Study and Its Relationship to Combs' Hypotheses

The present study, similar to those mentioned above, is derived from Combs' hypotheses. It deals specifically with teachers and its purpose is to both expand and refine Combs' and Gooding's

findings by addressing three research questions.

The first research question is: Are there differences in the perceptual characteristics listed above between "outstanding" teachers and teachers from a randomly selected control group?

This question seeks to refine the results of the Gooding study (Gooding, 1964) in which differences in perceptual characteristics were found between outstanding teachers and ineffective teachers, without regard to the vast majority of teachers in the middle ranges who are neither outstanding nor ineffective. If these perceptual characteristics are, in fact, truly powerful or critical factors in effective teaching, then one would expect to find differences in these characteristics between outstanding teachers and teachers from a randomly selected control group. If on the other hand, these perceptual characteristics do not represent a truly powerful or critical factor in effective teaching, then one would not expect to find differences with respect to them between outstanding teachers and teachers from a randomly selected control group.

The second research question is: Are there differences in the perceptual characteristics listed above between outstanding "open" teachers and outstanding "traditional" teachers?

The purpose of this question is to expand Combs' theory by applying it to teachers in two specific but very different educational contexts, which are described by the use of functional criteria developed by Amaral, et al., (1970), and refined by Walberg

and Thomas (1972). If Combs' hypothesis is true, that an effective helping relationship is not dependent on technique or methodology, but is rather the expression of basic good human interrelationships, and if further, this basic good human interrelationship can partially be defined by the perceptual characteristics he describes, then one would expect to find no differences with regard to these perceptual characteristics among outstanding teachers regardless of their techniques or methodologies, or whether they can be described as "open" or "traditional."

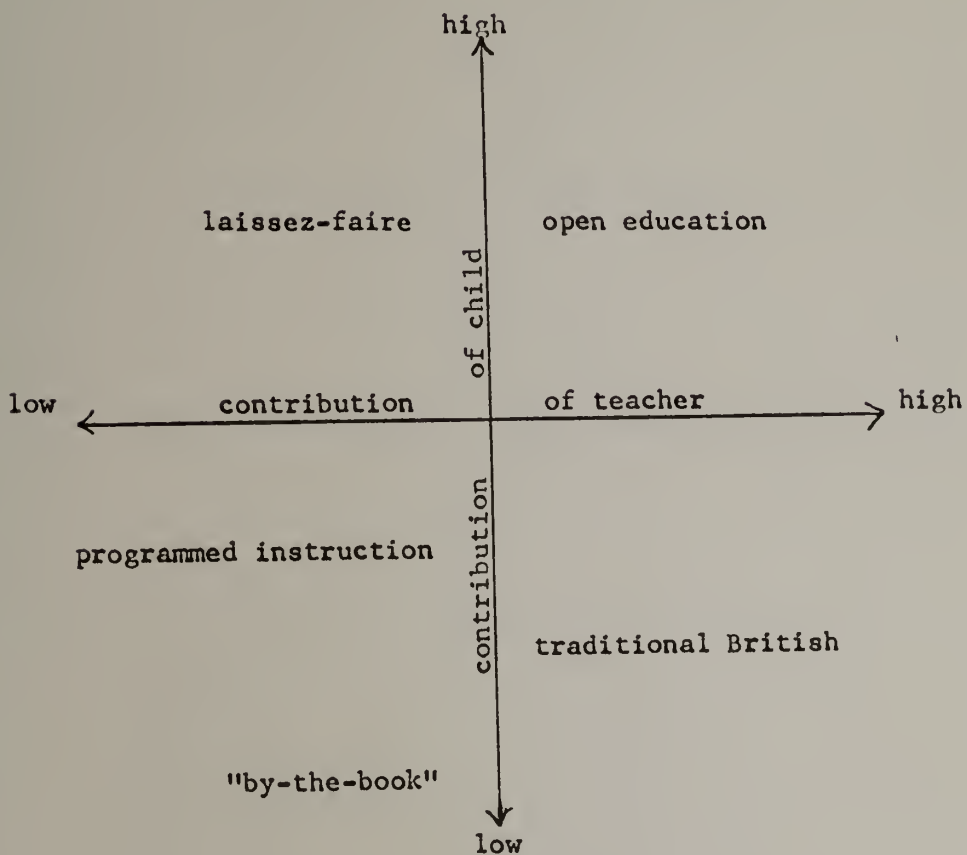
The third research question is: Are there differences in the perceptual characteristics listed above between "open" and "traditional" teachers who are randomly selected?

This question deals with the possibility that there is some overlap between the characteristics of teachers who are described as outstanding by Combs and Gooding and teachers who are described by Walberg and Thomas as "open." If there is an overlap, then one would expect to find differences in perceptual characteristics between "open" and "traditional" teachers.

The possibility of overlap between classifications of "open" and "outstanding" arises out of the definitions given to the term "open education" by many of its advocates.

"Open" and "traditional" education have been included in a double classification scheme by Amaral, et al. (1970) which re-

presents the amount of input teachers and students have in the decision-making process in the classroom. This scheme is presented in Figure 1.



According to this scheme "open" classrooms are classrooms in which both teachers and students are active people who share as strong initiators in classroom activities. In "traditional" classrooms on the other hand students are not active in decision-making. The teacher remains a strong initiator but the students are passive recipients of the teacher's planning.

Much has been written of the "open" teacher's humaneness. Judith Evans, et al. (1971) developed a questionnaire to distinguish between "open" and "traditional" teachers. This questionnaire includes items which classify open teachers as adaptable, sensitive individuals characterized by great warmth for children and respect for their abilities to make decisions for themselves. It is certainly possible that this definition overlaps with Combs' characterization of effective helpers as people who have essentially positive perceptions of themselves and others, who see themselves and others as attractive, likeable people, capable of handling anything they may have to deal with.

A full description of the Teacher Questionnaire is contained in Chapter II.

C H A P T E R I I

METHODS

In this chapter the discussion will include: (a) the research site and the sample, (b) the development of the teaching situations questionnaire, (c) the collection of data, (d) the selection of outstanding teachers, (e) the selection of "open" and "traditional" teachers, (f) the selection of the control group, (g) the rating of the teaching situations questionnaire, and (h) the research design.

The Research Site and the Sample

In order to test whether there were perceptual differences between outstanding teachers and teachers from a randomly selected control group, and between "open" and "traditional" teachers, a relatively large school system would be needed. For this reason, a single small city school system in New England was selected for the research site. Research was confined to a single school system in order to control for variables such as per pupil expenditure, classroom size, and availability of support staff.

The sample was confined to regular classroom teachers in grades K-4. The original instrument to be used for sorting teachers into either the "open" or "traditional" categories was validated and reliabilities tested for K-3 teachers. However, grade 4 teachers were added in order to increase the sample size.

Of the 239 teachers in grades K-4 in the school system, 168

returned the questionnaires and 71 did not. Among the 168 who returned questionnaires, 30 teachers were eliminated from the sample because of incomplete or improper returns.

Of the 71 teachers who did not return the questionnaires it is impossible to tell how many failed to do so because they did not attend the meeting at which the questionnaires were distributed, or because they did not wish to take part in the research. Participation was voluntary. The returns were from 70.2% of the possible total number of teachers (239); usable returns were from 57.7%.

In order to have a sample which approaches the theoretical ideal it would have been necessary to have 100% co-operation and 100% usable returns. However, in practical research situations, it is seldom possible to achieve the theoretical ideal. In fact, the degree of co-operation was achieved only because the Assistant Superintendent gave up one of her own meeting times with the teachers in order to facilitate the collection of the data. This co-operation was exceedingly unusual. The teachers' contract permitted the calling of one meeting per month. In this instance, the Assistant Superintendent did so for the purposes of the research.

In any sample which falls short of the theoretical ideal, it must be recognized that there are possible differences between those who choose to take part and those who choose not to. These

possible differences remain uncontrolled and limit the study accordingly.

The Development of the Teaching Situations Questionnaire

The original intent of the research was to gather data relative to the perceptual organizations of teachers through classroom observations and interviews, much in the way Gooding (1964) had done. However, in the present research, outstanding teachers were to be selected by peer nomination. This selection process will be fully explained in the next section. The decision to rely on the selection of outstanding teachers by peer nomination rather than by the customary method of supervisory rating, obviated classroom observation and interviews.

Earlier field work by this investigator indicated that anxiety levels would be pushed beyond reasonable limits if teachers were asked to nominate "outstanding" teachers from among their peers and then research team members were to be seen interviewing and observing some teachers but not others. The only way to allay such anxieties would have been to observe and interview all teachers in each building, keeping the records only for those who had been classified in either the outstanding or the control groups.

Such a procedure was impractical because of the large size of the school system and its distant location from the University of Massachusetts. An alternative method was sought by which data on

teachers' perceptual organization could be collected from all teachers without direct observation or interview.

In two studies, Benton (1964) and Dickman(1967), the perceptual organizations of Episcopal Priests and student nurses respectively were successfully studied by the use of projective testing techniques. In these cases, critical incidents relative to pastoral work and nursing were developed. The responses to these critical incidents were then rated for perceptual characteristics.

Accordingly, a number of critical incidents relative to elementary school teaching were created. They were field tested at the laboratory school at the University of Massachusetts, where eight teachers responded to them and noted the length of time needed for each response. On the basis of their responses three questions were judged likely to elicit differences among teachers relative to perceptual characteristics. These three questions then comprised the "Teaching Situations Questionnaire (Appendix C)."

The questions, plus the perceptual characteristics they were designed to elicit, are listed below.

Question 1: What would you say is your most important function as a teacher? Please explain.

This incident was designed to elicit teachers' perceptions

of the teaching task. Specifically, did teachers perceive teaching as:

1. Freeing rather than controlling
2. Concerned with larger rather than smaller issues
3. Revealing rather than concealing
4. Involved rather than uninvolved
5. Encouraging process rather than achieving goals

Question 2: The teacher next to you has suddenly taken quite ill and a substitute cannot be found for some time. You are asked to take over. How do you feel? What will you do? What will you expect others to do?

This incident was designed to elicit teachers' perceptions of themselves. Specifically, did they see themselves as:

1. With people rather than apart from people
2. Able rather than unable
3. Dependable rather than undependable
4. Involved rather than uninvolved
5. Wanted rather than unwanted

Question 3: You notice that a particular child in your class has begun to withdraw and become very hostile to you. He says he does not like school anymore. His work is deteriorating. How will you feel? What will you do? Why?

This incident was designed to elicit teachers' perceptions of others. Specifically did they see others as:

1. Able rather than unable
2. Friendly rather than unfriendly
3. Worthy rather than unworthy
4. Internally rather than externally motivated
5. Dependable rather than undependable
6. Helpful rather than hindering

A full discussion of the rating of teacher responses to these critical incidents will follow later.

PROCEDURES

The Collection of Data

In order to facilitate the collection of the needed data, the help of the Assistant Superintendent in charge of curriculum was enlisted. She supplied the researcher and the teachers with a coding system devised to make it impossible for anyone to know which teachers would be selected as outstanding. At a special meeting of all K-4 teachers in the system she explained that the school system was taking part in a research project sponsored by a research team at the University of Massachusetts School of Education, and that it concerned the nature of effective teaching. She also explained that the data collected would be strictly confidential, and that the teacher coding system ensured confidentiality. Even she, the Assistant Superintendent, would not know which teachers had been nominated as outstanding. In fact, no school administrator would know or have access to any of the data. As

further guarantee, she explained that when the questionnaires were completed, they should be sealed in the addressed and stamped envelopes provided, and that two teachers should volunteer to help collect the envelopes and accompany her to the post office to mail them. The teachers were then handed envelopes which contained an explanation of the research (Appendix A), the teacher questionnaire which distinguishes between "open" and "traditional" teachers (Appendix B), the Teaching Situations Questionnaire which would later be rated for perceptual characteristics (Appendix C), and a nomination form for nominating outstanding teachers (Appendix D). They were asked to fill out the questionnaires independently. As they finished the questionnaires, they were returned to the Assistant Superintendent. When all questionnaires were finished, two teachers accompanied the Assistant Superintendent to the post office where the envelopes were posted.

The Selection of Outstanding Teachers

As previously mentioned, outstanding teachers in this study were selected by peer ratings. In his article entitled "Rating Methods in Research on Teaching," Remmers (1963) states:

It is likely that no approach to the measurement of variables in research on teaching has been used more often than the rating method... The reason...is readily understood. Many of the variables in research on teaching are so

complex that tests, questions, and objective behavior records are either inadequate or too inconvenient. Sometimes we need what only a recording instrument as sensitive, complex, and alert as a human observer can tell us about the behavior or characteristics of another person or object, and then we turn to the methods of recording and communicating such messages called rating scales (p. 20).

If ratings are used often and with good reason, they must also be used with caution. The ratings are entirely dependent upon the characteristics of the rater. If he can be blessed with being "sensitive, complex, and alert," he can also be insensitive, biased and selectively perceptive.

There have been many rating systems devised to judge teacher effectiveness, including student questionnaires, self-reports, peer ratings and supervisory ratings. Unfortunately, as far as teaching is concerned, none of these methods has been demonstrated to be clearly superior to any others. In other fields however, there is evidence that peer ratings may be the better predictors of long-term success. The military has pioneered the use of peer ratings. Jenkins (1948) used peer ratings in identifying qualities differentiating the "wanted" from the "unwanted" pilot in Naval Aviation Squadrons. Willionis and Leavitt's (1947) study found that buddy ratings of Marine officer candidates were a more valid predictor of success in OCS and of combat performance than

several objective tests: furthermore, these ratings were significantly better than superiors' ratings in predicting the criteria. Wherry and Fryer (1949) found a higher validity for buddy ratings than for superiors' ratings at the Signal Corps OCS.

In one of the few reported uses of peer ratings in industry, Wirtz (1958) found that in an insurance agency a peer nomination questionnaire was very useful in identifying potential supervisory personnel and was highly predictive of performance.

The Peace Corps has successfully used peer ratings to predict long-term success after training (Boulger and Coleman, 1964), and Lieberman, Yalom and Miles (1972) found that peer predictions were superior to all other predictions including expert predictions in predicting casualties in eighteen different encounter groups.

In view of the above findings, a decision was made to obtain peer ratings in the selection of outstanding teachers rather than supervisory ratings which is the usual procedure. Teachers may have less contact with each other than Navy pilots or Signal Corps officers, and therefore be in a poorer position to judge their peers. However, teachers generally have much more contact with each other and with the students they teach than is usually the case with supervisory personnel. Supervisory ratings were collected however to be used in the event that the peer nominations could not be collected.

The instructions for filling out the Teacher Nomination form were simple. The teachers were to list the code numbers of any teachers in their own building whom they believed were outstanding for any reason. Specifically, the instructions stated:

Could you please assist us by writing down the code numbers of any teachers who you feel are outstanding or very good. You do not have to have a very good reason for your choices, nor does any teacher have to be perfect. As professionals, we simply want your own best intuition.

The Assistant Superintendent also told them that they could list their own code numbers if they wished.

When the envelopes were received by the investigators, the nomination sheets were removed, self-nominations were discarded, and nominations tallied. It had been decided that any teacher who had 60% peer nominations would be classified as "outstanding." In the final selection three teachers who had 57% peer nominations were included to increase the number. In this way 31 teachers or 22.4% of the sample were classified as outstanding.

The Selection of Open and Traditional Teachers

If Combs' hypothesis that an effective helping relationship is not dependent upon technique or methodology but is rather the expression of basic good human interrelationships, was to be tested,

then teachers from two very different methodological backgrounds would be needed for comparison. Consequently the decision was made to use "open" and "traditional" teachers for comparison.

Open and traditional were chosen largely because the literature is rich in contrasting the two teaching styles. Many adherents of open education see it as the polar opposite of traditional education.

These two methodologies have been codified by Bussis and Chittenden (1970) and by Judith Evans (1971) and refined by Walberg and Thomas (1972) into a Teacher Questionnaire. This questionnaire is concerned with eight different dimensions of classroom behavior and organization. When more of these behaviors and organizational practices are evidenced, or when they are evidenced to a greater degree, the teacher is characterized as "open." When fewer of these behaviors and organizational practices are evidenced or when they are evidenced to a lesser degree, the teacher is characterized as "traditional." These eight dimensions of teacher behavior as taken from Evans (1971) are:

1. Provisioning for learning: flexibility in the organization of instruction, materials.
2. Diagnosis: less attention to goals, such as examination scores, and more attention to the child's thinking process.

3. Instruction: much individual attention rather than solely total class instruction, encouragement of children's initiative and choice, interdisciplinary emphases.
4. Evaluation: individual standards or goals preferred to comparing the child to standardized achievement norms. Record-keeping often done in order to evaluate growth rather than correctness.
5. Humaneness: teachers have characteristics such as respect for children, openness, and warmth.
6. Seeking opportunities to promote growth: extensive use of community, colleagues, advisors.
7. Assumptions: ideas about children and the process of learning. Many ideas are stressed such as children's innate curiosity, trust in children's ability to make decisions, and so on.
8. Self-perception of the teacher: a sensitive, adaptable, continual learner who sees himself as a resource for helping children reach their own potentials rather than seeing himself as a disseminator of a given body of knowledge.

All teachers in the sample completed the Teacher Questionnaire that was contained, along with the other materials, in the package given to them by the Assistant Superintendent in the meeting called for that purpose. The questionnaire consisted of 43 items concerning classroom organization and behavior. The teachers were instructed to respond to these items by indicating on a four-point scale the extent to which each item was true of their own classrooms. The directions and the first question are printed below. A copy of the entire questionnaire will be found in Appendix E.

Instructions: For each of the following statements, circle the number which most closely expresses your estimate of the extent to which the statement is true of your own classroom. If the statement is absolutely not the case, circle "1" if it is very minimally true, choose "2." If the statement generally describes your classroom choose "3"; if it is absolutely true choose "4."

1. Texts and materials are supplied in class sets so that all children may have their own.

1 2 3 4

When the envelopes were returned, the questionnaires were scored using a scoring program developed by Dan Sheehan at the University of Massachusetts, and teachers were placed along a continuum from "traditional" to "open." The scores ranged from 81 for the most "traditional" teacher to 154 for the most "open" teacher. The median score was 109. When all teachers had been placed along the continuum, a median split was performed, and teachers on the lower side of the split were classified as "traditional" while teachers on the high side of the split were classified as "open." On the basis of the median split, 16 of the teachers previously classified as outstanding were classified as "open" and the remaining 15 were classified as "traditional." One of the "open" teachers was randomly eliminated in order to equalize the numbers in each cell of the research design.

The division of outstanding teachers into "open" or "traditional" categories completed the second classification system

needed to test Combs' hypothesis that good teaching is more a matter of basic good human interrelationships, partially defined by perceptual habits, than of methodology or technique. This hypothesis would clearly be supported if there proved to be no differences in the perceptual habits tested between outstanding teachers classified as "open" and outstanding teachers classified as "traditional."

Selection of the Control Group

The control group was randomly selected from the remaining pool of teachers who had not been classified as outstanding. This selection was accomplished in two stages. Those who were classified as "open" were numbered consecutively. Fifteen of these teachers were then selected according to numbers produced by a random number generator. Fifteen of the remaining traditional teachers were also selected in this manner.

This two part procedure for the selection of the control group was necessary in order to match the outstanding group in classifications of "open" and "traditional."

Preparation of the Score Sheet

On the perceptual score sheet, each of the perceptual dimensions was stated in the form of a semantic differential. The semantic differential developed by Osgood, and reported by Osgood, Suci and

Tannenbaum (1957) is a simple but powerful measuring device which measures the raters' attitudes toward any given subject. Briefly, it consists of a series of rating scales with opposing or bipolar adjectives at each end. These scales set up a "semantic space," a region of some unknown dimensionality and Euclidian in character. Each semantic scale is assumed to represent a straight line function that passes through the origin of this space, and a sample of such scales then represents a multi-dimensional space (Osgood, Suci, Tannenbaum, 1957, p. 25)." Remmers (1961) notes that with the semantic differential it is possible to measure the meaning of almost any subject to anyone. Primarily it was developed and used to measure the semantic meanings of given subjects for particular groups of people (Triondis, 1959).

The analysis of a semantic differential is primarily concerned with three dimensions of meaning: evaluation, potency and activity. In this study, a derivative of the semantic differential was used, which was concerned with the evaluative scale. This derivative of the semantic differential was used to measure the teachers' attitudes or perceptions as inferred by the rater. It should be remembered that the semantic differential is still a rating scale and as such is subject to the weakness of all rating scales mentioned earlier. Keeping the structure of the semantic differential then, each of the eleven perceptual criteria to be

scored was stated as a continuum which utilized a seven point scale. The scale was numbered from one to seven. In each case the perceptual organization hypothesized to be characteristic of the outstanding teacher was located to the end of the scale nearest the number 1 so that the highest rating would yield the lowest numerical score. For example, the first hypothesis concerns the teacher's perception of self. Specifically does the teacher see herself as identified or apart. The rater makes his judgment and then scores the sheet from highly identified ("1") to highly apart ("7").

In an effort to reduce the possible effects of "halo," the rating sheet was divided into two sections, "x" and "y." This division of the score sheet was accomplished by placing successive items on alternate forms. The scales were also reversed on the "y" form in order to reduce response set. When the score sheet was completed rater training began. An example of the score sheet will be found in Appendix E.

Rater Training

A basic problem in the use of inferential techniques in the conduct of research is that of demonstrating reliability and validity of inference as a research method. Reliability is somewhat less of a problem if raters take sufficient care in training

so that inter-rater reliability is high. Recent studies designed from a perceptual point of view have demonstrated high validity of perceptual inference made from observation data. For example, research by Combs and Soper (1963) yielded results which were reliable and which also gave evidence of validity in terms of concurrent and predictive criteria. Evidence cited earlier, in reference to peer rating techniques (Jenkins, 1948; Leavitt, 1947; Wherry and Fryer, 1949; Wirtz, 1958; Boulger and Coleman, 1964; and Yalom and Miles, 1972), also indicates that inferential rating techniques have high predictive validity.

A basic assumption in making inferences about others' perceptions is that it is possible for the rater to read the personal meanings which motivate the behavior. If a person's behavior is always a function of his perceptions of himself, and the world around him (Combs, 1971), then the rater must be able to infer accurately these perceptions from the behavior. In other words, he must be able to assume an internal frame of reference.

For this reason the raters for this study underwent intensive training in the technique of perceptual inference. The training was to develop and to sharpen to a high degree of reliability their ability to make judgments concerning the teacher's perceptual organization from responses to the Teaching Situations Questionnaire. There were three training sessions of approximately

four hours each. Subjects for the practice sessions were drawn from the large pool of teachers who were not classified in either the outstanding or the control groups, but who had nevertheless completed all of the questionnaires.

During the early discussions in the rater training, it was decided that the first question, "What would you say is your most important function as a teacher? Please explain." which was intended to elicit teachers' perceptions of the teaching task, would be discarded. This question was discarded because the teacher responses seemed "textbookish," and therefore difficult to rate and less likely to produce differences. With the elimination of this question, eleven perceptual organizations in two areas were left to be tested. These were:

The teachers' perceptions of self:

1. Identified rather than apart
2. Adequate rather than inadequate
3. Trustworthy rather than untrustworthy
4. Wanted rather than unwanted
5. Worthy rather than unworthy

The teachers perceptions of others:

1. Able rather than unable
2. Friendly rather than unfriendly
3. Worthy rather than unworthy
4. Internally motivated rather than externally motivated
5. Helpful rather than hindering
6. Dependable rather than undependable

During the first of these practice sessions specific criteria for rating were established. For example, the first question to be rated was: "The teacher next to you has suddenly taken quite ill and a substitute cannot be found for some time. How do you feel? What will you do? What will you expect others to do?" This question was to be rated for the teacher's perceptions of self on the following criteria: The teacher sees himself as,

1. Identified rather than Apart
2. Adequate rather than Inadequate
3. Trustworthy rather than Untrustworthy
4. Wanted rather than Unwanted
5. Worthy rather than Unworthy

It was decided that teachers would be rated very high (1) on the Identified-Apart continuum if they responded very enthusiastically. For example, "I'm always glad to help out another teacher."

The ratings would be very low (7) if the teacher refused or responded cynically, as in "Sure I'd do it if I got double pay," or "Absolutely not, I'm no substitute."

Similarly, criteria for rating each of the perceptual organizations were established. These questions, and the criteria for rating the responses follow. Examples included are for each end of the continuum. In each case, a rating of "4" represented a neutral rating.

Question 1: The teacher next to you has suddenly taken quite ill and a substitute cannot be found for some time. You are asked to take over. How do you feel? What will you do? What will you expect others to do?

CRITERIA FOR RATING QUESTION 1 - TEACHERS' PERCEPTIONS OF SELF

1

4

7

Identified

The teacher responds with great enthusiasm as in, "Always glad to help another teacher..."

Apart

The teacher refuses or responds cynically as in "Sure I'd do it if I got double pay," or "Absolutely not, I'm no substitute."

Adequate

The teacher approaches the situation as a challenge: "This would be a wonderful challenge."

Inadequate

The teacher approaches the situation as a threat, as in "I don't think anyone could do a good job."

Trustworthy

The teacher shows confidence in the outcome as in "I'm sure everything would be just fine."

Untrustworthy

The teacher shows lack of confidence in the outcome as in "What a disaster!"

Wanted

The teacher indicates that others like her as in: "No problem. Mary and I work together all the time."

Unwanted

The teacher indicates that others don't like her as in: "We have different styles of teaching. I don't think Mary would want me to take her class."

Worthy

Overall tone to response which indicates that the teacher saw herself with dignity and integrity.

Unworthy

Overall tone to response which indicates the teacher saw herself without dignity or integrity.

Question 2: You notice that a particular child in your class has begun to withdraw and become very hostile to you. He says that he does not like school anymore. His work is deteriorating. How will you feel? What will you do? Why?

CRITERIA FOR RATING QUESTION 2 - TEACHERS' PERCEPTIONS OF OTHERS

1	4	7
<p>Able The teacher puts great emphasis on the child in the solving of his problem.</p>		<p>Unable The teacher puts greatest emphasis on others in looking for solutions to problems -- doesn't even mention the child.</p>
<p>Worthy The teacher is willing to devote much time and effort to the child as indicated by listing several things she would do as in: "I'd do anything I possibly could to help him out."</p>		<p>Unworthy The teacher spends little time or wants the child removed as in "I'd send him to another class."</p>
<p>Helpful The teacher expects the child or other children to be of assistance as in "I'm sure the other children will help out."</p>		<p>Hindering The teacher sees the child as a nuisance as in "I'd be very upset if I had a child like that in my class."</p>
<p>Friendly The teacher displays her own friendly attitude toward the child as in "I'd try a little tender loving care."</p>		<p>Unfriendly The teacher indicates in some way that the child has a malicious intent.</p>
<p>Internally Motivated The teacher puts great emphasis on looking to the child for the origin of the problem.</p>		<p>Externally Motivated The teacher looks other places for the origin of the problem: home, health, etc., but does not mention the child.</p>

CRITERIA FOR RATING QUESTION 2 - TEACHERS' PERCEPTIONS OF OTHERS

1

4

7

Dependable

Indication that the teacher sees the child's behavior as normal or at least logical as in "I think things will be fine once we figure out what's bothering him."

Undependable

Indication that the teacher sees his behavior as quixotic, capricious or irrational.

Although these criteria were established for rating the teachers' responses, it is important to note that no a priori setting of criteria could possibly anticipate the range of responses represented by all of the subjects, nor would it be wise to be rigid about criteria in making perceptual inferences, since the same behavior may have different meanings to different people. For this reason, the criteria were not seen as absolute rules but as helpful cues for rating.

During the second and third training sessions, the raters rated sample questionnaires using subjects from the pool of teachers not used in the study. At the end of each session, the ratings were compared and discussed, and the criteria or cues for rating sharpened. The period of training continued until the judges varied not more than one continuum point on a minimum of 90% of their ratings, and never more than three continuum points on any item.

Rating of the Questions

The raters in this study included the author and a graduate student in the School of Education at the University of Massachusetts. Both had had experience in elementary school teaching. As stated previously each of the teachers serving as a subject in the research was given a code number by the Assistant Superintendent in the teachers' school district. After the teachers had been distributed by code number into each of the four cells of the research design (i.e., "outstanding-open," "outstanding-traditional," "control-open" and "control-traditional"), the Teaching Situations Questionnaires with these code numbers were selected out of the entire pool of Questionnaires by a third person who recoded them so that neither the writer nor the other rater had any knowledge of how a teacher was classified until all of the questionnaires had been rated. This procedure insured that the rating was absolutely "blind."

The questionnaires were then rated by each of the raters in the following manner. Each questionnaire was rated once using the "x" form of the rating sheet. When all of the questionnaires had been rated, each was again rated using the "y" form of the rating sheet. Neither rater rated for longer than two hours at a given time. The entire rating took approximately eight hours for each of the raters. In this manner, scores were obtained for each

teacher on each of the eleven perceptual organizations.

When the rating was completed, inter-rater reliability was computed for the entire sample using the Spearman Rank Coefficient. Inter-rater reliability was .83.

The individual scores for each teacher were then transferred to I.B.M. cards along with classification codes. These cards were then prepared for a "MANOVA" multivariate analysis of variance program.

The analysis of the data will be discussed in Chapter 3.

The Research Design

In order to test the hypotheses, the following research design was developed:

	Outstanding	Control
Open		
Traditional		

Figure 2. Research Design

This design was developed because it would allow for a two-way multiple analysis of variance, testing the main effects of the two main hypotheses utilizing the eleven perceptual characteristics as the dependent variable. Such a design would also allow for the testing of the third hypothesis or any other possible interactions.

MANOVA was chosen because it is a very powerful procedure yielding a single multi-variate F ratio, utilizing all available information, individual univariate F ratios for each variable for which information is included, and discriminate function coefficients which indicate in a relative sense how much each variable contributed to the final outcome represented by the multivariate F ratio. All F ratios are computed using the Wilks Lambda Criterion.

C H A P T E R I I I

RESULTS

In this chapter the following will be discussed: (a) the statistical procedure used, (b) comparisons between outstanding and control teachers, (c) comparisons between open and traditional teachers, (d) other interactions, (e) inter-rater reliability, (f) interpretation and implications for further research.

The data used in the analysis consisted of the raw scores for each of the eleven perceptual organizations for each teacher. Means and standard deviations computed were for each of these perceptual organizations or for each variable in each cell of the research design. A multiple analysis of variance or MANOVA was then performed. The means and standard deviations for each group are presented in Table 5. A graphic representation of these means is presented in Figure 3. Remembering that the lowest scores represent the most positive perceptual organizations, this Figure shows clear differences between the outstanding teachers represented by the two lower lines and the control teachers represented by the two upper lines.

Main Effect: Outstanding - Control

The MANOVA table representing this effect is presented in Table 2. With regard to the differences between the outstanding teachers and the control group, the MANOVA yielded a multivariate

TABLE 5

WITHIN CELLS MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE

		Outstanding- Open	Outstanding- Traditional	Control- Outstanding	Control- Traditional
Var. 1 Self: Identified-Apart	M	2.467	2.333	2.800	3.600
	SD	1.187	1.447	0.561	1.595
Var. 2 Self: Trustworthy-Untrustworthy	M	2.533	2.267	3.400	3.600
	SD	1.187	1.387	0.910	1.352
Var. 3 Self: Worthy-Unworthy	M	2.333	2.267	2.867	3.267
	SD	1.047	1.387	0.640	1.100
Var. 7 Self: Adequate-Inadequate	M	2.600	2.133	3.533	3.400
	SD	1.183	1.346	1.060	1.549
Var. 8 Self: Wanted-Unwanted	M	2.467	2.267	3.200	3.000
	SD	0.990	1.438	0.941	1.134
Var. 4 Other: Able-Unable	M	2.600	2.267	3.000	3.667
	SD	1.121	0.884	1.309	1.397
Var. 5 Other: Worthy-Unworthy	M	1.933	2.000	2.467	2.800
	SD	0.594	0.845	1.187	0.941

TABLE 5 (cont.)

WITHIN CELLS MEANS AND STANDARD DEVIATIONS FOR EACH VARIABLE

		Outstanding- Open	Outstanding- Traditional	Control- Outstanding	Control- Traditional
Var. 6 Other: Helpful-Unhelpful	M	2.600	2.667	3.200	3.333
	SD	0.828	0.816	1.146	1.113
Var. 9 Other: Friendly-Unfriendly	M	2.333	2.067	2.867	2.933
	SD	0.617	0.884	1.246	0.799
Var. 10 Other: Internally Motivated	M	2.733	2.533	3.067	3.667
	SD	1.003	1.125	1.438	1.397
Var. 11 Other: Dependable-Undependable	M	2.467	2.333	2.933	3.000
	SD	0.640	0.816	1.387	0.845

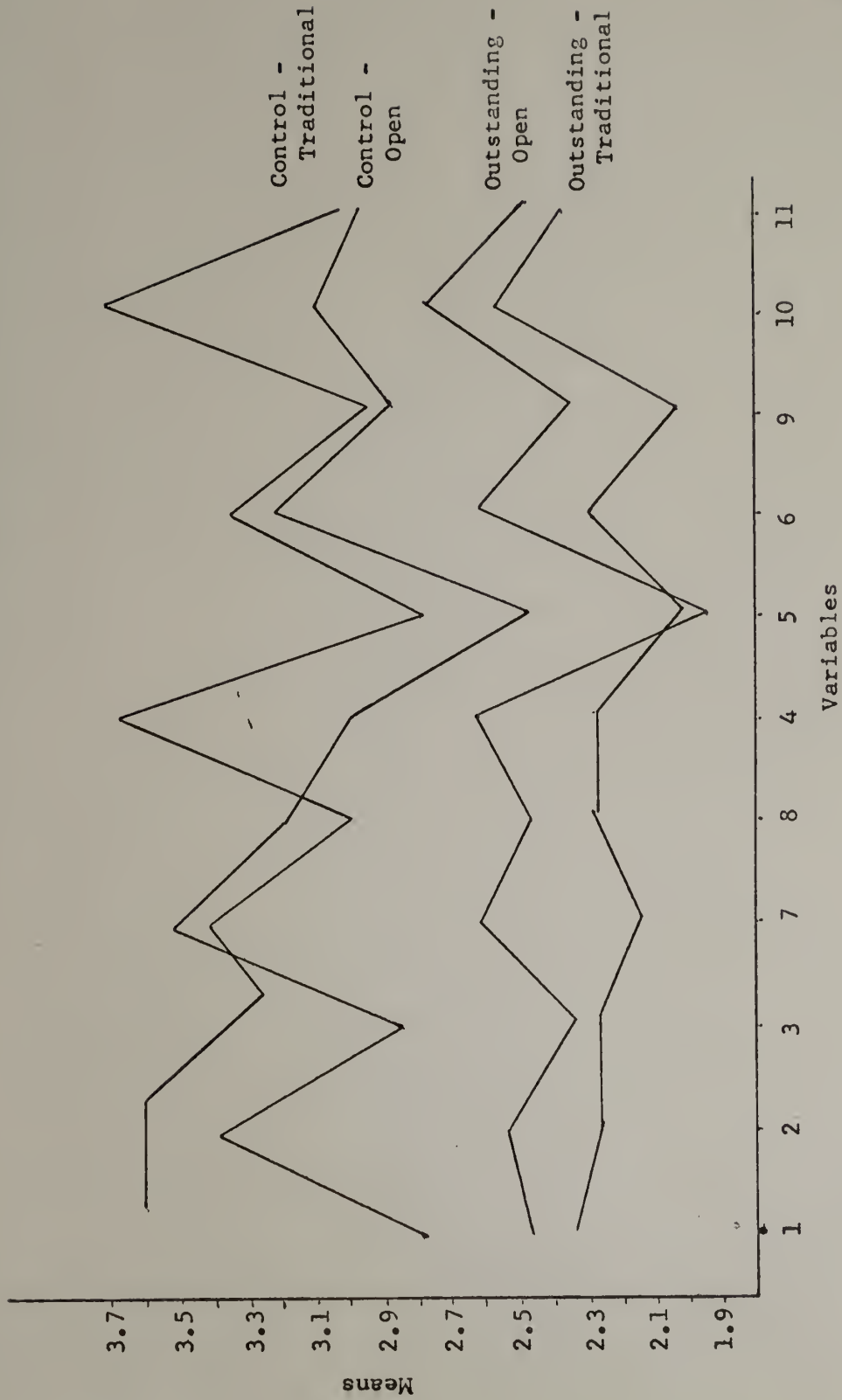


Figure 3. Within Cells Means for Each Variable

TABLE 6

MANOVA TABLE - MAIN EFFECT: OUTSTANDING - CONTROL

Item #	F Scores	Mean Sq.	P Less Than	Standardized Discriminant Function Coefficients
7 Self: Adequate	10.737	18.150	0.002	1.384
2 Self: Trustworthy	12.119	18.150	0.001	1.028
4 Others: Able	8.519	12.150	0.005	0.846
5 Others: Worthy	7.932	6.667	0.007	0.757
9 Others: Friendly	8.770	7.350	0.004	0.543
10 Others: Internally Motivated	5.079	8.067	0.028	-0.247
3 Self: Worthy	7.604	8.817	0.008	-0.320
6 Others: Helpful	6.163	6.017	0.016	-0.609
1 Self: Identified	6.036	9.600	0.017	-0.621
11 Others: Dependable	5.187	4.817	0.027	-0.626
8 Self: Wanted	6.182	8.067	0.016	-1.007
Multivariate Test	2.620		0.011	

F ratio of 2.620, significant beyond the .01 level of confidence. This F ratio was computed by using all of the available data from all eleven variables. Individual univariate F ratios ranged from a low of 5.079, significant beyond the .027 level of confidence for the variable testing the teachers' perception of others along the Internally Motivated-Externally Motivated continuum, to a high of 12.229, significant beyond the .001 level of confidence for the variable testing the teachers' perception of self along the Trustworthy-Untrustworthy continuum.

In other words, the group of teachers classified as outstanding by their peers were significantly more positive in their perceptions of both themselves and others than were the randomly selected teachers. This was true for all eleven variables for which inferences were made.

An examination of the discriminant function analysis reveals which variables contributed most and which contributed least to this overall finding. It must be emphasized however that all variables contributed in a positive way to the overall finding, as all univariate F's were significant. The variable which contributed most was the item which tested the teachers' perception of self along the Adequate-Inadequate continuum. The variable which contributed least was the item which tested teachers' perceptions of self along the Wanted-Unwanted continuum. In other words, the out-

standing teachers were most different from their peers with regard to their own feelings of adequacy and least different with regard to their feelings of being wanted. Although the outstanding teachers were least different from their peers relative to the Wanted-Unwanted continuum, they were still significantly different.

These findings are clear support for Combs' hypothesis that successful practitioners in the helping professions are characterized by generally positive perceptual organizations concerning themselves and others.

Main Effect: Open - Traditional

The MANOVA table for this effect is presented in Table 7. The multivariate F test testing for differences between open and traditional teachers failed to produce any significant differences. This was true for the multivariate F ratio which utilized all available data as well as for each of the univariate F ratios testing for differences on each of the eleven variables for which inferences were gathered. This failure to find differences between open and traditional teachers tends to support Combs' hypothesis that successful practice in the helping professions is not highly related to technique or methodology.

Interactions

The MANOVA table representing interactions is presented in

TABLE 7

MANOVA TABLE - MAIN EFFECT: OPEN - TRADITIONAL

Item #	F Scores	Mean Sq.	P Less Than	Standardized Discriminant Function Coefficients
1 Self: Identified	1.048	1.667	0.310	1.931
2 Self: Trustworthy	0.011	0.017	0.916	0.635
3 Self: Worthy	0.359	0.417	0.551	-0.184
4 Others: Able	0.292	0.417	0.591	0.367
5 Others: Worthy	0.714	0.600	0.402	0.171
6 Others: Helpful	0.154	0.150	0.697	-0.392
7 Self: Adequate	0.799	1.350	0.375	-2.066
8 Self: Wanted	0.460	0.600	0.500	-0.074
9 Others: Friendly	0.179	0.150	0.674	-0.725
10 Others: Internally Motivated	0.378	0.600	0.541	0.346
11 Others: Dependable	0.018	0.017	0.894	0.019
Multivariate Test	1.447		0.185	

Table 8. The third question which this study intended to deal with was whether or not there were differences in perceptual organizations between open and traditional teachers in the control group. The multivariate F test, testing for interactions failed to produce any significant differences. This was also true for each of the eleven univariate F tests. In other words, "open" and "traditional" teachers in the control group were not significantly different from each other with regard to the eleven perceptual organizations for which inferences were collected.

Inter-rater Reliability

The Pearson Product Moment Correlation Coefficient for reliability was .83. This coefficient was computed using the scores from both raters for each of the subjects.

Interpretation and Implications

The differences between "outstanding" and "control" teachers were consistently so significant as to surprise this investigator. There are a number of possible explanations for the degree of differences.

The first is related to the selection of outstanding teachers by peer nomination rather than by supervisory nomination, the case with the preceding studies. It is highly likely that those teachers who maintain such positive perceptions of themselves and others

TABLE 8

MANOVA TABLE - INTERACTIONS

Item #	F Scores	Mean Sq.	P Less Than	Standardized Discriminant Function Coefficients
1 Self: Identified	2.054	3.267	0.157	1.478
2 Self: Trustworthy	0.545	0.817	0.463	1.030
3 Self: Worthy	0.704	0.817	0.405	-0.691
4 Others: Able	2.629	3.750	0.111	1.175
5 Others: Worthy	0.317	0.267	0.575	0.260
6 Others: Helpful	0.017	0.017	0.897	-1.234
7 Self: Adequate	0.246	0.417	0.622	-0.330
8 Self: Wanted	0.000	0.000	1.000	-1.041
9 Others: Friendly	0.497	0.417	0.484	-0.149
10 Others: Internally Motivated	1.511	2.400	0.224	0.383
11 Others: Dependable	0.162	0.150	0.689	-0.263
Multivariate Test	1.370		0.219	

would relate very well to their peers and therefore be more likely nominated. In light of this explanation, a comparison was made between the peer nominations and the supervisory nominations which were collected but not used. This comparison showed that there were 13 teachers nominated by a minimum of two out of three supervisors who did not meet the criteria of 60% peer nomination. In other words, if supervisory nominations had been used in place of peer nominations, the sample of outstanding teachers would have been different. This finding indicates that further research needs to be carried out which compares teachers nominated by their peers to teachers nominated by supervisors. It is highly possible that supervisors judge teacher effectiveness by very different criteria than teachers do.

Another explanation is that although the scoring sheet was divided into two forms in order to reduce response set, this phenomenon was not entirely avoided.

An examination of the scoring sheet (Appendix E) shows that two variables for the first question and three variables for the second question were rated at one time using form "x" of the rating sheet. On form "y", three variables from the first question, and three variables from the second question were rated. The fact that each variable was not rated completely independently could certainly have affected the strength of the findings but

not their direction. In future research of a similar nature, separate rating sheets should be used for each variable to be rated in order to insure absolute independence.

As previously mentioned, Gooding compared effective teachers with ineffective teachers without regard to the vast range of teachers in the middle ground who are neither effective nor ineffective. Thus the reader was left to wonder if these perceptual characteristics were uniquely related to effectiveness in teaching or whether they were related to all but ineffective teaching. Clearly, if they were related to all but ineffective teaching, these perceptual habits could not be considered as critical factors in teacher effectiveness.

This study then, by comparing outstanding teachers with randomly selected teachers, shows these characteristics to be more uniquely related to outstanding teaching. Therefore they can be viewed with more confidence as critical factors or important contributors to effectiveness in teaching.

Similarly, this study strengthens the theory that in teaching as well as in psycho-therapy, there is a kind of good basic human interrelationship toward which successful practitioners tend to drift no matter what their original methodological training. Although one would assume that the teachers in Gooding's study represented a range of teaching styles, no systematic effort was

made to control for method. The results of the present study, which systematically compared "open" and "traditional" teachers tends to show that there were no differences between them with regard to the perceptual characteristics measured. This was true within both the "outstanding" group and the "control" group. In other words, in teaching as well as in psycho-therapy it would seem that successful practitioners from differing methodological backgrounds are more similar to each other in terms of the perceptual characteristics measured than they are to less successful practitioners from the same methodology.

Implications for Further Research

These findings bear certain implications for future research on teacher effectiveness and for those whose goal has been the identification and development of effective educators. This study was successful precisely because it proceeded carefully from the theoretical ground work laid out by Combs, and tested by Combs, et al. (1969). This success and the reason for it suggest two things for future research.

First, it suggests that Getzel and Jackson's advice that research on teacher effectiveness be carried out from the vantage point of a theoretical framework can be successfully heeded. Secondly, it suggests that the theoretical framework of perceptual psychology as interpreted by Combs may be of particular helpful-

ness in developing further research on teacher effectiveness. Certainly, this study and its predecessors do much to validate perceptual theory and in particular the "self as instrument" concept as a useful tool. Perceptual theory in return has been of significant value in helping to illuminate and partially define the successful teacher. Certainly, the consistency of these findings with earlier work calls for more intense and varied research into teachers' perceptual fields.

If the "self as instrument" concept of professional helpers is to be expanded, different aspects of the helper's self must be studied and refined. For teaching, there may be certain aspects of self which are crucial. Since a person's self is partially defined by his perceptions and since his perceptions are also partially defined by self, different areas of perception should be studied. For example, how do successful teachers perceive their own likely future? Their students' likely future? How do they perceive their past? Their students' past? Their own ethnicity? Their students' ethnicity? Their socio-economic status? Their students' socio-economic status? Their sex? Their students' sex? How do less successful teachers view all of these? Perceptions or strong beliefs in these areas may well represent core areas of teachers' selves which may influence their effectiveness.

This study compared teachers' perceptual habits on the basis of their effectiveness as rated by peers. Certainly there are other

criteria against which to measure teachers' perceptions. One of the most important of these must naturally be student outcomes, or learning. Certainly, no area of studies on teacher effectiveness can ignore these crucial criteria for long.

Specific questions suggested for further study are: How are teachers' perceptions related to student learning? How are teachers' perceptions of self, task, and others related to students' perceptions of self, task and others? How are teachers' perceptions of self, task, and others related to overall classroom climate? to school climate? to the amount of administrative and peer support they receive?

Implications for Teacher Education

These findings if replicated and supported by further research should have serious implications for teacher educators. Colleges of education have long sought ways to identify and to facilitate the development of effective educational personnel. Whatever is found to be characteristic of effective teachers therefore must suggest new goals for the training of teachers both pre-service and in-service.

The outstanding teachers in this study were characterized by significantly more positive attitudes towards themselves and others. They tended to see themselves as adequate, capable people of dignity and worth who are identified with and liked by others. They

tended to see others as friendly, well intentioned individuals with dignity and integrity, who are basically capable and enhancing to self.

The results of this study, which indicate that these characteristics were so strongly identified with outstanding teachers, certainly suggest that teacher candidates with similar views should be sought. Perhaps admissions offices and interviewers for teachers' colleges could develop screening devices which would help select those individuals most like the outstanding teachers in this study.

If such characteristic ways of perceiving are indeed important in teaching effectiveness, then teacher training institutions will need to develop curricula and ways of dealing with students in such a way as to foster the growth of these attitudes. Certainly, if prospective teachers are to feel capable, worthy, identified, trustworthy and likeable, they must be treated as such. They must be given opportunity and guidance and provided with success experiences which will help them in developing positive attitudes towards themselves. They must be provided with rich opportunities to interact with students in friendly co-operative atmospheres. They must be acquainted with current scientific findings and given exposure to diverse and varying points of view.

They should be acquainted with the basic tenets of perceptual

theory and given the opportunity to investigate problems in education from differing frameworks, and they should be encouraged to develop their own best ways for dealing with them.

Since this research also indicates that effectiveness is less highly related to method than to perception, prospective teachers should be encouraged to adapt and restructure methods and skills in teaching to their own style.

Implications for Supervision

The findings of this research are particularly applicable to supervision and in-service training of teachers. Supervisory and administrative personnel must strive to create the kind of environment which will foster attitudes similar to those characteristic of outstanding teachers. They must certainly begin by treating both teachers and students alike, with dignity and respect. They should strive to understand and to judge teachers' behavior from the teachers' own internal frame of reference rather than from external criteria or teaching "standards."

There is much in contemporary literature which indicates that students should be treated with consideration and respect for their own learning style. Certainly, the results of this research indicate that teachers should be given the same consideration and respect for their teaching styles.

C H A P T E R I V

SUMMARY AND LIMITATIONS

The search for critical variables contributing to teacher effectiveness has long been a legitimate goal of educational research. While much effort has been devoted to this goal, the bulk of the findings have been inconclusive.

Research on effective teaching has suffered in part from the lack of a strong theoretical framework. Thus, when research undertaken from the theoretical framework of perceptual psychology began to produce evidence that effective counseling was more highly related to the counselor's ways of perceiving himself, his client and his task than to his methods or techniques (Fiedler, 1950), a new approach was suggested for the investigation of teacher effectiveness.

Consequently, in 1964 Gooding undertook a study proceeding from the theoretical framework of perceptual psychology which determined that ineffective and effective teachers could be distinguished on the basis of characteristic perceptual organizations.

The present research, which remains within the framework of perceptual psychology, sought to strengthen Gooding's findings by determining whether outstanding teachers could be distinguished from randomly selected teachers on the basis of characteristic perceptual organizations. It also sought to determine whether

there were differences in perceptual organization between teachers who espouse differing methods and techniques in teaching. "Open" and "traditional" teachers were selected for this purpose.

Beginning with the basic hypothesis that outstanding teachers would have characteristic perceptions of themselves and others, regardless of their methodologies or techniques, a group of eleven perceptual dimensions expressed as continua were established. These continua were expressed by bipolar adjectives as follows:

Teachers' Perceptions of Self:

Identified Apart
 Adequate Inadequate
 Trustworthy Untrustworthy
 Wanted Unwanted
 Worthy Unworthy

Teachers' Perceptions of Others:

Able Unable
 Worthy Unworthy
 Helpful Hindering
 Friendly Unfriendly
 Internally Motivated Externally Motivated
 Dependable Undependable

In each case it was hypothesized that the outstanding teacher would be characterized by the adjective to the left. These continua were used to rate teachers' reactions to critical incidents in teaching by two raters who were given intensive training in making perceptual inferences.

Four groups of teachers were involved in the research. These groups included "outstanding-open," "outstanding-traditional," "control-open" and "control-traditional." Control teachers were selected at random.

Perceptual inferences were then made by the raters for each of the eleven perceptual dimensions on the basis of each teacher's responses to a critical incidents questionnaire. This questionnaire consisted of three questions which requested the teachers' response to situations which could possibly arise in their schools. Responses to two of these questions were used in the analysis.

The ratings of the subjects' perceptual organizations on the series of eleven perceptual continua as inferred by the raters, were then subjected to a multiple analysis of variance.

The results showed that there were no differences between "open" and "traditional" teachers on the perceptual variables measured, but that outstanding teachers had significantly more positive perceptions than control teachers. This was true for all eleven variables regardless of whether they were "open" or "traditional."

Limitations

The reader is cautioned that the results reported are limited in two general areas: limitations due to the sample, and limitations due to methodology.

Limitations Due to the Sample

The sample of teachers included in this study were female teachers in grades K-4 only. It is perfectly possible that those perceptual organizations found to be characteristic of these outstanding teachers could be different from those needed by male teachers or teachers who work with older children.

Caution must also be exercised in generalizing the results beyond the demographic description of the sample. The school district which supplied the sample is an economically depressed lower middle class city of 150,000 people. In 1970 over 70% of all mothers with school-aged children worked to help support their families. It is possible that teachers in suburban or rural areas are quite different from teachers who live and work in a city similar to the one described above.

A further limitation is the sample size. While 60 teachers represented a sample large enough for statistical significance, it is certainly necessary for this research to be replicated with larger groups of teachers.

Limitations Due to Methodology

There are three major methodological limitations of this study. First there is a possible confounding between the perceptual organizations tested and the selection of outstanding teachers by peer nomination. It is quite likely that teachers who have essen-

tially positive views of themselves and others will relate well to others and therefore be more likely nominated. Although there was substantial reason for using peer nominations as discussed in Chapter II, this possible confounding remains a limitation of the present study.

Another limitation is due to the fact that each of the eleven variables was not rated absolutely independently. As mentioned previously, studies of a similar nature should utilize separate rating sheets for each variable tested.

A third methodological limitation of this study is that it included two high inference rating techniques. The outstanding teachers were selected by peer nomination, without any sort of criteria for effectiveness. While this was a necessary procedure in order to maintain the independence of the "outstanding" classification, there is a clear need for research which takes into account specific criteria for effectiveness such as student learning.

The teachers' perceptual organizations were arrived at by rater inference. While this study and those which preceded it have demonstrated that perceptual inference can be a highly reliable research tool, there is a need for more studies which will demonstrate its validity.

Although this study supports the earlier work of Combs, et al. (1969) and thereby supports his general hypothesis that effec-

tiveness in teaching is related to the teacher's characteristic perceptual organizations, these findings must be replicated by further studies with the necessary methodological corrections before any strong implications can be suggested.

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APPENDIX A: TEACHER LETTER

Dear Teacher,

A research team from the School of Education at the University of Massachusetts is engaged in a very important research project on the nature of effective teaching. This study is of such importance that the New Bedford Public School administration has agreed to permit the University to carry it out in your schools.

The researchers are all members of the Teacher Preparation Program Council (T.P.P.C.) at the University of Massachusetts which last year won the gold medal among teacher preparation programs from the American Association of Colleges of Teacher Education. In order to constantly improve our work in teacher preparation, we must continue to do research on effective teaching. For this we need the help of all regular K-4 classroom teachers in New Bedford.

We realize that you are busy, harried people with a big job to do. For this reason, we have designed the research to take as little of your time as possible. Specifically, we ask you to complete three questionnaires which should take no more than 40-50 minutes of your time:

1. Complete a checklist questionnaire designed to supply data about the ways in which you go about your job (15 minutes)
2. Write descriptions of your reactions to three possible teaching situations (5-10 minutes each)
3. Complete a checklist for nominating outstanding teachers (5 minutes)

All data collected from this research will be handled with the strictest of confidence. In order to insure absolute anonymity, Dr. Mahon has agreed to supply you with a list of code numbers to be used instead of your names on the questionnaires. Please look up your name on the code list and put your code number instead of your name in the space provided on the return questionnaires. The research team does not have your names, and Dr. Mahon will not see the coded data. This procedure guarantees your privacy. The data is to be used for research purposes only. We believe it is absolutely essential that the strictest of confidence be maintained, and we would rather give up the research than break this trust.

When you have completed the questionnaires, please seal them in the enclosed envelope and return them to Dr. Mahon who will mail them directly to the research team. Data will be handled by code number only. No school name, city name or county name will ever be used. No teacher or school official will ever see the data. No report of any kind will ever be made to any school official.

We realize that this is an unusual request, but we hope that you will understand that research on teaching cannot be undertaken without the co-operation and support of teachers. We also hope that you will derive some measure of personal pleasure and satisfaction from knowing that you have made a contribution to important professional research.

Sincerely,



Dr. Robert J. Miltz
Associate Director
Teacher Preparation Program
Council
University of Massachusetts

APPENDIX B: TEACHER QUESTIONNAIRE

Your Teacher Code Number _____

QUESTIONNAIRE

Instructions: For each of the following statements, circle the number which most closely expresses your estimate of the extent to which the statement is true of your own classroom. If the statement is absolutely not the case, circle "1"; if it is very minimally true, choose "2". If the statement generally describes your classroom choose "3"; if it is absolutely true choose "4."

	strongly disagree	disagree	agree	strong agree
1. Texts and materials are supplied in class sets so that all children may have their own.	1	2	3	4
2. Each child has a space for his personal storage and the major part of the classroom is organized for common use.	1	2	3	4
3. Materials are kept out of the way until they are distributed or used under my direction	1	2	3	4
4. Many different activities go on simultaneously.	1	2	3	4
5. Children are expected to do their own work without getting help from other children	1	2	3	4
6. Manipulative materials are supplied in great diversity and range, with little replication.	1	2	3	4
7. The day is divided into large blocks of time within which children, with my help, determine their own routine.	1	2	3	4
8. Children work individually and in small groups at various activities.	1	2	3	4
9. Books are supplied in diversity and profusion (including reference books, children's literature).	1	2	3	4
10. Children are not supposed to move about the room without asking permission.	1	2	3	4
11. Desks are arranged so that every child can see the blackboard or teacher from his desk.	1	2	3	4

	strongly agree	disagree	agree	strong agree
12. The environment includes materials I have developed.	1	2	3	4
13. Common environmental materials are provided.	1	2	3	4
14. Children may voluntarily use other areas of the building and schoolyard as part of their school time.	1	2	3	4
15. Our program includes use of the neighborhood.	1	2	3	4
16. Children use "books" written by their classmates as part of their reading and reference materials.	1	2	3	4
17. I prefer that children not talk when they are supposed to be working.	1	2	3	4
18. Children voluntarily group and regroup themselves.	1	2	3	4
19. The environment includes materials developed or supplied by the children.	1	2	3	4
20. I plan and schedule the children's activities through the day.	1	2	3	4
21. I make sure children use materials only as instructed.	1	2	3	4
22. Children work directly with manipulative materials.	1	2	3	4
23. Materials are readily accessible to children.	1	2	3	4
24. I promote a purposeful atmosphere by expecting and enabling children to use time productively and to value their work and learning.	1	2	3	4
25. I use test results to group children in reading and/or math.	1	2	3	4
26. Children expect me to correct all their work.	1	2	3	4
27. I base my instruction on each individual child and his interaction with materials and equipment.	1	2	3	4

	strongly disagree	disagree	agree	strong agree
28. I give children tests to find out what they know.	1	2	3	4
29. The emotional climate is warm and accepting.	1	2	3	4
30. The work children do is divided into subject matter areas.	1	2	3	4
31. My lessons and assignments are given to the class as a whole.	1	2	3	4
32. To obtain diagnostic information, I observe the specific work or concern of a child closely and ask immediate, experience-based questions.	1	2	3	4
33. I base my instruction on curriculum guides or the text books for the grade level I teach.	1	2	3	4
34. I have children for just one year.	1	2	3	4
35. Children's activities, products and ideas are reflected abundantly about the classroom.	1	2	3	4
36. Before suggesting any extension or re-direction of activity, I give diagnostic attention to the particular child and his particular activity.	1	2	3	4
37. The children spontaneously look at and discuss each other's work.	1	2	3	4
38. I use tests to evaluate children and rate them in comparison to their peers.	1	2	3	4
39. I try to keep all children within my sight so that I can be sure they are doing what they are supposed to do.	1	2	3	4
40. I have helpful colleagues with whom I discuss teaching ideas.	1	2	3	4
41. Evaluation provides information to guide my instruction and provisioning for the classroom.	1	2	3	4
42. Academic achievement is my top priority for the children.	1	2	3	4
43. Children are deeply involved in what they are doing through the day.	1	2	3	4

Your Teacher Code Number _____

Present Position: permanent _____
providional _____
temporary _____

Age: 20-25 _____	41-50 _____
26-30 _____	51-60 _____
31-40 _____	over 60 _____

Education: (check all applicable)

Normal school degree _____

Bachelor's degree _____

Masters degree _____

Other (specify) _____

APPENDIX C

TEACHING SITUATIONS QUESTIONNAIRE

Directions: Please write your responses to the following three questions. The first one is about teaching in general. The last two are about possible teaching situations. If you need more space, use the back of the sheet. Please write at least three or four sentences.

1. What would you say is your most important function as a teacher? Please explain.

2. The teacher next to you has suddenly taken quite ill and a substitute cannot be found for sometime. You are asked to take over. How do you feel? What will you do? What will you expect others to do?

3. You notice that a particular child in your class has begun to withdraw and become very hostile to you. He says that he does not like school anymore. His work is deteriorating. How will you feel? What will you do? Why?

APPENDIX E: RATING FORMS

Form X

Rater _____ Code# _____

Question #2 Perceptions of Self

Inadequate	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	Adequate
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Unwanted	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	Wanted
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Question #3 Perceptions of Others

Unfriendly	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	Friendly
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Externally Motiv.	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	Externally
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Undependable	<u>7</u>	<u>6</u>	<u>5</u>	<u>4</u>	<u>3</u>	<u>2</u>	<u>1</u>	Dependable
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APPENDIX E: RATING FORMS

Form YRater Code # Question #2 Perceptions of Self

Identified	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Apart
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Trustworthy	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Untrustworthy
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Worthy	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Unworthy
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Question #3 Perceptions of Others

Able	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Unable
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Worthy	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Unworthy
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Helpful	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	<u>6</u>	<u>7</u>	Hindering
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