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CONSULTATION EFFECTIVENESS OF SCHOOL
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The Ohio State University, Ph.D., 1974
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LEADER BEHAVIOR, LOCUS OF CONTROL AND CONSULTATION
EFFECTIVENESS OF SCHOOL PSYCHOLOGISTS

DISSERTATION
Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Philosophy in the Graduate School of The Ohio State University

By
Larry Hugh Rider, B.A., M.S.

The Ohio State University
1974

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Major Field: School Psychology

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CHAPTER I
INTRODUCTION

Consultation is a problem solving method employed with varying degrees of success by school psychologists evidencing different leader behaviors. In the people-helping professions, consultation models have at least two characteristics: 1) a person or persons with a perceived work problem concerning a client, 2) another person or persons who is perceived to have the competency and concern to deal with the problem and who is perceived as having a helping influence on the first person. Moreover, the first person has the freedom to accept or reject the help and influence of the second person.

School psychologists employ various types of consultation models. Client-centered consultation is the most frequently used model (Fine and Tyler, 1971; Hummell and Bonham, 1968). Client-centered consultation may be viewed as a product of the child study model of school psychology (Farling, 1968; Abidin, 1971) and of Caplan's client-centered mental health consultation model (Caplan, 1970). The client-centered consultation model focuses the discussion between the school psychologist and teacher
on the child's problems, for purposes of 1) diagnosis, 2) selecting and implementing intervention strategies, and 3) follow-up.

The chances of client-centered consultation progressing through the above three phases effectively may well be increased if the consultant and consultee share similar role expectancies. The role of the consultant and the consultee's perception of that role is effected by the orientation of both parties to the consultation process (Robbins and Spencer, 1968). If the consultee is expecting the consultant to be very directive and task oriented in both solving the problem presented by the client and in outlining the content of the procedures to follow in implementing a plan of action, the consultee may be dissatisfied if the consultant takes an indirect approach and expects the consultee to be actively involved in both the problem solving and the procedural phases of the consultation. If the role expectancies are reversed and the consultee expects the consultant to involve her in the problem solving and procedural implementation, but the consultant is directive in resolving the problem, then dissatisfaction also may occur. In any case, when the role expectancies of both parties are not mutual, the chances of dissatisfaction by both parties may be increased (Robbins and Spencer, 1965; Mannino, 1968). The dissatisfaction that results could prompt the consultee to reject
The help and influence of the consultant.

The Problem

Different role expectations between the school psychologist and teacher is one psychological construct which determines if the teacher will accept or reject the help and influence of the school psychologist. On related factor which could determine how the teacher reacts to the consultation is the manner by which the school psychologist attempts to influence the instructional attitudes and practices of the teacher (Abidin, 1971). A second factor, also related to role expectations, is the manner in which the school psychologist attempts to structure the working relationship between himself and the teacher, in order to efficiently accomplish the tasks necessary to solve the problem and complete the consultation (Meyers, 1973). A third factor, also related to role expectation, is the manner by which the school psychologist conveys to the teacher his respect for her as a person and as a professional and his willingness to share with the teacher the responsibility and decision making involved in resolving the problem (Caplan, 1970; Meyers, 1973). Doubtlessly, other factors than the three listed above also may be involved in the role expectations which school psychologists and teachers hold for each other during consultation. Furthermore, factors other than role expectancy listed above are
involved when a teacher decides to accept or reject the help and influence of the school psychologist. However, the present study is concerned only with the three factors discussed above.

It should be stressed that the three factors were chosen because the literature on consultation by school psychologists indicates that the three factors are probably related to why a teacher accepts or rejects consultation (Abidin, 1971; Pine and Tyler, 1971; Meyers, 1973). Research in the area does not indicate that other factors should not be considered.

The three factors were operationalized in order to investigate the effects of the factors upon teacher acceptance and rejection of consultation. The three measurable constructs which operationalize the three factors are:

1. Locus of Control, as measured by the Internal-External Control Scale (Rotter, 1966). Individuals with internal locus of control were able to influence the expressed attitudes of external female college students more than were externally controlled "influencers" (Phares, 1965).

2. Initiating Structure, as measured by the Leader Behavior Description Questionnaire (LEDQ) (Hal- pin and Coons, 1957). "Initiating Structure refers to the leader's behavior in delineating
the relationship between himself and members of the work group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure" (Halpin, 1966, p. 86).

3. Consideration, as measured by the LBDQ. "Consideration refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and members of his staff" (Halpin, 1966, p. 86).

The degree of acceptance or rejection of the help and influence of the school psychologist by the teacher was operationalized by the Consultation Evaluation Form - R (CEF-R). The CEF-R is a modified version of the CEF (Mannino, 1968). The CEF was expanded into the CEF-R by the investigator for the present study. The CEF-R measures the degree to which the teacher perceives that certain tasks were accomplished during consultation; the degree of utility of the solution reached; and the degree to which the school psychologist influenced the teacher's attitudes and thinking. For the remainder of this report, consultation effectiveness shall refer to the degree of acceptance or rejection of the help and influence of school psychologists by teachers, as measured by the CEF-R. The acceptance or rejection by the consultee (in this case elementary teachers) of the process and outcome of consultation is one
level of consultation effectiveness. Consultee acceptance is perhaps the most frequently used criterion of consultation effectiveness (Mannino and Shore, 1970). Thus, the problem under investigation is consultation effectiveness and the effect of the locus of control and leader behavior of school psychologists upon it.

Rationale for the Study

Leader Behavior

Studies in leader behavior have consistently identified two general leader dimensions which effect various group outcomes: 1) concern for group maintenance through healthy interpersonal and intragroup relations (hereafter called Consideration), and 2) concern for getting the job done or solving the problem (hereafter called Initiating Structure). The literature suggests that the two dimensions are mutually exclusive, but that both are needed in varying degrees depending on the situation, for effective leadership and group problem solving. When the leader is high in one dimension, but low on the other, the group is not as effective as when the leader is high on both. In other words, being both a direct and indirect leader is needed, depending on the situation (Sergiovanni and Starratt, 1971).

The LBDQ is usually analyzed by placing the individual scores into one of four quadrants. Quadrant #1 is for scores above the median on both Initiating Structure and Con-
sideration. Quadrant #2 is for scores above the median on Initiating Structure, but below the median on Consideration. Quadrant #3 is for scores below the median for both dimensions. Quadrant #4 is for scores above the median on Consideration, but below the median for Initiating Structure. Research in education with the LEDQ has indicated that leaders with scores in Quadrant #1 are the most effective.

The role of leader behavior in the consultation process is not clear for at least two reasons. The first reason is that consultation is a collegial relationship and neither party has an ascribed leader role. However, work in small group dynamics suggest that when an individual is the most helpful member of a group in enabling the group to meet its goal, that member attains the role of leader and is so perceived by the other members in the group (Shaw, 1971). Furthermore, since the person asking for help (the teacher), usually allows the helper (the school psychologist) to direct the flow of discussion and decision making (Robbins and Spencer, 1968), it may be assumed that the psychologist assumes a leader role.

The second reason is related to the first. Research instruments which measure the dimension of leader behavior have typically been utilized in situations in which the leader position is clearly established and the other group members are responsible to the leader or supervisor. Such instruments have not been utilized to investi-
gate the role of leader behavior in collegial relationships, such as consultation. However, before the present study was proposed, it was determined that consultation between a school psychologist and an elementary teacher concerning the resolution of problems presented by a child, for whom the teacher is instructionally responsible, is considered an appropriate situation for investigation with the LBDQ. The rationale for this decision was that the LBDQ should measure the two dimensions of leader behavior in both formal and informal leader situations (Stogdill, 1974). In fact, part of the motivation for the present study was to compare descriptions of leaders in education with ascribed leadership roles.

When discussing the development of the LBDQ and its application in organizations, Halpin observed:

Our concept of leader behavior sidesteps a few important issues. It limits us, for instance, to dealing with formal organizations, and focuses attention exclusively upon the 'head men' within these organizations. Furthermore, the whole question of the distribution of leadership acts among members of the group is avoided. Nor are our formulations readily adaptable to certain aspects of leadership phenomena that can be observed within informal community groups. Our only defense of such limitations is that we have had to start somewhere. We chose to start with the officially designated leaders of formal organizations. This was an heuristic decision. As more information is gathered and as we gradually begin to build a systematic conceptual framework within which additional hypotheses about leader behavior can be tested, we shall undoubtedly test these hypotheses in informal as well as formal organizations, and with group members other than those officially designated as leaders. The fact that we have not explored these other leadership phenomena implies no skepticism of their importance but is
simply an admission that we have not yet found the
time and the opportunity (and the funds) to investi-
gate these equally challenging areas (Halpin, 1966,
p. 85-86).

The decision to investigate an informal leader situation
with the LEDQ, such as consultation, is also an heuristic
decision.

Locus of Control

Locus of Control research has indicated that individ-
uals with "internal control" personalities are more con-
fident and innovative than "external control" personalities
(Rotter, 1966; 1972). Research concerning the role of
locus of control and attitude change has produced evidence
that internally controlled individuals or "influencers"
were able to induce greater changes in expressed attitudes
concerning aspects of college life with "external" female
college students than were externally controlled "influ-
encers" (Phares, 1965 in Rotter, 1972).

It has been suggested that in many cases, school
psychologist-teacher consultation is affected by the abil-
ity of the school psychologist to influence the teacher's
attitudes and beliefs concerning the problem behavior of
Furthermore, it has been suggested that the long term suc-
cess of an instructional strategy resulting from consulta-
tion is effected by the attitudes held by the teacher to-
ward the strategy (Abidin, 1971). Therefore, since the
ability to influence the attitudes of teachers is considered necessary for effective consultation by school psychologists, the research by Phares indicates that "internal" school psychologists may influence teacher attitude more than "external" school psychologists and consequently be more effective consultants with teachers.

Significance of the Study

At the present time, school psychologists are attempting to aid teachers in meeting the demands of classroom teaching. One of the main responsibilities of school psychologists is to aid teachers in individualizing instruction for children who do not learn up to their potential through group instruction. The technology and instructional methods which have been developed to aid in individualizing instruction can be time consuming and foreign to the value system of the teacher. Therefore, consultation has been utilized by school psychologists, in an attempt to work with teachers in formulating intervention strategies, which teachers feel are appropriate for both themselves and their students. Currently, when this process breaks down, the involved parties can usually determine if a proper, functional diagnosis of the problem was made. A determination of the usefulness of the intervention strategy can usually be made. Other factors, such as changes in the physical, emotional, or sociological functioning of
the child can be examined to determine what role they may have played in causing the child's lack of progress. Also, the teacher's behavior can be observed and analyzed through the use of classroom interaction analysis systems, to determine what role the teacher may have played. However, at present, about all that can be examined of the school psychologist's role is whether a proper diagnosis was made. There is no systematic method of examining how school psychologists work with teachers in transforming diagnostic information into functional interventions, which the teacher can use. The present study is an attempt to determine the role of locus of control and leader behavior in examining how school psychologists work with teachers during the problem solving process, called consultation.

Concurrent Studies

Currently, three other doctoral studies are being conducted in the area of consultation by school psychologists, by three school psychology doctoral students at the Ohio State University. Their purpose is to identify factors which describe the practices and procedures of school psychologist-teacher consultation. Two of the studies are utilizing the critical incidence interview as the method of gathering data from school psychologists, in order to identify the factors involved in consultation. The third study is utilizing a modified Delphi technique to gather
information concerning the process and techniques of consultation by school psychologists. Hopefully, the findings of the four dissertations can serve as a partial foundation of a uniform set of constructs which describe the practices and procedures of school psychologist-teacher consultation. The constructs could then provide the basis for an observational system, which would serve as a research tool for increasing understanding of the consultation process.

Needed Studies

In a review of studies with the LBDQ, Korman (1966) indicated the need for studies which do more than correlate the LDEQ with a dependent variable. He suggested a need for predictive studies with the LBDQ.

The locus of control study by Phares (1965) was conducted under laboratory conditions. There exists a need to determine if internal influencers can change the expressed attitudes of individuals more than external influencers, in a practical setting.

With these needs in mind, a study was designed which would:

1. Determine the effect of Initiating Structure behaviors upon school psychologists' consultation effectiveness.

2. Determine the effect of Consideration behavior
upon school psychologists' consultation effectiveness.

3. Determine the effect of school psychologists' Locus of Control upon consultation effectiveness.

4. Determine the role of leader behavior by school psychologists in predicting consultation effectiveness.

5. Determine the role of Locus of Control of school psychologists in predicting consultation effectiveness.

Hypotheses

1. Consultation effectiveness is greater for "internal" school psychologists than for "external" school psychologists.

2. Consultation effectiveness is greater for school psychologists high on both Initiating Structure and Consideration than for any other combination of the two leader dimensions.

Research Questions

1. What is the role of leader behavior in predicting school psychologists' consultation effectiveness?

2. What is the role of locus of control in predicting school psychologists' consultation
effectiveness?

**Definition of Terms**

**Individual Teacher Consultation:** Face-to-face goal directed communication resulting in a problem solving, mutually helping relationship between a teacher and a school psychologist.

**Leader Behavior:** The overall, cumulative teacher perception of Initiating Structure and Consideration by school psychologists, as reported by teachers on the LBDQ.

**Internal-External Locus of Control:** The school psychologist's self rating on Rotter's I-E Scale, is the definition of Locus of Control.

**Teacher:** An individual certified by the state of Ohio as an elementary teacher who has consulted with a school psychologist in the sample concerning a problem in the classroom at least once during the 1973-1974 school year, while working full time.

**School Psychologist:** An individual certified by the state of Ohio as a school psychologist (post internship) working full time as a school psychologist in Ohio, and identified prior to the study as utilizing consultation, as defined for this study.

**Consultation Effectiveness:** Teacher perceptions of general consultation outcomes and consultation task accomplishment, as measured by the Consultation Evaluation
Form - R (CEF-R).

**Limitations of the Study**

The study is limited to school psychologists in Ohio who consult with teachers on a collegial basis. The consultation model is limited to individual client-centered consultation between school psychologists and elementary teachers. The consultation situation is limited to resolving a problem presented by a child, or the classroom, for which the teacher is instructionally responsible.

Another limitation of the study is that the Locus of Control of only the school psychologists was measured. The Locus of Control of the teachers was not measured (in an attempt to increase the rate of return of the questionnaires). As a result, no comparison could be made between internal school psychologists and external school psychologists and their consultation effectiveness with internal and external teachers. Therefore, the results obtained concerning the effect of Locus of Control of school psychologists upon consultation should be viewed as somewhat restricted and preliminary in nature.

**Organization of the Dissertation**

In Chapter II, pertinent research and discussion from the literature is presented. The literature in the area of leadership and leader behavior is research oriented. Scientific inquiry concerning the LBDQ dimensions
of Initiating Structure and Consideration has been conducted for over twenty years by sophisticated researchers in business, psychology and education. The literature concerned with Locus of Control has a similar research history. However, the volume of research is not nearly so great as that of leadership research. The literature in the area of consultation derives its authority from experiences and not so much from research findings. The number of research projects dealing with consultation is limited. The number of books and journal articles discussing the subject is much greater. Also, the effects of leader behavior and locus of control upon consultation in any area or situation has not been investigated previous to this study. Therefore, the rationale for the study presented from the literature is not basically research based.

In Chapter II, pertinent research findings from leader behavior and Locus of Control will be presented. Clinical and school consultation experiences from the literature and consultation research findings will be presented.

In Chapter III, the procedures for the study and the report of a preliminary study are presented. The preliminary study included the identification of Ohio school psychologists who consult with teachers in a manner which emphasizes mutual problem-solving.

In Chapter IV, consultation effectiveness is
analyzed as a function of Locus of Control, Initiating Structure, and Consideration. The analysis considers the effect and predictiveness of the three independent variables upon consultation effectiveness. These results are summarized and implications of the dissertation are discussed in Chapter V.
CHAPTER II
REVIEW OF THE LITERATURE

There are at least three forces which have pressed the development of interest in consultation activities by Ohio school psychologists during the past decade. The first force is the use of mental health preventive strategies in the schools. The major preventive strategy employed by mental health workers in the schools is consultation (Ojemann in Caplan, 1961; Yolles in Caplan, 1970). The second force is the successful application of behavioral techniques in the schools. The use of behavioral techniques has prompted many school personnel to view children's behavior in terms of the effects of a variety of contingent relationships. School psychologists are often called upon to aid teachers in understanding and applying behavioral techniques in the classroom. Individual teacher consultation has been one of the methods employed in that process (Ulrich, Stocknik and Mabry, 1973; Fine and Tyler, 1971).

The third force is the general adoption of the child study model of school psychology by Ohio school psychologists. The child study model focuses upon 1) diagno-
ses of the problem, 2) determining procedures to resolve the problem, 3) operationalizing and implementing the solution, 4) continual evaluation of the child's progress, and 5) follow-up with next year's teacher (McClung and Studden, 1972; Gallo, 1974). At present, many school psychologists use individual teacher consultation to accomplish steps two, three and four (Gallo, 1974). Professionals in the areas of preventive mental health, behavioral analysis, and school psychology or child study frequently utilize individual teacher consultation when working with elementary teachers. However, at present, little is known concerning what happens during consultation; what conditions will produce effective consultation; and the effect of certain psychological and sociological constructs upon consultation effectiveness (McClung and Studden, 1972; Robbins and Spencer, 1965).

Two constructs which may effect and be useful as predictors of consultation effectiveness are leader behavior and locus of control. Leader behavior has been related to various types of industrial and educational effectiveness (Korman, 1966; Helpin, 1966). In general, leader behavior has been found to consist of two dimensions; Initiating Structure and Consideration (Sergiovanni and Starrett, 1971). The second construct is from the area of Social Learning Theory and is termed Locus of Control. Locus of Control has been related to effectiveness
in the influencing process (Phares, 1965).

A review of related literature from Social Learning Theory and Leader Behavior is presented as a background for discussing the possible effects of Initiating Structure, Consideration and Locus of Control upon consultation activity in preventive mental health; behavior analysis; and child study. Therefore, the order of discussion is 1) Social Learning Theory, 2) Leader Behavior, 3) Mental Health Consultation, 4) Behavioral Analysis, and 5) Child Study.

Social Learning Theory

The initial study done in the specific area of internal-external control was done by Phares (1957). The study was stimulated by Rotter's theory of the nature of social learning (Rotter, 1954), in which human behavior is conceived as being a product of choices. Which choice and thus which behavior occurs is, for Rotter, a function of both the value of the reinforcement and the expectancy that a given behavior will be successful for a given situation. As an individual develops and acquires more experience, he differentiates events which are casually related to preceding events from those which are not. It follows that when reinforcement is seen as not contingent upon the individual's own behavior, its occurrence will not increase an expectancy as much as when it is seen as contingent.
From a theoretical viewpoint, it seems likely that, depending upon the individual's history of reinforcement, individuals would differ in the degree to which they attribute reinforcements to be the result of their own actions (Rotter, 1966).

The nature of the learning process differs, depending upon whether the situation is one in which the reinforcements are a direct outcome of internal characteristics of the individual, or are essentially controlled by someone else or powers beyond the individual's control (Rotter, 1960). As a general principle, "internal control refers to the perception of positive and/or negative events as being a control; external control refers to the perception of positive and/or negative events as being unrelated to one's own behavior in certain situations and therefore, beyond personal control" (Lefcourt, 1966). The control construct is considered a generalized expectancy, operating across many situations (Rotter, 1966).

A laboratory study directly related to the present study has indicated that "internal" influencers were able to influence significantly greater the amount of expressed attitude change of "external" female college students than were "external" influencers (Phares, 1965). At present, the importance of a consultant's ability to change teacher attitudes in client-centered consultation is not known. However, it has been theorized that attitude change is an
important aspect of the process of consultee-centered consultation. During consultee-centered consultation, the consultant deals with such issues as lack of understanding, lack of skill, lack of self-confidence, and lack of objectivity on the teacher's part (Caplan, 1972). Therefore, the importance of attitude change as an outcome of consultation may vary, depending on the type of consultation employed.

**Leader Behavior in Education**

Research in educational leadership has tended to focus on leader behavior, rather than on leader personality traits (Stogdill in Cunningham and Gephart, 1973). This may be due to the fact that excellent reviews of the trait approach (Stogdill, 1948; Gibb, 1954) to leadership have given direction to educational researchers interested in the area of leadership. These directions could be summarized as 1) focusing on the behavior of leaders, 2) realizing that although clusters of traits have been identified that differentiate leaders from followers, it is difficult to identify the traits objectively in individuals, and 3) personality traits which are appropriate to one situation may not be appropriate to another situation. Therefore, research concerned with personality traits of leaders has not been utilized in the training of educational leaders as much as research dealing with leader
behavior. Moreover, trait theorists tended to view leadership as a one-way influence process, rather than a two-way interaction process between the leader and the follower (Stogdill in Cunningham and Gephart, 1973). As a result, research which focuses upon leader behavior has dominated the field of leadership research in education. Examples of behaviorally oriented research are the studies which developed from the Ohio State Leadership Studies (Shartle, 1950).

"Studies in education dealing with dimensions of leadership behavior have tended to rely heavily on the Ohio State Leadership Studies and the instrument which emerged from these studies, the Leadership (sic) Behavior Description Questionnaire (the LBDQ)" (Sergiovanni and Starrett, 1971). The LBDQ measures two dimensions of leader behavior; "Initiating Structure" and "Consideration". The definitions of each are that "Initiating Structure refers to the leader's behavior in delineating the relationship between himself and members of the work group, and in endeavoring to establish well-defined patterns of organization, channels of communication, and methods of procedure. Consideration refers to behavior indicative of friendship, mutual trust, respect, and warmth in the relationship between the leader and the members of his staff" (Halpin, 1966, p. 86).

Studies in education which have utilized the LBDQ
have indicated that educational administrators tend to evidence more Consideration and less Initiating Structure than aircraft commanders (Halpin, 1955). School staff members and board of education members tend to agree within their groups in their descriptions of superintendent's leader behavior, but there is not agreement between the two groups in their descriptions. The staff's indicate less superintendent Consideration than both the board members and the superintendents themselves. The board members tend to describe the superintendent's behavior higher on both dimensions than do the staff members (Halpin, 1956, in Halpin, 1966).

Studies in education with the LBDQ have also tended to place the descriptions of leader behavior into one of four categories or styles. Halpin has described them as four quadrants within a square. The Quadrants are presented in Figure 1.

Quadrant 1 describes leaders who emphasize both Consideration and Initiating Structure. Quadrant 2 describes leaders who emphasize Consideration over Initiating Structure. Quadrant 3 describes leaders who emphasize neither dimension. Quadrant 4 describes leaders who emphasize Initiating Structure over Consideration. The studies have tended to indicate that leaders in Quadrant 1 are the most effective (Halpin, 1966 in Sergiovanni and Starrett, 1971).
The findings of Halpin and Hemphill were correlational in nature and no statement of prediction of effectiveness can be made. Research to establish the predictiveness of Initiating Structure and Consideration in various settings is needed (Korman, 1966).

The LBDQ has been widely used in research studies other than the Ohio State Leadership Studies. Several studies have focused upon the ideal and actual leader behavior of the school principal. In one study (Sharpe, 1956), principals perceived themselves as deviating more from ideal norms than their teachers and staff. One finding from both education and industry is that actual Consideration and Initiating Structure scores are more positively related to outcome criteria than are ideal Consid-
eration and Initiating Structure scores (Greenwood and McNamara, 1969). This seems to hold for principal-teacher relationships as well (Fast, 1964). In the same study, it was observed that the smaller the discrepancy between expected and observed principal leader behavior, the higher the teacher satisfaction was. This finding is similar to the finding of Robbins and Spencer (1968), that when consultant and consultee share role expectancies, the consultee satisfaction is higher. Perhaps, when consultants or principals are consistent in their leader attitudes and values, as well as their leader behavior, it is easier for those working with them to formulate expectations concerning their respective roles.

While the criterion of teacher satisfaction and perception was frequently utilized in studies of educational leadership, at least one study utilized student achievement as the outcome criteria. Consideration and Initiating Structure scores of principals, as described by teachers, were significantly related to province-wide achievement scores in Canada (Keller and Andrews, 1963). Another very interesting finding from the Canadian studies (as related by Stogdill in Cunningham and Gephart, 1973) is that teacher leader behavior as described by pupils is also positively and significantly related to high academic achievement (Greenfield and Andrews, 1961). This finding is interesting, not only because of the content of
the finding, but also because of methodological considerations. The Greenfield and Andrews study represents one of the few studies which has investigated an informal leader situation. The teacher-pupil relationship is characterized by behavior and interactions which may be much more informal than the relationship between Halpin's "headman" of an organization and his staff. In many ways, the teacher-pupil relationship may have more in common with the consultant-consultee relationship than it does with manager-staff or foreman-worker relationships. Therefore, while the LBDQ has been used successfully in a variety of formal leader situations, the Greenfield and Andrews study demonstrates (as Halpin Suggested) that perhaps the conditions for studying informal leader situations have existed for some time.

When the LBDQ is utilized in informal leader situations, it may be possible that the findings may differ from those of formal situations, where the norms and roles of group members are generally more established. Concerning school psychologist-elementary teacher consultation, any findings which differ from the findings concerning educational administrators may be due to the influence of mental health consultation, behavioral analysis, or the child study model of school psychology.
Mental Health Consultation

One of the major outcomes of the report of the Joint Commission on Mental Illness and Health (1961) was the emphasis placed on preventive techniques in the mental health professions. The discrepancy between mental health problems and the manpower to cope with the problems was one of the main reasons indicated for the interest in preventive techniques, such as consultation (Albee, 1959). The incidence of consultation in the schools by Mental Health personnel increased following the 1963 Community Mental Health Centers Act. The Act included consultative and education services as one of the five essential service areas required for funding (Yolles, 1970). With the increased consultation activity in the school by community mental health psychologists, it is natural that several mental health consultation models and techniques influenced the consultation practice of school personnel, including psychologists (McClung and Studden, 1972).

Mental health consultation in the schools has taken many forms, emphasizing differing levels of prevention. At least two studies have dealt with the psychological influence of the school atmosphere or culture (Sarason, et. al, 1966). Many programs have utilized the schools, in order to work with the parents of children, concerning topics ranging from mental health and child rearing to child management (Patterson, 1971; McManus,
One of the most frequently cited consultation modes is case consultation with the individual teacher or principal (Morse, 1967; McClung and Studen, 1972; Mannino and Shore, 1970; Fine and Tyler, 1971).

Mental health consultants have also provided training to paraprofessionals to work as mental health aids in the schools. In the schools, parents or senior citizens often work as aides (Cowen, Gardner and Zax, 1967). Working with the student as well as the teacher is the consultation mode of Newman (1964), who follows a psychodynamic approach in working directly with the students' and teachers' feelings.

Most mental health consultation activity in the schools followed the consultation model of Caplan, as outlined in 1956 and expanded in 1960.

The first systematic model of mental health consultation was that of Gerald Caplan (McClung and Studen, 1972). It delineates four types of consultation:

1. Client-centered consultation—the focus is on helping the consultee find the most effective intervention strategy for the client.

2. Consultee-centered case consultation—the goal is to help the consultee identify his work difficulty and help him function effectively with the type of case the client presents.

3. Consultee-centered administrative consultation—
the focus is on the consultee's relationship with the people and programs within the agency.

4. Program-centered administrative consultation—the goal is to help the administrators of a program with various aspects of program development (Caplan, 1970).

Caplan's mental health consultation model is currently the most popular consultation model among school psychologists. The most popular type of consultation is client-centered (Fine and Tyler, 1974). The techniques which are utilized during the four types of consultation vary. However, certain tasks should be accomplished by the consultant, no matter what the type of consultation is utilized. Perhaps the reason why Caplan's client-centered consultation is popular among school psychologists is that the techniques required for accomplishing the tasks of client-centered consultation do not deal with the defenses of the consultee. Also, the focus of client-centered consultation is upon the client and his problems and not upon the consultee (in this case the teacher).

One of the primary tasks of the mental health consultant is to establish a relationship with the consultee, in which co-equal status exists (Berlin, 1964). In addition to establishing co-equal status with school personnel, mental health consultation emphasizes "authority of ideas," as opposed to superior-subordinate or therapist-patient
School Mental Health consultation has the general goal of helping educators, especially teachers, to understand the mental health aspects of their work situation, and as a result, be more effective with their students and/or co-workers. The relationship which the mental health consultant establishes with the teacher includes a feeling of co-equal status or a "colleague" relationship; leadership derived from authority of ideas; a de-emphasis of the consultants' contributions to the relationship; and a feeling on the part of the teacher that he/she has ownership for the ideas generated during consultation (Bindman, 1959; Berlin, 1964; Meyers, 1973).

The general acceptance by school psychologists of the techniques of client-centered consultation has resulted in the consultation of school psychologists being characterized by relationships which include the factors mentioned above. Moreover, the techniques of client-centered consultation and other types of consultation, can be characterized as behavior on the part of the consult which would be perceived by consultees as Consideration. Therefore, if the use of mental health consultation techniques by school psychologists is high, then the Consideration scores could be significantly higher than the Initiating Structure scores.
Consultation and Behavioral Analysis

Applied behavior analysis has been used successfully in the schools to improve academic and classroom adaptability of children (Morice, 1968; Hewett, 1967; Stephens, 1970; Zimmerman and Zimmerman, 1962). While behavioral techniques have been successful in modifying student behavior, few studies report the consultation process employed with the teacher. One of the most popular techniques is "in-service", in the form of a university course (Zimmerman and Zimmerman, 1971; Hall, 1971). The group norms functioning in the interaction of the professor-student relationship have not been reported for such in-service courses and cannot be compared with consultation or public school in-service. The reinforcement of changing pupil behavior is often assumed to be reinforcing enough to maintain the teacher's behavior of establishing and carrying out the contingencies of the behavioral program learned during in-service. Other reinforcements for the teacher include feedback of results and social praise from the instructor or investigator (Hall, 1971). While these reinforcements do maintain the acquired instructional behaviors in many teachers, Hall (1971) reports that not all teachers carry out and maintain the procedures recommended. He suggests that social interaction with the researcher is the source of much of the reinforcement for the teacher and when the researcher leaves the procedures,
and the behavior which implements them are no longer employed. Such problems are compounded if the actual goal of the teacher was to place the child in Special Education, a problem frequently faced by school psychologists.

Reinforcement techniques recommended to overcome the problem of teacher extinction of behavioral techniques include the school psychologist's relieving for a short period of time, a teacher who successfully uses behavioral techniques. Receiving attention and relief time from support personnel are other suggested techniques. Social reinforcement for consistent successful teacher performance, rather than social reinforcement from support personnel at times of crisis or inefficiency, is also recommended (Brown 1972).

Work in social learning theory (Rotter, 1966) indicates that extinction in people is effected by whether the person feels he/she has some control over the contingencies of a situation. Extinction can occur rapidly if people do not feel they control the contingencies, even though they were on a variable reinforcement schedule. Extinction does not occur if people feel they control, or have ownership for, the contingencies in their environment, even though they were on a continuous reinforcement schedule (Abidin, 1971).

The techniques and strategies of behavioral counseling have been used in a similar manner in behavioral
consultation. Techniques such as: 1) reinforcing, either verbally or nonverbally, teacher statements which describe behaviorally a student's problem; 2) choosing initial problem areas which have observable results; 3) pairing discriminative stimuli (such as modeling or role-playing) with reinforcement; 4) modeling behavioral strategies; 5) role-playing behavioral strategies; and 6) the use of a variable schedule of verbal reinforcement as the consultee becomes more proficient, have been found efficient in behavioral consultation and could be viewed as the processes of behavioral consultation (Mayer, 1972).

When consulting, school psychologists attempt to influence the attitudes of individual elementary teachers concerning the uses of behavioral techniques in the classroom. Therefore, it seems likely that the ability of the psychologist to influence the attitudes of the teacher has an effect upon his perceived consultation effectiveness. Furthermore, the influencing ability of school psychologists may be related to his/her locus of control. If this is the case, then internal control school psychologists should be more effective consultants than external control school psychologists.

Child Study

At present, the nature and procedures of the child study model have not been systematically outlined in the
literature of school psychology. Rather, child study could be characterized as traditional case study, plus accountability. The addition of accountability has increased the use of consultation as the "consumers" of school psychological services have indicated in the schools and the courts that they should be informed of and involved in the decision making process. Accountability has also increased the use of behavioral objectives which specify the time and conditions under which a specific, measurable goal will be reached. As background for discussing the effect of child study upon the practices of school psychologists, a brief discussion of the procedures of case study and accountability is presented.

There are three conditions which are necessary to conduct effective case studies with school children. The first of these is a common recognition of the problem; the second is knowledge of the problem area presented by the child; and the third is the establishment of tentative hypotheses concerning the etiology and intervention strategies (Leton and Schmidt in Magary, 1966).

The first of the conditions is necessary, not only for case study, but for consultation. If the nature and seriousness of the problem is not agreed upon by the school psychologist and teacher, then differences in role expectancy could occur. The second condition, diagnostic skill and knowledge, is not as related to consultation as the
other two conditions. It is important, of course, for case study. The third condition, establishing tentative hypotheses, is the first step in analyzing the known facts and starting the problem solving process. In recent years, there has been increased mutual problem solving between the school psychologist and teacher (Meyers, 1973). However, the extent to which school psychologists are involving teachers in the initial hypothesis testing phase of problem solving is not known. Many of the conditions which are necessary for an effective case study to occur are also necessary for consultation. Also, child study does not differ from case study at this stage.

Once the conditions of case study are met, the procedures which characterize case study are conducted. The literature in the area of case study tends to stress such steps as 1) referral; 2) pre-study inquiry; 3) case study hypotheses; 4) selection of tests and other approaches; 5) administration of tests; 6) observations and interviews; and 7) report of interpretations. The child study model, as outlined by Gallo (1974) would follow the same steps. However, Leton and Schmidt also outline three additional steps which are carried out in a different manner in child study. The three steps are: 8) conclusions; 9) recommendations; and 10) assistance to the pupil, teacher, or parent to effect a solution to the problem. The communication of conclusions and recommendations has been one way;
from school psychologist to teacher. The important aspect of reporting the interpretations was clinical exactness, which met the standards of applied psychology. The child study model focuses upon two-way communication through consultation and the operationalization of test data by establishing measurable objectives (Gallo, 1974).

Since the procedures of client-centered consultation have been discussed previously, only the possible effect of accountability through objectives upon Initiating Structure during consultation will be discussed.

Objectives have been utilized in order to reach educational goals systematically in a manner which would hold educators accountable. As educators were influenced by the works of authors like Popham and Mager, they began to structure educational activities and goals with more precision. At the same time, management techniques such as P.P.B.S. and P.E.R.T. also called for the use of measurable objectives. Teachers, especially in special education, were beginning to utilize objectives as a means of individualizing instruction. In school psychology, the work of Lawrence Peter (of Peter Principle fame) and his Prescriptive Teaching (1965) advocated the use of objectives as one means of making psychological information more relevant to the needs of teachers. With the increased use of objectives, educators began to structure educational activities in relation to who would complete an activity.
to an agreed upon measurable criteria and by a specific time.

When a school psychologist and teacher utilize child study, they have to establish informal procedures which will allow the resolution to the problem which was reached during initial consultation to be translated into objectives. They have to mutually determine when and who will carry out an intervention, under what conditions and to what criteria. In the opinion of the investigator, the school psychologists who utilize consultation to facilitate establishing objectives with teachers are engaged in behaviors which structure the work situation. Therefore, the behavior of school psychologists who structure the when and who and under what conditions of individualizing instruction through objectives during consultation are measurable by the Initiating Structure scale of the LBDQ.

At the present time, it has not been determined in the literature to what extent school psychologists in Ohio are utilizing child study (as discussed in this report) as compared with case study. The most valid present indicators (the results of the O.S.P.A. accountability study and the opinion of the Ohio Division of Special Education Consultant for School Psychology) indicate that the incidence of child study is not high. Rather, most Ohio school psychologists follow the procedures of case study.
If these indicators are correct, and school psychologists are not structuring the objectives of individualized instruction during consultation, then it is probable that Initiating Structure scores of Ohio school psychologists will not be as high as their Consideration scores on the LBDQ.

Summary

The literature indicates that, because of the influence of mental health consultation upon school psychology, the Consideration scores of school psychologists as a group will be high. The informal indication that child study is just beginning to be utilized in Ohio by school psychologists would indicate that Initiating Structure scores will not be high. The influencing ability of school psychologists may be related to their Locus of Control. Therefore, internal school psychologists may be more effective consultants than external school psychologists.

Additional Hypotheses

In view of the indications that child study may not have effected the consultation procedures of Ohio school psychologists to the extent that mental health consultation procedures have, two additional hypotheses were considered. The two original and the two additional hypotheses are presented below.

1. CEF-R scores are not higher for "internal"
school psychologists than for "external" school psychologists.

2. CEF-R scores are not higher for school psychologists high on both Initiating Structure and Consideration scales of the LEDQ, than for any other combination of the two leader dimensions.

3. The scores of school psychologists on the CEF-R are not related to scores on the LEDQ Consideration scale.

4. The scores of school psychologists on the CEF-R are not related to scores on the LEDQ Initiating Structure scale.

Research Questions

1. What is the role of leader behavior in predicting school psychologists' consultation effectiveness?

2. What is the role of Locus of Control in predicting school psychologists' consultation effectiveness?
CHAPTER III
PROCEDURES OF THE STUDY AND PRELIMINARY STUDY

The Sample

The population of Ohio school psychologists who utilize individual teacher consultation has not been identified. In 1967-68, 54 per cent of Ohio school psychologists reported that a description, which included consultation, described their role or position. However, the type or nature of the consultation activity was not specifically identified (Farling, 1969). Furthermore, there is no evidence of Ohio school psychologists utilizing consultation with teachers with greater frequency in 1974 than in 1967-68. As a result, it could not be assumed that all Ohio school psychologists utilize consultation with individual teachers in a manner characterized by the sharing of decision-making responsibility. Therefore, a systematic randomized sampling procedure was used by the investigator to identify a sample of Ohio school psychologists who utilize individual teacher consultation.

The Ohio Division of Special Education's alphabetical listing of Ohio school psychologists by counties was utilized to determine the initial population. Every sixth
school psychologist from the entire list (excluding interns and first year psychologists on the list) was sent a questionnaire to determine if the recipient perceived himself as utilizing individual teacher consultation, as defined for the study. The initial sample consisted of 100 school psychologists. The school psychologists were mailed the questionnaire. Ten days later, a follow-up post card was sent to those who had not returned the questionnaire. In order to increase the rate of return, the Ohio School Psychologists Association endorsed the study. An introductory letter from the chairperson of the O.S.P.A. Research and Accountability Committee accompanied the questionnaire to identify the school psychologists' study sample.

A total of 61 school psychologists returned the questionnaire. A total of 24 (36 per cent of those returned) school psychologists were placed in the final sample. Since a final sample of 30 to 40 school psychologists was desired, the systematic randomized sampling procedure, covering the population, was again utilized. Every thirteenth school psychologist on the population list was sent the questionnaire. Thus, a total of 150 school psychologists received the first questionnaire. A total of 92 questionnaires were returned (61 per cent) and 38 school psychologists (41.3 per cent of 92, 25.3 per cent of 150) qualified for the study sample.

In order to establish the study sample, the school
psychologists were asked to rank the frequency with which they utilized five consultation strategies. Only two of the strategies were consistent with the definition of consultation utilized for the study. When a school psychologist ranked both of the two "appropriate" strategies with a rank of 1, 2 or 3 he was identified as utilizing consultation as defined for the study. Also, since the study was conducted near the end of the school year (April and May, 1974), each school psychologist was asked to indicate if he/she was willing to participate in the actual study. (Twenty-one met criteria for consultation, but were not able to participate.) When a school psychologist indicated his willingness to participate in the study and was identified as utilizing consultation, as defined for the study, he/she was placed in the study sample (N=38).

Results of the Preliminary Study to Establish the Study Sample

The five consultation strategies which were ranked by the eighty-eight school psychologists (eighty-eight replies of the ninety-two were usable for this purpose) may serve as broad indicators of the consultation preferences of Ohio school psychologists. The five strategies each contained at least one of the following factors: 1) emphasis on the school psychologists solving the problem; 2) emphasis on the school psychologists and teacher mutually solving the problem; and 3) the psychologists aid in
implementing the intervention strategy. It should be noted that the purpose of the questionnaire was to identify a group of school psychologists who perceive themselves as working mutually with teachers during consultation. The purpose of the questionnaire was not to determine in a sophisticated manner the consultation techniques or practices of Ohio school psychologists.

TABLE 1
RANKINGS OF CONSULTATION STRATEGIES

<table>
<thead>
<tr>
<th>Total Points</th>
<th>Overall Rank</th>
<th>Strategies</th>
</tr>
</thead>
<tbody>
<tr>
<td>280</td>
<td>3</td>
<td>I give the teacher the best recommendations that I have worked out which will be the most helpful in aiding the teacher to prevent or correct the child's problem in the classroom.</td>
</tr>
<tr>
<td>154</td>
<td>1</td>
<td>I discuss with the teacher the child's classroom problem and work out cooperatively with the teacher what should be done.</td>
</tr>
<tr>
<td>316</td>
<td>4</td>
<td>I work out the best recommendations for the child and teacher and aid, in some manner, in implementing them in the classroom.</td>
</tr>
<tr>
<td>231</td>
<td>2</td>
<td>The teacher and I mutually work out strategies to correct or prevent the child's classroom problem. I aid the teacher, in some manner, in implementing them in the classroom.</td>
</tr>
<tr>
<td>339</td>
<td>5</td>
<td>I submit to the teacher for approval the best recommendations that I have worked out for correcting or preventing the child's classroom problem.</td>
</tr>
</tbody>
</table>
The five strategies were ranked from one to five by multiplying the five possible rankings for each strategy (1, 2, 3, 4, and 5) by the frequency for each possible ranking. The overall ranking and total points for each strategy are given in Table 1.

The frequency of rankings and the distribution of points for each strategy is given in Table 2. The appropriate ranking of strategies two and four identified school psychologists who consult.

<table>
<thead>
<tr>
<th>Strategy #1</th>
<th>Frequency of Ranks</th>
<th>Point Distribution</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ranks</td>
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<td></td>
</tr>
<tr>
<td>1</td>
<td>1/4</td>
<td>1/4</td>
</tr>
<tr>
<td>2</td>
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<td>32</td>
</tr>
<tr>
<td>3</td>
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<td>4</td>
<td>24</td>
<td>96</td>
</tr>
<tr>
<td>5</td>
<td>18</td>
<td>90</td>
</tr>
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</table>

<table>
<thead>
<tr>
<th>Strategy #2</th>
<th>Frequency of Ranks</th>
<th>Point Distribution</th>
</tr>
</thead>
<tbody>
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<td>Ranks</td>
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<td>4</td>
<td>16</td>
</tr>
<tr>
<td>5</td>
<td>1</td>
<td>5</td>
</tr>
</tbody>
</table>
The rankings would indicate that Ohio school psychologists perceive themselves as utilizing consultation strategies which emphasize mutual problem-solving with teachers. The most frequent "one" response was for a strategy which contained only the factor of mutual problem solving. The most frequent "five" response was for a strategy which emphasized the school psychologist solving the problem. Strategy number four contained both mutual

<table>
<thead>
<tr>
<th>Strategy #3</th>
<th>Frequency</th>
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<td>112</td>
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<th>Frequency</th>
<th>Point Distribution</th>
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<td>of Ranks</td>
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<table>
<thead>
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<th>Frequency</th>
<th>Point Distribution</th>
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<td>of Ranks</td>
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<tr>
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<tr>
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</tr>
<tr>
<td>5</td>
<td>42</td>
<td>210</td>
</tr>
</tbody>
</table>
problem solving and aiding in the implementation of intervention strategies. Its distribution of rankings was less skewed than the other strategies. Due to the nature of the questionnaire, no conclusions can be reached, except that the majority of Ohio School psychologists who use consultation may perceive that their consultation with teachers is emphasized by mutual problem solving, regardless of the degree of involvement in implementing intervention strategies.

In order to conduct the study itself with the thirty-eight school psychologists, three research instruments were utilized. They are the Internal-External Control Scale, the Leader Behavior Description Questionnaire, and the Consultation Evaluation Form - R. Validity and reliability data is presented.

**Instrumentation**

The Leadership Behavior Description Questionnaire-1957 (LBDQ) was developed at the Ohio State University by the Personnel Research Board. The LBDQ measures two dimensions of leadership behavior, Initiating Structure and Consideration. The relationship between the two on a similar scale the LBDQ-XII was .29 for Consideration to "system" orientation and .10 for Initiating Structure to "person" orientation (Brown, 1967).

The split-half reliability for the LBDQ - 1957 is
.83 for Initiating Structure scores, and .92 for the Consideration scores (Halpin, 1957). Concurrent validity for Consideration with various types of subordinate ratings as criteria ranges from -.31 to .28 for overall rating and .27 to .83 for more specific ratings. Concurrent validity for Initiating Structure with the same type of ratings range from -.19 to .47 for overall rating to .28 to .68 for more specific ratings (Fleishman, Harris & Burtt, 1955; Bass, 1957; Halpin 1957 in Korman, 1966).

Factor analysis studies by Hemphill and Coons, 1950; Brown, 1967; Sergiovanni, et al, 1969 and others have consistently identified Consideration and Initiating Structure as the two factors measured by the LEDQ. Permission to use the LEDQ and to alter the directions to the needs of the present study was obtained (Stogdill, 1974).

An internal consistency analysis for the Internal-External (I-E) Control Scale (Rotter, 1966) for college students yielded .70 for males and females. Test-retest reliability after one month was males .60; females .83; combined .72. After two months, the reliability was males .49; females .61; combined .55. Concerning concurrent validity "correlations with the Marlow-Crowne Social Desirability Scale (1964) range from -.07 to -.35. Several factor analysis studies reported by Rotter support the assumption of unidimensionality of the I-E Scale, and numerous laboratory and survey studies give evidence for its con-
struct validity" (Robinson and Shaver, 1969). Studies by Strickland (1962); Cordi (1962) and Ladwig (1963) are reported in Rotter (1966) which reported the I-E Scale correlating from .03 to -.22 with measures of intelligence.

Consultation effectiveness was measured by a modified version of the Consultation Evaluation Form (Mannino, 1963), known as the Consultation Evaluation Form - R (CEF-R) developed for the present study. The CEF-R purports to measure the occurrence of the following outcomes of consultation: 1) task accomplishment (which the original CEF measured), 2) general teacher utilization of the decisions made in consultation, and 3) general teacher involvement in the problem-solving process.

The investigator conducted a test-retest reliability pilot study with the CEF-R in March, 1974 with seven school psychologists paired with forty teachers in Franklin and Madison Counties, Ohio. The ten day test-retest reliability for the thirty-three returned CEF-Rs is .72, (N=33). Permission to incorporate and alter the CEF into the CEF-R has been obtained (Mannino, 1974).

Data Collection

Following the identification of the study sample, each school psychologist was mailed six copies of the LBDQ and CEF-R and one copy of the I-E Scale with addressed, stamped return envelopes. This procedure was utilized to
reduce the cost of the study and gave one person control of collecting and returning the data.

Each instrument was coded by school psychologist and teacher. For example, the six teachers paired with school psychologist 23 received instruments coded: 23-1, ...23-6 for the LBDQ and CEF-R and 23 for the I-E Scale. Follow-up of data not collected was by post card and telephone from the investigator to the school psychologists.

Data Analysis

Total LBDQ and CEF-R scores were obtained for each school psychologist. Each school psychologist also reported an I-E Scale score. Overall LBDQ medians and standard deviations were obtained for the school psychologists.

A one way analysis of variance of the CEF-R scores by the LBDQ was performed utilizing the nonparametric Kruskal-Wallis test. Multiple comparisons based on Kruskal-Wallis rank sums of CEF-R scores were performed between the four quadrants of the LBDQ. A treatment versus control procedure was utilized. The effect of Consideration (C) and Initiating Structure (S) on the CEF-R was determined by the Wilcoxon Rank Sum test. The effect of a school psychologist's Locus of Control (I-E Scale) on the CEF-R was determined by the Wilcoxon Rank Sum test (Hollandier and Wolfe, 1973).

A stepwise regression analysis was performed on
the independent variables (C, S, and L of C) in relation to the dependent variable (CEF-R) with significance level equal to .20 until a non-significant variable or combination of variables was obtained (Draper and Smith, 1966).
Analysis of Data Received

The data from the study sample was returned as follows: Twenty-eight of the thirty-eight school psychologists in the study sample returned the data. Two additional school psychologists returned their data one month after the deadline for data analysis. Thus, although the return rate was thirty of thirty-eight (78.9 per cent), the final study sample which was analyzed was twenty-eight of thirty-eight (73.6 per cent). Each of the school psychologists responded to the I-E Scale, for a total of twenty-eight. The number of responses for the LBDQ and CEF-R was four teachers for each of the twenty-eight school psychologists, for a total of 112. Also, seven school psychologists returned more than four teacher packets. The thirteen "extra" teacher responses to the LBDQ and the seven CEF-R's from the seven school psychologists, were not included in the data analysis. They were eliminated when their number appeared on a thrown die. This procedure was necessary to insure equal responses for each school psychologist and resulted in a loss of 11.5 per cent of
Before considering the analysis of the data, it is important to remember that the population for the study was only the fifty-nine Ohio school psychologists who were identified as utilizing consultation. This caution is necessary since the population of school psychologists who utilize consultation has not been determined. For the remainder of the report, the term school psychologist refers to school psychologists who were identified as utilizing consultation.

The findings of the study were analyzed by 1) analysis of variance and nonparametric tests of location to determine the effects of Initiating Structure and Consideration and Locus of Control upon consultation effectiveness, and 2) step-wise regression to determine the role of the independent variables in predicting consultation effectiveness. The findings pertaining to each of the three hypotheses are presented and discussed. Also, the findings pertaining to the research questions are presented and discussed separately.

Locus of Control

To determine the effect of school psychologists' Locus of Control upon their consultation effectiveness, a nonparametric test of sample locations was performed on the CEF-R totals as a function of Internal Locus of Control
(yes, no) and External Locus of Control (yes, no) on the I-E Scale. "Internal" school psychologists were those below the median on the I-E Scale and "Externals" were those above. The range of scores for the fourteen internals was from four to nine, with a median of six. The range of scores for the fourteen externals was from nine to sixteen, with a median of twelve. The four school psychologists with the overall median score of nine were placed into either the internal or external category through the random procedure of drawing their assigned number from an ash tray, as it were.

The corrected for ties, normal approximation to the Wilcoxon Rank Sum test was applied to the data. The resulting test statistic is \( W = 0.1150 \) with \( M = 14 \) and \( N = 14 \). The significance level at which Hypothesis One could be rejected with the normal approximation is 0.4542. The results are summarized in Table 3.

<table>
<thead>
<tr>
<th>TABLE 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>RESULTS OF WILCOXON RANK SUM TEST OF CONSULTATION EFFECTIVENESS AS A FUNCTION OF LOCUS OF CONTROL</td>
</tr>
<tr>
<td>Test Statistic: ( W = 0.1150 ) (( M = 14 ); ( N = 14 ))</td>
</tr>
<tr>
<td>Significance Level for Rejection: 0.4542</td>
</tr>
</tbody>
</table>

Thus, the hypothesis that "internal" school psy-
chologists and "external" school psychologists are equally effective consultants with elementary teachers was accepted. Apparently, the Locus of Control of the school psychologists does not effect the outcomes of consultation. When school psychologists consult with teachers concerning the application of behavioral techniques, it may be that the Locus of Control of both must be considered before any conclusions can be reached, regarding the effect of Locus of Control upon the influencing ability and consultation effectiveness of school psychologists.

Leader Behavior

The second hypothesis, that school psychologists high on both Initiating Structure and Consideration, are more effective consultants than school psychologists from the other three LBDQ quadrants, was partially upheld by the data.

<table>
<thead>
<tr>
<th>Quadrant</th>
<th>Rank Sums</th>
<th>Rank Means</th>
<th>H*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number 1: C+; S+</td>
<td>121.5</td>
<td>20.2500</td>
<td></td>
</tr>
<tr>
<td>Number 2: C+; S-</td>
<td>166.5</td>
<td>20.8125</td>
<td></td>
</tr>
<tr>
<td>Number 3: C-; S-</td>
<td>45.0</td>
<td>7.5000</td>
<td></td>
</tr>
<tr>
<td>Number 4: C-; S+</td>
<td>73.0</td>
<td>9.1250</td>
<td>15.433a</td>
</tr>
</tbody>
</table>

*Significance level = .002; (df=3)
A one way analysis of variance was performed, using the nonparametric Kruskal-Wallis test. The analysis indicates that sufficient evidence of significant differences in consultation effectiveness between quadrants exists. The analysis is summarized in Table 4.

In order to determine which quadrants differ significantly from each other, Dunn's treatment versus control multiple comparison procedure was performed. The results are summarized in Table 5.

**TABLE 5**

MULTIPLE COMPARISONS OF CONSULTATION EFFECTIVENESS BY LEDQ QUADRANTS

<table>
<thead>
<tr>
<th>LEDQ Quadrants</th>
<th>Differences</th>
<th>Dunn's Approximation</th>
<th>Significance Level</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-2</td>
<td>.5625</td>
<td>.1266</td>
<td>1.000</td>
</tr>
<tr>
<td>1-3</td>
<td>12.7500</td>
<td>2.6846</td>
<td>.043</td>
</tr>
<tr>
<td>1-4</td>
<td>11.1250</td>
<td>2.5041</td>
<td>.074</td>
</tr>
<tr>
<td>2-3</td>
<td>13.3125</td>
<td>2.9965</td>
<td>.016</td>
</tr>
<tr>
<td>2-4</td>
<td>11.6875</td>
<td>2.8416</td>
<td>.028</td>
</tr>
<tr>
<td>3-4</td>
<td>1.6250</td>
<td>.3657</td>
<td>1.000</td>
</tr>
</tbody>
</table>

Quadrant 1 differed significantly at the .074 and .043 levels, from quadrants 3 and 4 respectively, which were low on Consideration. It did not differ significantly from quadrant 2, which is also high on Consideration. Quadrant 2 differed significantly, at the .028 and .016 levels, from quadrants 3 and 4 respectively, which were low on Consideration. The quadrants which were low on
Consideration (3 and 4) did not differ significantly from each other.

The second hypothesis was partially upheld by the data. School psychologists which were perceived as evidencing Consideration during consultation (those in LEDQ quadrants 1 and 2) were significantly more effective consultants than those who were perceived as evidencing less Consideration (quadrants 3 and 4). It appears that the difference in perceived Initiating Structure between quadrants 1 and 2 school psychologists does not effect consultation effectiveness. The leader dimension which appears to discriminate between consultants in terms of effectiveness is Consideration. This question was tested by hypotheses 3 and 4.

**Consideration**

The third hypothesis, that school psychologists high on Consideration (quadrants 1 and 2) were more effective than school psychologists low on Consideration (quadrants 3 and 4), was upheld by the data. The corrected for ties, normal approximation to the Wilcoxon Rank Sum test was applied to the data. The resulting test statistic was $W^* = 3.9903$ with $M=14$ and $N=14$. The significance level at which Hypothesis Three could be rejected is .0002. The results are summarized in Table 6.
Thus, there is very strong evidence that school psychologists who are perceived as evidencing a high degree of Consideration behavior are more effective consultants than those perceived as evidencing a lower degree of Consideration behaviors.

Apparently, when elementary teachers consult with school psychologists, they expect or come to value a high degree of Consideration. When teachers do not perceive Consideration behavior on the part of school psychologists, a significant portion view the consultation as less effective.

Initiating Structure

The fourth hypothesis, that school psychologists high on Initiating Structure (quadrants 1 and 4) were more effective than school psychologists low on Initiating Structure (quadrants 2 and 3), was not upheld by the data. The corrected for ties, normal approximation to the Wilcoxon Rank Sum test was applied to the data. The re-
The resulting test statistic was \( W^* = 0.3909 \) with \( M = 14 \) and \( N = 14 \). The significance level at which Hypothesis Four could be rejected is \( .3856 \). The results are summarized in Table 7.

---

**TABLE 7**

RESULTS OF WILCOXON RANK SUM TEST OF CONSULTATION EFFECTIVENESS AS DISCRIMINATED BY ABOVE VS. BELOW THE MEDIAN LBDQ INITIATING STRUCTURE SCORES

Test Statistic \( W^* = 0.3909 \) (\( M = 14; N = 14 \))

Significance Level for Rejection = \( .3856 \)

---

The analysis indicates that Hypothesis Four is to be accepted. Therefore, there is practically no evidence of differences in consultation effectiveness between school psychologists who are perceived, to a high degree, as evidencing Initiating Structure during consultation and those who are perceived to a lower degree as evidencing Initiating Structure. As was indicated by the multiple comparisons between LBDQ Quadrants, apparently elementary teachers do not currently expect, or come to value, the initiating of structure into the consultation situation by school psychologists. It will be interesting to notice if the increased use of objectives for individualizing instruction and other aspects of the child study model of school psychology will change this situation.
Prediction of Consultation Effectiveness

In order to determine the role of the two leader behavior dimensions and Locus of Control as predictors of school psychologists' consultation effectiveness, a step-wise regression analysis was performed. The initial correlation matrix is presented in Table 8.

TABLE 8

<table>
<thead>
<tr>
<th>Variable</th>
<th>C</th>
<th>S</th>
<th>L</th>
<th>C.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>1.00</td>
<td>0.206</td>
<td>0.171</td>
<td>0.750a</td>
</tr>
<tr>
<td>S</td>
<td></td>
<td>1.000</td>
<td>0.159</td>
<td>0.190</td>
</tr>
<tr>
<td>L</td>
<td></td>
<td></td>
<td>1.000</td>
<td>-0.055</td>
</tr>
<tr>
<td>C.E.</td>
<td></td>
<td></td>
<td></td>
<td>1.000</td>
</tr>
</tbody>
</table>

aSignificance level less than .002 (df=26/two-tailed)

The only independent variable which correlates significantly with consultation effectiveness was Consideration. Although Locus of Control was negatively correlated with consultation effectiveness, the correlation was so close to zero that Locus of Control could be considered to have no correlation with C.E.

The independent variable most correlated with consultation effectiveness was Consideration, and therefore, it was the first variable entered into the regression
equation. The results are presented in Table 9.

<table>
<thead>
<tr>
<th>Table 9</th>
</tr>
</thead>
</table>

RESULTS OF STEP 1 OF THE STEPWISE REGRESSION ANALYSIS

Variable Entered: Consideration

Multiple R: 0.7499  
R-SQ: 0.5623  
Standard Error of Estimate: 13.2812

<table>
<thead>
<tr>
<th>Analysis of Variance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Regression</td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td>Residual</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables in Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Constant</td>
</tr>
<tr>
<td>Consideration</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Variables not in Equation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Variable</td>
</tr>
<tr>
<td>Structure</td>
</tr>
<tr>
<td>L. of C.</td>
</tr>
</tbody>
</table>

At this point, the regression equation was $C. E. = 132.0387 + (0.77151) \text{ var 1}$. Since the significance level for the F to Enter was set at .20, the two remaining variables were able to enter the equation. If a more conservative significance level had been chosen, it is doubtful that either Initiating Structure or Locus of Control would have been accepted into the regression equation. Since neither variable significantly changed the regression equa-
tion following Step 1, or significantly changed the F to Remove value of Consideration, Steps 2 and 3 of the analysis were not included in the body of the report. They form Appendixes K and L.

A summary of the results of the stepwise regression analysis is presented in Table 10.

### TABLE 10

**SUMMARY OF STEPWISE REGRESSION ANALYSIS**

<table>
<thead>
<tr>
<th>Step Number</th>
<th>Variable</th>
<th>Multiple R</th>
<th>R-SQ Increase in R-SQ</th>
<th>F Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>C</td>
<td>0.7499</td>
<td>0.5623</td>
<td>0.5623</td>
</tr>
<tr>
<td>2</td>
<td>L of C</td>
<td>0.7726</td>
<td>0.5969</td>
<td>0.0345</td>
</tr>
<tr>
<td>3</td>
<td>S</td>
<td>0.7750</td>
<td>0.6006</td>
<td>0.0037</td>
</tr>
</tbody>
</table>

*aSignificance level less than .01

The final regression equation was C. E. = 135.9080 + (.7928)var. 1 (C) + (.0190)var. 2 (S) - (1.1814)var. 3 (L of C). However, in terms of an equation which includes only variables which would not be removed at more conservative alpha values, the equation following step one is suggested.

The final regression equation explains 60.06 percent of the variance with Consideration accounting for 56.23 percent. Furthermore, the F value to enter or remove Consideration was 33.4071, which was significant be-
yond the .01 level with \( df=1/26 \). Therefore, it appears that Locus of Control and the leader behavior dimension of Initiating Structure play a very small part in the role of predicting consultation effectiveness of school psychologists, as perceived by elementary teachers. The leader behavior dimension of Consideration appears to play a significant role in predicting consultation effectiveness as it accounts for 56.23 per cent of the variance. This conclusion is in line with the findings presented earlier concerning the effect of Consideration, Initiating Structure, and Locus of Control upon consultation effectiveness, in which Consideration was found to be the only one of the three which significantly effected consultant effectiveness.
CHAPTER V
SUMMARY AND DISCUSSION

Summary

An investigation which attempted to determine the effects and predictiveness of specific psychological constructs upon school psychologists' consultation effectiveness was designed and conducted. The constructs investigated were the leader behavior dimensions of Consideration and Initiating Structure and Locus of Control. Consideration and Initiating Structure were measured by the Leader Behavior Description Questionnaire (LBDQ). Locus of Control was measured by the Internal-External Control Scale (I-E Scale). Consultation effectiveness was measured by an instrument adapted for the present study from the Consultation Evaluation Form. The resulting instrument was the Consultation Evaluation Form-R (CEF-R).

From a total of 150 school psychologists, fifty-nine Ohio school psychologists were identified by an informal questionnaire as utilizing consultation in a collegial manner. Thirty-eight of the fifty-nine school psychologists agreed to participate in the study. Twenty-eight school psychologists returned the data for analysis.
by the deadline. Thus, the sample for the study was twenty-eight school psychologists and the population was fifty-nine school psychologists.

The thirty-eight school psychologists were mailed the I-E Scale and six teacher packets containing instructions, the LBDQ, and the CEF-R. Only the school psychologists completed the I-E Scale, in order to increase the rate of return. The last six teachers with whom the school psychologists had consulted completed the LBDQ and the CEF-R. Each of the twenty-eight school psychologists had four teacher responses on the LBDQ and CEF-R, for a total of 112 teachers.

Major considerations in the rationale for the study included that if the theory and procedures of mental health consultation have influenced the consultation activities of Ohio school psychologists, then the effects of Consideration behavior by school psychologists upon their consultation effectiveness are significant. Furthermore, if the procedures of educational accountability, especially the use of instructional objectives and continuous quality control or evaluation, have influenced the consultation activities of Ohio School psychologists, then the effects of Initiating Structure behavior upon consultation effectiveness are evident. Finally, if school psychologists attempt to utilize attitude influencing procedures during consultation, then "internal" Locus of Control school psy-
Chologists should produce more attitude change than "external" school psychologists and therefore, be perceived as being more effective consultants.

The three considerations discussed above were developed into the following four hypotheses and two research questions.

Hypotheses:

1. Consultation effectiveness is greater for "internal" school psychologists than for "external" school psychologists.

2. Consultation effectiveness is greater for school psychologists high on both Initiating Structure and Consideration, than for any other combination of the two leader dimensions.

3. Consultation effectiveness is greater for school psychologists high on Consideration than for school psychologists low on Consideration.

4. Consultation effectiveness is greater for school psychologists high on Initiating Structure than for school psychologists low on Initiating Structure.

Research Questions

1. What is the role of leader behavior in predicting school psychologists' consultation effectiveness?

2. What is the role of Locus of Control in predicting school psychologists' consultation effectiveness?
The results of the study which pertain to the four hypotheses and the two research questions may be summarized as follows:

1. Hypothesis One was not supported by the data on Locus of Control. When the Locus of Control of the teachers is not considered, but only that of the school psychologists is considered, "internal" school psychologists do not effect consultation effectiveness any more than "external" school psychologists.

2. Hypothesis Two was partially supported by the data on leader behavior. The effects of school psychologists' leader behavior between the four LEDQ Quadrants upon Consideration effectiveness differed significantly. Multiple Comparisons between LEDQ Quadrants indicated that school psychologists located in Quadrants high on Consideration (1 and 2) were significantly more effective than school psychologists located in Quadrants low in Consideration (3 and 4).

3. Hypothesis Three was supported by the data on Consideration. School psychologists high on Consideration were significantly more effective consultants as perceived by teachers, than were school psychologists low on Consideration.

4. Hypothesis Four was not supported by the data on Initiating Structure. School psychologists high on Initiating Structure were not more effective consultants, as
perceived by teachers, than were school psychologists low on Initiating Structure.

5. Research Question One was answered in a negative manner by the data on Locus of Control. The Locus of Control of the school psychologists alone played only a very, very minor role in predicting consultation effectiveness. "Internal" Locus of Control was very slightly negatively correlated with consultation effectiveness.

6. Research Question Two was answered in both a positive and a negative manner by the data on leader behavior. Consideration played a very significant role in predicting consultation effectiveness. It accounts for over half of the overall variance and almost all of the variance accounted for by the three independent variables. Also, it could be considered to be the only variable which would have remained in the regression equation if a smaller significance level had been utilized. Initiating Structure played even less of a role than Locus of Control in predicting consultation effectiveness.

The major finding of the study was that Consideration significantly effects and predicts consultation effectiveness of school psychologists, as perceived by elementary teachers. Locus of Control and Initiating Structure
did not have an effect upon, or adequately predict consultation effectiveness.

Discussion

The significant findings regarding Consideration and consultation effectiveness indicate that the theory and procedures of mental health consultation strongly influences the consultation practices of those Ohio school psychologists who consult in a collegial manner. Moreover, apparently Ohio elementary teachers have come to expect a fairly high degree of Consideration behavior on the part of school psychologists during consultation. When a school psychologist evidences a high degree of Consideration, a strong probability exists that the elementary teachers with whom he/she consults will perceive the consultation as effective. A possible explanation of this fact is suggested by Caplan (1970; 1974).

The procedures of mental health consultation focus on a work need of the consultee and it tends to take time, in order for the consultant to establish rapport; build mutual trust and respect; establish a climate of coordinate or shared responsibility for problem solving; and to de-emphasize his role in the problem solving so that the teacher identifies or feels ownership for the solution. Caplan suggests that, when two people are involved in such interpersonal activities, both parties will tend to come
to value the relationship and the outcomes or solutions the relationship produces. Research with group consultation by mental health consultants suggests the same explanation for high consultation outcomes when effectiveness is measured at the consultee level (Mannino, 1968). Furthermore, when school psychologists utilized intensive consultation they were perceived by elementary teachers as being significantly more effective consultants than when they utilized limited consultation (Fine and Tyler, 1974). The differences in consultation effectiveness between high versus low Consideration school psychologists, could be partially affected by the time spent in consultation with elementary teachers, as suggested by the Fine and Tyler findings.

The highly non-significant findings regarding Initiating Structure and consultation effectiveness may be explained by two factors. The first possible factor is that school psychologists are continuing to utilize the case study approach to school psychology and not the child study approach. While case study is still a part of child study, it appears that school psychologists have not taken on the hard task of initiating structuring into their consultation in a manner which is characterized by joint decision making with the teacher in regards to establishing objectives and other accountability and quality control procedures. Therefore, teachers do not expect school psycholo-
gists to initiate a high degree of structure during consultation and therefore, do not discriminate between school psychologists who are high or low on Initiating Structure, in regards to consultation effectiveness.

The second factor is that as consultation is conducted currently by school psychologists, the variance on the Initiating Structure dimension of the LBDQ is very high (the standard deviations and means of the LBDQ are reported in Appendix J). Therefore, although the Consideration scale of the LBDQ is useful in understanding the leader behavior of school psychologists during consultation, the Initiating Structure scale does not appear to be as useful in measuring the initiating of structure that may exist in the informal situation of school psychologists-individual teacher consultation. The finding that Consideration, but not Initiating Structure, was related to effectiveness is one factor which may differentiate informal leader behavior from formal leader behavior. However, further research is necessary in order to determine if the informal situation of individual teacher consultation by school psychologists is different in this respect from other informal leader situations.

The very high non-significant findings in regards to Locus of Control and consultation effectiveness indicates that the Locus of Control of the school psychologists alone does not effect or predict consultation effec-
tiveness. It is apparent that what is needed is a replication of the Phares (1965) study in the applied situation.

Suggestions for Future Research

The most apparent need for future research is a replication of the Phares (1965) study, which would compare "internal" Locus of Control school psychologists with "external" Locus of Control school psychologists, as each group works with "internal" and "external" teachers. Such a study could establish the usefulness of the construct Locus of Control in understanding the consultation situation.

In terms of needed research in the area of leader behavior, as related to consultation effectiveness, several suggestions seem feasible.

1. An investigation is needed which would compare informal leader situations in terms of Initiating Structure and could determine if Consideration is more related to effectiveness in informal situations, or if this finding is unique to the situation of the present study. The need for the use of the LBDQ in informal situations seems apparent.

2. It has been suggested that an observational approach to investigating leader behavior is more desirable than attempting to measure leader be-
behavior through questionnaires (Guba in Cunningham and Gephart, 1973). This suggestion also seems to apply to the methods of investigating consultation. In order to determine what categories of behavior should be observed, it may be desirable to utilize the findings of the present study, in regards to Consideration and the findings of the three concurrent studies being conducted on school psychologists' consultation at Ohio State, to develop categories of behavior to be observed. Such an undertaking could be as useful to developing the technology to investigate consultation, as the development of the LBDQ was to investigating leader behavior instead of personal leader traits.

3. In order to determine the cause of the high effect of Consideration upon consultation effectiveness, it would be helpful to investigate the relationship between intensive and limited consultation and high and low Consideration. The general research procedure of Fine and Tyler (1974) could be utilized with the addition of the Consideration scale of the LBDQ being given to the teachers involved.

4. The Initiating Structure data from the present
study could be utilized as one type of baseline data on the incidence and effectiveness of the child study approach to school psychological services. However, it may be useful to incorporate a measure of structure more appropriate to school psychologists, teachers, and consultation than the Initiating Structure scale of the LBDQ.

A final suggestion is that the criteria for consultation effectiveness in future research should be the change in behavior of the client. Although the procedures for measuring such changes are more difficult to obtain than measures of consultee satisfaction and opinion, the need for obtaining them is present. The nature of consultation appears to be characterized by Consideration behavior and, therefore, the objectivity of consultee reports of client change may be doubtful.

Suggestions for Practical Applications

The most obvious suggestion for the practice of consultation by school psychologists which was generated by the present study is that if school psychologists who consult want to be effective, they should evidence a high degree of Consideration behavior. The use of mental health consultation procedures, as discussed by Caplan, Berlin and Bindman, should be encouraged by professional
organizations, such as the Ohio School Psychologists Association. Furthermore, the use of training programs, such as the Interpersonal Communication Workshop developed by the Far West Regional Laboratory for both pre and in-service training programs should be encouraged.

The lack of significant findings in regard to Initiating Structure has several implications. First, school psychologists need to determine effective procedures of Initiating Structure in the consultation situation, so that the procedures of educational accountability and quality control will be implemented by both school psychologists and teachers. A possible first step might be for professional organizations, such as O.S.P.A. and the Inner University Council of School Psychology Trainees to develop and implement instructional objectives with a teacher during consultation. One emphasis of such a training module should be the continued need for the use of Consideration behavior on the part of school psychologists.

It seems imperative that the Ohio Division of Special Education be involved in any research or in service efforts which have the goal of improving the Initiating Structure behavior of school psychologists. The need for the Division's involvement is apparent for at least two reasons. First, they have demonstrated the ability to successfully conduct in service education on a large scale. This was demonstrated with Project Break-Through, during
which school psychologists from across Ohio participated in an ongoing in service program dealing with Behavior Modification. Secondly, the Division continues to have funds to support research in the area of alternative program delivery systems. If Ohio school psychologists are to increase their use of educational accountability procedures, then the research which indicates possible directions and utility will need to be included as one component of the delivery system of school psychological services.
APPENDIX A

IDENTIFYING LETTER TO SCHOOL PSYCHOLOGISTS
March 18, 1974

Dear Colleague:

On March 8 the O.S.P.A. Executive Board gave its unanimous indorsement and support to a research effort by Mr. Larry Rider, a graduate student in school psychology at The Ohio State University. The study is an attempt to determine the manner in which school psychologists consult with elementary teachers.

The enclosed form is the first stage of Mr. Rider's study. The second stage involves 1) completing a ten minute questionnaire and 2) distributing and collecting three, ten minute questionnaires to be completed by four different teachers. All information submitted to Mr. Rider will be handled confidentially and no information about individuals will be released in any manner.

We seek your cooperation in assisting Mr. Rider with his study.

Sincerely,

[Signature]
Co-Chairperson, Research and Accountability Committee
APPENDIX B

QUESTIONNAIRE TO IDENTIFY STUDY SAMPLE
(SCHOOL PSYCHOLOGISTS WHO CONSULT)
Dear Colleague:

Please rank the following consultation techniques from 1 for used most frequently in cases of consulting with individual teachers to 5 for used least frequently. The techniques are meant to describe activities before a formal report is written and after working with the child. Please read all techniques before responding.

<table>
<thead>
<tr>
<th>Rank</th>
<th>Technique</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I give the teacher the best recommendations that I have worked out which will be the most helpful in aiding the teacher to prevent or correct the child's problem in the classroom.</td>
</tr>
<tr>
<td>2</td>
<td>I discuss with the teacher the child's classroom problem and work out cooperatively with the teacher what should be done.</td>
</tr>
<tr>
<td>3</td>
<td>I work out the best recommendations for the child and teacher and aid, in some manner, in implementing them in the classroom.</td>
</tr>
<tr>
<td>4</td>
<td>The teacher and I mutually work out strategies to correct or prevent the child's classroom problem. I aid the teacher, in some manner, in implementing them in the classroom.</td>
</tr>
<tr>
<td>5</td>
<td>I submit to the teacher for approval the best recommendations that I have worked out for correcting or preventing the child's classroom problem.</td>
</tr>
</tbody>
</table>

As Mr. Lawrence indicated in his letter, there is a second part to this study. Please check here if you are willing to help me with this study _. Check here if you cannot participate in the second part of the study __.

Please use the enclosed envelope to return this page by March 22, 1974. I look forward to working with you to help our profession grow.

Thank you for your cooperation,

[Name]

P. S. I cannot overemphasize your prompt return of this letter.
APPENDIX C

LETTER OF INSTRUCTION TO SCHOOL PSYCHOLOGISTS
Dear Colleague:

In an earlier questionnaire you identified yourself as a school psychologist who utilizes individual teacher consultation. Thank you for returning the earlier questionnaire and for participating in this study.

Please identify the last six different teachers you individually consulted with face-to-face concerning a problem presented by individual students in each of the six teachers' classrooms. Inform the teachers that the study is attempting to determine what factors help school psychologists work better with elementary teachers. Please assure each teacher that the results are confidential, will not be released to anyone, and will be grouped together so that individual responses will be impossible to determine. Also, please inform each teacher why he/she was chosen and that five other teachers are participating but do not tell who they are!

As each teacher agrees to participate, please distribute a "Teacher Packet" to each teacher. Instruct them to fill out the questionnaires as per the instructions in the packet. (Enclosed is a copy of their instructions.) It should take from 20-30 minutes to fill out the questionnaires. Collect the questionnaires from the teachers as soon as possible and return them to me.

You will notice a questionnaire for you to complete. It should take about ten minutes. It is essential to the study that you complete your questionnaire.

When your questionnaire is completed, please return it in the return envelope. Your promptness is greatly appreciated. If you could remind the teachers to return all materials by April 26 it would be most helpful.

All data and individual results will be dealt with confidentially and will not be released in any manner at any time. If you have any questions, please call me collect at 614-879-8248.

Again, thank you for your cooperation and promptness.

Sincerely,

P. S. If you cannot return six "Teacher Packets" by April 26, please return no fewer than four packets.
APPENDIX D

INSTRUCTIONS FOR THE I-E SCALE
INSTRUCTIONS FOR THE I-E SCALE

This is a questionnaire to find out the way in which certain important events in our society affect different people. Each item consists of a pair of alternatives lettered a or b. Please select the one statement of each pair (and only one) which you more strongly believe to be the case as far as you're concerned. Be sure to select the one you actually believe to be more true rather than the one you think you should choose or the one you would like to be true. This is a measure of personal belief: Obviously there are no right or wrong answers.

Your answers to the items on this inventory are to be recorded by drawing a circle around either a or b for each item. Please answer these items carefully but do not spend too much time on any one item. Be sure to find an answer for every choice.

In some instances you may discover that you believe both statements or neither one. In such cases, be sure to select the one you more strongly believe to be the case as far as you're concerned. Also try to respond to each item independently when making your choice; do not be influenced by your previous choices.
APPENDIX E

INTERNAL-EXTERNAL CONTROL SCALE
1.a. Children get into trouble because their parents
b. The trouble with most children nowadays is that their parents are too easy with them.

2.a. Many of the unhappy things in people's lives are partly due to bad luck.
b. People's misfortunes result from the mistakes they make.

3.a. One of the major reasons why we have wars is because people don't take enough interest in politics.
b. There will always be wars, no matter how hard people try to prevent them.

4.a. In the long run people get the respect they deserve in this world.
b. Unfortunately, an individual's worth often passes unrecognized no matter how hard he tries.

5.a. The idea that teachers are unfair to students is nonsense.
b. Most students don't realize the extent to which their grades are influenced by accidental happenings.

6.a. Without the right breaks one cannot be an effective leader.
b. Capable people who fail to become leaders have not taken advantage of their opportunities.

7.a. No matter how hard you try some people just don't like you.
b. People who can't get others to like them don't understand how to get along with others.

8.a. Heredity plays the major role in determining one's personality.
b. It is one's experiences in life which determine what they are like.

9.a. I have often found that what is going to happen will happen.
b. Trusting to fate has never turned out as well for me as making a decision to take a definite course of action.

10.a. In the case of the well prepared student there is rarely if ever such a thing as an unfair test.
b. Many times exam questions tend to be so unrelated to course work that studying is really useless.

11.a. Becoming a success is a matter of hard work, luck has little or nothing to do with it.
b. Getting a good job depends mainly on being in the right place at the right time.

12.a. The average citizen can have an influence in government decisions.
b. This world is run by the few people in power, and there is not much the little guy can do about it.
13.a. When I make plans, I am almost certain that I can make them work.
   b. It is not always wise to plan too far ahead because many things turn out to be a matter of good or bad fortune anyhow.

14.a. There are certain people who are just not good.
   b. There is some good in everybody.

15.a. In my case getting what I want has little or nothing to do with luck.
   b. Many times we might just as well decide what to do by flipping a coin.

16.a. Who gets to be the boss often depends on who was lucky enough to be in the right place first.
   b. Getting people to do the right thing depends upon ability; luck has little or nothing to do with it.

17.a. As far as world affairs are concerned, most of us are the victims of forces we can neither understand nor control.
   b. By taking an active part in political and social affairs the people can control world events.

18.a. Most people don't realize the extent to which their lives are controlled by accidental happenings.
   b. There really is no such thing as "luck".

19.a. One should always be willing to admit mistakes.
   b. It is usually best to cover up one's mistakes.

20.a. It is hard to know whether or not a person really likes you.
   b. How many friends you have depends upon how nice a person you are.

21.a. In the long run the bad things that happen to us are balanced by the good ones.
   b. Most misfortunes are the result of lack of ability, ignorance, laziness, or all three.

22.a. With enough effort we can wipe out political corruption.
   b. It is difficult for people to have much control over the things politicians do in office.

23.a. Sometimes I can't understand how teachers arrive at the grades they give.
   b. There is a direct connection between how hard I study and the grades I get.

24.a. A good leader expects people to decide for themselves what they should do.
   b. A good leader makes it clear to everybody what their jobs are.
25. a. Many times I feel that I have little influence over the things that happen to me.
   b. It is impossible for me to believe that chance or luck plays an important role in my life.

26. a. People are lonely because they don't try to be friendly.
   b. There's not much use in trying too hard to please people; if they like you, they like you.

27. a. There is too much emphasis on athletics in high school.
   b. Team sports are an excellent way to build character.

28. a. What happens to me is my own doing.
   b. Sometimes I feel that I don't have enough control over the direction my life is taking.

29. a. Most of the time I can't understand why politicians behave the way they do.
   b. In the long run the people are responsible for bad government on a national as well as a local level.
APPENDIX F

TEACHER INSTRUCTIONS
Teacher Instructions

First of all, thank you for agreeing to participate in this study of factors which help elementary teachers and school psychologists work together. As your school psychologists indicated, I will add together all teacher responses so that it will be impossible to determine any individual teacher's responses. You will be completing two questionnaires. It should take you from 20-30 minutes to complete them. Please work alone when completing the questionnaires and do them in the order as given by the directions.

Directions

1. Take the two envelopes from the Teacher Packet.
2. Take the questionnaire from the envelop marked NUMBER 1, fill it out completely, put it back in the envelop and seal the envelop.
3. Do the same for the questionnaire in the envelop marked NUMBER 2.
4. Replace the two envelops containing the completed questionnaires in the Teacher Packet and seal it.
5. Return your Teacher Packet to your school psychologist no later than April 25.
6. If you are not able to complete both questionnaires at one time, feel free to do them at your earliest convenience.

Again, thank you for your cooperation and promptness.
Leader Behavior Description Questionnaire

Developed by staff members of
The Ohio State University Leadership Studies

School Psychologist Being Described, code number: ________________.
School District, code number: ________________.
Teacher, Your Code Number: ____________________.

On the following pages is a list of items that may be used to describe the behavior of your school psychologist. Each item describes a specific kind of behavior, but does not ask you to judge whether the behavior is desirable. This is not a test of ability. It simply asks you to describe, as accurately as you can, the behavior of your school psychologist.

Note: The term "group" as employed in the following items, refers to your school. The term "members" refers to all the people in your school. The term "leader" refers to your school psychologist.

Published by
Center for Business and Economic Research
Division of Research
College of Administrative Science
The Ohio State University
Columbus, Ohio 43210

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APPENDIX H

LEADER BEHAVIOR DESCRIPTION
QUESTIONNAIRE
Directions:

a. READ each item carefully.

b. THINK about how frequently the leader engages in the behavior described by the item.

c. DECIDE whether he always, often, occasionally, seldom or never acts as described by the item.

d. DRAW A CIRCLE around one of the five letters following the item to show the answer you have selected.

   A - Always
   B - Often
   C - Occasionally
   D - Seldom
   E - Never

1. He does personal favors for group members.  A B C D E
2. He makes his attitudes clear to the group.  A B C D E
3. He does little things to make it pleasant to be a member of the group.  A B C D E
4. He tries out his new ideas with the group.  A B C D E
5. He acts as the real leader of the group.  A B C D E
6. He is easy to understand.  A B C D E
7. He rules with an iron hand.  A B C D E
8. He finds time to listen to group members.  A B C D E
9. He criticizes poor work.  A B C D E
10. He gives advance notice of changes.  A B C D E
11. He speaks in a manner not to be questioned.  A B C D E
12. He keeps to himself.  A B C D E
13. He looks out for the personal welfare of individual group members.  A B C D E
14. He assigns group members to particular tasks.  A B C D E
15. He is the spokesman of the group. 
16. He schedules the work to be done. 
17. He maintains definite standards of performance.
18. He refuses to explain his actions.
19. He keeps the group informed.
20. He acts without consulting the group.
21. He backs up the members in their actions.
22. He emphasizes the meeting of deadlines.
23. He treats all group members as his equals.
24. He encourages the use of uniform procedures.
25. He gets what he asks for from his superiors.
26. He is willing to make changes.
27. He makes sure that his part in the organization is understood by group members.
28. He is friendly and approachable.
29. He asks that group members follow standard rules and regulations.
30. He fails to take necessary action.
31. He makes group members feel at ease when talking with them.
32. He lets group members know what is expected of them.
33. He speaks as the representative of the group.
34. He puts suggestions made by the group into operation.
35. He sees to it that group members are
working up to capacity.

36. He lets other people take away his leadership in the group.

37. He gets his superiors to act for the welfare of the group members.

38. He gets group approval in important matters before going ahead.

39. He sees to it that the work of group members is coordinated.

40. He keeps the group working together as a team.
APPENDIX I

CONSULTATION EVALUATION FORM-R
CONSULTATION EVALUATION FORM-R

Here are some characteristics of school psychologist-teacher consultation which have been known to occur. Please rate the degree to which you think each occurs with your present school psychologist. Draw a circle around one of the five letters following the item to show the answer you have selected.

A - Always
B - Often
C - Occasionally
D - Seldom
E - Never

1. Establishes a congenial working atmosphere.
   A B C D E

2. Summary of the case is formulated.
   A B C D E

3. Problem areas are clarified and defined.
   A B C D E

4. Alternative solutions to problem are discussed.
   A B C D E

5. Pertinent information regarding the problem is presented and discussed.
   A B C D E

6. Opportunities for both of us to express ideas and opinions.
   A B C D E

7. Practical solution to problem reached.
   A B C D E

8. Solutions from consultation are used.
   A B C D E

9. The psychologist and I work out the solution together.
   A B C D E

10. The solutions take up too much of my time.
    A B C D E

11. The psychologist forces his ideas on me.
    A B C D E

12. Solutions are realistic for the resources of this school.
    A B C D E

13. I tell the psychologist if the solution isn't working.
    A B C D E
14. Consulting with the psychologist helps me with similar cases.

15. Solutions reached are practical when used in the classroom.

16. The solutions have helped individual children improve in the problem area.

17. The psychologist tries to subtly manipulate me during consultation.

18. I feel responsible for the implementation of solutions.

19. I help in arriving at solutions.

20. My patterns of thinking about similar cases are effected by consultation.
APPENDIX J

MEANS AND STANDARD DEVIATIONS OF LEDQ DIMENSIONS
### TABLE 11

**MEANS AND STANDARD DEVIATIONS OF LBDQ DIMENSIONS**

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<th>Mean</th>
<th>S.D.</th>
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<td>Below Median:</td>
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APPENDIX K

RESULTS OF STEP 2 OF THE STEPWISE REGRESSION ANALYSIS
### TABLE 12

RESULTS OF STEP 2 OF THE STEPWISE REGRESSION ANALYSIS

Variable Entered: Locus of Control

Multiple R: 0.7750  R-SQ: 0.5969  
Standard Error of Estimate: 13.2059

#### Analysis of Variance

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APPENDIX L

RESULTS OF STEP 3 OF THE STEPWISE REGRESSION ANALYSIS
### TABLE 13

RESULTS OF STEP 3 OF THE STEPWISE REGRESSION ANALYSIS

Variable Entered: Structure

Multiple R. 0.7750  
R-SQ: 0.6006

Standard Error of Estimate: 13.2059

#### Analysis of Variance

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