INFORMATION TO USERS

This material was produced from a microfilm copy of the original document. While the most advanced technological means to photograph and reproduce this document have been used, the quality is heavily dependent upon the quality of the original submitted.

The following explanation of techniques is provided to help you understand markings or patterns which may appear on this reproduction.

1. The sign or "target" for pages apparently lacking from the document photographed is "Missing Page(s)". If it was possible to obtain the missing page(s) or section, they are spliced into the film along with adjacent pages. This may have necessitated cutting thru an image and duplicating adjacent pages to insure you complete continuity.

2. When an image on the film is obliterated with a large round black mark, it is an indication that the photographer suspected that the copy may have moved during exposure and thus cause a blurred image. You will find a good image of the page in the adjacent frame.

3. When a map, drawing or chart, etc., was part of the material being photographed the photographer followed a definite method in "sectioning" the material. It is customary to begin photoing at the upper left hand corner of a large sheet and to continue photoing from left to right in equal sections with a small overlap. If necessary, sectioning is continued again — beginning below the first row and continuing on until complete.

4. The majority of users indicate that the textual content is of greatest value, however, a somewhat higher quality reproduction could be made from "photographs" if essential to the understanding of the dissertation. Silver prints of "photographs" may be ordered at additional charge by writing the Order Department, giving the catalog number, title, author and specific pages you wish reproduced.

5. PLEASE NOTE: Some pages may have indistinct print. Filmed as received.

Xerox University Microfilms
300 North Zeeb Road
Ann Arbor, Michigan 48106
MATTHEWS, Edward William, 1933-
A STUDY OF CRITICAL REQUIREMENTS FOR SCHOOL PSYCHOLOGISTS.

The Ohio State University, Ph.D., 1973
Education, psychology

University Microfilms, A XEROX Company, Ann Arbor, Michigan
A STUDY OF CRITICAL REQUIREMENTS FOR
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

Edward William Matthews, B.Sc., M.A.

* * * * * *

The Ohio State University
1973

Approved by

[Signature]
Adviser
Department of Education
ACKNOWLEDGMENTS

The author wishes to acknowledge the guidance and encouragement of Dr. Charles Huelsman throughout the many years of graduate study and during the conduct of the study. The writer also wishes to thank Dr. Damon Asbury, Dr. Calvin Catterall and Dr. Ann Engin for helpful suggestions and advice.
VITA

November 10, 1933  .  .  .  .  .  Born - Marion, Ohio
1955  .  .  .  .  .  .  .  .  B.Sc. (Music Education), The Ohio State University, Columbus, Ohio
1956-1958  .  .  .  .  .  .  .  United States Navy
1958-1960  .  .  .  .  .  .  .  Music Teacher, Holmes-Liberty Schools, Bucyrus, Ohio
1960-1962  .  .  .  .  .  .  .  Music Teacher, Bucyrus City Schools, Bucyrus, Ohio
1962-1964  .  .  .  .  .  .  .  Student, The Ohio State University, Columbus, Ohio
1964-1965  .  .  .  .  .  .  .  Intern School Psychologist, Delaware City Schools, Delaware, Ohio
1965  .  .  .  .  .  .  .  .  M.A. (Psychology), The Ohio State University, Columbus, Ohio
1965-1968  .  .  .  .  .  .  .  School Psychologist, Kettering City Schools, Kettering, Ohio
1966-1970  .  .  .  .  .  .  .  Parttime Instructor, Psychology Department, University of Dayton, Dayton, Ohio
1968-1970  .  .  .  .  .  .  .  Staff Psychologist, Childrens' Medical Center (Hospital), Dayton, Ohio
1970-1971  .  .  .  .  .  .  .  Staff Psychologist, Columbus Public Schools, Columbus, Ohio
1971-1973  .  .  .  .  .  .  .  EPDA Fellow, Department of School Psychology, The Ohio State University, Columbus, Ohio
1972-1973 .............. Administrative Intern, Psychological Services, Columbus Public Schools, Columbus, Ohio

1973-Present ........ Staff Psychologist, Columbus Public Schools, Columbus, Ohio
TABLE OF CONTENTS

| ACKNOWLEDGMENTS | ii |
| VITA | iii |
| LIST OF TABLES | vii |

Chapter

I. INTRODUCTION ................................................. 1

Research on the Job Requirements of School Psychologists
Time Studies
Case Load Analysis
NASP Guidelines
Summary

The Development of the Critical Incident Technique

Critical Incident Technique as Applied to the Fields of Medicine and Dentistry

Critical Incident Technique and U.S. Government

Critical Incident Technique and the Field of Education

Evaluation of the Critical Incident Technique in a Study of School Psychologists' Job Requirements

The Problem

Statement of the Problem

Significance of the Study

Basic Questions

Definition of Terms and Concepts

Summary

II. PLAN OF STUDY ................................................. 29

General Considerations in Over-all Planning

Pilot Study

Development of Plans for Collecting Incidents

Selection of Participants

Collection of the Interview Data

Sponsorship of the Study

The Interview
<table>
<thead>
<tr>
<th>Chapter</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Analysis of the Data</td>
<td></td>
</tr>
<tr>
<td>Transcribing Incidents to Analysis Cards</td>
<td></td>
</tr>
<tr>
<td>Identification of the Critical Behavior</td>
<td></td>
</tr>
<tr>
<td>Organizing and Structuring the Behaviors</td>
<td></td>
</tr>
<tr>
<td>Establishing Major Areas of Classification</td>
<td></td>
</tr>
<tr>
<td>Category Formulation</td>
<td></td>
</tr>
<tr>
<td>Objectivity of the Classification Scheme</td>
<td></td>
</tr>
<tr>
<td>Classification System</td>
<td></td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>III. RESULTS AND DISCUSSION</td>
<td>50</td>
</tr>
<tr>
<td>Question 1</td>
<td></td>
</tr>
<tr>
<td>Question 2</td>
<td></td>
</tr>
<tr>
<td>Question 3</td>
<td></td>
</tr>
<tr>
<td>Question 4</td>
<td></td>
</tr>
<tr>
<td>Question 5</td>
<td></td>
</tr>
<tr>
<td>Question 6</td>
<td></td>
</tr>
<tr>
<td>IV. SUMMARY, CONCLUSIONS AND IMPLICATIONS OF FINDINGS</td>
<td>93</td>
</tr>
<tr>
<td>Summary</td>
<td></td>
</tr>
<tr>
<td>Implications</td>
<td></td>
</tr>
<tr>
<td>Staff Selection</td>
<td></td>
</tr>
<tr>
<td>Staff Evaluation</td>
<td></td>
</tr>
<tr>
<td>In-service Training</td>
<td></td>
</tr>
<tr>
<td>School Psychology Training Program</td>
<td></td>
</tr>
<tr>
<td>Implications for Further Research</td>
<td></td>
</tr>
<tr>
<td>APPENDIX</td>
<td>112</td>
</tr>
<tr>
<td>REFERENCES</td>
<td>113</td>
</tr>
</tbody>
</table>
LIST OF TABLES

Table                                                      Page
1. Critical Behaviors of School Psychologists       51
2. Frequency Distribution of All Behaviors
   Within the Ten Areas                          69
3. Frequency Distribution of Behaviors Supplied
   by Principals Within the Ten Major Areas       70
4. Frequency Distribution of Behaviors Supplied
   by Psychologists Within the Ten Major Areas    71
5. Locus of Intervention                          83
CHAPTER I

INTRODUCTION

The responsibility of a department of psychology, within a large urban school system, is to provide the best possible psychological services to a wide range of individuals, individual children, groups of students, parents, teachers and school administrators.

In order to meet the requirements of the particular school system the psychology department must be in a position to select and employ those school psychologists who have the skills that are required by the specific system. In addition to selecting qualified personnel, the department must also provide in-service training experiences so that psychologists will be able to make available to the system the most contemporary psychological and educational theory and practice. Not only is the department responsible for selection and in-service training, but it is also responsible for evaluation. The evaluation should indicate the level of expertise each psychologist has in the wide range of services which are required by the system.

The activities performed by the department of psychology, selection, training and evaluation, are based
upon the assumption that an adequate job description of the school psychologist exists. A selection process is based upon the assumption that the job characteristics of the school psychologist are known. That is, the department identifies these skills which contribute to effective functioning within the school system and then selects and employs the individuals who have the required skills. In order to determine what the content of in-service training should be, the department must outline whatever contributes to the effective functioning of school psychologists. After determination is completed, the department builds a training component that provides educational experiences which seek to develop the skills. Similarly, evaluation can be carried out only after determining the tasks of the school psychologist both in general and in the unique. However, only after ascertaining the job requirements of the school psychologist can the standards used to judge individual psychologist's effectiveness and the content of a staff evaluation procedure be set. General and unique tasks of the school psychologist must be determined first.

Research on the Job Requirements of School Psychologists

In the past, two basic approaches have been used to determine the tasks that school psychologists perform. One group of studies asked psychologists to report case
load characteristics for a period of time. From an analysis of the reports submitted by various psychologists, categories are formed which indicate the most frequent problems referred to the psychologist. A second technique which has been used consists of asking a group of psychologists to submit a log which indicates how much time is spent in professional activities. The logs are analyzed and major categories are formed which represent those activities encompassing a significant amount of time. The following review indicates that the major work areas engaged in by school psychologists include: comprehensive individual psycho-educational evaluation, consultation with school personnel, and consultation with parents.

**Time Studies**

According to a 1959 report (Bonham, 1961) on school psychology in Ohio, it was concluded that most school psychologists in Ohio spend a major portion of their time doing individual child study. It was found that school psychologists evaluated 200 to 250 children each year, which consumed 55 per cent of the total professional time of the psychologists. The 1959 survey also reported that the psychologist spent an additional 20 per cent of his time engaged in holding 150 to 200 conferences with school
personnel. Another 20 per cent of the psychologist's time was spent in conferences with parents.

A 1967 survey (Farling, 1968) of the school psychologists in Ohio showed that they continued to spend their time in the area of individual child study. Seventy-eight per cent of the psychologists responding to a choice of job descriptions selected descriptions emphasizing direct child study. The great majority of the school psychologists reporting to this survey also selected parent-teacher conferences and psychometric screening as the next most important responsibilities of school psychologists. Providing consultant services were also cited by the psychologists as being a major area of responsibility. The consultative services provided in order of importance were consultation on policies and decisions regarding early admission, consultant to parents and teachers, consultant services to the educable mentally retarded program, consultant on curriculum and instruction, and consultant to in-service training.

The functions that school psychologists perform in Minnesota (Dansinger, 1968) are very similar to the functions of Ohio school psychologists. The school psychologists, in a survey conducted in 1967, reported individual testing was the activity where the largest proportion of time was spent. Parent-teacher conferences ranked among the top seven activities.
Colorado school psychologists (Flax, 1966) reported activities which are very similar to those activities reported by psychologists in Ohio and Minnesota. Nearly all the psychologists responding to the 1966 survey indicated that they performed intelligence testing and test interpretation. About three-fourths of the Colorado group reported activities related to follow-up programs, in-service training and personal counseling. The data from Colorado suggested that most school psychologists in that state spend the largest portion of their time in diagnosis and remediation.

School psychologists working in Massachusetts (Keenan, 1964) during 1964 also reported working in those areas already identified by the psychologists from Ohio, Minnesota and Colorado. The psychologists from Massachusetts reported work which focuses upon the areas of consultation and diagnostic study of children. However, unlike the former groups these psychologists reported more frequent consultation with teachers.

A very recent time study was reported (Rothman, 1972) which involved 120 practicing Ohio school psychologists. Testing was reported as the activity which took the largest portion of the psychologists' time. Report writing was the activity which took the second largest portion of the psychologists' time. A large portion of the psychologists reported that between three to five per cent of
their time was spent in consultation with school personnel. Time was allotted to service areas in the following order (from greatest amount of time spent to least amount of time spent): (1) clerical activities, (2) service to children, (3) service to the school, (4) service to the profession, (5) service to parents, (6) service to teachers, (7) service to the community.

From the research studies that have been cited so far it is possible to conclude that the following areas are the major areas of work of the school psychologist:

1) Comprehensive individual psycho-educational evaluation
2) Consultation with school personnel
3) Consultation with parents.

The survey of research indicates that answers to the questions concerning staff selection, in-service training and staff evaluation in any school psychology department probably would involve heavy emphasis upon assessment and consultation skills. Because school psychologists so frequently engage in the above activities, their effectiveness or ineffectiveness should in great part be judged by their expertise in these three basic areas.

Case Load Analysis

There is still a further body of research which should be consulted in order to delineate further the major work areas of the school psychologist. The research deals with
the types of problems that are frequently referred to the school psychologists. By knowing what types of cases are referred to the psychologist and thereby the types of problems he encounters, it would be possible to determine the types of skills needed by the psychologists to solve those problems. This section of the review of literature seeks to answer the following question: what types of problems are school psychologists asked to solve? If an answer to this question could be found, the job requirements of the school psychologists could be further clarified. The following review should indicate what types of problems are most frequently referred to the psychologists. Once the problems are known, inferences can be drawn concerning the skills that the psychologists must have to solve the problems. This portion of the review indicates that the effective school psychologist must have skills which will help children, parents, teachers and administrators formulate solutions to a wide range of educational and psychological problems.

In Ohio the most frequent problem areas encountered by school psychologists (Gross and Farling, 1969) were placement problems (37 per cent), and academic problems (26 per cent). The next most frequently referred problems in order of frequency were intellectual problems, acting out behavior, and family problems. Sixty-four per cent of all cases were males with almost no difference
found between varying types of school districts (Gross, 1969).

Similar findings, again in Ohio (Nicholson, 1967), were derived from an analysis of 590 reasons for referral. Academic difficulties, class placement, emotional reactions, behavior problems, moral problems, family and home problems were the major problem areas encountered by the school psychologist. The bulk of the case-study work being performed by psychologists in the 59 surveyed districts was with children whose primary problem evolved around their lack of success in academic tasks. It was noted that 69 per cent of those children referred as having problems in the academic task area were boys. The second most frequently stated reason for referral was class placement. Twenty-six per cent of all children referred were in this category. Teachers referred children for class placement for a determination of the child's eligibility for placement in classes for the educable mentally retarded or in classes for gifted children. Seventy-three per cent of all referrals originated from classroom teachers.

A study conducted by the Ohio Department of Education (Gross, 1966) reported similar findings. The study identified the following problem areas: (1) routine testing such as placement or continuation in special education
programs, (2) children with academic problems, (3) mental retardation or low ability, and (4) acting out behavior.

It is now possible to add the information gained through the analysis of reason for referral and case load to the earlier cited studies and to suggest further possible answers to the basic questions concerning staff evaluation, selection and in-service training. It would appear that any evaluation of staff or any in-service training program should directly bear upon the assessment and consultation areas. In addition in-service training programs should be designed to increase the psychologist's proficiency in the assessment and consultation process with specific stress upon introducing the psychologist to specific techniques which have proven to be useful to remediate a wide range of school problems. The problems include class placement, academic problems, physical problems, intellectual problems, acting out problems, family problems and community problems.

**NASP Guidelines**

The NASP guidelines (Patros, et al., 1972) concerning the qualifications necessary to function effectively includes the above areas drawn from research findings. However, the NASP statement includes many requirements which were not identified by research. From the NASP statement it is possible to outline the following job
qualifications for school psychologists

A. Individual Assessment--The school psychologist administers a wide range of individual tests and/or observational techniques. The psychologist interprets, communicates with and helps others to utilize the results from individual assessment techniques in such a way that they will be of maximum help to the student.

B. Individual Difference--The school psychologist demonstrates flexibility in the way that he helps teachers and other professional educators to grow at their own rate as they progress toward a greater understanding of how to help pupils learn. The school psychologist helps school personnel find ways of adapting to the learning needs of the individual learner.

C. Exceptional Children--The school psychologist assists teachers and other professional educators in identifying these children whose needs are so atypical that they require the specialized help beyond that available to the typical child. The school psychologist, through his knowledge of education and psychology, helps determine the best possible school placement and program for exceptional children.

D. Learning and Remediation--The school psychologist, through consultation with teachers, parents and others, help arrange conditions for learning so as to maximize the effectiveness of learning.
E. Personality Theory and Development--The psychologist, because of his professional background in child growth and development, personality theory and abnormal psychology, assists educators and parents in developing a greater understanding of student behavior and to create a social climate in the school which maximizes learning and personal growth for the student.

F. School Organizations--The psychologist knows his area of expertise and the area of expertise of others on the educational staff. The psychologist participates with others in helping to change the organizational structure of the school in order to improve communication within the system and functioning of the system.

G. Measurement and Accountability Research--The school psychologist assists educators in using and developing group measurement techniques. He encourages educators to accept responsibility for growth toward predetermined goals.

The above job requirements, as outlined by NASP and the studies concerning time study and case load analysis, are broad and inclusive.

The particular constellation of factors which leads to successful functioning as a school psychologist in a particular and unique educational setting depends upon the constraints within the local school system. For example,
most urban school systems have departments of evaluation and research which assume the duties included as measurement and accountability. Likewise, most urban systems have a wide range of special school personnel: curriculum specialists at the elementary level in each of the content areas; curriculum specialists at the secondary level in each of the content areas; remedial educational consultants at the elementary level who have specialized knowledge in reading and mathematics; school nurses; speech and hearing therapists; clinical audiologists; home-school community agents; guidance counselors at both the elementary and secondary levels. These personnel perform many of the duties which are cited in the literature and by NASP.

The duties of school psychologists must always be defined in combination with factors found within the local school system (Flax, 1966). The job requirements for school psychologists in one school system vary in comparison to the job requirements of the school psychologists in another system.

In all likelihood many of the requirements reported by NASP and cited in the research studies will be found necessary to function effectively in a specific school system. However, to build a valid evaluation instrument for psychologists, to institute an in-service training program which is meaningful in terms of local needs, and
to select qualified staff, the unique constellation of job requirements for a specific system must be determined. As stated before, many of the requirements which were described earlier may be found necessary. However, the particular arrangements of these requirements invariably will depend upon factors within the specific school system.

Summary

A review of research reveals a need for a more specific and scientific approach in determining the job requirements of school psychologists. Much has been written describing school psychologists both in Ohio and other states. While these studies are valuable, they do not address the specific and unique job qualifications of psychologists. Nearly all the studies have been quite similar and it appears that little more can be gained through an approach utilizing a time study or a case-load analysis other than the study of trends. It appears that what is now needed is a more definitive study of those specific qualities and competencies that make for effective functioning as a school psychologist with special reference to a unique system. In the present study an attempt is made to apply an entirely different research technique to the situation. The following is a description and analysis of the technique.
The Development of the Critical Incident Technique

Flanagan, while serving as a psychologist in the Aviation Psychology Program, was confronted with the same type of problem the present study addresses—determining job requirements. Flanagan developed a technique through which it is possible to identify the competencies an individual must have in order to effectively perform a job. This technique has come to be known as the critical incident technique.

Flanagan (1949) stated—

A new approach has been developed which attempts to substitute data in the form of representative samples of observed behavior for opinions. Critical incidents are collected which report observation of behavior representing either unsatisfactory or outstanding performance of important aspects of the individual's job. These are only the usual judgments of sameness and relevance necessary to the compilation of any statistical series. Since the incidents involve only behavior and not inferences based on the behavior, they tend to represent objective data rather than subjective opinions or impressions.

Flanagan (1942) pointed out another advantage of the technique—

This procedure has considerable efficiency because of the use of only extremes of behavior. It is well known that extremes can be more accurately identified than behavior which is nearly average in character.

The critical incident technique is different from other methods for determining requirements in that emphasis is placed upon the discovery of those job requirements.
which are critical in the sense that they have been observed to be determining factors in the successful or unsuccessful participation of a significant number of individuals on a specific job (Sternloff, 1953).

Persons well acquainted with a particular job are asked to make judgments of what represents effective or ineffective job performance. The individuals who make the judgments must have observed the incident they are to report about. The person reporting the incident is not asked to report attitudes, motives or aptitudes but rather to describe a situation together with all its relevant detail and state explicitly what an individual was observed doing in the situation.

Flanagan (1954) stated specific conditions which must be established to determine job requirements. These conditions are:

1) actual behavior must be observed.

2) The observer must have knowledge of the aims and goals of the individual with respect to the activities observed.

3) The observer must be qualified to make judgments regarding successful and unsuccessful behavior in the activity observed.

4) The conditions of reporting must be such as to insure a reasonable degree of accuracy.

5) The specific judgment to be made by the observer in applying the criteria for determining effective and ineffective behavior with respect to important aspects of the activities reported on must be clearly defined.
The critical incident technique has been used in studies on groups and individuals in industrial work and educational research projects. The American Institute for Research reports these groups as having conducted projects utilizing the critical incident technique in recent years.

It is being used by the American Council on Education in a survey of general education in a group of eighteen colleges; by Teachers College, Columbia University, in a citizenship study; by the New York State Education Department, the New England School Development Council and the National Committee on Teacher Examination in studies of teachers; by the United States Civil Service Commission in connection with its Quality Examining Program; by the American Psychological Association in developing a code of ethical standards; and by numerous other individuals and groups on a wide variety of problems including social adjustment, clinical therapy, educational objectives, and industrial efficiency (American Institute of Research, 1950).

This review of literature will cite studies involving the use of the critical incident technique in the areas of medicine and dentistry, education, psychology and U.S. Armed Services.

Critical Incident Technique as Applied to the Fields of Medicine and Dentistry

A study at the University of Pittsburgh was completed which defined the critical requirements for dentists (Wagner, 1949a). Patients and practicing dentists were asked to describe specific situations in which a dentist had been particularly effective or ineffective. This
study provided the dental school at the University of Pittsburgh with information of the specific kinds of dental practice which have made the difference between effectiveness and ineffectiveness both in the public practice of dentistry and in the dental school clinics.

The critical incident technique was a technique used to establish an empirical method for evaluating nursing behavior (Fivars and Gosnell, 1966). Essentially nurses and other members of the hospital staff were asked to respond to the following statement. Think of the last time that you observed a nurse do something that you thought was especially effective in contributing to patient care. What led up to the situation? Exactly what did the nurse do? Why do you feel it was particularly effective? After the incidents were collected and analyzed, the information which originated from the analysis was used to develop curriculum objectives, learning experiences consistent with the determined requirements, and a nurse evaluation instrument.

Physicians, nursing supervisors, staff nurses and patients in hospitals around the Washington, D.C. area were asked to participate in a study of nursing behavior related to patient care and improvement (Gorham, Lichtenstein and Marchese, 1959). The incidents given by these various individuals were categorized into a behavioral classification system. A number of evaluation tools were developed
on the basis of the lists of critical behaviors. Among the instruments developed were behavioral checklists and an observational record form.

**Critical Incident Technique and U.S. Government**

Pilots, flight engineers and radar observers, all members of an air crew, served as subjects in a study conducted to determine air crew requirements (Wagner, 1949b). Interview teams collected 9,000 critical incidents which were then categorized into four main areas containing twenty-four job requirements.

The critical requirements of United States Air Force Officers were the subject of a piece of research conducted by the American Institute for Research (Preston, 1968). An extensive list of critical requirements was formulated by an analysis of effective and ineffective incidents describing the actions of officers in a particular military situation.

The research staff of the American Institute for Research conducted an investigation into the critical requirements of research personnel (Flanagan, 1949). Twenty-five hundred research workers contributed reports of incidents they observed on the individuals they worked with and those they supervised. An analysis of the incidents yielded over 3400 different behaviors. These behaviors
were then classified into a framework which included eight critical areas of behavior important in conducting research.

Critical Incident Technique and the Field of Education

Public school superintendents and board of education members were asked to submit written descriptions of incidents involving effective or ineffective performance of school board members (Barnhart, 1952). From these incidents effective and ineffective behaviors were extracted. An analysis of these behaviors led to the determination of four areas of necessary capability.

Concerning the research method used, Barnhart concluded:

There seems to be no valid reason why the critical requirements technique could not be applied in any activity. Modification might be required, but the basic principles appear applicable (Barnhart, 1952).

The critical incident technique was applied to determine the critical requirements for teachers (Jensen, 1954). Incidents were collected from students in methods of teaching courses, student teachers, and school principals concerning classroom behavior of teachers. Teachers' critical behaviors were classified under three general categories:

1) Personal Qualities - included in this area were references to the emotional stability of the
teacher, also behavior which reflected honesty, fairness and objectivity.

2) Professional Qualities - included in this area were behaviors which related to knowledge of subject matter, organization of instructional materials and ability to provide necessary remedial instruction.

3) Social Qualities - included in this area were the behaviors relating to face-to-face relationship with students and associates, ability to understand and appreciate feelings of others.

Jensen (1951) concluded by stating:

It is suggested that the critical incident technique might be employed profitably in local school situations in developing valid bases for teacher evaluation and as an aid to the in-service growth of teachers.

The critical requirements for school administrators, based upon an analysis of critical incidents, were developed by Sternloff (1953). The two groups contributing incidents in this research were school board members and school administrators.

A very comprehensive series of investigations have been conducted at the University of Georgia under the sponsorship of the W. K. Kellogg Foundation. Five studies have been reported in this series all dealing with performance requirements of school principals. One study in this series (Robins, 1954) analyzed the incidents reported
by school principals. A second study (Phillips, 1954) focused upon incidents supplied by teachers. The other studies in the series (Bice, 1955; Tyson, 1955) were based upon incidents given by school board members and instructors at teacher training institutions. The fifth study of the series (Elliott, 1955) identified effective and ineffective principal behavior through an analysis of his behavior as reported by students. The five studies completed at the University of Georgia were initiated to determine the competencies essential for successful administration and to improve the administrator education program at the University.

On September 4, 1952 the Council of Representatives of the American Psychological Association adopted Ethical Standards of Psychologists as official policy of the Association. The critical incident technique was utilized in gathering data for the standards. The basic data for the Code of Ethics were the experiences that psychologists had in resolving problems that appeared to them to have had ethical implications. Some 7500 members of APA were asked by letter to describe a situation they knew of first hand, in which a psychologist made a decision having ethical implications and to indicate what the correspondent perceived as being the ethical issue involved. The APA Code became the first code of ethics which had an empirical
base resting upon the raw data of the experiences of psychologists.

In most of the above studies the authors suggested that the critical incident technique would be applicable to other areas.

**Evaluation of the Critical Incident Technique in a Study of School Psychologists' Job Requirements**

The use of the critical incident technique to the study of job requirements for school psychologists appears to be valuable in the following ways:

1. The critical incident technique, when employed to the practice of school psychology in a unique school system, should provide a comprehensive list of behaviors which may have made the difference between effective and ineffective participation within the profession of school psychology.

2. The critical incident technique yields information which deals with job requirements which are genuinely important and provides a means to establish the relative importance among the many job requirements.

3. The definition of requirements obtained by the critical incident technique is stated in the context of the important situations which characterize the job of the school psychologist and is
necessarily specific to the job of the school psychologist.

4. Subjective lists which are based upon opinion or theory, or hunches, are avoided. The use of the critical incident technique should allow for a more objectively derived compilation of job requirements.

The critical incident technique has been used successfully to determine the job requirements in a number of professions: officers in the Armed Services, Nursing, Dentistry, School Administration. There seems to be no major limitation why the critical incident technique could not be applied to the study of school psychologists' job requirements.

The Problem

Statement of the Problem

It is the purpose of this study (1) to determine the nature of the effective and ineffective critical behaviors of school psychologists as reported by school psychologists and public school principals in one school district, (2) to determine the school psychologists' job requirements that may be formulated from an analysis of the report of critical behaviors, (3) to find similarities and/or differences in the job requirements as suggested by principals on one hand and psychologists on the other, (4) to develop
a technique applicable to school psychology and related educational areas, and (5) to test the practicability of the procedure.

**Significance of the Study**

This study should supplement and strengthen objectively the existing school psychologists' job analysis, because it should indicate the relative importance of the school psychologists' behaviors and qualifications within a unique school system from the point of view of the principals as well as of school psychologists themselves. The study also should indicate what major difficulties are encountered by school psychologists. That is, an analysis of the ineffective behavior should indicate those situations in which the psychologists are encountering major difficulty in role performance. Furthermore, once the ineffective behaviors are identified ways of meeting them can be proposed. The findings of the study will provide data which will be valuable for (1) screening prospective school psychologists who are seeking employment in the one school system, (2) evaluating school psychologists currently employed, and (3) determining in-service education needs of the local school psychologists. For the purposes of this study the Columbus, Ohio City School District was utilized.
Basic Questions

1. When the total number of behavioral elements given by both principals and psychologists are combined, will effective behaviors significantly outnumber ineffective behaviors?

2. Will principals report more effective behaviors in contrast to ineffective behaviors?

3. Will school psychologists report more effective behaviors in contrast to ineffective behaviors?

4. How do effective and ineffective behaviors as identified by the research compare to those areas that were identified in the literature? (i.e., psycho-educational assessment, consultation with school personnel and consultation with parents).

5. What are the effective and ineffective behaviors in the school psychologists' performance as seen by the school psychologist in contrast to the principal?

6. What are the critical job requirements for school psychologists as identified by school psychologists and principals?

Definition of Terms and Concepts

For purposes of clarity, certain terms which will be used throughout the study are defined as follows:

School Psychologist—The school psychologist is an individual who is certified by the State Board of Education
in Ohio and is currently employed and functions as a school psychologist in the Columbus City Schools.

**Principal**—The principal is the individual directly responsible to the superintendent for the full direction of a single school. In addition to being directly responsible to the superintendent for the operation of the school the principals used in this study will have had experience working with two or more school psychologists in Columbus, Ohio.

**Critical Requirements**—Those specific behaviors which seem to reflect the difference between success or failure in school psychologists' activities.

**Critical Incidents**—Those specific situations wherein the behavior of the school psychologist was critical enough to result in success or failure in accomplishing specific tasks.

**Summary**

In order for a department of psychology situated within a large urban school system to select qualified personnel, to provide in-service training experiences and to evaluate staff members, the job requirements of school psychologists must be ascertained. A number of studies have been conducted relative to the essential requirements of school psychologists. These studies may be classified into two groups: those dealing with time log analysis, and
those dealing with case load analysis. These studies have indicated that the primary job requirements evolved around conducting individual child psycho-educational assessment and consulting with parents and school personnel. While these studies are valuable, they provide information which is general and does not define the specific and unique constellations of job requirements required of school psychologists in Columbus. There is an evident need for employing an objective method of systematic collection of factual detail relating to on-the-job behavior in order to determine the essential requirements for school psychologists in Columbus.

A research method designed to define job requirements was developed by Flanagan and is known as the "Critical Incident Technique." Certain conditions must be established for the reporting of usable critical incidents: (1) actual behavior must be observed, (2) the respondent must have knowledge of the aims and goals of the individual with respect to the activity observed, (3) the respondent must be qualified to make judgments regarding effective and ineffective performance of the job, (4) the conditions of reporting must be such as to insure a reasonable degree of accuracy.

The critical incident technique has been used successfully to determine the job requirements in a number of professions: Officers in the Armed Services; Nursing;
The use of the critical incident technique in the study of job requirements for school psychologists appears to be valuable in the following ways:

1. It should provide a comprehensive list of behaviors which have made the difference between effective and ineffective participation within the profession of school psychology.

2. It should establish job requirements which are genuinely important and provide a means to establish the relative importance among the many requirements.

The purposes of the present investigation are (A) to determine the nature of effective and ineffective behaviors of school psychologists as reported by school psychologists and school principals, (B) to determine the school psychologists' job requirements that may be formulated from an analysis of the reports of critical behaviors, (C) to find what similarities and/or differences are in the job requirements as suggested by principals on one hand and psychologists on the other, (D) to develop a technique applicable to school psychology and related educational areas, and (E) to test the practicability of the procedure.
CHAPTER II

PLAN OF STUDY

The basic data of the present study are incidents of school psychologist behaviors as reported by school psychologists and school principals employed in the Columbus Public Schools. The plan used in the study follows that of the critical incident technique as described by Flanagan (1954). No one in the profession of school psychology has used (and published) the critical incident technique to establish the job requirements of school psychologists. Because the application is new to the profession, a detailed step-by-step discussion is in order. The successive steps which were taken are discussed under the following headings:

1. General Consideration in Over-all Planning
2. Pilot Study
3. Development of Plans for Collecting Incidents
4. Selection of Participants
5. Collection of Interview Data
6. Analysis of Data

29
General Considerations in Over-all Planning

When the study was first being considered, several approaches to the general problem of establishing the job requirements of school psychologists in Columbus were considered. Among those considered was an analysis of logs which would indicate how much time the psychologist was spending in any one activity. Another approach that was considered was actually observing the psychologist at work and recording his behavior during selected work periods. Each of these approaches was rejected in favor of the use of the critical incident technique. The critical incident technique represented a procedure which could produce the type of data the study sought to examine.

Fivars's book, Nursing Evaluation: The Problem and the Process (1966), along with the references cited previously suggested certain guidelines that might be followed in establishing an evaluation system for school psychologists. The critical incident technique was the basis upon which Fivars built her nursing evaluation instrument.

An instrument was constructed which would serve to elicit from the principals and psychologists usable critical incidents. The content of the instrument which was finally devised closely resembled the statements that A. C. Jensen (1951) used in his study, "Determining Critical Requirements for Teachers."
Pilot Study

A pilot study was carried out with several school psychologists and visiting principals in the Columbus Public Schools in order to establish whether the approach as outlined by Flanagan, Fivars and Jensen was applicable to school psychology. The investigator had drawn up procedures which essentially resembled the ones which are presented in the following sections of this report. The pilot study was carried out (1) to determine if the instrument that was designed would generate usable incidents and (2) to secure the criticism of those participating in the pilot study. The results of the pilot study did not yield changes in the instrument but did yield suggestions on how the procedure could be changed in order to facilitate subject participation. These suggestions were included in the research methodology.

Development of Plans for Collecting Incidents

Selection of Participants

Flanagan (1954) states that participants who provide the reports concerning critical incidents must be chosen because of their familiarity with the activity. Since the school principal and the school psychologist are in such a position, both groups from within the one school district are included in the study. A randomized sample of 25 school principals was selected by numbering all
principals in the Columbus School System and then selecting the principals on the basis of 25 different numbers drawn from a table of random numbers.

The 25 psychologists in the study were all full time employees with the Columbus Board of Education and were serving in the capacity of school psychologists. All the psychologists were serving in schools which were administered by the principals.

Collection of the Interview Data

The data was collected through interviews with the principals and psychologists in order to avoid difficulties with mailed questionnaires. All interviews were conducted by the investigator.

Sponsorship of the Study

Dr. Damon Asbury, Supervisor, Area of Psychological Services, Columbus Public Schools, offered his support to the study. Dr. Asbury suggested that this investigator seek the sponsorship of the individual school psychologists in Columbus. The individual psychologists in Columbus were interviewed and their support for the study was attained.

Also during the interview with the psychologist, the investigator asked each school psychologist to call a principal who had been selected to serve in the research. This request was made in order to introduce the principals
to the general nature of the research and also to acquaint them briefly with the investigator.

The Interview

Interviews of participants followed a basic plan.

1. A telephone call was made to obtain a satisfactory time for the interview. During the phone contact the general purpose of the study was stated as "A study of the work of the school psychologist."

2. A personal interview was held with the principals and psychologists either in their office or at their home.

The interview began with an introduction of the investigator himself and the statement of the purpose of the study. It was also explained that the respondent could terminate his services as a subject at any time during the interview. It was also explained that the respondent's identity would not be revealed in any publication or document. After this information had been conveyed to the respondent, they were asked to respond to the following statements. The school principals were asked to respond to these two statements.

Statement 1. Think of the school psychologists with whom you have been closely associated. The psychologists you have in mind probably did many things that convinced you that he or she was effective but what was some outstanding act which made you consider the psychologist
effective? Describe some specific thing that the psychologist did that made the psychologist stand out in your mind as being particularly effective on the job. What led to the situation? Exactly what did the psychologist do? Why do you feel it was effective?

Statement 2. Think of the school psychologists with whom you have been closely associated. Of those psychologists, think of the one psychologist you consider most ineffective. The psychologist you are thinking of probably did a lot of things which caused you to feel that the psychologist was ineffective, but what was the particular incident that stands out in your mind as a clear example of ineffectiveness on the job? What specific act demonstrated the psychologist's ineffectiveness? What led to the situation? Exactly what did the psychologist do? Why do you feel that it was ineffective?

The school psychologists were asked to respond to these two statements.

Statement 1. Think of the last time that you, as a school psychologist, did something that you thought was especially effective in contributing to the solution of a critical psychological and/or educational problem. What led to the situation? Exactly what did you do as a psychologist that was critical in solving the problem? Why do you feel you handled the critical situation in an effective manner?
Statement 2. Think of the last time that you, as a school psychologist, did something you thought was especially ineffective in contributing to the solution of a critical psychological and/or educational problem. What led to the situation? Exactly what did you do as a psychologist that was ineffective in handling the critical problem? Why do you feel that your handling of the critical situation was ineffective?

The answers given by the respondents were recorded on interview sheets that were specifically designed for that purpose. Following the recording of the data on the sheets, the information was read back to the respondent in order to determine the accuracy of the record and to make corrections.

Analysis of the Data

Transcribing Incidents to Analysis Cards

During the interview the information from the respondent was collected on interview sheets. In order to facilitate the analysis of the incidents, each incident reported was typewritten on a 5 x 8 card. The 5 x 8 cards had been especially prepared for this analysis. The format of all the cards was exactly the same. Along the top edge was space which was used for recording data. By looking at the top edge of the card it was possible to determine whether the incident had been given by a
psychologist or a principal. There was also space pro-
vided to indicate the interview number and whether the
given incident was effective or ineffective. Below the
space set aside for the data were two large spaces.
These spaces were used to record information concerning
the background information of the situation reported and
the psychologist's behavior. The incidents were numbered
consecutively according to interview time and date. All
the incidents given by one respondent were assigned the
same number. When a respondent gave more than one effec-
tive or ineffective incident, this was indicated by a sub-
number following the major designation, e.g., E-25-3. The
E indicated that the incident recorded on the card in-
volved effective behavior, the 25 indicated that it was
the twenty-fifth interview and the three indicated that it
was the third example of behavior given by the respondent.

Identification of the Critical Behavior

After each incident had been transcribed to 5 x 8
cards, an examination was made to determine if all inci-
dents were usable. The next step consisted of reading
each incident and isolating the specific behavior that was
performed by the psychologist. This behavioral element
was then underlined on the 5 x 8 card. The abstracted
behavior elements were then individually typewritten on
3 x 5 cards. The 3 x 5 cards contained the same identifying
information that was contained on the 5 x 8 card.

Organizing and Structuring the Behaviors

The reports of behavior which were collected from the principals and psychologists could have been organized into any one of a number of classification schemes. However, since the eventual use of this research will be directed toward making recommendations concerning psychologist selection, content of in-service training, and staff evaluation, the classification scheme used in this research reflected a job-oriented approach. In addition, the classification system provided a framework of on-the-job activities already familiar to psychologists. Furthermore, the review of literature suggested possible groupings of the data; i.e., individual assessment, consultation with school personnel and parents.

Establishing Major Areas of Classification

After a frame of reference had been decided on, careful reading of all the behaviors recorded on the 3 x 5 cards was done and 10 major areas of classification were inductively derived:

I. Consulting with Parents
II. Consulting with Teachers
III. Consulting with Principals
IV. Evaluating and Counseling with Students
V. Placing Students in Special School or Community Programs

VI. Providing Group Counseling Services

VII. Referring Children to Physicians

VIII. Organizing Pupil Personnel Councils

IX. Maintaining a School Visitation Schedule

X. Providing Immediate Information Feedback to School Personnel

Category Formulation

The above process resulted in the summarization of all the behaviors in 10 broad areas. The next step in the analysis was the formation of categories within the broad 10 major areas. This phase of the analysis can be considered to be a further analytical reduction in that it succeeded in grouping the behavior in still smaller categories. Essentially this stage of the analysis involved re-reading all the behaviors which were included in each of the ten major areas. Similar behaviors within each major area were grouped together. The categories within the major areas were developed on an entirely deductive basis. If the behavior could not be assigned to a category within a major area, then a revision was made in the system by redefining the category or a new category was added. Revision of major areas and categories within areas was made as the need for them arose.
A total of 21 categories appeared under ten major areas from an analysis of all the behaviors. After all the behaviors had been classified into a category, a descriptive statement was written which summarized all the behavior within that category. These statements became the major category headings. Following the writing of the category headings, a statement was written concerning a description of the major area. This statement described the similarity of all categories listed under each major area.

Objectivity of the Classification Scheme

The objectivity of this classification system was checked by two other school psychologists who were suited for the task. Both of these individuals were (A) familiar with the purpose and method of the research and (B) Ph.D. level school psychologists. These individuals, who served as judges of the objectivity of the classification system, were each given copies of the classification scheme. This information informed them of the major areas and categories. They were also given a statement which defined each area and sub-category. In addition each received a copy of all the psychologists' behaviors. The process these individuals went through was (1) to read and to become familiar with the classification, (2) to read each 3 x 5 card which contained the statement concerning the
psychologists' behaviors, and (3) to indicate in which area the behavior fell. The arrangements made by the two individuals of the behaviors within areas and categories were then compared with the arrangement made by the investigator. There was an 11 item disagreement between the classifications made by the investigator in comparison to the classifications made by the other two individuals. This adequately demonstrated the basic objectivity of the classification system.

The individuals who served as judges as to the objectivity of the classification system suggested ways in which the total number of areas could be reduced so as to make the classification system more manageable and also how to reword the description of the areas in such a way as to provide greater clarification.

Classification System

The classification system was considered complete when the system was checked and changed to accommodate the suggestions that were made. This classification system resulted in the identification of ten major areas. The major areas and the categories and their definitions are as follows:
AREA I
Consulting with Parents

This area concerns the psychologist's proficiency in consulting with parents. For the purpose of this study the following categories are used.

A. Explaining and clarifying the nature and cause of school and/or home problems. Included in this category are those behaviors which relate to the psychologist's success in explaining, clarifying and aiding the parents gain insight into the nature of their child's school and/or home problems. This category has three major sub-categories of behavior.

1. Behaviors regarding explaining and clarifying school and/or home problems.
2. Behaviors which relate to the personal effectiveness of the psychologist.
3. Behaviors which relate to the words and language used by the psychologist.

B. Recommending to parents ways of changing the home and/or school environment in order to remediate problems. Included in this category are those behaviors which relate to the psychologist's success in explaining to parents what they might do at home in order to help resolve the child's or parent's problem. Included in this category are those behaviors
which relate to helping parents implement behavior modification programs at home.

C. Recommending and identifying community resources. Included in this category are those behaviors which relate to the psychologist's recommending to parents that they seek the services of a private psychiatrist or special school resources for their child.

D. Organizing parent-training sessions. Included in this category are those behaviors which relate to the psychologist's organizing parent-training sessions dealing with child management issues.

AREA II
Consulting with Teachers

This area concerns the psychologist's proficiency in consulting with teachers regarding procedures for instituting changes within the school and classroom in order to remediate school problems. For the purpose of this discussion the following categories are used.

A. Recommending and helping the teacher implement ways of changing the school and classroom environment so as to better adapt that environment to the needs of individual learners. Included in this category are those behaviors which relate to the psychologist's success in establishing rapport with teachers in conferences and recommending ways of changing classroom procedures
and materials. Within this category are also those behaviors which relate to establishing a behavior modification program within classrooms.

B. Explaining to teachers the results of the psychoeducational evaluation through conferences and written reports. Included in this category are only those behaviors which relate to explaining results of the evaluation through conferences and reports and does not include any behaviors relating to recommending things for the teacher to do.

C. Recommending to teachers ways of changing the teachers' behavior in order to produce a better learning climate. Included in this category are those behaviors which are successful in getting the teacher to change his orientation and behavior toward the student or other personnel in the school.

D. Organizing teacher in-service training workshops. Included in this category are those behaviors which relate to the psychologist's success in organizing, implementing, and managing in-service educational experiences with teachers.

AREA III

Consulting with Principals

This area concerns the psychologist's proficiency in consulting with the school principal. For the purpose of
this study the following categories are used.

A. Changing the principal's perceptions of individual students. Included in this category are those behaviors which relate to the psychologist's success in changing the perception of the principal regarding educable mentally-retarded children, emotionally-disturbed children, and neurologically-handicapped children.

B. Changing the principal's perception of the role of the school psychologist. Included in this category are those behaviors which relate to the psychologist's success in changing the perception of the principal regarding the role and function of the school psychologist.

C. Recommendation to the principal. Included in this category are those behaviors which relate to the psychologist's success in recommending actions which the principal might take.

D. Psychologist-Principal-Parent Relations. Included in this category are those behaviors which relate to the psychologist's success in maintaining a positive relationship between himself, parents and the principal.
AREA IV
Evaluating and Counseling with Students

This area concerns the psychologist's proficiency in conducting psycho-educational evaluations, counseling with students and gathering diagnostic data relating to individual children. For the purpose of this study the following six categories are used.

A. Establishing rapport with students. In this category are those behaviors which relate to the psychologist's success in establishing a congruent empathetic relationship before and during the formal psychological evaluation. Included in this category are those behaviors which relate to setting and maintaining adequate structure during the examination and greeting the student in such a manner that the child is not made to feel overly anxious.

B. Gathering data regarding a student's problem through a clinical interview. In this category are those behaviors which relate to the psychologist's success in establishing a counseling relationship with a student so that the student will discuss information which bears upon the student's problem.

C. Collecting data through observation and consultation. In this category are those behaviors which relate to the psychologist's success in gathering data concern-
ing individual students through making observations of the child in a variety of environmental settings, consulting with other school personnel and parents and consulting the child's school record.

D. Conducting individual counseling sessions with individual students. In this category are those behaviors which relate to the psychologist's success in conducting individual counseling sessions with students in order to effect a change in the student's behavior.

E. Conducting a psycho-educational assessment and making a differential diagnosis. In this category are those behaviors which relate to the psychologist's success in conducting psycho-educational evaluations and making a differential diagnosis.

F. Screening children for the educable mentally-retarded program. In this category are those behaviors which relate to the psychologist's success in screening a number of children during one work day for the educable mentally retarded program.

AREA V

Placing Students in Special School or Community Program

This area concerns the psychologist's proficiency in arranging and/or aiding others in placing a child in a
special educational program or school. This area has three categories of behaviors.

A. Included in this category are those behaviors which relate to the psychologist's success in arranging for a child to be placed in a special educational program or school.

B. Included in this category are those behaviors which relate to the psychologist's success in helping others place a child in a program which is not associated with the public school—such as children's home, a private nursery school.

C. This category concerns those behaviors which relate to creating special remedial reading programs.

AREA VI

Providing Group Counseling Services

This area concerns the psychologist's proficiency in conducting group counseling sessions. Included in this category are those behaviors which relate to the psychologist's success in organizing and conducting group counseling sessions with elementary and junior high school students who were behavior problems in school, having adjustment difficulties or using drugs.
AREA VII
Referring Children to Physicians

This area concerns the psychologist's proficiency in referring a child to a physician. Included in this category are those behaviors which relate to the psychologist's referring and/or arranging for an examination with a physician.

AREA VIII
Organizing Pupil Personnel Councils

This area concerns the psychologist's proficiency in organizing a pupil personnel council. Included in this area are those behaviors which relate to the psychologist's success in organizing a pupil personnel council at the secondary school level involving the psychologist, assistant principal, nurse, guidance counselor and faculty members.

AREA IX
Maintaining a School Visitation Schedule

This area concerns the psychologist's proficiency with deriving and maintaining a schedule. For the purpose of this study the following category is used.

Establishing a school visitation schedule. Included in this category are behaviors which relate to the psychologist's maintaining a regular school visitation schedule; calling the principal in advance of going to the
school; being able to respond by going to the school within a few days after being called; being on duty for a full day.

AREA X

Providing Immediate Information Feedback to School Personnel

This area concerns the psychologist's proficiency in providing school personnel with immediate feedback of the results of the psycho-educational assessment.

Summary

A pilot study was conducted to establish whether the critical incident technique as developed by Flanagan (1954) was applicable to the profession of school psychology. The pilot project yielded satisfactory results. Twenty-five randomly selected principals and twenty-five school psychologists were asked to report critical incidents involving school psychologists. From the incidents 190 critical behaviors were abstracted and classified into major areas and categories. The objectivity of the classification system was checked by two qualified school psychologists. There was 5 per cent disagreement regarding behaviors, which was removed by restating the classifications. The major areas together with categories within the major areas were presented. The critical behaviors, grouped by area and category are analyzed in the following chapter.
CHAPTER III

RESULTS AND DISCUSSION

The purpose of this chapter is to report the distribution of behaviors abstracted from the critical incidents within the areas and categories of classification together with the frequency of occurrence as reported by principals and psychologists. In addition to reporting the behavioral elements which were abstracted from the critical incidents, information is presented which seeks to answer the questions which were stated earlier in the report. Finally, the critical requirements of school psychologists in Columbus, Ohio are reported.

All of the critical behaviors distributed by the areas, together with the frequency of occurrence as reported by principals and psychologists are reported in the following table.
TABLE 1
CRITICAL BEHAVIORS OF SCHOOL PSYCHOLOGISTS

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
</table>

I. Consulting with Parents

A-1. Behaviors regarding explaining and clarifying school and/or home problems.

Effective

a. Consulted with parents concerning the nature and cause of their child's school problem. 2 10

b. Clarified with parents the cause and nature of their child's emotional problem. 2

c. Reassured parents that the problem their child was having could be solved. 1

d. Explained to parents what they could realistically expect of their child. 1

e. Counseled the parents into accepting the social and academic limitations and strengths of their child. 1

f. Consulted with a parent, and was successful in getting the parent to accept the fact, that they had not been responsible for their child's retardation. 1

g. Discussed with parents information concerning home behavior and was able to show how this behavior related to school misbehavior. 1

h. Advised parents concerning what constitutes good family living. 1
### TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Did not meet with parents and explain results of psychological evaluation.</td>
<td></td>
</tr>
<tr>
<td>b. Reported findings about family structure which principal could not report to parents because of possible parent misunderstanding.</td>
<td></td>
</tr>
<tr>
<td>c. Found fault with and concentrated upon the negative aspects of the child-rearing practices of parents.</td>
<td></td>
</tr>
<tr>
<td><strong>A-2. Behaviors which related to the personal effectiveness of the psychologist.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Put parents at ease so communication between school and parent could transpire.</td>
<td></td>
</tr>
<tr>
<td>b. Related to parents in a relaxed-friendly manner.</td>
<td></td>
</tr>
<tr>
<td>c. Presented information to parents concerning their child's problem in a way that did not alarm them and yet convinced them that they had a problem.</td>
<td></td>
</tr>
<tr>
<td>d. Explained to defensive parents in a non-threatening way what the school was trying to accomplish regarding their child.</td>
<td></td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Informed parents of school regulations and policies in a rigid, lecturing fashion.</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td>b. Was overbearing with parents; lectured them and always had to have last word.</td>
<td>1</td>
</tr>
<tr>
<td>c. Told parents their child was mentally retarded and failed to consider parent's opinion and feelings regarding their child.</td>
<td>1</td>
</tr>
<tr>
<td>d. Was unable to communicate with parents because rapport was impossible to attain.</td>
<td>1</td>
</tr>
</tbody>
</table>

A-3. Behaviors which related to the words and language used by the psychologist.

**Effective**

a. Discussed the child's problem with words and language parents understood.  
   
**Ineffective**

a. Used vocabulary and language that parents could not understand.  

b. Used statements which were Freudian in nature which parents found difficult to understand and accept.  

B. Recommending to parents ways of changing the home and/or school environment.

**Effective**

a. Developed for parents a behavior modification plan which eliminated child's problem.  
   

b. Consulted with parents over a year's period, regarding how to improve their child's motivation and study habits.
<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>c. Advised parents regarding how to deal effectively with family problems involving the parents, their son and daughter.</td>
<td>1</td>
</tr>
<tr>
<td>d. Outlined to parents home and management program which resolved child's problem.</td>
<td>1 3</td>
</tr>
<tr>
<td>e. Consulted with a parent about re-orienting her attitude concerning her husband's reportedly atypical sexual behaviors.</td>
<td>1</td>
</tr>
<tr>
<td>f. Set up a plan with a parent which could be followed at home so that a boy's attitude toward his father could be changed.</td>
<td>1</td>
</tr>
<tr>
<td>g. Advised a father to play a more dominant role with his son and advised mother to stop being so concerned about son in school.</td>
<td>1</td>
</tr>
<tr>
<td>h. Suggested to parents various home activities in order to correct a child's visual-perceptual problem.</td>
<td>1</td>
</tr>
<tr>
<td>i. Set up specific guidelines for parents to follow to solve their child's incoherence problem.</td>
<td>1</td>
</tr>
<tr>
<td>j. Consulted with parents about possible strategies to resolve a school phobia problem.</td>
<td>1</td>
</tr>
<tr>
<td>k. Outlined to parents possible school program which would benefit their child.</td>
<td>1</td>
</tr>
<tr>
<td>Areas and Categories</td>
<td>Frequency</td>
</tr>
<tr>
<td>--------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Ineffective</td>
<td></td>
</tr>
<tr>
<td>a. Was unable to convince parents that their child needed to be placed in a school for the emotionally disturbed and receive help from a psychiatrist.</td>
<td></td>
</tr>
<tr>
<td>b. Was unable to consult with parents concerning how they might help correct their child's home-school problem.</td>
<td></td>
</tr>
<tr>
<td>C. Recommending and identifying community resources.</td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td></td>
</tr>
<tr>
<td>a. Requested parents take their son to a clinic so that emotional problems could be treated.</td>
<td></td>
</tr>
<tr>
<td>b. Suggested to a parent that she receive help from an agency to solve child-rearing difficulties.</td>
<td></td>
</tr>
<tr>
<td>c. Aided parent in enrolling child in private preschool program.</td>
<td></td>
</tr>
<tr>
<td>d. Recommended to a parent that his child receive psychiatric help.</td>
<td></td>
</tr>
<tr>
<td>D. Organizing parent-training sessions.</td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td></td>
</tr>
<tr>
<td>a. Organized a six-week child management seminar with parents.</td>
<td></td>
</tr>
<tr>
<td>b. Organized three parent-study sessions to discuss child-rearing practices.</td>
<td></td>
</tr>
<tr>
<td>Areas and Categories</td>
<td>Frequency</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Psychologist Principal</td>
<td></td>
</tr>
<tr>
<td>II. Consulting with Teachers</td>
<td></td>
</tr>
<tr>
<td>A. Recommending and helping teachers implement ways of changing the school or classroom environment.</td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Conferred with a teacher and explained to her what she might do in the classroom to solve a child's school problem.</td>
<td>4</td>
</tr>
<tr>
<td>b. Developed a behavior modification program to correct a school phobia problem.</td>
<td></td>
</tr>
<tr>
<td>c. Developed with the assistance of the principal a behavior modification program to correct a child's school behavior problem.</td>
<td>1</td>
</tr>
<tr>
<td>d. Developed, with the assistance of a teacher, a behavior modification program to correct a disruptive child's behavior.</td>
<td>1</td>
</tr>
<tr>
<td>e. Evaluated a behavior modification program in a school and suggested specific techniques directed toward changing individual teachers' behavior.</td>
<td>1</td>
</tr>
<tr>
<td>f. Recommended specific techniques that the teacher could do to correct a child's spelling problems.</td>
<td>1</td>
</tr>
<tr>
<td>g. Suggested to the classroom teacher an educational program to correct a child's visual-perceptual problem.</td>
<td>1</td>
</tr>
<tr>
<td>Areas and Categories</td>
<td>Frequency</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Failed to provide the teacher with recommendations or suggestions regarding how to correct a child's classroom problem.</td>
<td>13</td>
</tr>
<tr>
<td>b. Was unable to provide follow-up service to a teacher to help the teacher implement corrective strategies.</td>
<td>2</td>
</tr>
<tr>
<td>c. Wrote recommendations that were so general that they were of no use to the teacher.</td>
<td>1</td>
</tr>
<tr>
<td>d. Provided the school with only limited recommendations, one of which was always a medical check-up to determine if child was neurologically handicapped.</td>
<td>1</td>
</tr>
<tr>
<td>e. Went to a teacher and impulsively presented recommendations which were not heeded because adequate rapport with the teacher had not been established.</td>
<td>1</td>
</tr>
<tr>
<td>f. Was unable to establish a suitable educational program for a child who was disqualified from attending the EMR program.</td>
<td>1</td>
</tr>
<tr>
<td>g. Presented a behavior modification program to a classroom teacher who rejected the program because of having no time or no experience with behavior modification.</td>
<td>1</td>
</tr>
<tr>
<td>Areas and Categories</td>
<td>Frequency</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td><strong>B. Explaining to teachers the results of the psycho-educational evaluation</strong></td>
<td></td>
</tr>
<tr>
<td>through conferences as well as written reports.</td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Explained to a teacher the results of the psycho-educational assessment.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Communicated to teachers through written reports and notes but failed to hold individual teacher conferences.</td>
<td>3</td>
</tr>
<tr>
<td><strong>C. Recommending to teachers ways of changing the teacher's attitude and behavior.</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Discussed with the classroom teacher and coach how they could relate to a child on a more personal one-to-one basis.</td>
<td>1</td>
</tr>
<tr>
<td>b. Changed a teacher's view regarding school psychologists from a professional who finds fault in a professional who helps teachers.</td>
<td>1</td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Was unable to suggest to a teacher the teacher's need to consult with a psychiatrist regarding personal problems.</td>
<td>1</td>
</tr>
<tr>
<td>b. Was not successful in modifying a teacher's behavior regarding how she responded and controlled disruptive students in her classroom.</td>
<td>1</td>
</tr>
<tr>
<td>Areas and Categories</td>
<td>Frequency</td>
</tr>
<tr>
<td>----------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td>c. Was unable to change a white teacher's perception of five black children, who the teacher felt were defiant, hostile and troublemakers.</td>
<td>1</td>
</tr>
<tr>
<td>d. Was unable to change an aggressive teacher's behavior toward a verbally unresponsive child.</td>
<td>1</td>
</tr>
<tr>
<td>e. Was unable to change a teacher's perception of a child's capacity and was not successful in getting the teacher to provide work on the child's level.</td>
<td>1</td>
</tr>
</tbody>
</table>

D. Organizing teacher in-service training workshops.

**Effective**

a. Organized a teacher in-service training program which focused upon learning of disabled children. | 1 |

b. Organized a teacher in-service workshop which introduced teachers to the theory and techniques of behavior modification. | 1 |

c. Provided teaching staff with counseling services through which they were able to discuss their chronic problems with students. | 1 |

d. Organized over a six-week period an in-service training workshop for teachers focused upon human relations. | 1 |

**Ineffective**

a. Was unsuccessful in a teacher workshop because presentation was not dramatic and entertaining. | 1 |
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>III. Consulting with Principals</td>
<td></td>
<td></td>
</tr>
<tr>
<td>A. Changing the principal's perception of the individual student and/or the school psychologist.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was unable to change psychologist's perception of a child from educable mentally retarded to trainable mentally retarded.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. Was unable to change the principal's perception of a child from educable mentally retarded to a dull-normal classification.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>c. Was unsuccessful in placing a child in a school for the emotionally disturbed because school staff rejected psychologist's findings.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>d. Was unable to change principal's perception of a child from educable mentally retarded to a child with a language disability.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>e. Was unsuccessful in changing the principal's perception of a child from neurologically handicapped to educable mentally retarded.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>f. Was unable to change principal's perception of the psychologists from an &quot;IQ tester&quot; to a professional having other skills in the behavioral sciences.</td>
<td>2</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td>B. Recommendations to the principal.</td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Gave the principal recommendations which he could follow to solve child's school problem.</td>
<td>3</td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Failed to explain fully a demonstration project involving low-achievement children to the school principal.</td>
<td>1</td>
</tr>
<tr>
<td>C. Psychologist-Principal-Parent Relationships.</td>
<td></td>
</tr>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
</tr>
<tr>
<td>a. Made recommendations to parents which were the opposite of those made by the principal causing principal-parent relationship problems.</td>
<td>1</td>
</tr>
<tr>
<td>b. Requested that principal leave a parent conference which resulted in the principal not keeping abreast of a child's school problem.</td>
<td>1</td>
</tr>
</tbody>
</table>

IV. Evaluating and Counseling with Students

A. Establishing rapport with students.

**Effective**

a. Established rapport with the child by spending adequate time with the child by setting and maintaining structure. | 2 |
<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Ineffective</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Alarmed a child by going to the classroom and in front of the whole class asked to see a child.</td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Used language which young children could not understand.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Related to students in an abrupt-hurried fashion never allowing them to fully express their views concerning their problems.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>d. Did not establish rapport with children but related to them in a fashion which made them feel anxious.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>B. Gathering data regarding students' problems through clinical interview.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Related to a student in a warm, understanding fashion and through the counseling relationship gathered extensive data concerning the child's problem.</td>
<td>1</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td><strong>C. Collecting data through observation and consultation.</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Effective</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Observed the child in many settings--classroom and playground--to gather diagnostic data.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>b. Interviewed parents and gathered extensive information regarding the child's history and development.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>c. Consulted with the teacher and principal to gather extensive data regarding child's problem.</td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>d. Held a pre-evaluation conference with the teacher to gather data.</td>
<td></td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>

**Ineffective**

| a. Failed to examine the child's school record before evaluating the child. | 1 |
| b. Reported invalid information about a child which could have been avoided by consulting with the teacher and the principal before and after the evaluation. | 1 |

**D. Conducting individual counseling sessions.**

**Effective**

| a. Conducted counseling sessions with a child to correct the child's school problem. | 2 |

**Ineffective**

| a. Referred the child to a community agency rather than providing the child with individual counseling services at school. | 1 |

**E. Conducting a psycho-educational assessment and making a differential diagnosis.**

**Effective**

| a. Conducted an extensive psychological evaluation to establish the child's exact learning disability. | 1 | 1 |
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td>b. Gave child an extensive battery of tests and determined that child had a severe visual-perceptual problem.</td>
<td>1</td>
</tr>
<tr>
<td>c. Administered an extensive battery of psychological tests and determined a child had IQ of 140 and a severe visual-perceptual problem.</td>
<td>1</td>
</tr>
<tr>
<td>d. Diagnosed the child as being hyperactive and having a visual-perceptual problem.</td>
<td>1</td>
</tr>
</tbody>
</table>

**Ineffective**

| a. Made diagnoses of neurologically handicapped regardless of the type of child referred. | 1          |

**F. Screening children for educable mentally retarded program.**

**Effective**

| a. Screen a number of children for the educable mentally retarded program during one work day. | 2          |

**V. Placing Students in Special School or Community Programs**

**A. Proficiency in arranging and/or aiding others in placing a child in a special school program.**

**Effective**

<p>| a. Told the principal the specific person to call to have child placed in an N.H. adjustment classroom. | 1          |</p>
<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>b.</strong> Succeeded in placing a child who had been in the educable mentally retarded program into a junior high program.</td>
<td>2</td>
</tr>
<tr>
<td><strong>c.</strong> Was instrumental in getting the child services from a reading clinic.</td>
<td>1</td>
</tr>
<tr>
<td><strong>d.</strong> Was successful in placing a child in a special N.H. adjustment classroom.</td>
<td>1 2</td>
</tr>
<tr>
<td><strong>e.</strong> Was successful in placing a child in a school for the emotionally disturbed.</td>
<td>2</td>
</tr>
<tr>
<td><strong>f.</strong> Was successful in placing a child in a school for the educable mentally retarded.</td>
<td>2</td>
</tr>
</tbody>
</table>

**B.** Proficiency in helping arrange placement in a program not associated with public school.

**Effective**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Was successful in placing a child in children's home through appearing in court.</td>
<td>1</td>
</tr>
<tr>
<td><strong>b.</strong> Assisted in placing a child in a private nursery school.</td>
<td>1</td>
</tr>
<tr>
<td><strong>c.</strong> Assisted in placing a child in a children's home.</td>
<td>1</td>
</tr>
</tbody>
</table>

**C.** Organizing a remedial reading program.

**Effective**

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>a.</strong> Organized and implemented a year-long remedial tutorial reading service for 24 elementary students.</td>
<td>1</td>
</tr>
</tbody>
</table>
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
</table>

VI. Providing Group Counseling Services

A. Proficiency in conducting group counseling.

Effective

a. Organized group counseling sessions for four junior high school girls who were on drugs. 1

b. Organized group counseling sessions for junior high school students who were having adjustment difficulties. 1

Ineffective

a. Failed to provide weekly group counseling sessions to seven boys who were behavior problems in school. 1

VII. Referring Children to Physicians

A. Proficiency in referring child to a physician.

Effective

a. Referred a hyperactive child to a physician and through medication was successful in reducing the child's hyperactive behavior. 2

VIII. Organizing Pupil Personnel Councils

A. Proficiency in organizing a pupil personnel council.

a. Organized a pupil personnel council made up of psychologist, assistant principal, nurse, guidance counselor, and faculty members to staff cases to remediate children's school problems. 1 1
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Psychologist</th>
<th>Principal</th>
</tr>
</thead>
<tbody>
<tr>
<td>IX. Maintaining a School Visitation Schedule</td>
<td>Frequency</td>
<td></td>
</tr>
<tr>
<td>A. Proficiency with deriving and maintaining a school visitation schedule.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Responded promptly to the call of the principal concerning coming to the building to see a child.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>b. Established a definite schedule of services for one building which allowed principal to plan and schedule activities.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>c. Called principal several days in advance of going to the school which enabled him to contact faculty and plan activities.</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Was unable to meet principal's request for emergency help, even though the psychologist had not been to the school in two weeks.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>b. Did not schedule a building for specific days which resulted in the principal being unable to plan or schedule activities.</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>c. Arrived at 9:30, left at 12:00 for lunch, got back around 1:30—psychologist was not in building long enough to do an effective job.</td>
<td>1</td>
<td></td>
</tr>
</tbody>
</table>
TABLE 1 (Continued)

<table>
<thead>
<tr>
<th>Areas and Categories</th>
<th>Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>X. Providing Immediate Information Feedback to School Personnel</td>
<td></td>
</tr>
<tr>
<td>A. Proficiency in providing immediate feedback of information.</td>
<td></td>
</tr>
<tr>
<td>Effective</td>
<td>3</td>
</tr>
<tr>
<td>a. Provided the school with immediate feedback regarding results of psycho-educational evaluations.</td>
<td></td>
</tr>
<tr>
<td>Ineffective</td>
<td>1</td>
</tr>
<tr>
<td>a. Neglected getting results of the psycho-educational evaluation to the school until two weeks after the evaluation was completed.</td>
<td></td>
</tr>
</tbody>
</table>

The information in the foregoing table may be organized in such a manner that will provide answers to the questions which were stated earlier in the report. Table 2 reports the total number of effective and ineffective behaviors per area cited by both principals and psychologists. This table also reports the total number of effective and ineffective behaviors across all areas cited by principals and psychologists. Table 3 reports only those behaviors cited by principals. Table 3 includes the same type of information as does Table 2 but the information is only from one respondent source—principals. Table 4 reports the data given only by psychologists. By examining
the three tables an analysis may be made concerning the
over-all data collected in the study and also information
given by the two respondent groups.

**TABLE 2**

**FREQUENCY DISTRIBUTION OF ALL BEHAVIORS**
**WITHIN THE TEN AREAS**

<table>
<thead>
<tr>
<th>Areas</th>
<th>Frequency of Effective Behaviors</th>
<th>Frequency of Ineffective Behaviors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Consultation with Parents</td>
<td>55</td>
<td>12</td>
<td>67</td>
</tr>
<tr>
<td>II-Consultation with Teachers</td>
<td>32</td>
<td>30</td>
<td>62</td>
</tr>
<tr>
<td>III-Consultation with Principals</td>
<td>3</td>
<td>11</td>
<td>14</td>
</tr>
<tr>
<td>IV-Evaluating and Counseling</td>
<td>20</td>
<td>9</td>
<td>29</td>
</tr>
<tr>
<td>V-Placing Children in School and Community Programs</td>
<td>15</td>
<td>0</td>
<td>15</td>
</tr>
<tr>
<td>VI-Conducting Group Counseling</td>
<td>2</td>
<td>1</td>
<td>3</td>
</tr>
<tr>
<td>VII-Referring a Child to a Physician</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>VIII-Organizing a Pupil Personnel Council</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>IX-Maintaining a School Visitation Schedule</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>X-Providing Immediate Feedback of Information</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>140</strong></td>
<td><strong>67</strong></td>
<td><strong>207</strong></td>
</tr>
<tr>
<td>Areas</td>
<td>Frequency of Effective Behaviors</td>
<td>Frequency of Ineffective Behaviors</td>
<td>Total</td>
</tr>
<tr>
<td>-----------------------------------</td>
<td>----------------------------------</td>
<td>-----------------------------------</td>
<td>-------</td>
</tr>
<tr>
<td>I-Consultation with Parents</td>
<td>30</td>
<td>5</td>
<td>35</td>
</tr>
<tr>
<td>II-Consultation with Teachers</td>
<td>15</td>
<td>18</td>
<td>33</td>
</tr>
<tr>
<td>III-Consultation with Principals</td>
<td>3</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>IV-Evaluating and Counseling</td>
<td>14</td>
<td>8</td>
<td>22</td>
</tr>
<tr>
<td>V-Placing Children in School and Community Program</td>
<td>5</td>
<td>0</td>
<td>5</td>
</tr>
<tr>
<td>VI-Conducting Group Counseling</td>
<td>0</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>VII-Referring a Child to a Physician</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>VIII-Organizing a Pupil Personnel Council</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>IX-Maintaining a School Visitation Schedule</td>
<td>6</td>
<td>3</td>
<td>9</td>
</tr>
<tr>
<td>X-Providing Immediate Feedback of Information</td>
<td>3</td>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>77</strong></td>
<td><strong>39</strong></td>
<td><strong>116</strong></td>
</tr>
</tbody>
</table>
TABLE 4

FREQUENCY DISTRIBUTION OF BEHAVIORS SUPPLIED BY PSYCHOLOGISTS WITHIN THE TEN MAJOR AREAS

<table>
<thead>
<tr>
<th>Areas</th>
<th>Frequency of Effective Behaviors</th>
<th>Frequency of Ineffective Behaviors</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>I-Consultation with Parents</td>
<td>25</td>
<td>7</td>
<td>32</td>
</tr>
<tr>
<td>II-Consultation with Teachers</td>
<td>17</td>
<td>12</td>
<td>29</td>
</tr>
<tr>
<td>III-Consultation with Principals</td>
<td>0</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>IV-Evaluating and Counseling</td>
<td>6</td>
<td>1</td>
<td>7</td>
</tr>
<tr>
<td>V-Placing Children in School and Community Programs</td>
<td>10</td>
<td>0</td>
<td>10</td>
</tr>
<tr>
<td>VI-Conducting Group Counseling</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>VII-Referring a Child to a Physician</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>VIII-Organizing a Pupil Personnel Council</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>IX-Maintaining a School Visitation Schedule</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>X-Providing Immediate Feedback of Information</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>63</td>
<td>28</td>
<td>91</td>
</tr>
</tbody>
</table>
Earlier in the report a series of research questions were stated. These questions are now answered. The questions proceed from the general to the specific. The first question concerns an examination of the entire data matrix (Table 2). The second question is directed toward only that data given by principals (Table 3) while the third question is directed toward only that data given by psychologists (Table 4). The fourth question seeks to find contrast in the data (Tables 3 and 4) given by principals and psychologists. The last question is directed toward establishing the job requirements of school psychologists in Columbus, Ohio.

**Question 1**

When the total number of behavioral elements given by both principals and psychologists are combined, will effective behaviors significantly outnumber ineffective behaviors?

**Evidence.** Table 2 reports the frequency distribution of all behaviors within the ten areas. The total number of effective behaviors reported by principals and psychologists numbered 140 while the total number of ineffective behaviors numbered 67. This difference is significant at the .05 level (see Appendix).

**Implications.** Principals and psychologists reported a significantly greater number of effective behaviors in
contrast to ineffective behaviors. One possible interpretation of this finding may be that for the combined groups psychologists are viewed as engaging more often in effective behavior in contrast to ineffective behavior. The data may suggest that psychologists are performing effectively within the school system and that this work is viewed in a positive sense. It could be argued that had the reverse been found (ineffective behaviors outnumbering effective behaviors), serious concern would be indicated because of the possibility of an unfavorable attitude both groups may have concerning the behavior of the school psychologists.

**Question 2**

Will principals report more effective behaviors in contrast to ineffective behaviors?

**Evidence.** Two types of analyses were completed to answer this question. The first analysis consisted of a comparison between the total number of effective behaviors reported by principals with the total number of ineffective behaviors reported by principals (Table 3). The second analysis consisted of a comparison being made between the effective versus the ineffective behaviors reported by principals per area.

Table 3 indicates that the principals reported 77 effective behaviors in comparison to 39 ineffective
behaviors. This difference is significant at the .05 level. The second analysis, involving the comparison of effective versus ineffective behaviors per area, yielded no differences which were significant.

**Implications.** The significant difference that was found by the two methods of analysis could be interpreted to mean that principals view the psychologists as essentially engaging in constructive behavior. Again, like in the over-all analysis, had the principals cited a significantly greater number of ineffective versus effective behaviors, serious concern would perhaps be indicated regarding the functioning of the psychologists within the school system. Even though no significant differences were found when the number of effective versus ineffective behaviors were compared per area, the following interpretations could be made. Table 3 indicates that Area II Consultation with Teachers contains 15 effective behaviors and 18 ineffective behaviors. These data could be interpreted to mean that of all the areas needing the psychologist's attention Area II may be high on the need hierarchy. This interpretation is further reinforced when the data from psychologists is considered. That is, the data from psychologists (Table 4) indicates that Area II also contains the highest frequency of ineffective behaviors. The data certainly cannot be interpreted to mean that psychologists are ineffective in consulting with
teachers. However, the data may indicate that the psychologists should be encouraged to increase their effectiveness in this area.

**Question 3**

Will school psychologists report more effective behaviors in contrast to ineffective behaviors?

**Evidence.** The data (Table 4) given by psychologists were submitted to the same type of analysis as that data from principals. The first analysis consisted of comparing the total number of effective behaviors (63) with the total number of ineffective behaviors (28). This difference was significant at the .05 level. The second analysis, which compared the effective versus ineffective behaviors per area, produced no significant differences.

**Implications.** The significant difference that was found could be interpreted to mean that psychologists may view themselves as engaging in constructive behavior within the school system. As stated before, in the interpretation section relating to the total data matrix (Table 2), had the reverse been found (i.e., ineffective behaviors outnumbering effective behaviors), serious doubt could be raised concerning how the psychologists view their work in general. That is, had they cited a significantly greater number of ineffective behaviors, one would wonder how they would view their work in general. Attention can be
focused on the psychologist data in Area III Consultation with Principals. In this area psychologists report 8 ineffective behaviors in comparison to no effective behaviors. Perhaps these data imply that the psychologists should closely examine this area in terms of increasing their effectiveness in consultation with principals.

**Question 4**

How do effective and ineffective behaviors as identified by the research compare to the areas that were identified in the literature (psycho-educational assessment, consultation with school personnel and consultation with parents)?

**Evidence.** The total columns in Table 2 report the total number of behavioral elements per area. It is observed that Areas I, II, and IV contain the majority of the behavioral elements. Area I is that area which concerns consultation with parents while Area II concerns consultation with teachers. Area IV deals with evaluating and counseling. In addition to these three areas containing the majority of the behavioral elements there is no significant difference found between the number of behaviors in Area I in comparison to Area II nor is there a significant difference found between the number of behaviors in either Area I or II in comparison to Area IV. Essentially Areas I, II and IV do not significantly differ from
one another in terms of the numbers of behaviors each contain.

Implications. The above analysis indicates that no significant difference exists between the number of behaviors cited in Areas I, II and IV. This analysis could indicate that there is no difference between those areas of performance as identified by the research and those areas identified in the literature. It will be recalled that the review of literature cited research which analyzed time logs and reason of referral statements. The present investigation utilized an entirely different method; however, the results are essentially the same. The major work areas which were identified by the research are identical to those reported in other studies. One possible conclusion that could be reached is that the school psychologists in Columbus, Ohio engage in those behaviors which are very similar to, if not identical with, those psychologists who responded to the research cited in the review.

Question 5

What are the effective and ineffective behaviors in the school psychologist's performance as seen by the school psychologist in contrast to the principal?

Evidence. In order to determine possible answers to this question the data reported by principals and psychologists
were reported in separate tables, Table 3 reports the data given by principals while Table 4 reports the data given by psychologists. By contrasting the contents of the two tables answers to the above question may be obtained.

Turning first in the analysis to the total number of effective behaviors reported by principals (77 behaviors) in comparison to the total number of effective behaviors reported by psychologists (63 behaviors) the difference was not significant. When the same type of comparison was made between ineffective behaviors reported by principals in contrast to psychologists, no significant difference was found. This would indicate that no significant difference exists between the number of effective or ineffective behaviors reported by principals in comparison to psychologists.

Turning next in the analysis to a comparison of the number of behaviors noted per area by principals in comparison to the number of behaviors noted per area by the psychologists. In this case a comparison was being made between the number of behaviors noted by the principals within an area in contrast to the number of behaviors cited by the psychologists in that area. When all possible comparisons between the same areas were made, no significant differences were found.

Implications. It was established that no significant differences exist between the number of effective and
ineffective behaviors reported by principals and by psychologists and that no significant differences exist between the total number of behaviors reported per area by principals and by psychologists. These data would suggest that principals and psychologists do not differ significantly in their reports concerning what constitutes the major areas of functioning for the school psychologists.

The above section of the study was sought to provide answers to the questions that were stated in the earlier section of the report. Before answering the question dealing with critical requirements, one more interpretation of the data will be made. The following section organizes the data in a much different way and seeks to interpret the data in terms of locus of intervention.

The school psychologist as he works within the school system and community focuses his time and services upon various individuals and groups to produce change within schools, classrooms and homes. The psychologist may choose to focus his professional services upon individual students, groups of students, and entire classrooms. He may choose to focus his professional services upon adults within both the school and home, including parents, teachers, and school administrators.

Those behaviors which were reported by psychologists and principals in the present study, involving services directed entirely toward students, consisted of providing
children with individual psychological and educational counseling and providing students with the opportunity of receiving individual tutoring in order to correct reading problems.

The behaviors which were reported by psychologists and principals, involving services to groups of students, centered upon group counseling. The psychologist was reported to have engaged in behaviors which sought to organize and implement group counseling sessions for students.

The psychologist provides direct service to the adults within the community and school mainly through the process of consultation. His service to teachers involves recommending ways the teacher may correct a child's school problems. The psychologist, through the teacher consultation process, suggests ways in which the teacher should change. The psychologist suggests ways that the teacher may change his own behavior and attitudes in order to promote a more adequate classroom learning climate. The psychologist provides direct service to teachers by organizing in-service training sessions. In these sessions the psychologist discusses with teachers how they may change their classroom in order to promote more effective learning.

The psychologist also directs his services toward the school principal. In this respect he suggests things that
the principal might do in order to help correct school problems.

Parents also receive services from the school psychologist which attempt to change the child or home in such a way to produce better adjustment. The psychologist in helping parents produce change within their child and/or home engages in many activities. Among these activities are: helping parents establish a behavior modification program at home; advising the parents to seek the help of a psychiatrist or psychologist; helping parents institute a home management program which will solve their child-rearing problems; and suggesting ways of increasing a child's academic motivation and willingness to complete homework. Also in helping parents to solve parent problems the psychologist may organize parent-training sessions which succeed in bringing to parents the latest psychological knowledge and techniques.

The behaviors reported in the study by psychologists and principals were analyzed according to the above broad categories of intervention. These behaviors which focused upon providing direct services to students were placed in one category. A second category was formed and included those direct services offered to groups of students. The services directed toward the teachers and principals formed two other categories. The last category that was established involved all of those behaviors which are
directed toward parents and which seek to produce a change within the home either in terms of parents, siblings or a particular child.

The various categories together with frequency of behaviors are reported in Table 5.

It is evident when Table 5 is consulted that more than one-half of the effective and ineffective behaviors noted by principals and psychologists were located with the teacher group. The second highest frequency of behaviors fell within the parent group. Perhaps the above data could be interpreted to mean that of those effective and ineffective behaviors noted by principals and psychologists in the above areas, the majority of the behaviors related to effectiveness or ineffectiveness while working with adults. This factor is interesting to consider because of the way it contrasts with the more traditional model which is found in some clinical and hospital settings. In these settings the behaviors of psychiatrists and psychologists are focused upon the child through the consultation process. This does not appear to be the case with the school psychologists. They may direct their behavior to the important adults in the child's life.
TABLE 5

LOCUS OF INTERVENTION

<table>
<thead>
<tr>
<th>Locus</th>
<th>Frequency of Behavior Reported by Principal</th>
<th>Frequency of Behavior Reported by Psychologist</th>
<th>Total</th>
<th>Grand Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Effective Ineffective</td>
<td>Effective Ineffective</td>
<td>Total</td>
<td>Grand Total</td>
</tr>
<tr>
<td>Student</td>
<td>2   1</td>
<td>0</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Group</td>
<td>0   1</td>
<td>3</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td>Teacher</td>
<td>13  15</td>
<td>16</td>
<td>12</td>
<td>56</td>
</tr>
<tr>
<td>Principal</td>
<td>3   1</td>
<td>0</td>
<td>8</td>
<td>12</td>
</tr>
<tr>
<td>Parent</td>
<td>6   1</td>
<td>17</td>
<td>3</td>
<td>27</td>
</tr>
<tr>
<td>Total</td>
<td>24  19</td>
<td>36</td>
<td>23</td>
<td>102</td>
</tr>
</tbody>
</table>
Question 6

What are the critical job requirements for school psychologists in Columbus, Ohio?

One purpose of the present study was to arrive at a list of those behaviors which define the effective school psychologist in the Columbus Public Schools. Critical requirements are those specific behaviors which differentiate between success and failure as a school psychologist as described by 25 principals and 25 school psychologists. The list of critical behaviors as reported in Table 1, together with the statistical analysis reported in Tables 2, 3 and 4, furnish a basis for the definition. The effective behaviors indicated the ways in which a school psychologist should perform in the Columbus, Ohio Public School if he is to be judged as being effective by psychologists and principals. The ineffective behaviors indicated those behaviors he should avoid. The frequency associated with each behavior suggests the relative importance of that behavior. From the descriptions of behavior a list of statements has been prepared concerning critical requirements. The statements of the requirements are objective, positive statements of observable behaviors required of successful school psychologists in the schools of Columbus, Ohio.

The process of establishing the critical requirements resembled the process which was used when the classification
of critical behaviors were determined. The process of establishing the critical requirements utilized the analytical reduction of the behaviors by areas and categories. However, the critical requirements are presented in rank order according to the frequency of the behaviors reported. Therefore, the following list of critical requirements should be interpreted from the standpoint that the requirements first listed are those which are most critical and the requirements listed last are the least critical.

The following statements then may be taken as an initial statement concerning the critical requirements of school psychologists in Columbus, Ohio.

AREA I. Consulting with Parents

A. Behaviors regarding explaining and clarifying school and/or home problems:
   a. Consults with parents concerning the cause and nature of the child's social, emotional and/or academic problem(s).
   b. Counsels parents to accept the problem they have with their child and reassures them that the problem can be solved.
   c. Discusses with parents the similarities and relationships between home and school problems.
B. Behaviors relating to the personal effectiveness of the psychologist.
   a. Relates to parents, some of which are hostile and defensive, in a relaxed-friendly way which enables rapport to be built between the parent and school personnel and the psychologist.
   b. Considers the opinions and feelings of parents when discussing their child's problem.

C. Behavior relating to the words and language used by the psychologist: Uses words and language that parents can understand and accept.

D. Behaviors in recommending to parents ways of changing the home and/or school environment.
   a. Develops for the parents a behavior modification program which will eliminate a child's home and/or school problem.
   b. Consults with parents, sometimes over an extended period of time, regarding how to eliminate a wide range of school and/or home problems involving such problems as school phobia, encopresis, visual perception, academic motivation and study habits.
   c. Consults with parents regarding how to resolve family conflict sometimes involving husband, wife and siblings.
E. Behaviors in recommending and identifying community resources.
   a. Knows the various school programs and their standards and is able to suggest to parents which programs are best suited for the child's individual educational and psychological needs.
   b. Knows the various community programs and their entrance standards and is able to suggest to parents which community programs are best suited for the child's individual educational and psychological needs.

F. Behavior in organizing parent-training sessions:
   Organizes parent-discussion groups, which focus upon child management and child-rearing practices.

Area II. Consulting with Teachers

A. Behaviors in recommending and helping teachers implement ways of changing the school and/or classroom environment.
   a. Confers with the teacher and explains what might be done in the classroom to solve a child's problem.
   b. Develops with the assistance of the principal and/or teacher a behavior modification program to correct or resolve a child's behavior problem.

B. Behaviors in explaining to teachers the results of the psycho-educational evaluation through conferences as well as written reports: Explains to teachers the
results of the psycho-educational evaluation through
teacher conferences and written reports.

C. Behavior in recommending to teachers ways of changing
the teacher's attitude and behavior: Discusses with
the teacher his own behaviors and attitudes and how
they affect classroom learning and suggests ways in
which the teacher may change his attitude and
behavior to enhance classroom learning.

D. Behavior in organizing teacher in-service training
workshops: Organizes teacher in-service training
programs which focus upon such topics as human rela-
tions, the learning disabled children and behavior
modifications.

AREA III. Consulting with Principals

A. Behaviors in changing the principal's perception of
individual students and of the school psychologist.

a. Consults with the principal and is able to explain
and clarify the individual student's educational
and psychological abilities and needs.

b. Consults with the principal and is able to explain
and clarify the professional role and function of
the school psychologist.

B. Behavior in recommending to the principals: Makes
recommendations and suggestions to the principal re-
garding how to correct a child's school problem.
AREA IV. Evaluating and Counseling with Students

A. Behavior in establishing rapport with students: Establishes adequate rapport with students by setting and maintaining adequate interview structure; using language and words children can understand; greeting the student in such a way as to not make him feel anxious.

B. Behavior in gathering data regarding student's problem through clinical interview: Relates to students in a warm understanding fashion and through the counseling relationship gathers extensive data concerning the child's problem.

C. Behavior in collecting data through observing a child in many social settings and consults with important adults who have contact with the child, i.e., parents, teachers, and principal.

D. Behavior in conducting individual counseling sessions: Conducts individual counseling sessions to correct a child's school problem.

E. Behavior in conducting a psycho-educational assessment and making a differential diagnosis: Administers an extensive battery of psycho-logical and/or educational tests to arrive at a differential diagnoses.
F. Behavior in screening children for the educable mentally retarded program: Screens a number of children for the educable mentally retarded program during one work day.

AREA V. Placing Students in Special School and Community Programs

A. Behavior relating to proficiency in arranging and/or aiding others in placing a child in a special school program: Succeeds in aiding others in placing children in special education programs such as programs for educable mentally retarded, neurologically handicapped, and emotionally disturbed.

B. Behavior regarding proficiency in arranging and/or aiding others in placing a child in a program not associated with the public schools: Succeeds in aiding others in placing a child in community programs such as private nursery schools, children's home.

AREA VI. Providing Group Counseling Services

Behavior in organizing and conducting group counseling sessions for students who have a wide range of problems: drugs, adolescent adjustment problems, behavior difficulties.

AREA VII. Referring Children to Physicians

Behavior in referring children to physician in order for special consultation services.
AREA VIII. Organizing Pupil Personnel Councils

Behavior in organizing a staff procedure wherein the psychologist, assistant principal, guidance counselor, nurse and faculty members formulate and implement corrective strategies regarding school issues and problems.

AREA IX. Maintaining a School Visitation Schedule

Proficiency with deriving and maintaining a school visitation schedule.

A. Behavior in responding promptly to the call from school personnel regarding coming to the school and consulting regarding a school problem.

B. Behavior in establishing a schedule of visitations to specific schools enabling principal to plan and schedule activities.

AREA X. Providing Immediate Information Feedback to School Personnel

Behavior in providing school personnel with immediate feedback concerning the results of the psycho-educational evaluation.

The requirements listed above are critical in the sense that each behavior has been seen by principals and psychologists as important in differentiating between success or failure in performing the job of school psychologists in Columbus, Ohio. It is important to emphasize that the above requirements were derived from incidents cited
by only principals and psychologists. Therefore, the above statement of requirements should not be taken to be inclusive of all the necessary requirements but rather only those requirements which were derived from the two respondent groups.

An individual psychologist may possess these and other competencies in various degrees. It cannot be assumed that all psychologists, to function effectively, must be proficient in all of the competencies listed here. However, one might assume that a psychologist who has attained a large number of these competencies would be expected to function more effectively in Columbus, Ohio in comparison to a psychologist who has only a limited number of the above competencies.
CHAPTER IV

SUMMARY, CONCLUSIONS AND IMPLICATIONS OF FINDINGS

The final chapter of this report includes a summary of the investigation and implications based upon the conclusions.

Summary

School psychology programs, which function within large urban school districts, are seeking ways to determine the effectiveness of their services. Departments of psychological services are attempting to develop more viable staff development programs which can succeed in producing school psychologists who have the academic and experiential backgrounds to enable them to engage actively in resolving current educational problems and issues. Program development and program evaluation, can only be effective if they are based on a systematic analysis of activities which school psychologists perform. A basic prerequisite to building an effective school psychology program and developing evaluation procedures for that program is a definition of the requirements for successful participation in the job both in terms of the actual component activities and their relative importance. It is also essential that
this definition be translated into activities, aptitudes and personality traits.

Traditionally, in school psychology, job description has resulted in long lists of job requirements with little differentiation among requirements. Likewise, job requirements are described in very general terms and provide little assistance in solving the practical problems of training and evaluation. A job analysis of school psychology should be the determination of critical performance requirements. These requirements include those activities which have been seen as making the difference between success and failure in carrying out an important part of the professional work of the school psychologists.

The present study had as its objective the determination of the critical performance requirements of school psychologists in a large urban school system. Critical performance requirements are those activities which have been demonstrated to have made the difference between success and failure in carrying out part of the job assigned to school psychologists. Focus was upon determining those activities performed by the psychologist which were critical to the success or failure of the job as it is currently being performed by professional school psychologists. The specific purpose of the study was (A) to determine the nature of the effective and ineffective behavior of the school psychologist and (B) to
determine the school psychologist job requirements that may be derived from an analysis of the reported effective and ineffective behaviors.

The review of the literature revealed a limited number of studies which have been conducted relative to the job requirements of school psychologists. These studies were classified into two basic groups: first, studies that involved the analysis of time logs which were supplied by school psychologists; second, studies which analyzed case load or referral statements.

These studies provided objective evidence that the psychologist's major job requirements are within the following areas:

1. Conducting individual psycho-educational evaluation.
2. Consulting with school personnel.
3. Consulting with parents.

The critical incident technique was used in this study to determine the critical requirements of school psychologists in a specific school system. A critical incident is a specific situation wherein the behavior of the psychologist was critical enough to result in success or failure in accomplishing specific tasks. The use of the critical incident technique demanded that the certain conditions must be established for the reporting of critical incidents: actual behavior must be observed; the person reporting must have knowledge of the aims and
goals of the person with respect to the activity observed: the person reporting must be qualified to make judgments regarding effective or ineffective behavior in the activity observed; conditions of reporting must be such as to assure a reasonable degree of accuracy.

Individual interviews were held with 25 school principals and 25 school psychologists in Columbus, Ohio to obtain critical incidents. An analysis of the incidents revealed 140 effective and 67 ineffective behaviors, a total of 207 specific behaviors. A job-oriented frame of reference was selected for the classification of the behaviors reported by psychologists and principals, because the study was to provide criteria against which the effectiveness of school psychologists was to be judged.

The behaviors were classified into ten major areas. Descriptive statements were devised to describe these areas. The objectivity of the classification system was checked by two qualified individuals. Both of these individuals were (A) familiar with the purpose and method of the research and (B) Ph.D. level school psychologists. Establishing the objectivity of the classification consisted of giving two qualified individuals the 207 behaviors and having them arrange all the behaviors within the areas and categories that had been derived by the investigator. The arrangements made by the two individuals of the behaviors within areas and categories were
then compared with the original arrangement made by the investigator. There was an 11 item disagreement between the classifications made by the investigator in comparison to the other classifications made by the other two individuals. This adequately demonstrated the basic objectivity of the classification system.

The individuals who served as judges as to the objectivity of the classification system suggested ways in which the total number of areas could be reduced so as to make the classification system more manageable and also how to reword the description of the areas in such a way as to provide greater classification. The classification system was considered complete when the system was changed in order to accommodate the suggestions that were made.

The major areas of the school psychologist's work were rank-ordered in terms of the frequency distribution of the total number of reported behaviors. This rank-ordering, involving areas with the most reported behaviors to areas involving the least number of behaviors is as follows:

1. Consultation with Parents.
2. Consultation with Teachers.
4. Placing Children in School and Community Programs.
5. Consultation with Principals.
To determine whether a differing viewpoint existed between principals and psychologists, thereby biasing the data, a separate analysis was made. No significant differences were found. This similarity of responses indicated that there was no significant difference in the distribution of behaviors reported by principals and psychologists with respect to effectiveness or ineffectiveness of the psychologists' job performance. The conclusion reached through this analysis was that the behaviors reported separately by principals and psychologists could be combined and serve as the basis for the determination of critical requirements for effective participation within the profession of school psychology as practiced in Columbus, Ohio.

The critical behaviors provided the basis for the determination of critical requirements as related to the ten major work areas of the school psychologist. The process of establishing the critical requirements was similar to the process used when the major classification areas were determined. The process of establishing the critical requirements was a further analytical reduction of the various areas and categories. Thirty-four job-
oriented critical requirements were thus formulated. Of the thirty-four job-oriented critical requirements formulated the following summarizes those behaviors which were reported most frequently.

Consulting with parents - discusses with parents the nature and cause of their child's problem; relates to parents in an effective manner so that rapport may be attained between psychologists, school personnel and parent; uses language and words that parents understand; recommends ways of changing school and/or home environment so as to produce better adjustment on the part of the child; identifies for parents various school and community programs which might be consulted in order to solve their child's problem.

Consulting with teachers - recommends and helps teachers implement ways of changing the school and classroom environment; explains the results of psycho-educational evaluations through teacher conferences and written reports; recommends to teachers ways of changing teacher attitude and behavior; organizes teacher in-service training workshops.

Consulting with principals - explains individual students' educational and psychological abilities and needs; explains role and function of the school psychologist; recommends ways of correcting a child's school problem.
Evaluating and counseling with students - establishes rapport by setting and maintaining adequate interview structure; gathers extensive data concerning the child's educational-psychological problem; observes children in many social settings; conducts psycho-education assessments and makes a differential diagnosis.

A separate analysis was made in order to determine how the school psychologist produces change within the school system or home. The psychologist could choose to interact with individual children, groups of children, teachers, principals, or parents in order to produce change. The results of this study indicate that the psychologists concentrate their major efforts upon teacher and parents to produce change rather than providing direct services to individual or groups of children to produce change.

The present study suggests that when any school psychology department within a school system is trying to establish job requirements for psychologists within that district, that the critical incident technique might be considered as yet another research technique to collect meaningful information concerning job requirements. In the past, time log analysis and case load analysis had constituted the major approaches used to determine job qualifications. The present study suggests that the critical incident technique, like the before mentioned
techniques, produces meaningful data which might be considered when a psychology department is trying to determine the job requirements of its constituents.

**Implications**

**Staff Selection**

In the past no well-defined criteria has existed in the Area of Psychological Services in the Columbus Public Schools to determine what type of school psychologists are needed. Most psychologists were considered qualified to serve within the schools if they were certified as a psychologist by the Ohio State Department of Education, and if they and their records favorably impressed those responsible for the operation of the Area of Psychological Services. The results of this investigation suggest further guidelines which could be used for staff selection.

It would be anticipated that a newly-employed psychologist who had a large number of the competencies in the basic areas that were identified in this investigation would perform more effectively in the school in comparison to a psychologist who had few of the competencies.

This study suggests the desirability of emphasizing the critical requirements as criteria for selection of staff school psychologists in Columbus, Ohio. The requirements identified by this technique could augment the existing traditional criteria of degrees, certification and experience.
In addition to augmenting the traditional criteria for employment the study may also indicate the advisability of hiring school psychologists who have either advanced academic training and/or extensive experience in one specific area within school psychology. As positions become available within the Area of Psychological Services, these positions may be filled by individuals who have as their specialty one of the major areas identified by the study. In this case, these highly-trained individuals could serve as area leaders who could interface with in-service training component within the department. That is, these individuals with specialty emphasis, could serve as staff resource persons for all the psychologists on the staff. If this were to become the case, the department would not only ask of its prospective employees to have a general knowledge of school psychology but also require that each new prospective employee have a specialty area which is not yet represented on the staff.

In addition to having implications for the selection of school psychologists the study provides information which relates to staff evaluation.

Staff Evaluation

The individual staff psychologist functioning within a large psychology department and within a large school system needs to have others evaluate his professional
proficiency so that he may improve his overall effectiveness in providing effective psychological services to parents, children and school personnel. Therefore, it is recommended that the critical requirements set forth in the study be carefully reviewed by those interested in the work of the school psychologist in Columbus, Ohio. Through such a review, an appraisal system could be developed for evaluating job performance of school psychologists. This would help in assisting the school psychologist to become objective about his performance within the work environment of the school system. It is suggested that evaluation forms, developed in cooperation with the entire psychology staff in Columbus for recording systematically observed occurrences of critical behavior would provide objective evidence on which to base judgments of effectiveness. A tentative evaluation process should be developed on the basis of the findings and be used on an experimental basis in the school situation.

In addition to having implications for staff selection and staff evaluation the study also provides information which bears upon in-service training.

**In-Service Training**

The content of in-service training programs to be offered by the Area of Psychological Services, Columbus Public Schools is in part determined by this investigation.
According to the findings of the study, in-service education should seek to develop basic competencies within the major areas which were identified. The critical requirements that were determined should provide information concerning the content of in-service training sessions.

The findings of the study indicate the topics of possible year long in-service training sessions. The highest number of ineffective behaviors noted by both principals and psychologists fell into Area II - Consultation with Teachers. The study suggests that if the effectiveness of psychologists could be increased in this area the overall effectiveness of the psychologists would be markedly enhanced.

The report indicates that the effectiveness of the school psychologist would be enhanced if the relationship between the school psychologist and the school principal was clarified especially as this relationship involves selecting and placing children into and out of special education. The data of the study indicate that psychologists report eight ineffective behaviors and no effective behaviors in Area III - Consultation with Principals. The ineffectiveness, as reported by school psychologists, derived from many issues. One of great important issues involves special education, i.e., program standards and pupil selection. In seven cases the psychologist reported being ineffective because of being unable to convince the
principal that one type of special education was needed in the place of another type of educational program. The issues which are implied in the psychologists' ineffectiveness in Area III are not transitory issues but indeed reflect profound problems because of the effect they have on individual learners. This issue is clearly demonstrated in one of the ineffective behaviors noted by a psychologist. The psychologist regarded a student who had been referred as a child with a language disability while the principal regarded him as educable mentally retarded. This is not a small difference of opinion when one considers that the educational treatment and expectations for the two groups are considerably different.

So far in the implication section dealing with in-service training mention has been made about the psychologist's consultation with school personnel. It is suggested that the data could be used in yet another way. The following process might prove valuable for the entire psychology staff to consider.

It is suggested that the data derived from the study should be made available to the school psychologists who participated in the study. The presentation of the data could take several forms—namely, simply discussing with the staff the findings of the study, giving each staff member a copy of the study, or engaging the staff in a process which involves the following activity.
Each staff member could be given the National Association of School Psychologist Professional School Psychology Evaluation Grid. The psychologist would also be given a deck of 207 cards containing the behaviors which were identified by the study. The psychologist would then be requested to sort the 207 cards according to the evaluation grid. Once the psychologists had sorted the behaviors according to the evaluation grid, they would then be asked to perform another analysis which would seek to further classify the 207 behaviors. This final step in the analysis would direct the psychologists to examine each cell in the grid and sort those behaviors within each cell into three groupings. Grouping I would involve those behaviors he has frequently engaged in and which were effective. Grouping II would involve those behaviors which he has engaged in and which were ineffective. Grouping III would involve those behaviors which he has not engaged in and which have not been part of his professional work activity. After the school psychologist has sorted the behaviors according to the grid and according to the above three groupings, he would then be requested to develop methods and strategies to overcome those areas of ineffectiveness that were identified by the analysis. The same type of analysis could be performed with Group III—behaviors which he has not engaged in and which have
not been part of his professional work activity. The psychologists could be invited to either avoid performing the ineffective behaviors in the future and/or develop the effective behaviors. By performing the above analysis the individual school psychologist could review the data collected in the study and become acquainted with those behaviors cited by principals and psychologists as contributing to successful or unsuccessful work performance.

School Psychology Training Programs

If a training program is producing students who will eventually function in a large urban center, it seems very important that personnel directing the training program consider the basic competencies in the major areas identified in the present study, consulting with parents, consulting with teachers and evaluating and counseling. When length of training is considered, producing students who have competencies in these three rather divergent areas becomes no small task, especially when it is considered that when a psychologist leaves a training program and becomes a full-functioning autonomous professional, most of the skills must be at an operational level.

In addition to the study providing training directors with insight into the basic competencies needed the study also has implications for entering school psychology students. It is suggested that if a person, who has little
or no knowledge about school psychology, and yet is considering school psychology as a possible career field, would read the critical behaviors of school psychologists, he would receive a basic understanding of the type of work performed by the school psychologist.

So far in this chapter implications have been cited which pertain to the following areas--staff selection and evaluation, in-service training and school psychology training programs. The report will conclude with statements concerning implications for further research.

**Implications for Further Research**

The focus of future research using the critical incident technique as it relates to school psychology can take two basic forms. One form of research can deal with additional individuals from the Columbus Public School System and community. Another form of research can deal with individuals from throughout Ohio and perhaps the nation.

The study utilized principals and psychologists. In the future several other groups could be selected to report critical incidents involving the school psychologist. These groups of individuals could involve a teacher group, a guidance counselor group, and a parent group. These various groups could essentially be asked to respond to the statements used in this study. It would be interesting to see if those behaviors which are reported by these
various groups of individuals are similar or different from those behaviors reported in the present study. That is, do guidance counselors report the same type of behaviors as do principals or psychologists? Do parents identify the same type of effective and ineffective behaviors as compared to teachers, to psychologists, to principals? With this additional evidence the critical requirements of school psychologists would receive further delineation.

The present study was based upon the reports of twenty-five school psychologists employed by the Columbus Public Schools. It is suggested that school psychologists across the state could be asked to respond to similar statements as were used in the study. It would be valuable to determine whether the critical requirements of school psychologists in Columbus, Ohio were different from the critical requirements for school psychologists, for example, in Cleveland, Dayton, or Cincinnati. If differences were found what variables produced those differences? Suppose that such a study was conducted with school psychologists in Cleveland. The results of the study could then be compared to the results of the present study and perhaps major differences could be found. Basic questions could then be asked regarding what is different between the two systems that produced the observed differences. Are the school psychologists different? Does the school system require the school psychologist to have different skills
or does the school system have different expectations for the psychologist?

A study which included many school psychologists from across the state would have implications for the State Department of Education. At the present time in Ohio the State Board of Education has suggested basic courses which should be taken in order to receive certification as a school psychologist. In addition the State of Ohio has one of the most extensive school psychology intern programs in the nation. The results of the proposed study utilizing school psychologists across the state would have direct application to the certification pattern and intern program. For example, if such a study were completed and critical requirements for school psychologists in Ohio could be determined, those critical requirements could be compared to the course work requirements and internship program standards to see if indeed those behaviors were being developed through college and internship resources.

In conclusion, the present study demonstrated the usefulness of the critical incident technique in determining the critical performance requirements of school psychologists in a large urban school system. The major contribution of the investigation lies in the partial determination of critical requirements for effective or successful school psychologists. The critical requirements as determined by the study have implications for those
responsible for school psychology training programs, persons considering school psychology as a career, as well as for those individuals directly related to the Area of Psychological Services, Columbus Public Schools.

The results of the study indicate that the requirements for effectiveness in school psychology are complex. They are not confined to academic knowledge but include non-technical behavior which centers upon establishing and maintaining adequate interpersonal relationships with children as well as with adults. Although the technical aspects of the job are strongly supported, the human relations aspect of the job also appears to be a particularly important area.
APPENDIX

Throughout the study the following statistical test was used.

\[
\hat{p}_1 - \hat{p}_2 \pm \sqrt{\frac{x^2}{c-1}} \sqrt{\frac{\hat{p}_1 + \hat{p}_2 - (\hat{p}_1 - \hat{p}_2)^2}{n}}
\]

If this confidence interval contains 0.00, the comparison between \( p_1 \) and \( p_2 \) is not significant. If the confidence interval does not contain 0.00, the comparison between \( p_1 \) and \( p_2 \) can be considered significant.

\[
x^2_{19, .05} = 30.14 ; \quad x^2_{9, .05} = 16.91 ; \quad x^2_{5, .05} = 11.07
\]

\[
x^2_{2, .05} = 5.99 ; \quad x^2_{11, .05} = 3.84 ; \quad x^2_{4, .05} = 9.48
\]

REFERENCES


113


