An Investigation of the Reliability of Decision-Making in Educational Planning Teams

Larry J. Powitz

Loyola University Chicago

Recommended Citation


This Dissertation is brought to you for free and open access by the Theses and Dissertations at Loyola eCommons. It has been accepted for inclusion in Dissertations by an authorized administrator of Loyola eCommons. For more information, please contact ecommons@luc.edu.

This work is licensed under a Creative Commons Attribution-Noncommercial-No Derivative Works 3.0 License.

Copyright © 1984 Larry J. Powitz
AN INVESTIGATION OF THE RELIABILITY OF DECISION-MAKING
IN EDUCATIONAL PLANNING TEAMS

by

Larry J. Powitz

A Dissertation Submitted to the Faculty of
the School of Education of Loyola
University of Chicago in Partial
Fulfillment of the Requirements
for the Degree of Doctor
of Education

May
1984
The study was designed to provide an intensive and systematic examination of the reliability of educational diagnostic decision-making by professional school personnel charged by P.L. 94-142 with the responsibility of determining appropriate educational programming for students referred for a case study evaluation.

First of all, an attempt was made to assess the consistency of diagnostic decision-making across five actual case studies among individual school professionals who worked within a simulated condition and among those same individuals as they operated within the context of a simulated group setting (MDS team). Consistency (agreement) in educational diagnosis among these individual simulated subjects reached significant levels in sixteen out of twenty cases but varied as a function of the type of case study (i.e., nature of presenting problem, student characteristics, protocol data, etc.) and professional discipline (school psychologists, school social workers, school nurses and teachers). In contrast, consistency in educational diagnosis between actual (i.e., school professionals of record who directly interacted with students) and simulated individual subjects reached significant levels in only eight out of twenty cases. Percents of agreement in educational diagnoses between actual and simulated teams reached significant levels in two out of five case studies, whereas, agreement among simulated teams reached significant levels in four
out of five actual case studies. No significant differences in percents of agreement scores relative to diagnostic decisions were found among simulated subjects grouped by professional discipline and no significant differences in percents of agreement scores were found between the simulated MDS teams and their respective disciplines.

A systematic examination of the utility of particular sources of information (i.e., psychological test protocols, health data, social developmental histories, achievement measures and general information) in facilitating consistency in categorical diagnoses among school professionals was also conducted. The relative value of such informational sources in determining the final educational diagnosis was also assessed. Findings related to these matters indicated that significant levels of agreement were attained when diagnoses were based on certain sources of information, although the degree of consistency varied as a function of the particular informational sources, the professional discipline employing such source, and the type of case study. In addition, educational diagnoses based on particular informational sources proved to be significantly more predictive of the ultimate individual, final, outcome diagnoses than were diagnoses based on certain other sources of information.

Diagnostic decisions made prior to the MDS Conferences by individual team members representing the various disciplines were compared to their respective teams' consensual group diagnoses. This procedure was used to provide some index as to the relative import or influence that certain school professionals might have
had on a group diagnostic decision. With respect to these comparisons, no significant differences among simulated subjects grouped by professional disciplines were found between individual diagnoses and the diagnoses finally made by their respective teams.

Finally, the import of parental participation at the MDS Conferences was assessed. The results indicated that team members were almost unanimous in their rejection of the parent as a meaningful contributor in the process of determining the most suitable educational program for their youngster.

One major weakness of this investigation is the limitation in generalizability of these findings resulting from the small number of subjects employed and consequently the small number of MDS teams. In addition, the small number of case studies utilized for diagnostic purposes may also have been a factor in reducing the generalization that may be drawn from current findings. Because of the small n and the categorical nature of the data, the Binomial Test was employed in many instances as the test of statistical significance. However, in view of the repeated measures procedure employed in the present study, the assumption of statistical independence required by the Binomial Test may have been violated and results should, therefore, be viewed skeptically.

A major strength of the present investigation lies in the overall analytic model devised for comparing educational diagnoses between school professionals who were actually involved in the collection and interpretation of a data set within the context of a naturalistic setting and those school professionals who evaluated this same data set in an artificial or simulated condition.
Another benefit which might have accrued from the design of the present study was the use of the expert guides by the simulated subjects for interpretation of the case data. These guides were systematically derived from actual team members' (experts') introspective reports describing the cognitive steps they employed in the original evaluation of the student. The structure imposed by these guides may have been a factor in facilitating consistency in diagnostic decision-making among the simulated subjects. Although the expert model employed in this study was not intended as a formula for diagnostic interpretation, the results of its use may be reflective of the need for a more systematic procedure for the interpretation of case data among field professionals.
Acknowledgments

I would like to express my appreciation to my Graduate Advisor and Dissertation Chairman, Dr. Ronald Morgan, for his guidance and encouragement throughout this research project. His expertise and concern were invaluable. I wish also to thank the members of my dissertation committee, Drs. Todd Hoover and Joy Rogers for their contributions and support. A special thanks is extended to Dr. Joy Rogers for her assistance in this project which went beyond all expectations. A sincere thank you is also extended to Dr. Jack Kavanagh and Mr. Sanford Perlman, who provided advisement and technical assistance on matters relating to statistical procedures.

I would further like to thank Dr. Robert Sadler, District Superintendent of Chicago Public Schools, and those school professionals and parents who cooperated with me on this investigation. Gratitude is also expressed to Ms. Sandra Thompson for her efforts in typing and preparing this manuscript.

Finally, I am grateful to my parents for providing me with financial assistance throughout my graduate studies and to my wife Bonnie, not only for the long hours she spent proofreading this manuscript, but most of all for her talent in keeping our family healthy and happy while I was preoccupied with my graduate studies. Her continued love and moral support were deeply appreciated.
Vita

The author, Larry J. Powitz, is the son of Morriss and Clara Powitz. He was born December 17, 1940, in Chicago, Illinois. He is married and has three children.

His elementary and secondary education was obtained in the Chicago public schools. He graduated from Waters Elementary School in 1955 and Von Steuben High School in 1959. In June, 1966, Larry Powitz graduated from Roosevelt University with a B.A. in Psychology.

The author began graduate courses at Northeastern Illinois University in 1968 and at Roosevelt University in 1969. In June, 1972 he received his Master of Arts in Clinical Psychology from Roosevelt University. Larry Powitz began his studies at Loyola University in January, 1978.

For the past eighteen years, the author has been employed by the Chicago Board of Education. Larry Powitz began as a classroom teacher in 1966 and has taught grades fourth through eighth and special education classes for the behaviorally disordered. In 1974, he completed his internship as a school psychologist and was employed as a district psychologist until December 1982. Since December, 1982 until the present, the author has served as a city-wide school psychologist specializing in learning disabilities. For the 1982-83 school year Larry Powitz was elected Vice-President and Treasurer of the Chicago Association of School Psychologists (CASP).
In 1981 the author received a part-time faculty appointment as an instructor in Psychology at Oakton Community College in Des Plaines, Illinois, a position he currently holds.
TABLE OF CONTENTS

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

Chapter

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

II. REVIEW OF LITERATURE ......................................... 9

The Psychology of Group Processes
and Small Group Decision-Making .................... 10
Research Related to the Study of
Educational Planning Teams ......................... 22
Team Dynamics (efficacy of
the team approach) ........................................ 22
Educational Diagnostic Decisions
(Categorical Diagnosis) .............................. 44
Additional Considerations Related
to the Study of MDS Teams ....................... 63
Recapitulation .................................................. 66

III. METHOD ...................................................... 69

Hypotheses ......................................................... 69
Subjects .......................................................... 71
Procedure ........................................................ 73
    Procedural Specifications ......................... 75
    Actual Teams .......................................... 75
    Selection of the Cases ............................. 76
    Description of the Stimulus
    Materials ............................................. 76
    Description of the Simulated
    Team Evaluations ................................. 80

Procedures Used for the Comparison
of the Final Educational Diagnostic
Decisions Among Individual Subjects
and Teams .................................................. 87
Summary ....................................................... 91

IV. RESULTS ..................................................... 92

Results Related to Null Hypothesis
One .......................................................... 92
Results Related to Null Hypothesis
Two .......................................................... 98
# TABLE OF CONTENTS -- Continued

<table>
<thead>
<tr>
<th>Results Related to Null Hypothesis</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>Three</td>
<td>101</td>
</tr>
<tr>
<td>Four</td>
<td>107</td>
</tr>
<tr>
<td>Five</td>
<td>111</td>
</tr>
<tr>
<td>Six</td>
<td>114</td>
</tr>
<tr>
<td>Seven</td>
<td>124</td>
</tr>
<tr>
<td>Eight</td>
<td>133</td>
</tr>
</tbody>
</table>

V. DISCUSSION .......................... 139

| Discussion of Hypotheses One-Five | 139  |
| Discussion of Hypothesis Six      | 150  |
| Discussion of the Findings Related to Hypothesis Seven | 154  |
| Discussion of Hypothesis Eight    | 156  |
| Summary of the Findings and Suggestions for Future Research | 158  |
| A Final Note                      | 167  |

BIBLIOGRAPHY ............................ 170

APPENDIXES ............................. 181
# LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Topics of Group Research Which Have Been Reviewed in the Annual Review(s) of Psychology Since 1950</td>
<td>13</td>
</tr>
<tr>
<td>2.</td>
<td>Percents of Agreement Between Actual Individual Subjects and Simulated Individual Subjects for Each Actual Case Study</td>
<td>93</td>
</tr>
<tr>
<td>3.</td>
<td>Percents of Agreement Scores and Corresponding Values of k and P in Accordance with the Binominal Test</td>
<td>97</td>
</tr>
<tr>
<td>4.</td>
<td>Percents of Agreement Between Actual Team and Simulated Teams for Each Actual Case Study</td>
<td>99</td>
</tr>
<tr>
<td>5.</td>
<td>Simulated Psychologists' Individual Diagnostic Decision Prior to the MDS Conferences for Five Actual Case Studies</td>
<td>102</td>
</tr>
<tr>
<td>6.</td>
<td>Simulated Social Workers' Individual Diagnostic Decisions Prior to the MDS Conference for Five Actual Studies</td>
<td>103</td>
</tr>
<tr>
<td>7.</td>
<td>Simulated Nurses Individual Diagnostic Decisions Prior to the MDS Conferences for Five Actual Case Studies</td>
<td>104</td>
</tr>
<tr>
<td>8.</td>
<td>Simulated Teachers' Individual Diagnostic Decisions Prior to the MDS Conferences for Five Actual Case Studies</td>
<td>105</td>
</tr>
<tr>
<td>9.</td>
<td>Simulated Teams' Educational Diagnoses for Five Actual Case Studies</td>
<td>108</td>
</tr>
<tr>
<td>10.</td>
<td>A Comparison of Percents of Agreement in Educational Diagnoses Across Five Actual Case Studies Between Simulated MDS Teams and Their Respective Disciplines</td>
<td>113</td>
</tr>
<tr>
<td>11.</td>
<td>Percents of Agreement of Diagnostic Decisions Made on the Basis of Various Informational Sources Among Simulated Psychologists Across Five Case Studies (Appendix C)</td>
<td>242</td>
</tr>
<tr>
<td>12.</td>
<td>Percents of Agreement of Diagnostic Decisions Made on the Basis of Various Informational Sources Among Simulated Social Workers Across Five Case Studies (Appendix C)</td>
<td>247</td>
</tr>
<tr>
<td>Table</td>
<td>Description</td>
<td>Page</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>------</td>
</tr>
<tr>
<td>13</td>
<td>Percents of Agreement of Diagnostic Decisions Made on the Basis of Various Informational Sources Among Simulated Nurses Across Five Case Studies (Appendix C)</td>
<td>250</td>
</tr>
<tr>
<td>14</td>
<td>Percents of Agreement of Diagnostic Decisions Made on the Basis of Various Informational Sources Among Simulated Teachers Across Five Case Studies (Appendix C)</td>
<td>253</td>
</tr>
<tr>
<td>15</td>
<td>Percents of Agreement in Educational Diagnosis Made on the Basis of Different Informational Sources for Each Professional Discipline Across the Five Actual Case Studies</td>
<td>116</td>
</tr>
<tr>
<td>16</td>
<td>Percents of Agreement of Professional and Ancillary Informational Sources with Final Outcome Diagnoses Across Psychologists, Social Workers, Nurses and Teachers</td>
<td>125</td>
</tr>
<tr>
<td>17</td>
<td>Sources of Information in Agreement with Final Diagnoses Across Psychologists (Appendix C)</td>
<td>256</td>
</tr>
<tr>
<td>18</td>
<td>Percents of Agreement of Diagnoses Based on Professionally Relevant Data and Ancillary Data with Final Decisions Across Professional Disciplines</td>
<td>130</td>
</tr>
<tr>
<td>19</td>
<td>First Commitments to Final Program Selections for Psychologists</td>
<td>131</td>
</tr>
<tr>
<td>20</td>
<td>Percents of Agreement Between Individual Team Members' (Individuals Pooled by Professional Discipline) Educational Diagnoses Prior to the MDS Conferences and Respective Final, Consensual, Group Diagnoses</td>
<td>135</td>
</tr>
</tbody>
</table>
## CONTENTS FOR APPENDIXES

<table>
<thead>
<tr>
<th>APPENDIX</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Procedural Data and Background Information on Each of the 5 Students That Were the Subjects of 5 Case Studies</td>
<td>181</td>
</tr>
<tr>
<td></td>
<td>Guide Questions and Directions by Profession for Simulated Subjects (including interpretive aids, T.A.T. protocol for psychologists and final decision programs)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>Parent and Actual Team Member Interviews</td>
<td>223</td>
</tr>
<tr>
<td>C</td>
<td>Tables 11 - 14</td>
<td>242</td>
</tr>
<tr>
<td></td>
<td>Table 17</td>
<td>256</td>
</tr>
</tbody>
</table>
Chapter One

Introduction

The present study was an outgrowth of certain mandates regarding the organization and administration of special education as set forth in Public Law 94-142 and related legislation. Specifically, the present study was designed to test the consistency of decision-making in educational planning teams. Such teams having been charged, by P.L. 94-142, with the responsibility of determining the need for special education placement for referred students.

Section 84.35 (c) of the Rehabilitation Act of 1973 (P.L.93-112) states that: "In interpreting evaluation data and in making (educational) placement decisions, a recipient shall... (3) ensure that the placement decision is made by a group of persons, including persons knowledgeable about the placement options..."

In an interpretation of such legislation, Phillips (1981) asserts that such language does not mandate that educational placement decisions are to be derived from a group or team decision. Thus, according to Phillips, the directive "...the placement decision is made by a group of persons including persons knowledgeable about the placement options..." refers only to collaboration among school professionals (team members) and does not state or imply that placement decisions must be made by a team or group. He states, "The decision-making model itself also raises some problems because it is variously construed in the school psychology literature. Although the mandate is only for collaboration, many writers discuss it as if team or group decisions are mandated."
He cites several studies (Patton, 1976; Hyman, Carrol, Duffey, Manni, & Winikur, 1973; Yoshida, Fenton Maxwell & Kaufman, 1978) in which the investigators have presumably advocated "...that collaboration requires a team approach and group-derived decisions."

Regardless, of how one construes the function of the MDS team as set forth in P.L. 94-142; in the Chicago Public Schools (the location of the present study) and possibly in many other school districts, students are placed in special education programs on the basis of a consensual team or group decision. Article IX (Section 9.17) of Illinois Rules and Regulations to Govern the Administration and Operation of Special Education states that, "Recommendations (for special education placement) made at the multidisciplinary conference shall be determined by consensus of the participating public school personnel (educational planning team)...." Indeed, one purpose of the present study was to investigate the utility of such a planning team.

In accordance with P.L. 94-142 and, as more specifically defined by state statute,1 "knowledgeable" individuals, referred to above, often include the school psychologist, school social worker, school nurse, and classroom and/or special education teacher. Along with other designated school personnel and a parent participant, these individuals comprise what is termed a multidisciplinary staffing team (MDS), pupil personnel service team (PPS) or

1Illinois Rules and Regulations to Govern the Administration and Operation of Special Education, Article IX, 1979.
more commonly, an educational planning team. As stated above, each multidisciplinary team is charged with the responsibility of determining the appropriateness of special education for those students who have been referred for a case study evaluation.

In general, the actual decision-making process begins with individual team member evaluations followed by a general team meeting or multidisciplinary conference (MDS) in which individual evaluations are pooled. A consensus of team members is then sought with regard to the most appropriate educational placement. Decision-making in this instance may be viewed as a particular kind of problem-solving task. Thus, the MDS team is seen as a problem-solving body whose pre-established goal (by law) is to determine proper educational placement for particular students.

Typically, the problem situation presented to the team involves a student with a school-related adjustment problem, the nature of which may be intellectual, academic, behavioral, social, home induced or a combination of the above.

In order to effect the goal, the individual team members perform certain operations apart from the group in the form of professional assessments. Such individual operations (i.e., psychological assessment, social assessment, health assessment and academic assessment) are ultimately pooled and evaluated at a group meeting. This meeting (MDS conference) may be viewed as the culminating operation which will lead to satisfaction of the goal, namely, a comprehensive educational plan which may or may not include special education programming. Borrowing from Hill's
(1982) classification system (derived from Lorge, Fox, Davitz & Brenner, 1958), this model of individual-group decision-making may be illustrated by the hyphenated abbreviation I-CG4 which denotes that subjects participate individually and then in a coacting group of four members (CG4). The coacting group in this instance represents the MDS team. The number four was chosen for illustrative purposes because that was the number of individuals comprising each MDS team employed in the present study.

Professional problem-solving thus occurs first at the individual and then at the group level. In the latter case, the problem-solving task has an added component -- one person does not interpret data in isolation, but several persons work in concert. Thus, the final group decision that is offered by an MDS team may be influenced by countless individual personal variables compounded by the complex interaction within a group (team) setting. In addition, such a decision may also be influenced by the fact that such a group functions within the administrative context of the school environment. Further, it should be noted that the kinds of problems that have to be solved by MDS teams are indeterminate (Robertson, 1981) in nature. As contrasted with determinate tasks for which the correct answers are known (for e.g., crossword puzzles, mathematical problems, etc.), indeterminate tasks are those for which there is no necessarily correct solution such as selecting applicants for a job, deciding how to handle an aircraft hijacking or choosing the most appropriate educational programs for students with learning problems.

An examination of decision-making groups working on determi-
nate tasks has been done by Laughlin, Kerr, Halff & Marciniak (1975) and Laughlin, Kerr, Munich & Haggerty (1976). Basically, they investigated the accuracy of decisions as a function of certain social decision schemes employed by the group. They found that groups were more accurate if one member knew the correct answer and the group used the truth-wins scheme (i.e., the right answer when proposed by a member is so persuasive that it convinces others). As stated by Zander (1979), "Research is now wanted on the comparative value of such social decision schemes on an issue for which there is no correct answer." Although the present study was not designed to specifically investigate the relationship between the use of certain decision schemes and the accuracy of group decisions, information is presented relative to the reliability of individual decision-making among groups (MDS teams) when the problem-task is indeterminate in nature.

As a school psychologist, I have participated in over 300 multidisciplinary staff conferences in my eight-year career. Seldom have I experienced an MDS team whose entire membership has contributed equally to the final decision. Very often certain members will begin to speak from the vantage point of their own disciplinary framework but such "speaking out" is often short-lived and individual opinions appear to become buried by the opinions of typically more dominant members—in my experience these dominant members being the school psychologist or an astute special education teacher. In some situations, such dominant team members never seem to attend to any information about the child other than that which they have individually compiled. Fur-
thermore, nondominant members often appear to have had opinions contrary to those members in control but have reportedly "swallo­owed" them for lack of confidence and/or in the interest of speedy decision-making. Such a posture may indeed distract from an open and rational group decision based on a "true consensus" of all team members. As described above, one dominant member may in effect "dictate" the "right" educational placement decision.

Problems not only seem to exist within teams but also between teams and between like professionals (i.e., school psychologist compared with another school psychologist). On numerous occasions, a child my team has staffed into a particular educational program (e.g., a classroom for the learning disabled) suddenly transfers to a new school. Our staffing report does not arrive at the new school for some time. Meanwhile, the child is re-eval­uated and staffed at the new school by an entirely new team of school professionals and the recommended placement is a classroom for the mentally impaired (educable mentally handicapped). This frequently noted variance in opinion relative to educational placement decisions among members of the same team, between like professionals across team lines and finally, between whole teams all assessing the same child leads one to question the reliability and import of decisions which emanate from the MDS conference.

"Knowledgeable" people supposedly determine whether or not a particular child will in fact receive the kind of educational service he/she may need. Do we have adequate procedural controls in order to arrive at correct decisions? And even before one
addresses the issue of correctness or accuracy of educational placement decisions, the question of reliability of such decisions should be posed. Federal and state law have mandated (imposed) the reality of MDS conference teams. Does such an instrumentality best serve the interests of children or should the procedures be revised, modified or deleted?

To date, there appears to be a limited amount of research directly related to an evaluation of the operation and effectiveness of the MDS staffing team. As stated in Armer and Thomas (1978): "Though there is ample support in the literature for an interdisciplinary team approach (Ferguson, 1970; Rettke, 1969; Thomas, 1972; Buktenica, 1970), most examples are based on theory or subjective judgment, not on empirical investigation. Thus, it is not surprising that administrators, teachers, and pupil services staff have stressed the need for data-based evaluation of the effectiveness of the approach." More recently in a study by Bensky, Shaw, Grouse, Bates, Dixon & Beane (1980) which investigated stress and its relationship to educators and P.L. 94-142, commentary was made relative to "...the limited amount of research in the area of P.L. 94-142, special education and teacher stress..."

Utilizing actual case study data presented in simulated individual and group staffing situations, the present study was designed to investigate the consistency of decision-making in MDS teams. Some of the specific questions posed were as follows: How predictive of final consensual group (team) decisions are the individually determined decisions which are arrived at prior to
the MDS conference? Are decisions based on professionally relevant data likely to change with the addition of ancillary or general information? Are some informational sources more important than others in the decision-making process and if so, can the nature and degree of such influence be identified within and across professional groups?
Chapter Two

Review of Literature

Given that the educational planning team as defined by P.L. 94-142 represents one instance of a small group decision-making body, it seems appropriate to present some general background information relating to the study of small group functioning. Accordingly, a brief chronology of those topics of research in the psychology of group processes and small group decision-making which appear to have maintained the highest level of research interest and productivity for the last half century will be presented in this review of the literature chapter. To the extent allowable by the nature of such research, the findings of such studies will be related to the research problem at hand. The following areas of research findings directly related to the study of educational planning teams will then be presented: the relationship between inter-member collaboration and school personnel perceptions of team competency; the relationship between team member participation and satisfaction with team process; the extent to which various team members appreciate the legal directives and general purpose of the PPS staff conference; the effects of role clarification on classroom teachers' participation in educational planning teams; the extent to which team eligibility decisions are actually based on data which is supportive of criteria used as a basis for special placement; and the extent to which consistency in educational diagnostic decisions among individual school professionals may be affected by lack of adequate criteria upon which to base such diagnoses. In
analyzing the special education pupil planning process, studies dealing with the following topics will be systematically reviewed: the differential influence among members of MDS teams on special education placement decisions; parent involvement in the educational planning process; an analysis of the processes involved when individual school professionals and teams make psychoeducational decisions; the efficacy of categorical diagnosis (LD, EMH etc.) for purposes or special education programming; the usefulness of psychometric instruments in differential diagnosis and the superiority of team vs. individual special education placement decision-making. In addition, the conceptualization of the MDS team as a kind of work group will be presented along with an analysis of those pressures and/or distractions which may prove counterproductive to effective decision-making. Finally, a recapitualization will be presented in which research related to the MDS staffing team is integrated within the framework of small-group studies in general. The nature of the research specifically related to MDS teams and component members will also be summarized as will the relative efficacy of individual versus group performance in problem solving.

The Psychology of Group Processes and Small Group Decision-Making

According to Hare (1976), the study of group behavior prior to 1920 dealt primarily with the effect of an audience on individual performance and a comparison of the individual and the group in their problem solving abilities. Topics of group
research in the 1930's involved the study of group members' suggestibility (willingness to believe distorted information), effect of competition and rivalry among members and the causes of laughter in an audience (Murphy, Murphy & Newcomb, 1937). In the late 1930's, major research topics consisted of the effects of various leadership styles (White & Lippet, 1960), why individuals become leaders (Jennings, 1943), and the consequences of social support in an industrial setting (Roethlisberger and Dickson, 1939).

Table 1 presents a list of the group research topics which have been reviewed in the *Annual Review(s) of Psychology* since 1950 (Zander, 1979). Fourteen of the twenty-seven volumes in the *Annual Review(s) of Psychology* since 1950 have had chapters related to group research. These chapter headings provide a convenient source for identifying important topics of research as the authors saw them.

As noted by Zander (1979), the topics of group research which have had the longest tenure or which have been mentioned more frequently in the *Annual Review(s) of Psychology* since 1950 (see Table 1 for details) are those which have dealt with the following issues: "...the power of the group to influence members, communication networks, aspects of leadership, coding the comments of discussants, and interpersonal power." In recent years the origins and effects of group cohesiveness (Janis, 1972, Cartwright, 1968, Flowers, 1977, Anderson, 1975), the nature of social pressures within a group (Brehm, 1985) and the dynamics of
making group decisions (Laughlin, 1975, Laughlin, 1976) have attracted the greatest interest.
<table>
<thead>
<tr>
<th>Topic</th>
<th>Year(s) Cited in Annual Review of Psychology</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Coding the nature of comments by discussants in group</td>
<td>1950, '51, '53, '58</td>
</tr>
<tr>
<td>2. Changing the behavior of individuals through lectures and group discussions</td>
<td>1950</td>
</tr>
<tr>
<td>3. The power of a group to determine the behavior of members, social pressures toward uniformity of behavior and belief among members</td>
<td>1951, '52, '53, '55, '56, '57, '58, '60, '67</td>
</tr>
<tr>
<td>4. Leadership and management, effects of a leader's style</td>
<td>1951, '52, '58, '73</td>
</tr>
<tr>
<td>5. The effect of social networks on communication within groups</td>
<td>1953, '56, '58, '61, '67</td>
</tr>
<tr>
<td>6. The conflicted behavior of individuals who observe that the evidence of their own senses contrasts with the (stated) perceptions of others</td>
<td>1954, '73</td>
</tr>
<tr>
<td>7. Interpersonal social power and influence, sources and effects</td>
<td>1955 '60, '67, '76</td>
</tr>
<tr>
<td>8. The information of coalitions within larger groups</td>
<td>1955</td>
</tr>
<tr>
<td>9. Balance in the social structures of groups</td>
<td>1960, 67</td>
</tr>
<tr>
<td>10. Cooperation and competition, prisoner's dilemma, mixed motive games</td>
<td>1967, '73, '76</td>
</tr>
<tr>
<td>11. Social facilitation of an observed person's behavior, the effects of mere exposure</td>
<td>1973, '76</td>
</tr>
<tr>
<td></td>
<td>Title</td>
</tr>
<tr>
<td>---</td>
<td>----------------------------------------------------------------------</td>
</tr>
<tr>
<td>12</td>
<td>The &quot;riskiness&quot; of judgments, vs groups, the &quot;risky&quot; shift&quot;</td>
</tr>
<tr>
<td>13</td>
<td>Cognitive behavior, problem solving rules of making decisions in groups</td>
</tr>
</tbody>
</table>
The recent impetus for the study of the effects of group cohesiveness in policy or decision-making groups emanates from a theory first proposed by Janis (1972). The theory hypothesizes that individuals in such groups are under certain circumstances prone to act much differently and to use a faultier decision-making process than they would if they either worked individually on the problem or worked in groups that were free of certain constraints. Janis (1972) utilized several historical case studies (i.e., Bay of Pigs Invasion) to exemplify a phenomenon he identified as "groupthink" which refers to the tendency of decision-making groups to naturally and unconsciously develop properties and engage in communication patterns which make it difficult to formulate sound policy. Janis (1972), suggested the following as antecedents to groupthink (i.e., the lack of critical thinking in decision-making groups): "the development of an extraordinarily high sense of group cohesiveness; the detachment of the group from the moral implications of the problem by thinking and speaking in abstract, euphemistic terms such as 'body counts,' 'hawks/doves,' 'enemy.' etc.; the unconscious and probable unintentional setting of narrow parameters of the acceptability of solutions by the leader of the group; the development of the feeling of infallibility among the members of the group; and the emergence of mindguards" who protect the group from any facts, criticism, reevaluations, etc., which might alter the facade of unanimity and shatter the group's feeling of infallibility." Taking the
lead from Janis's original formulation of the groupthink phenomenon which, as noted, was based on historical case studies, Courtright (1978) examined this phenomenon under controlled laboratory conditions. Findings strongly suggested that the absence of disagreement in a cohesive decision-making group is the most important manifestation of the groupthink syndrome.

Assuming, based on Janis's (1972) and Courtright's (1978) work (also see Flowers, 1977) that group cohesiveness can be a negative factor which distracts from critical thinking in task oriented groups, one may consider it of some import to analyze further the determinants of this cohesiveness. Based on the theorizing of Festinger, Schacter, and Back (1950) which distinguished two major classes of forces that act on members to remain in the group, namely, a) the attractiveness of the group for its members and b) the extent to which the group mediates goals for its members, Anderson (1975) examined the differential influence of value similarity (a) and goal-path clarity (b) on cohesiveness in task oriented groups. In brief Anderson (1975) hypothesized that to the extent a group is primarily task oriented, its members will place more weight on those factors that contribute to successful task completion (related to goal-path clarity), while placing less emphasis on those factors that contribute to interpersonal attraction (value-similarity involving socio-emotional factors). Findings indicated that the level of cohesiveness of a task oriented group is a function of goal-path clarity as opposed to value-similarity of its members. Integrating the theorizing and findings of Janis, Courtright, Flowers and
Anderson as they related to decision-making in task oriented groups, it would appear that a group that has a clearly defined and agreed upon goal will tend to be a cohesive unit. Such cohesion, however, may create a situation where disagreement among members is significantly minimized to the point that the problem or issue before the group, although clearly defined, is solved in a non-critical manner.

With reference to the study of the social pressures within a group, Brehm (1975) examined the relationship between group (social) pressure and an individual member's tendency to agree with a group decision. Brehm (1975) sought to demonstrate how reactance (Brehm, 1966) can reverse the commonly held notion which states that the amount of pressure to come into agreement with a group increases as the member's attraction to the group increases (Back, 1951, Festinger, 1953, Cartwright, and Zander, 1968). Findings indicated that "when a member finds himself in disagreement with the rest of his group and he is offered special rewards by the group for compliance, the degree of his public (seen by the group) compliance and private acceptance is determined by a joint function of his attraction to the group and the importance of his freedom in holding his own position on the issue (reactance). Where the importance of freedom is relatively small, both public and private compliance are a direct function of attraction to the group...as the importance of freedom increases, the magnitude of the direct function between attraction and compliance tends to decrease. Where the importance of freedom is relatively great, both public compliance and private acceptance
decrease as attraction to the group increases" (Brehm, 1975). Thus, it would appear that the extent to which group pressure can convert a disagreeing member into one who is in agreement with his group's decision is not only a function of that member's interpersonal attraction to the group but also is dependent upon how important his opposing position is to him. That is, how much personal freedom does he relinquish in changing to the group's choice? The processes (dynamics) involved in group decision-making were discussed earlier in this manuscript (chapter one) as it related to the work of Laughlin and Kerr (1975, 1976).

Finally, Bales (1950) studied the dynamics of small group process by devising a technique for categorizing the overt behavior of group members. This categorization system is based on Bales' conception of group process and in effect presents a method by which to empirically check these ideas. Bales interaction process analysis classifies each overt act that occurs in a group in one of 12 categories. These categories are further divided as follows:

"Social-Emotional Area (positive reactions):
1.) Shows solidarity; raises other's status; gives help and reward
2.) Shows tension release; jokes, laughs and shows satisfaction
3.) Agrees, showing passive acceptance; understands, concurs, and complies

Task Area (attempted answers):
4.) Gives suggestion and direction, implying autonomy for others
5.) Gives opinions, evaluation, and analysis; expresses feelings and wishes
6.) Gives orientation and
information; repeats, clarifies and confirms

Task Area (questions):
7.) Asks for orientation, information, repetition and confirmation
8.) Asks for opinion, evaluation, analysis, and expression of feeling
9.) Asks for suggestion, direction and possible ways of action

Second-Emotional Area (negative reactions):
10.) Disagrees, showing passive rejection and formality, withholds help
11.) Shows tension and asks for help; withdraws out of field
12.) Shows antagonism, deflating other's status and defending or asserting self (Bales, 1950)

The 12 categories are then further divided into 6 basic conceptual areas in accordance with Bales' ideas about small group processes. For example, acts primarily relevant to the problems of communication (orientation) are classified in either category six (6) or seven (7); those relevant to evaluation, in either category five (5) or eight (8); those relevant to control, or decision (problem-solving), in either category four (4) or nine (9) and those related to problems in tension-management in categories two (2) or eleven (11). In addition, acts may be classified as to whether they promote forward movement (positive actions, categories 1, 2, 3) or impede forward movement (negative actions, categories, 10, 11, 12). Trained observers code group members' acts into one or more of these categories, noting the person initiating the act and the person to whom the behavior is directed. (Bales, 1950; Mills, 1967).
In brief, the employment of Bales' methodology may offer an investigator a means for addressing several questions related to a systematic analysis of group processes. Some of these questions are as follows: "Does interaction follow an ordered sequence ...? Is there a dynamic relation, or covariation; between task activity and socio-emotional activity? ... Is there a pattern in the distribution of interpersonal interaction? ... How do members divide among themselves the performance of the various behavioral functions represented by the categories? ... (and) conceiving of the interaction process as a more-or-less ordered system changing through time, what variables affect the characteristics of this system (Mills, 1967)?" The answers to these questions, may enable an investigator to assess the degree to which a particular group has met pre-established criteria for effective functioning.

It should be noted at this juncture that issues of group work related to group cohesiveness, the effects of group pressure on individual members, and the dynamics of group decision-making all involve a careful examination of group processes. The present investigation, while certainly not discounting the importance of how decisions are made, was primarily concerned with whether or not outcome decisions which emanate from group processes are reliable or consistent. The present investigation was not designed to analyze the validity of such outcome decisions or specific group process variables that lead to such decisions. However, in relating the present study to past research in group processes,
the following general question was formulated: Is the relia-
bility of decision-making among task oriented groups affected by fac-
tors related to groupthink (group cohesiveness, etc.), social 
pressures within groups, variance in decision-making style and/or 
the dynamics of group-member interaction. Future studies might 
be designed to examine the relationship between the reliability 
of group outcome decisions and particular process variables in 
order to assess the effect of the latter on the former.

Concurring with Steiner (1974); Zander (1979) in his review 
of the psychology of group processes stated that there appear to 
be "few well-developed theories about behavior in groups." 
Zander(1979) commented as follows: "The theories that do ex-
ist...seldom aid in understanding groups as such, or even the 
behavior of members on behalf of their groups because the 
theories often are based on ideas taken from individual psychol-
ogy, and these are primarily concerned with the actions of indi-
viduals for the good of those individuals." The result is that 
studies in this area have more often focused on the behavior of 
individuals in group settings than on the properties and outcomes 
of a group as a unit or entity (Zander, 1979).

The present study was designed, in part, for the purpose of 
making one kind of decision-making group (the MDS team) the basic 
unit of study. Emphasis was placed on the outcome decisions of 
such groups within an educational group decision-making context 
(i.e, decision-making among school professionals at an MDS con-
ference). By examining the reliability of such outcome decisions 
it was thought that, at least, a limited opportunity to study the
production of one type of small decision-making group would be provided.

Research Related to The Study of Educational Planning Teams

Team Dynamics (efficacy of the team approach)

Armer and Thomas (1978) attempted to evaluate the effectiveness of the interdisciplinary team approach. They developed a scale to measure interdisciplinary collaboration (I.C.) in PPS teams and to "relate the extent of such collaboration to the attitudes of school personnel toward PPS teams" (Armer and Thomas, 1978). Basically, three techniques were used to measure I.C.: the I.C. scale (see below), a judge's rating of team collaboration and team meeting patterns with instructional personnel.

I.C. Scale (Armer & Thomas, 1978)

"Subscales of the Interdisciplinary Collaboration Scale

Equality of Influence

1. Each member of the team has as much power as any member.
2. The suggestion of some team members are considered more important than those of others.
3. Team decisions are controlled by one or two individuals.
4. The contributions of all professional disciplines on the team carry equal weight.

Flexibility of Roles

1. Being a member of the team has involved trying new roles.
2. Members of the team function pretty much the way they functioned before they were assigned to a team.
3. From the way a member of the team functions or from the types of tasks he deals with, it would be fairly easy to tell what his professional discipline is.

4. What a member does depends more on his particular skills than on his professional discipline.

Sharing of Suggestions

1. Each member has a clear idea of what other members are doing most of the time.

2. There is a low degree of participation on the part of some members of the team.

3. Everyone is actively encouraged to have his say before decisions are made.

4. Members do not discuss some of the important problems they are confronted with because the other professional disciplines would not fully understand the problems.

Joint Planning and Decision Making

1. Before undertaking a project, team members rarely ask for help and suggestions from others.

2. The activities undertaken by the team are jointly determined by all team members.

3. Members of the team work together as a team.

4. Although we are known as a team, most members end up "doing their own thing" with input from others.

Reciprocal Teaching and Learning

1. Working with other professional disciplines has not modified the way some of the team members view school problems.

2. Suggestions from other team members have improved my effectiveness in working in the schools.

3. Working closely with other team members has helped in developing skills I might not have learned working with people in my own professional discipline.

4. Some team members think they have nothing to learn from other members."
The I.C. scale was derived from five of Luszki's (1958) eleven factors which characterized the functioning of groups whose members were able to collaborate closely for interdisciplinary research. These factors were considered to have the most face validity and general import for measuring the I.C. of PPS teams (Armer & Thomas, 1978). The factors were as follows:

"a) Approximate equality of influence exerted by representatives of one discipline on another. b) flexibility of roles. c) sharing suggestions, ideas, and data among members from different disciplines. d) joint planning and mutual decision-making and e) reciprocal teaching and learning among members."

Team members were asked to rate each item (see I.C. scale) as to the degree to which each statement was representative of their team (definitely true...definitely false). Briefly, it was found that three of the five subscales namely, sharing suggestions and ideas; joint planning/mutual decision-making and reciprocal teaching and learning showed a high degree of correlation with both a judge's rating (a single expert) and the existence of regular planning meetings between PPS teams and school personnel.

In addition, Armer & Thomas (1978) attempted to assess the effects of collaboration on the attitudes of school personnel (see attitude questionnaire below).

"Attitudes of school personnel were measured by a group of questions appraising the familiarity and orientation of
school personnel to PPS functioning, and a semantic differential. The questions asked were the following.

1. Have pupil personnel services staff been working in your school?
   Yes ___ No ___ Don't Know ___

2. If yes, have they been working:
   as a team?
   as individuals?
   as both a team and individuals?
   don't know?

3a. In your estimation, has pupil services presence affected the atmosphere of this school year?
   Yes ___ No ___ Don't Know ___
   b. If yes, for the better ___ or for the worse ___?

4. Do you have any faculty or administrators meeting regularly with a group of pupil personnel staff?
   Yes ___ No ___ Don't Know ___

There was some evidence to indicate that school personnel were aware of differences in the ways high and low I.C. teams operated and that a high degree of I.C. led to a more positive view of PPS teams (Armer & Thomas, 1978).

Taking the lead from organizational theory Yoshida, Fenton, Maxwell & Kaufman (1978) attempted to relate the following assertions to the dynamics of "Pupil Planning Teams":

1) "...participation in a decision-making process is positively related to satisfaction with the process...greater participation increases the likelihood that an individual will feel committed to implement the group's decision.

2) ...that group decision-making occurs in the context of potent and established power relationships; thus, participation may give the leader or influential member a better opportunity for exploiting the power differential."
This latter point, if translated to the MDS team, would seem to indicate that power-role expectations which existed prior to the meeting would indeed affect or bias the decision-making process. Thus, the most influential member would in effect lead the group. Yoshida (1978) observed that, "Many states have replaced a single individual or 'gatekeeper' usually the school psychologist with a committee for making special education placement decisions." Because of this former role of "gatekeeper" and in view of the fact that the school psychologist determines eligibility for certain special education programs (see P.L. 94-142), the degree of influence of such individuals in team decision-making appears to be of some interest. The present study indirectly addresses this issue by comparing individual, diagnostic decisions made by all team members, including the psychologist, and the final consensual team decision. It was thought that a diagnostic decision made on an individual basis (apart from the group setting) by an influential member would tend to be in agreement with the final group decision. The implication drawn was that the influential member's "personal" decision would in effect become the group's decision.

In this regard, of the antecedents proposed by Janis (1972) to "groupthink" which were discussed earlier in this manuscript, the setting of narrow parameters on the acceptability of solutions by the leader of the group seems to apply to the case of one team member directing a team decision. As stated in Courtright (1978), "...the more the leader of the group actively promotes his own preferred alternatives, the more probable it is
that consensus will occur without an examination of the full range of potential solutions (from Courtright, 1978 quoting Janis (1972)."

Regarding the study of the self-perceptions of MDS team members and their satisfaction with the MDS process (point one above) Yoshida, et.al (1978) posed the following issues:

"a) Whether or not placement committee members of different professions differ in their self ratings of the extent to which they participate in the various tasks of a placement meeting."

b) Whether or not committee members differ in the degree to which they were satisfied that their presence in the PPT was necessary and the degree to which they were satisfied with the committee process and the magnitude of the relationship between participation and satisfaction."

The Self-Rating Instrument employed by Yoshida, et.al. (1978) pertaining to levels of participation and satisfaction is presented below.

"A. Participation
1. I usually contribute information to PPT decisions. (Contribute)
2. I frequently interpret information for the PPT. (Interpret)
3. I can comfortably disagree with statements made by other member during PPT meetings. (Disagree)
4. I do not always feel free to participate as actively as I desire in the PPT decision making for a student. (Participate)
5. I usually propose alternatives (Propose)
6. I usually evaluate alternatives (Evaluate)
7. I frequently participate in making decisions. (Finalize)

B. Satisfaction
1. I usually feel that my presence is necessary at the PPT meetings I attend (Presence)
2. The team approach is effective in making program decisions for special education students. (Team Approach)

In brief, a strong positive relationship was found between staff role and participation. Regular education teachers were lowest in participation and satisfaction, whereas, school psychologists were ranked highest on both variables. It is significant to note that within all roles (social worker, nurse, administrator, etc.) the level of satisfaction increased with higher levels of participation. As pointed out in the study, it is unfortunate that regular education (classroom) teachers ranked the lowest in participation and were not satisfied with the PPT process for they are the ones who are expected to implement educational programs for handicapped children.

Apart from Yoshida et.al. (1978), other studies have noted disproportionate influence, participation and satisfaction among MDS members (Gilliam, 1979; Gilliam & Coleman, 1981). Addressing the matter of disproportionate influence and status among team members, Knoff (1983) surveyed 40 school psychologists (trainees and practitioners) and 40 special education teachers (trainees and practitioners) in order to investigate their perceptions of MDS member's differential influence on special education placement decisions. Subjects rated 11 MDS professions on 7-point Likert scales. Ratings involved assessing each profession's influence on special education placement decisions given the intent of P.L. 94-142 and in the subjects' actual experience. Results indicated that MDS professions do exert disproportionate influence on placement decisions given both the intent of P.L. 94-
142 and in actual practice. Specifically, findings revealed that medical personnel (school nurse), the parent of the child under review and the regular classroom teacher were all rated as less influential in actual practice than they should have been given the intent of 94-142. In actual practice the school psychologist and the special education teacher were perceived as extremely influential, parent of the child under review - moderately influential, social worker - neither influential nor uninfluential, regular education teacher - very uninfluential and medical personnel - extremely uninfluential. However, findings of previous research studies (e.g. Gilliam & Coleman, 1981) differ relative to the patterns of this disproportionality. In this regard Knoff (1983) stated "...Each MT (Multidisciplinary Child Study Team) therefore should be considered as unique, each with team-interactions and patterns of professional influences. Ultimately, the team Chairperson must analyze the patterns of disproportionality, minimize their effects on group process, and coordinate steps toward acceptable resolutions...". Commenting on the importance of minimizing the effects of disproportionality of influence on group process Knoff (1983) stated, "Disproportionate professional influence, in particular, may bias interpretations by MTS of diagnostic data and ultimately, team recommendations".

Addressing the topic of goal consensus among team members, Fenton, Yoshida, Maxwell & Kaufman (1979) sought to determine if the placement teams as a unit recognized the duties that have been assigned to them by the state and also attempted to identify which team members by role recognized the organizational goals
for the placement team. The findings were as follows: 1) Over 60% of the teams surveyed had less than a 3/4 majority of their members who recognized the team's responsibility to make specific decisions; 2) More administrative and support personnel (psychologist, social worker, counselors, etc.) recognized team responsibility than did instructional personnel (excluding).

These findings seem to fit nicely with the above discussion of role perception as it relates to participation and resulting satisfaction with the PPS process among team members. Thus, regular classroom teachers ranked lowest in participation and satisfaction and as shown by the Fenton et.al. study (1979), they didn't appear to have a clear and precise appreciation of the purpose and goals of the MDS conference.

In this regard, Rucker and Vantour (1978) have proposed that classroom teachers would participate in the team process if they were aware of their duties and responsibilities as team participants. Trailor (1982), however, actually investigated the effects of role clarification on classroom teachers' participation in MDS teams. Prior to observation in regular MDS team meetings, Trailor (1982) had classroom teachers who were assigned to an experimental condition participate in inservice training sessions which emphasized classroom teachers' duties and roles as team members. The results indicated that the experimental teachers spoke more often than the control teachers. They were, however, not addressed by other team members significantly more than the controls. Thus, role awareness training seemed to have an effect on teacher participation in MDS team meetings although
such training did not appear to affect the importance of their role as viewed by other team members.

In an investigation of regular classroom teachers' involvement in the special education pupil planning process, Goldstein, Struckland, Turnbull & Curry (1980) found that such teachers were not actively involved in IEP development for mildly handicapped students. In a related study Pugach (1982) sought to generate information regarding the nature and extent of regular teacher involvement in and utilization of IEP's for mildly handicapped students both prior to and following the initial IEP meeting. Using questionnaire and interview techniques with a sample of 33 regular teachers it was found that a majority of the teachers were not systematically involved in developing IEP's for students for whom they had major instructional responsibility. As stated by Pugach (1982) "...Low levels of involvement regarding sharing in setting goals and objectives and specifying requisite support services suggest that decisions made with respect to placement and direction of instruction, as documented in the IEP, do not generally reflect the input of regular classroom teachers ... typically, the IEP does not reflect the total instructional program, but only that portion of instruction administered directly by special education teachers." In addition, findings indicated that teachers were routinely not included in the IEP meeting and regular teachers expressed little need to consult the IEP document.

Overall then, research findings in this area have indicated that the regular classroom teacher's participation, influence,
satisfaction and general status in the special education pupil planning process appear wanting. This runs contra to the intent of 94-142, namely, shared decision-making by knowledgeable individuals sensitive to the needs of the student.

Parent participation in the IEP process was addressed by Turnbull & Turnbull (1982). In attempting to define precisely the role of the parent in the IEP process, Turnbull & Turnbull (1982) cited one of the major purposes of the IEP meeting as set forth by the U.S. Department of Special Education:

"The IEP meeting serves as a Communication vehicle between parent and school personnel, and enables them as equal participants to jointly decide what the child's needs are, what services will be provided to meet those needs, and what the anticipated outcomes will be (Federal Register, 1981, p. 5462)."

The preceding passage in no uncertain terms depicts the parent as an equal partner in the special education planning process. Turnbull & Turnbull (1982) describe current parent involvement policy in terms of three common beliefs which he deduced from statements made during congressional debates concerning the passage of P.L. 94-142, such statements having been made by proponents of the bill. The statements are as follows:

"1. the parents (and the child) should be part of the process from which they are so often removed - (A belief in shared decision-making);

2. parent participation should increase the appropriateness of the educational services - (A belief in parent involvement as a means of insuring that schools satisfy their legal obligations to children); and

3. parents should receive counseling and training to prepare them to be part of the education of their child at home - (a belief in the role of parent as teacher)."
In reviewing the positions of Kirk and Gallagher (1979), Turnbull & Turnbull, (1982) point out that in the recent past parents of handicapped children were viewed as part of the problem, whereas, now as evidenced by current attitudes "...they are seen, in a rather sudden shift in philosophy as part of the solution". Turnbull & Turnbull (1982) take exception to this all encompassing movement to make parents decision makers, child advocates and teachers in the special education process. For example, in commenting on belief no. 2 above, Turnbull & Turnbull (1982) suggested that it is naive to assume that parents always will represent their child's interests especially when they conflict with their interests. Conflicts of interest may repeatedly result in any of the following situations: A parent's self-esteem precludes placing his/her child in special education; a parents need to reduce stress by institutionalizing the child conflicts with the child's need for the least restrictive alternative placement (Teitelbaum & Ellis, 1978) and/or a parent's need to protect his/her handicapped child from rejection and failure conflicts with the child's need to take risks in the regular classroom.

In brief, according to Turnbull & Turnbull (1982), assumptions underlying parent involvement are based more on what some advocates and policy makers think parents ought to be and do rather than on universally held parent preferences for involvement.

"Expecting all parents to be equal participants in decision-making is setting up many - if not most parents to fail and many
educators to be disillusioned by parents who do not fulfill this awesome and sometimes unwelcome responsibility." Turnbull & Turnbull (1982), stress that parents have different degrees of capability, time, energy and interest in being educational decision-makers, advocates etc. And so, as they point out, we must consider the needs, abilities and preferences of parents in regard to the demands of their children and expectations of the school. "Rather than mandating that all parents be equal participants with school personnel to make decisions jointly, public policy should tolerate a range of parent involvement choices and options, matched to the needs and interests of the parents (Turnbell & Turnbull, 1982)." Certainly, this position does not reduce the importance of parental involvement in the educational planning process. Indeed, openness to parental input should be a given. The issue relative to openness of school staff toward parental participation in the pupil planning process is addressed in the present study.

In an earlier study Yoshida, Fenton, Kaufman and Maxwell (1978), investigated planning team members' attitudes about the kinds of activities in which parents should participate during the planning team meeting. A sample of 1,372 planning team members responded to questionnaires in which they indicated which of 24 planning team activities they thought parents should participate in during the planning team meeting. These 24 activities were factor analyzed into six categories: a) procedural activities; b) instructional program development; c) program evaluation; d) information base development; e) leadership activities;
and f) organizational activities. Results indicated that only two activities were selected by more than 50% of the members as being appropriate for parental participation: presenting and gathering information relevant to the student’s case, reviewing the students’ progress and reviewing the appropriateness of the student’s program. These were selected 41.1% and 36.7% of the time respectively. The latter activities are related to parental participation in program evaluation. Most importantly, less approval was found among members for parental involvement in activities which relate to instructional program development. As Yoshida et al. (1978b), state "...parents are expected to provide information to the planning team, but they are not expected to participate actively in making decisions about their child's program". The point made is that planning team members' attitude toward parental participation will be a major factor in determining the actual role parents take during planning team meetings. If the results of this study are any indication, this role will be a limited one. As Turnbull & Turnbull (1982) state, parents should not be pressured into a role that is beyond their capabilities or desires, but a reasonable opportunity should be provided those parents who wish to participate in all aspects of the educational planning process.

Soffer (1982) examined the specific IEP content areas in which parents desired greater participation. Parents were asked to rate their actual and desired levels of participation in ten decisional areas corresponding to P.L. 94-142's required content for IEP's. The areas are as follows:
"1. Determining what your child's educational strengths and weaknesses are from how he/she is doing in school.
2. Determining what your child's educational strengths and weaknesses are from his/her behavior outside of school.
3. Planning what your child should learn or be able to do by the end of a year.
4. Planning what school staff should try to accomplish with your child during the year.
5. Determining what special education and other special individual services your child should receive.
6. Determining how much special education and how often special individual services should be provided to your child.
7. Determining how much of your child's time during the school year should be spent with nonhandicapped children.
8. Planning how long your child's special education services should continue.
9. Determining how your child's progress will be evaluated.
10. Determining when your child's progress will be evaluated next. (Soffer, 1982)."

Soffer (1982) found that parents (n=116) of handicapped children were most desirous of additional participation in two areas: "determining when a child's progress will be evaluated next (and) determining how a child's progress will be evaluated."

It is interesting to note that the areas in which parents desired greater participation are congruent with those activities that team members perceived as relatively important parental roles in the planning process, i.e., reviewing and/or evaluating student's progress (Yoshida et.al., 1978b). In integrating the findings of Yoshida et.al. (1978b) and Soffer (1982), it appears that parents desire additional participation in those activities that team members view as corresponding to appropriate parental roles. In
this regard, greater participation was not desired in categories cited by Soffer (1982) which dealt with determining special education placement and specific services and curriculum goals etc. In view of recent studies which have documented parental dissatisfaction with their limited role in the pupil planning process (Ysseldyke, Algozzine, & Mitchell, 1982; Gilliam, 1979; Hoff, Fenton, Yoshida & Kaufman, 1978), it might be assumed that parents are either unsophisticated, too manipulated or too insecure to desire greater participation in the remaining eight categories as cited by Soffer (1982). It is, therefore, unreasonable to assume that parents regard their participation as adequate in all but the two IEP content areas identified by Soffer (1982). Again, the evidence points to the possible need for comprehensive inservice training for those willing and capable parents (Turnbull & Turnbull, 1982) who wish to more fully participate in the special education planning process. In that way parents' perceptions of themselves as MDS participants might go beyond information providers and/or monitors of their youngster's progress.

An analysis of team decision-making per se was conducted by Ysseldyke, Algozzine & Mitchell (1982). Based on earlier investigations of MDS teams which employed naturalistic observation techniques (Patton, 1976; Goldstein, Struckland, Turnbull & Curry, 1980), Ysseldyke et al. (1982) developed an observation system for collecting data on the characteristics of effective team meetings. The characteristics which were identified for evaluation were derived from IEP legislation and organizational
theory literature. The procedure employed two experienced and sophisticated observers who viewed 34 videotaped team meetings and attempted to ascertain the extent to which such characteristics were evidenced. The following research questions, as set forth by Ysseldyke et.al. (1982), were based on desirable characteristics of MDS teams:

1.) To what extent do teams verbalize their goals (i.e., state the purpose of the meeting and the decision(s) to be made)?

2.) To what extent do teams analyze alternative methods for goal achievement (i.e., generating alternatives, and selecting the best alternative on the basis of explicit criteria)?

3.) To what extent are data provided in such a way that they contribute to a clear, understandable, and complete picture of the students' current educational performance?

4.) To what extent do all team members actively participate in decision-making functions (e.g., gathering information and verbalizing an opinion about the decision).

5.) To what extent do team members encourage or discourage parent participation by explicitly requesting information, directing information to parents in understandable language, and providing opportunities for parents to request information or seek clarification?

6.) To what extent do teams consider the least restrictive alternative in reaching a decision?

7.) To what extent do teams produce provisions, including a time schedule and assignment of responsibilities, for carrying out the decisions they reach (Ysseldyke et.al. (1982))?}

With respect to each research question (1-7), findings of this study were as follows: 1.) The purpose (goals) of the meeting was stated in only 35% of the meetings and in only four of the 34 meetings was there a statement of the decision to be made. In 84% of the meetings the purpose of the meeting was apparently
satisfied by a statement of the reason for referral. 2.) In none of the meetings was there a clearly identifiable time set aside for generating alternative solutions to address a student's education needs nor for identifying criteria for evaluating such alternatives. 3.) A relative area of strength was in data presentation and use. Most teams (81%) attempted to relate assessment data and everyday behavior to the student's problem, although, the quality of the data and its use was not evaluated. 4.) Roles of team members were never clearly defined, and there was never a statement made encouraging participation by individuals. In this regard, an earlier study (Ysseldyke, Algozzine & Allen, 1980) referenced by Ysseldyke et.al. (1982) found that "team members can sit throughout an entire meeting without participating, and never being encouraged to participate". 5) Parents were never asked whether they understood the purpose for the meeting and their expectations regarding the meeting. Parental input was requested only occasionally, usually to verify an observed problem (e.g., "Do you ever see this behavior at home?"). Technical language used by team members was never properly defined for parental understanding. The current investigation similarly found a lack of team member interest in parental participation. 6.) The concept of least restrictive environment was never explicitly stated and was apparently never employed in reaching a placement decision. 7.) Final decisions were reached in the absence of a clear consensus and procedure for implementing the decision was unclear.
In summary, the findings of Ysseldyke, et.al. (1982) characterize educational placement team meetings as wanting in those factors which have been identified as necessary for effective decision-making. Such factors include: (a) consensus decision-making; (b) clarity of goals; (c) structural separation of activities; and (d) nonspecialized participation by all team members including parents and the school staff who will implement the program (Fenton, Yoshida, Maxwell & Kaufman, 1979, Fenton, Yoshida, Maxwell, & Kaufman, 1977). In discussing methods for improving team meetings, Ysseldyke (1983) notes the role that inservice training may have on effective team functioning.

"...research findings suggest that the organization and structure of teams is important for efficient decision-making. When special education directors were asked to name constraints in implementing the team process, time & scheduling, lack of funds, and the need for training decision-making were cited. ...This training, which should emphasize organized procedures, a clearly stated agenda, participation by all members, and use of data relevant to the decision should enable teams to be more time-efficient and cost-effective".

From a review of the literature, Pfeiffer (1981b) was able to categorize difficulties that MDS teams face into four problem areas: "a) teams' unsystematic approach to collecting and analyzing diagnostic information ...; b) the minimal involvement of parents and regular educators on teams ...; c) teams' use of a loosely construed decision-making - planning process ...; d) the
lack of interdisciplinary collaboration and trust ...". In a 
later study, Pfeiffer (1981a) noted that all the available 
research on MDS team functioning has taken what he terms an "outs-
siders vantage point". That is, data on MDS teams has been col-
lected by investigators who do not actually serve on such teams. 
In order to gain a more complete perspective, Pfeiffer (1981a) 
assessed what team members themselves perceived were the major 
problems facing their respective teams. One hundred and forty-
seven members on forty MDS teams from four urban school districts 
completed a questionnaire which contained a comprehensive list of 
potential team problems. Findings indicated that the two most 
critical areas of concern were too constrictive a set of team 
roles and goals, and functioning under extensive pressure with 
minimal support. Extremely high ranks were given to "lack of 
program options" and "opportunity for follow-up work". The 
results of this study deserve some commentary. The high-problem 
areas (i.e., lack of program options and lack of opportunity for 
follow-up) appear to put the onus on the school administration 
etc. for inefficient team functioning. Without denying that the 
problems cited are real, one might conclude that the identifica-
tion of particular problem areas by team members may have been 
self-serving. It follows then that problem areas which might 
have made team members appear inefficient were avoided. There-
fore, a more realistic assessment of team functioning would in-
clude not only those problems cited by team members but also 
those cited by outside observers.

Difficulties with school-based assessment teams have been 
cited by other investigators (Yoshida, 1980; Hefferin & Katz,
1971; Pluckum, 1972; Taylor, 1978; Wallace, 1976) but an equally vocal group has advocated the team approach (Pfeiffer, 1982 a&b; pfeiffer, 1981c; Vautour, 1976; Hogenson, 1973; Falik, Grimm, preston, & Konno, 1971; Buktenica, 1970). The question becomes whether teams do a more effective job than individual professionals acting alone in determining appropriate special education programs for exceptional children. Several studies cited above (Vantour, 1976; Pfeiffer, 1981a,b&c, Pfeiffer,1982a)have addressed this issue. Vantour (1976) compared individual and group (team) educational diagnostic decisions by having individual members from twenty MDS teams first independently diagnose thirty exceptional children who had been assessed using the Rucker-Gable Educational Placement Scale (Rucker & Gable, 1974). This scale (RGEPS) measures knowledge of respondents of appropriate program selection for exceptional children. It consists of 30 brief behavioral descriptions of actual children referred for special education services. Subjects select from a continuum of seven educational programs, the one program that they feel represents the best setting for each of 30 children. Afterwhich, these same individuals functioned as part of a team and recommended the most appropriate setting for each of the thirty cases. Results indicated that mean program selection scores by the teams were significantly more accurate (agreed with the expert ratings) than those by the same individuals acting independently.

Commenting on the results of this study (Vantour, 1976), Pfeiffer (1982a) stated, "By looking only at mean placement scores and not the variability in decisions made, Vantour omitted
looking at a more critical issue - whether teams reduce potential variability (in decision-making) during (by) the group process ...

A reanalysis of Vantour's data indicates that his groups produced significantly less variability in placement decisions ...". Pfeiffer (1982a) also investigated whether special education diagnostic decisions made by teams were superior to those made by individual team members comprising those teams. The study was conducted in Puerto Rico for the purpose of determining whether the benefits of group decision-making noted in the Vantour (1976) study and in an earlier study by Pfeiffer (1981c) were evident in another culture. Employing a modified version of the Rucker - Gable Educational Programming Scale, Pfeiffer (1982a) found that teams in Puerto Rico" generated significantly less variability (i.e. errors) in their placement (diagnostic) decisions than did the same specialists acting independently". Errors in decisions were based on comparisons with expert ratings. As pointed out by Pfeiffer (1982a), generalizing from the present findings should be done cautiously. Subjects were educational evaluators and not members from various disciplines and none of the participants had worked with one another on educational planning teams. In addition, the design of the study called for all subjects to be given identical data on each of the stimulus cases; whereas, in an actual multidisciplinary situation members not only bring to meetings commonly shared information, but also information which is unique to their own professional role. In summary then, there is at least some evidence to suggest that group (team) decisions
made for the purpose of determining the most appropriate educa-
tional program for exceptional children are superior to decisions
made independently by individual team members.

**Educational Diagnostic Decisions (Categorical Diagnosis)**

An analysis of the special education pupil planning process
would be incomplete without a discussion of its primary purpose
or intended outcome, (i.e., an educational placement decision and
an individual educational plan for each exceptional child). Spec-
cial education program selection and the development of instruc-
tional strategies are based on a team member's individual diag-
osis of a student's learning problem(s). These diagnoses, al-
though not having the import of placement decisions like the lat-
ter, classify students according to learning and/or behavioral
problems. Borrowing on models established earlier in medicine,
biology, and psychology; this classification system provides the
primary means for differentiating among different "types" of
handicapped students. Particular diagnostic categories (e.g.,
learning disabilities (LD); educable mentally handicapped (EMH);
behavioral disordered (BD); trainable mentally handicapped (TMH))
are typically defined by state guidelines (i.e., Illinois Rules &
Regulations to Govern the Administration and Operation of Special
Education, article IX (section 9.16), 1979). Actual program
selection is based on the results of certain assessment pro-
cedures (i.e., psychometric testing, analysis of background infor-
mation, student observations etc.) which may satisfy state de-
finite criteria for program eligibility. Most importantly, cat-
egorical diagnoses which lead to educational placement decisions
(i.e., program selection - LD, EMH etc.) by MDS teams dictate the kind of educational intervention programs exceptional students will be involved in and the diagnostic label by which such children will be identified. Summarizing the observations of Mishell (1979) on categorization, Pfeiffer (1980) stated the following in relation to his study of the influence of diagnostic labeling on special education placement decisions: "Even if categorizing children is an efficient means of processing and communicating information, and even if labeling does not, in itself, bias placement decisions, it is evident that the labeling process does present many potential dangers and abuses". Negative consequences of labeling (i.e., degraded self-image, lowered teacher expectations etc.) have been addressed by other researchers (Algozine, Mercer, & Countermine, 1977; Carroll & Reppucci, 1978; Seitz & Geske, 1976; Tuchman, 1972; Gilling and Rucker 1977).

Questions then remain as to the efficiency of categorical diagnosis for purposes of special education programming. Do the various diagnostic categories denote universally accepted characteristics specific to the particular category? How objective is the methodology employed in making educational diagnostic decisions? What is the relationship between this classification procedure and the actual teaching of the youngster?

In the area of learning disabilities (LD), Ysseldyke (1983a) provides some insights relative to these issues. Relative to LD as a meaningful concept or category he states, "... For any categorical approach to definition of a concept to make sense, the conditions of a classification system must be met; that is,
universal and specific characteristics must be evident in the phenomena being studied. To build a diagnostic system using "green" as the inclusionary/exclusionary criterion would be of limited value in scientific classification of trees. We have failed to identify the characteristic(s) which is universal and specific to LD. If there is one characteristic that LD students share, it is low achievement; of course, it is not specific to that one group of students (Ysseldyke, 1983a). Several investigators (Ysseldyke, Alzozzine, Shenin and McGue, 1979; Sherry, 1982; and Wainer, Shumaker, Alley & Deshler, 1980) in studying the psychometric characteristics of LD as compared to non-LD students have found large degrees of overlap on psychometric test scores between the two groups.

The accuracy of psychometric measures in differentiating between normal and special education students and in discriminating between children in various special education categories has been investigated by Anderson, Kaufman, and Kaufman (1976) and Gutkin (1979) by using the WISC-R as the diagnostic tool. Anderson et.al. (1976) found that WISC-R scatter is questionable as a diagnostic indicator in the identification of learning disabled children and Gutkin (1979) found no significant differences between the scatter distributions (i.e., Verbal-Performance, Full Scale IQ, Verbal IQ and Performance IQ) of children classified as emotionally disturbed, learning disabled, minimally brain injured, and educable mentally retarded.

A study by Webster and Schenck (1978) examined the discriminative utility of norm referenced diagnostic test data
(WISC-R and the WRAT) along with cultural and familial information in differentiating LD children from non-LD children. These three pieces of information were taken from the case files of 1,524 children between the ages of six and seventeen with about average intelligence who had been diagnosed LD, EMH, ED, multi-handicapped or other (no clear diagnostic label was available although the student received special education services). Six discriminant functions analyses were performed on different combinations of the variables selected from the three informational sources (i.e., diagnostic data, familial and cultural). Examples of variables used to predict categorical placement decisions (i.e., LD, EMH etc.) were as follows: "I...10 WISC subtests scales and three subtest scales from the WRAT...; II...3 WISC IQ scores and the 3 subtest scales from the WRAT; VI...3 WISC I.Q. scores, 10 WISC subtest scales, CA, grade placement in school, MA, expected level of achievement,... 3 WRAT subtest scales, SES...". In brief, the results of these discriminant analyses consistently failed to differentiate LD children from the other groups (i.e., EMH, ED etc.). In addition, findings indicated "that at different age levels and under different I.Q. levels, different facets of the testing are attended to more than others". The three most significant variables attended to appeared to be "...the child's reactions to and stated behavior in various social situations as measured by the Picture Arrangement and comprehension subtests of the WISC-R, a general estimate of cognitive ability and potential as measured by the WISC-R FSIQ, and the ability to analyze phonemically and synthesize individual words as measured by performance on the Word Recognition subtest". 

47
of the WRAT. In essence, if a child is of average ability and functioning at a low grade-level as measured by a reading achievement test, there is a tendency to be labeled as LD. If the estimate of the child's overall intelligence falls within the dull normal or borderline defective range and the child is performing at around expected levels of achievement in word analysis, he is diagnosed as EMH. Finally, if the child is of average intelligence and performing close to grade level on the reading achievement test, yet is still having problems in learning, he is diagnosed as ED..."

In summary, the findings of Webster and Schenck (1978) seem to suggest that diagnostic personnel may be employing the WISC-R, the WRAT and other like assessment techniques in an "informal" manner when making educational diagnoses and that technically, such instrumentation remains inadequate for isolating characteristic psychometric patterns (profiles) typical of a certain class of students.

In a review of research findings (See Webster & Schenck, 1978 for specific references) related to the use of norm-referenced psychometric measures in educational diagnosis, Webster & Schenck (1978) state"... the utility of WISC-R subtest patterns in differentiating various classifications of children especially reading disabled and learning disabled children has been confusing and contradictory." In addition, they point out that" The predictive validity of other frequently used standardized tests such as the ITPA, the Detroit test of Learning Aptitude and the Bender - Motor Gestalt Test are of questionable
diagnostic utility". Webster and Schenck (1978) further suggest that it may be counter productive to continue comparing the performance of LD children to normals of equal MA and/or equal CA on diagnostic tests. He instead calls for a baseline analysis of informational processing strategies employed by children with learning problems. Such analysis might then lead to improved learning techniques (strategies, styles) for acquiring academic skills.

In a later study Webster & Lafayette (1980) examined the utility of Bannatyne's four-factor recategorization model in differentiating students classified as learning disabled, (primary problems in reading skill acquisition), emotionally disturbed, or educably mentally handicapped. Bannatyne (1968) initially proposed a three factor model which attempted to identify scatter patterns on the WISC and WISC-R that would practically distinguish various groups of handicapped or atypical learners. This three factor scheme involved dividing the subtests of the WISC into three categories, namely Spatial, Conceptual and Sequential. The spatial category consisted of the student's summed scores on the WISC or WISC-R subtests of Picture Completion, Block Design & Object Assembly. These tests were thought to measure the ability to recognize spatial relationships and to manipulate objects either directly or symbolically in multidimensional space. The Sequential factor comprised the summed scores in Picture Arrangement, Digit Span, and Coding and purported to measure visual and/or auditory short-term memory. The Conceptual category consists of the Comprehension, Similarities and Vocabulary subtests and was thought to measure verbal judgment, conceptual thinking and
expressive language facility. Bannatyne (1974) later revised his three factor categorization to include Acquired Knowledge (i.e., the summed scores of Information, Arithmetic, and Vocabulary subtests) as a fourth factor. Initial studies (Bannatyne, 1974) based on the original three factor scheme (i.e., all factors but acquired knowledge) showed that dyslexic readers scored highest in the Spatial category, moderate in the Conceptual category, and lowest in the Sequential category. According to Webster & Lafayette (1980), "The diagnostic implication of these findings is that students who demonstrate a similar pattern of performance on the Wechsler intelligence scale may have a reading problem associated with genetically inherited dyslexia". Other studies (Rugel, 1974; Smith, Coleman, Dokecki & Davis, 1977) examined the utility of the four-factor recategorization scheme in discriminating reading disabled, learning disabled, and educably mentally handicapped students. In general, findings indicated that the pattern of performance among these three classes of problem learners were very similar. In brief, the procedures of the Webster & Lafayette (1980) study involved the obtaining of WISC-R profiles from the case files of 294 LD, 26 EMH, and 71 ED students. Scale scores from each individual WISC-R were recategorized according to Bannatyne's four factor scheme. A discriminant function analysis was then performed to determine the extent to which the recategorization of WISC-R subtest scale scores would differentiate the three groups of handicapped students (LD, ED, EMH). Discriminate function analysis indicated that 99.7 percent of the students actually labeled by school diagnostic personnel as LD would be predicted to be LD on the basis of
Bannatyne's reclassification scheme. Results of the analysis also indicated that 100 percent of the students labeled ED and EMH would be predicted to be LD on the basis of the recategorization. Commenting on these findings, Webster & Lafayette (1980) state, "Use of the Bannatyne's recategorization results in a clear overclassification of non-learning disabled students as LD. Moreover, the recategorization appears to have little value in differentiating EMH from LD students even though the four-factor model was developed with the intent of distinguishing between these two groups".

In summary, the findings of Webster & Lafayette (1980) represent one more instance in which the Wechsler Intelligence Scale has proven to be ineffective as a basis for differentiating or categorizing various groups of special education students. Such was the result despite the introduction of an alternate method (Bannatyne's recategorization system) for interpreting subtest pattern profiles. As in Webster & Schenck (1978), Webster & Lafayette (1980) caution against the sole use of norm-referenced tests in differential diagnoses. "Interpretation of performance on norm-referenced testing must be supplemented by analysis of the student's actual behavior and learning styles and strategies in real-life settings. It is only through trained clinical behavioral observation, coupled with careful scrutiny and analysis of norm-referenced test data that the most appropriate and effective educational interventions may be generated and implemented."

The appropriateness of LD as a diagnostic category has been assessed by the use of several other procedures. In a study
(Epps, Ysseldyke & McGue, 1981) which sought to determine whether clinical judgment could discriminate LD students from low achievers, psychometric profiles were presented to school psychologists, resource teachers, and engineers (naive judges who never had taken an education or psychology course). School classification and the federal definition were used as dependent measures. Findings indicated that psychologists and special education teachers were able to differentiate between low-achieving students and students labeled LD with only 50% accuracy, whereas, engineers were able to differentiate with 75% accuracy. In an investigation (Ysseldyke, Algozzine & Epps, 1982) which applied several commonly used definitions of LD to normal students, over 75% could be labeled LD. When the same criteria were applied to school identified LD students, 25% could not be classified LD.

In another study, Ysseldyke, Algozzine, Rickey & Braden (1982) videotaped twenty MDS team meetings and then analyzed the kinds of data presented at such meetings. The relationship between the final team decisions and the amount of data presented was studied as was the relationship between the type of data presented and the final outcome decisions. More specifically, the extent to which data presented in the placement team meetings was related to the eligibility decisions which were made was assessed. The data were analyzed for participant statements which were directly related to a student's eligibility for LD placement in accordance with preselected criteria.

With reference to these criteria Ysseldyke et.al. (1982) stated the following: "There is no universally accepted set of
operational criteria for determining if a student is LD (learning disabled). Therefore, three commonly accepted methods were selected for use in this research. The first criterion employed the commonly used notion of a discrepancy between actual achievement (usually measured by achievement tests) and ability (as measured by intelligence tests). The second was based upon significant verbal/performance discrepancy between Verbal and Performance IQ on the WISC-R...emphasis on intra-individual differences. The final criterion consisted of the current federal definition of learning disabilities...

The results indicated that there was no significant relationship between presentation of statements supportive of ability/achievement discrepancies, verbal/performance discrepancies or federal definition criteria and the placement team decision. However, the relationship between the amount of data presented and the final decision was "moderately high \( r = 0.52 \) (i.e., the more test information presented, the more likely the decision was to classify the youngster as LD)". As Ysseldyke et al., (1982) states, "...Based on these findings, it appears as if the eligibility decision of the observed placement teams were made on some basis other than the common criteria evaluated in this study". Future research in this area might involve the identification of specific criteria that are commonly used for determining eligibility for other special education programs (educable mentally handicapped, trainable mentally handicapped, behavioral disordered, etc.) and then assessing the degree to
which placement teams actually employ the information which supports such criteria when making eligibility decisions.

With regard to the kinds of intervention strategies that are currently used with "LD" students, Ysseldyke (1983b) reported that "...teachers use the same instructional approaches, materials and techniques with LD students that they do with any other students. ...We could not find evidence that interventions for LD students...is somehow unique".

Problems in adequately defining characteristics of "LD" students for programming and instructional purposes also appear to pervade the identification and classification of the, so called, EMR or EMH student. The labeling of children, especially minority students, as educable mentally handicapped (EMH) by employment of certain assessment procedures has become a "burning" issue in legal and educational areas and has led to a nation-wide emphasis on "non-biased" assessment, one free from sociocultural and racial prejudice (Mercer, 1971; Mercer 1973; Ysseldyke & Regan, 1980; Reschly, 1979; Reschly, 1980; Reschly, 1981). In a comprehensive report on current practices relative to the identification of mildly mentally retarded children for conducting research, MacMillan, Meyers & Morrison (1980) point out, "...that for years the process for identifying EMR children in the schools has lacked the precision required to enable researchers to specify the population required to enable researchers to specify the population parameters for this group of children called "EMR" or "mildly mentally retarded". The process has been highly subjective and has never had as its intent the delineation of a "clean"
research population". They further note that recent litigation (Hobson v. Hansen, 1967; Diana v. State Board of Education, 1970; Larry P. v. Riles, 1979) regarding the identification process for EMR (EMH) students has "...introduced additional ambiguity into an already imprecise process".

Compounding the problem of inadequate criteria and/or procedures for declaring students eligible for special education (Algozzine, & Sutherland, 1977; Hallahan, & Kaufman, 1977; Thurlow & Ysseldyke, 1979; & Ysseldyke, Algozzine, Regan, & Potter, 1980) or in part because of it, is the matter of professional bias in psychoeducational assessment (Ysseldyke & Regan, 1980; Foster & Ysseldyke, 1976 & Foster, Ysseldyke & Reese, 1975).

Several researchers (Bergan & Smith, 1966; Dion, 1972; Dusek, 1975; Rubovits & Maehr, 1973 and Ysseldyke & Algozzine, 1979) have investigated the relationship between "naturally" occurring student characteristics (i.e., race, behavior, sex of student, socioeconomic status etc.) and biased interactions. Masling (1957, 1959) found that intelligence and personality test performance were affected by the manner (i.e., aloof or accepting) in which the responses were given. Palardy (1969) showed that reading performance was related to teachers' expectations for a child's ability to learn to read. Algozzine (1977) found that teacher-perceived attractive and unattractive children were treated differently and Sutherland and Algozzine (1979) found that children (girls) labeled as learning disabled were treated differently from those labeled as normal. In a recent study by Ysseldyke & Algozzine (1982) the extent to which classification
decisions within special education were differentially affected by information presented at the time of referral (i.e., prior to engaging in a psychoeducational assessment) was investigated. A computer simulation program was developed in order to study the processes diagnostic personnel (i.e., school psychologists, special education teachers, school administrators, regular class teachers and other school personnel, n=159) use in the schools when engaged in making educational program decisions about students. Specifically, decision makers were presented referral information for 16 students which varied on the basis of the sex, socioeconomic status, physical attractiveness (photograph), and nature of difficulty for which a student was referred. Although the referral data indicated the student might be evidencing academic or behavioral problems, all assessment data indicated normal or average functioning, both academically and behaviorally. The extent to which different assessment information was selected as a function of referral information was evaluated and the extent to which different kinds of information were perceived as influential in decision-making was analyzed. Findings indicated that subjects selected tests on which to make decisions in a similar manner regardless of the information presented at the time of referral, nonetheless, different decisions were made about the same child who was portrayed as average in all test performance data. 52% of the subjects (i.e., 83) declared the "average" child eligible for special education services. Decisions about the 16 different children were found to be more a function of referral information than child performance data.
Thus, for example, Ysseldyke & Algozzine (1982) found that decisions to classify the child as emotionally disturbed were more likely when the referral statement indicated behavior problems and decisions to classify the child as learning disabled were based on a variety of specific factors. Certain children (e.g., unattractive girl from low SES family and referred for academic problems) were much more likely to be diagnosed LD than other children (e.g. unattractive girl, low SES with behavior problems).

The results of Ysseldyke & Algozzine (1982), namely, that educational diagnostic decisions are more a function of referral information than child performance (assessment) data appears congruent with the findings of Algozzine, Christenson and Ysseldyke (1982). Algozzine et.al. (1982) investigated the probabilities associated with the "referral to placement process". Specifically, a national sample of special education directors reported that "from three to six percent of the school age population is referred for evaluation each year. ... Of those referred, an average of 92% are tested. Of those, tested, 78% are declared eligible for special education services". Algozzine et.al. (1982) concluded that "...when students are referred for psychoeducational evaluation the probability is very high that they will be declared eligible for special education services".

One possible conclusion from the results of Ysseldyke & Algozzine (1982) and Algozzine et.al. (1982) is that the decision to refer a student along with the referral information remain crucial factors in whether or not a student will be declared
eligible for special education placement. In this regard, irrespective of particular assessment information, Ysseldyke (1983b) comments that the "assessment and decision-making process is teacher driven... A "knee-jerk" response to problems cited by teachers". Based on an impressive amount of research in the area of psychoeducational assessment and the special education planning process, Ysseldyke (1983b) offers some suggestions. "We must stop perpetuating the automatic-referral-to-placement process that is occurring for so many students. A more appropriate initial emphasis would be on the implementation of interventions in the classroom. This emphasis should serve to reduce time consuming psychometric evaluations and improve instruction for children in the classroom".

In summary, results of the studies reported above appear to show the lack of definitive diagnostic criteria for placing children in categorical special education programs. This problem seems to be compounded by examiner bias in evaluating students' eligibility for special services and the tendency to place children in special education based on problems cited by teachers (referral information) irrespective of the outcome of a psychoeducational evaluation.

The question arises as to how diagnostic personnel (i.e., school psychologists, social workers, nurses, special education teachers) justify differential diagnosis of special education children. One might assume that practitioners make categorical diagnoses on the basis of clinical judgment and skill, previous
training, and a variety of criteria they have employed and refined which has led to acceptable placement decisions within their particular educational setting (See earlier discussion related to the Webster & Schenck (1978) study involving LD diagnosis). How school professionals make categorical diagnoses was recently addressed by Knoff (1983). He assessed the relative importance of 16 "pieces" of diagnostic and background data on special education placement decisions. Using questionnaires, subjects (20 special education trainees, 20 school psychology practitioners, and 20 special education practitioners) independently rated this information on identical Likert scales. Statistical analysis indicated significant differences (P < .05) among the 16 "pieces" of information as rated. Those "pieces" of diagnostic information which ranked the highest in determining special education placement decisions were "classroom observation of the referred child, assessments in receptive and expressive language (e.g., by the Peobody Picture Vocabulary Tests and the Carrow Tests, respectively), an interview with the child, and emotional indicators as determined, for example, by projective testing, a life-space interview, or behavioral observations..." (Knoff, 1983). In apparent contrast to the findings of Ysseldyke & Algozzine (1982), habitat, income level, race and sex were the only informational sources which were not rated at least as moderately important. IQ and social skills (adaptive behavior) were ranked fifth and ninth respectively. Unlike the findings of an earlier study (Matusjek and Oakland, 1979), subjects in Knoff (1983) "valued both IQ and adaptive behavior assessments'...". From this, Knoff (1983) suggested that school
professionals may be currently utilizing more "multifaceted assessments" (i.e., both IQ and adaptive behavior indices) in making educational diagnostic decisions. The extent to which such diagnostic data can reliably discriminate among the various special education categories (LD, EMH, BD etc.) however, was not addressed.

The issue then of the appropriateness of differential diagnosis based on current methodology still appears to be unresolved. In actual practice, however, because of state mandates and funding practices, declaring students eligible for EMH, LD, BD etc. (state mandated categories) programs is often the only way a youngster in need of specialized intervention is able to receive intensive, individualized treatment. Unfortunately, categorical diagnosis may represent one instance in which actual practice is not dictated by research findings.

In the present study, an attempt was made to improve upon current practices in educational (categorical) diagnosis by presenting an "expert" model for the interpretation of assessment data. It was thought that the employment of such a model would enhance consistency in educational decision-making among diagnostic personnel.

Relative to the issue of identification of reliable standards for the purpose of educational diagnosis, Peterson and Hart (1978) employed multiple discriminant function analysis in order to evaluate the consistency among school psychologists with respect to the identification of educationally handicapped children. In the Peterson and Hart study the students that were the
subjects of diagnostic evaluations were first identified as "high-risk" in terms of their probable eligibility for special education programming by teachers and counselors. Then each student was given an indepth psychoeducational evalulation employing such instruments and techniques as the WISC-R, Wide Range Achievement Test (WRAT), Peabody Individual Achievement Test (Reading Comprehension), a sentence completion task, parent and child interviews and a teacher's evaluation of learning and behavior problems. All this assessment information was presented to the individual school psychologists who on this basis, made categorical diagnostic decisions for various special education programs. Such diagnoses were based on Utah (locale of the study) state guidelines for the identification of educationally handicapped children. The results indicated "that the "mentally retarded," "culturally disadvantaged," "slow learner," and "no-significant-problem" groups could be efficiently identified statistically, but the distinctions between those groups were based almost entirely on the variables of Full Scale IQ and race. The other two classifications of "learning disabled" and emotionally handicapped" could not be efficiently identified statistically, and consistency of standards employed for those classifications was questioned" (Peterson and Hart, 1978). One explanation for the results was the inadequacy or incompleteness of the state guidelines employed in defining certain special education diagnostic categories. As stated in Petersen and Hart (1978), "...Those diagnostic categories which are described in the guidelines in terms of explicit IQ ranges were the most clearly identifiable statistically. It is, therefore, apparent
that consistent standards were followed most frequently when di-
agnosis represented a "cookbook" exercise. But in the applica-
tion of such labels as "emotionally handicapped" and "learning
disabled," in which diagnosis is generally viewed as representing
a complex, inferential process, there was little consistency in
evidence." It is important to note in this regard that the Il-
inois (locale of the present study) state guidelines for the
identification of educationally handicapped children do not
describe diagnostic categories in terms of explicit IQ ranges
(Illinois Rules and Regulations to Govern and Administration and
Operation of Special Education, Article IX, Section 9.16). In
light of the findings of the Petersen and Hart (1978) study, one
might speculate then as to what degree this lack of rigid diag-
nostic standards affects the consistency of educational diagnoses
among Illinois school professionals, a topic of interest in this
investigation. Unlike the Petersen and Hart (1978) study, the
design of the present investigation permitted the placement of
the school psychologist along with other school professionals
(social workers, nurses, teachers) within the context of a MDS
team. An analysis of team decision-making was then made by as-
sessing the consistency of educational diagnostic decisions among
individual, like-professional subjects irrespective of teaming
(similar to the Petersen and Hart study) and among whole MDS
teams across selected case studies. In addition, the present
study was designed to examine the utility of various profes-
sional sources of information as they were employed by individual
team members in arriving at diagnostic decisions, such individual
decisions occurring prior to the team meeting and in an isolated
condition. Furthermore, the agreement between individual team members' decisions based on separate sources of information (i.e., psychological protocols, social assessments, health data, achievements, ancillary information, etc.) and the final individual outcome diagnosis based on an integration of all the data was examined.

**Additional Considerations Related to The Study of MDS Teams**

Underlying the study of PPS teams should be the realization that such educational planning teams are not merely one more instance of a specified work group meeting for the purpose of solving a particular problem. In this case, the problem is one of deciding upon the most appropriate educational program for particular students who have been identified as exceptional in their learning characteristics.

As a kind of work group, the MDS team may be subjected to certain pressures and/or distractions which may prove counterproductive. On a psychodynamic level, one might view problems in group work by considering Bion's (1959) basic assumptions group and work group. In brief, Bion (1959) thought of any group as simultaneously consisting of these two groups (a basic assumptions and work group). A group's behavior at any point in time, he proposed, expresses some sort of balance between these two kinds of groups. "The more a group is functioning toward the work group end of this polarity, the more it is rationally and
maturely focusing on the performance of its overt task in as ef­
ficient a manner as possible; the more it's functioning toward
the basic assumptions end of the polarity, the more it is behav­
ing in a regressive manner wherein the group takes on primitive
familial connotations for its members and begins to be used for
emotional gratifications and tension release (Shaffer & Galinsky,
1974)." This state of emotional regression is thought to inter­
fere with the rational work of the group.

Irving Janis (1972; Janis and Mann, 1977) has pointed out
that in some cases of group decision-making, individual loyalty
to the group prevents members from raising controversial issues
and uncomfortable questions. The group becomes so preoccupied
with maintaining group consensus and harmony (cohesiveness) that
critical thinking is dramatically reduced to the point of being
ineffective. This phenomenon is known as "groupthink" (Janis,
1972) and was discussed earlier in this manuscript.

In evaluating the efficacy of group work, the question of
whether or not the disadvantages associated with group perfor­
mance (i.e., psychological pressures and attending counterproduc­
tion) outweigh the advantages represented by the commonly held
notion that "two heads are better than one" should be systemati­
cally addressed. The belief that the accuracy of a group deci­
sion is superior to that of a single individual is well docu­
mented by the employment of the jury system in resolving legal
issues and the widespread use of committees in solving an endless
array of economic, political, educational and social problems.
One rationale for group work may be that it offers an opportunity
for the pooling and integration of individual resources which may result in more accurate decision-making. On the other hand, perhaps it is simply a subtle way to socialize.

In a comprehensive review of the literature which contrasted individual versus group performance in problem solving situations, Hill (1982) compared individual versus group performance in six categories that involved the following task demands: learning/concept attainment, concept mastery, creativity, abstract problem solving, brainstorming and complex problem solving. He concluded that group performance was "...generally qualitatively and quantitatively superior to the performance of the average individual. Group performance, however, was often inferior to that of the best individual in a statistical aggregate and often inferior to the potential suggested in a statistical pooling model..." In statistical pooling, investigators summed the behavior or best ideas of several individuals who had worked separately, whereas, in the statistical aggregate model the experimenters summed the behavior and ideas of the one most competent individual (the most accurate and/or productive performer on assigned tasks) out of several individuals who had worked separately. As stated by Hill (1982), "...This research confirms the belief that the performance of one exceptional individual can be superior to that of a committee (Davis, 1969), especially if the committee is trying to solve a complex problem and if the committee contains a number of low-ability members..."

An analysis of individual versus group performance in the study of educational planning teams may prove to be an area of
profitable exploration (see Vantour, 1976; Pfeiffer, 1981, and Pfeiffer, 1982 - discussed earlier in this text). It should be noted, however, that problems of both an ethical and practical nature relative to the identification of high and low ability personnel will no doubt manifest themselves.

Recapitulation

In this chapter, I have presented a review of those topics in small group research which appear to have captured the interest of investigators from the 1930's to the late 1970's. It was pointed out that the MDS team represents one instance of a small group decision-making body. Some of the research which has been done with MDS teams has focused on the relationship between inter-team member collaboration and non-team members' (other school personnel) perceptions of team competency, the relationship between team member participation and satisfaction with the MDS team process and the relationship between role clarification training and participation at team meetings. In addition, the extent to which various team members appreciate the purposes and goals of the group has been analyzed in addition to the impact of a leader or influential member on the MDS team process. The relationship between the kinds of data presented at placement team meetings and the extent to which such data are related to the final eligibility decisions was also cited as was the extent to which consistency in educational diagnoses may be affected by lack of adequate standards (criteria) for making such diagnostic
judgments. Other topics addressed were as follows: parent involvement in the educational planning process; the efficacy of categorical diagnosis (LD, EMH etc.) for purposes of special education programming; and the usefulness of psychometric instruments in differential diagnoses. Furthermore, MDS teams, as with small groups in general, are not exempt from certain psychological pressures which may result in non-critical thinking (i.e., groupthink). The question then of whether or not the disadvantages associated with group work outweigh the advantages of the group over the single individual in decision-making was discussed and potential problems (identification of high and low ability personnel) in assessing individual versus group performance within the administrative context of an educational setting were addressed.

The present investigation was designed to provide relevant and hopefully useful information related to the functioning of small group decision-making processes and more specifically to the functioning of educational planning teams (MDS, PPS teams). The basic focus of the present study was upon the issue of the reliability or consistency of diagnostic decision-making first at the individual and then at the group level. At the individual level this study involved an intensive analysis of the consistency of educational diagnoses among like-school professionals. An examination of diagnostic decision-making involving these same school professionals within the context of a group (team) setting was also provided.
If one is going to diagnose children's learning and behavior problems and label them categorically (i.e., EMH, TMH, LD, BD, etc.) as a result, one must be certain that he/she is operating under reasonably exacting diagnostic standards (Petersen and Hart, 1978). In this regard, one must be certain that these diagnostic labels and all that they imply represent an accurate description of a child's functioning. Furthermore, there must be confidence that such classifications would be selected repeatedly by different school professionals all evaluating the same child. This latter issue is addressed by the present study.
Chapter Three
Method
Hypotheses

The following null hypotheses were tested:

1.) There is no significant relationship (difference) between actual and simulated individual team members' educational diagnoses across five actual case studies.

2.) There is no significant relationship (difference) between actual and simulated teams' educational diagnoses across five actual case studies.

3.) There is no significant relationship (difference) among simulated individual team members' educational diagnoses across five actual case studies.

4.) There is no significant relationship (difference) among five simulated teams' educational diagnoses across five actual case studies.

5.) There is no significant difference in the reliability of educational diagnoses between the simulated MDS teams and their respective disciplines.

6.) There is no significant relationship (difference) among selected educational diagnoses based on responses to stimulus materials across simulated subjects.

7.) There is no significant relationship (difference) between any one educational diagnostic decision based on a particular informational source and the
final decision based on an integration of all the data.

8.) There is no significant difference in educational diagnoses between individual simulated team members' decisions prior to the MDS Conference and the final, consensual, group (team) outcome decision.
Subjects

Subjects were thirty state certified pupil service professionals, (ten school psychologists, ten school nurses and ten school social workers). In addition, ten classroom or special education teachers served as subjects. All subjects were tenured, had at least seven years of experience within their respective disciplines, and were employees of the Chicago Board of Education. The professional competency of each subject was assumed in that all participants had satisfied the credentialing standards imposed by the State of Illinois and the Board of Examiners, Chicago Board of Education. Furthermore, the quality of each subject's work was known to the investigator and others and was intuitively judged to be of a sufficiently high standard to qualify him/her as a highly skilled professional.

All subjects including teachers held at least a master's degree in their respective disciplines. In addition, five of the school psychologists in the actual team group (expert group) held a Ph.D or Ed.D in educational psychology or a Ph.D in clinical psychology, were state certified, were school psychology intern supervisors, and had experience teaching psychology or related subjects at the college-level.

Subjects were informed that participation was voluntary, that they might withdraw themselves and/or their transcribed responses at any time, and that participation or nonparticipation would not affect their employment or the child's education in
any way. Although, by the nature of the study, subjects were known to one another, their agreement to participate or not participate was known only by the investigator.
Procedure

Subjects comprised ten MDS teams. The ten teams were subdivided into five actual and five simulated teams. Members of the five actual teams were instructed to retrieve relevant data pertaining to five different referred students with whom they had directly interacted. These students presented academic and/or behavioral problems that tended to cast some doubt upon the student's primary handicapping condition. It was thought that the nature of such problems would make a differential, educational diagnosis difficult.

The remaining five simulated teams operated apart from the school setting, never interacted with the student, parents or school personnel but were presented with identical, professionally relevant case data and general information on each student representing the five different actual case studies. Thus, the simulated psychologist evaluated the data obtained by the actual psychologist, the simulated social worker evaluated the data obtained by the actual social worker, etc.

Simulated team members evaluated such data and made educational diagnoses on an individual basis, after which, the simulated team members attended a simulated MDS team conference at which time a simulated group decision was reached. 2

2 Individual simulated team members were inadvertently asked to make final educational placement decisions as opposed to diagnostic decisions even though IEP's hadn't been prepared (i.e., in the absence of an IEP conference). See Chapter 5 for a fuller discussion of this circumstance.
The simulated team members responded to guide-questions systematically derived from actual team members' (like-skilled professionals) introspective reports describing the decision-making process they employed in the original evaluation of the youngster. These introspective, verbal reports described in detail the cognitive processing steps that actual team members (experts) employed in arriving at an educational diagnosis based on obtained data. A carefully structured interview by the present investigator was the method employed in obtaining these introspections. For example, actual psychologists were asked to delineate how educational diagnoses were made; first, on the basis of various psychological test records (protocols) then, on the basis of ancillary data and finally on the basis of an integration of all informational sources. Although the professional data bases differed, the same basic procedure was used in obtaining introspections from actual social workers, nurses, and teachers.

It was assumed that these introspective reports, carefully constructed by recognized experts in their respective disciplines, would have the effect of providing a means for a comparative interpretation and evaluation of identical case data across simulated like professionals.

Comparisons of educational diagnoses were made between actual and simulated subjects, among simulated subjects, within and across team lines, between actual and simulated teams and among simulated teams.
In addition, qualitative information from actual team members and parents regarding team members' perceptions of parents' role, parents' perceptions of team members' role and parents' perceptions of their own role in the decision making process was obtained.

An example of the methodology employed to obtain the qualitative information is as follows: A reasonable time after the actual MDS conference adjourned, actual team members were asked questions such as: "Was your decision regarding educational placement at any time influenced by parental input and/or presence at the MDS conference?" Likewise parents were asked questions such as: "Was there any team member(s) who influenced your decision regarding educational placement for your youngster more than other members? What is your opinion regarding the manner in which the MDS conference was conducted? Were the purpose and goals of the conference sufficiently explained? Did you feel your presence was needed?"

Procedural Specifications

Actual Teams

Actual teams were those teams who in the actual school setting came to a decision of record regarding an educational diagnosis for a particular youngster, such decision forming the basis for the educational plan as defined by P.L. 94-142. The members of the actual teams interacted directly with student and parental figures, school staff, outside agencies. As a result of this interaction, certain data were collected and evaluated which formed the basis for an individual member's
decision regarding an educational diagnosis for the referred student. Subsequent to individual evaluations, team members met as a group at which time individual assessments were pooled and integrated and a group consensus was reached as to whether the child was eligible for special education. Such consensus led to the identification of a specific handicapping condition.

Selection of the Cases

Only those cases were selected wherein the nature of a student's problem was such that it was difficult for a majority of team members (three out of four) to arrive at a determination of the student's primary handicapping condition, that condition or disability which would significantly limit his/her access to a regular educational program. That is to say that more than one possible special educational program, as defined by P.L. 94-142 seemed appropriate or, in fact, no special educational program, as defined by P.L. 92-142, appeared suited to the student's needs.

Thus, the controversy centered around whether or not the handicapping condition was primarily a specific learning disability, a behavioral disorder, a mental impairment, educational handicap, etc.

Description of the Stimulus Materials

Each actual team member (a total of 20 subjects - four from each of five teams) compiled a data file on a student who was referred to his/her team for a case study evaluation. That is to say that for each of the four disciplines represented in
the five actual staffing teams, a professionally relevant data file was compiled from each of the five borderline case studies. Each data file represented actual information obtained on the referred student which was collected by the actual team member (i.e., psychologist, social worker, nurse, and teacher).

Each actual team member was then asked to evaluate the data he/she collected on a particular youngster and to provide the investigator with a detailed introspective report relative to the method he/she employed in arriving at his/her educational diagnostic decision. The basic introspective reporting technique was an in-depth interview with each actual team professional. Actual team members were presented with carefully selected neutral-type questions and/or directions which were intended to promote disclosure of the thinking that was involved in arriving at an educational diagnosis. Questions, while being neutral, were relevant to the nature of each school professional's data base, such data base being the one normally employed by Chicago school professionals and the one sanctioned by the Pupil Personnel Service Division of the Chicago school system at the time of the present study.

The questions and directions presented to the actual school psychologist were as follows:

If you were to base an "educational placement decision" (See footnote 3) solely on the WISC-R protocol (another standard test of intelligence might be substituted here), although unlikely in practice, what
would that decision be?

Please delineate in a step-by-step fashion the methodology you employed in arriving at that decision.

The same request was made with reference to all other related measures used to gather information on a referred student. Depending on the nature of the case, the Bender-Gestalt Test of Visual-Motor Integration, House-Tree-Person drawings and/or the Thematic Apperception test (projective measures), ancillary tests of auditory and/or visual-motor perception and academic achievement measures were the measures most commonly used.

The questions and directions presented to the actual school social workers were as follows:

If you were to base an "educational placement decision" solely on the information contained in the social-development history and/or report of adaptive behavior, what would that decision be? Please delineate in a step-by-step fashion the methodology you employed in arriving at that decision.

The questions and directions presented to the actual school nurse were as follows:

If you were to base an "educational placement decision" solely on the information contained in the physical-developmental and general health history along with
the current medical-health status, what would that decision be? Please delineate in a step-by-step fashion the methodology you employed in arriving at that decision.

The questions and directions presented to the classroom or special education teacher were as follows:

If you were to base an "educational placement decision" solely on the information provided by student's academic achievement (class work), what would that decision be? Please delineate in a step-by-step fashion the methodology you employed in arriving at that decision.

After offering their detailed rationale for an "educational placement decision" based on component sources of information (WISC-R); Social Developmental History, etc.), actual school professionals were asked the following:

Based on an integration of all pertinent test data and ancillary information (cumulative school records), make a case for a specific "educational placement" which will best serve this youngster's needs.

Please delineate in a step-by-step fashion your thinking in arriving at such decision.

In requesting the verbal reports of the respondents, the investigator attempted to systematically map out the general sequence of steps the respondents used in solving the problem and then listed the sequence of suboperations they executed.
within each of these general steps. Thus, from these intro­specti ve reports, the investigator derived a list of guide questions and/or directions that was employed by the simulated team members as a model for interpretation of five stimulus cases (see Appendix A for details).

Description of the Simulated Team Evaluations

Members of the five simulated teams consisted of a school psychologist, a school social worker, a school nurse, and a classroom or special education teacher. However, these simulated teams functioned apart from the regular school setting. They were not teams of record and played no official part in an actual educational diagnostic decision. Simulated team members never observed or interacted with the students in question.

Simulated team members individually evaluated each of the five actual case studies by responding to the guide questions provided. After which, they met as a group and came to a collective decision regarding the need for special edu­cation services. Individual subjects were presented with stimulus materials at their places of residence. Subjects interacted only with the examiner and all room settings were reasonably free of noise and distration. Of course, the decision of the actual team members, both severally and collectively were, not available to the simulated team members.

Each school professional evaluated the identical
protocol or professionally relevant data sheet originally collected by his or her counterpart on the five actual MDS teams (actual psychologist's data interpreted by simulated psychologist, etc.). In addition, simulated subjects were presented with the identical ancillary information (i.e., school cumulative records, reason for referral, etc.) that was presented to his or her actual counterpart. Simulated team members thus were exposed to appropriate data obtained from five different borderline cases, cases actually staffed in a school setting by five actual teams.

To facilitate interpretation of data, simulated subjects were asked to respond to questions derived from actual subjects' introspective reports when assessing original data. As reported above, these introspective reports resulted from systematic interviews with actual team members (skilled professionals). Questions and/or directions were used to order the simulated subjects' responses to the data presented. The presentation of questions and/or directions was sequential in nature, the intention being to provide a programmed method for systematic decision making. Appendix A presents a complete set of guide questions, directions and informational data which was presented to the simulated subjects.

Guide questions and directions varied as a function of the particular methodology employed by different disciplines. Since the assessment instruments employed by the actual psychologists varied as a function of a particular case, it was
necessary to alter the guide questions and directions accordingly as per each case.

It should be noted (see Appendix A) that the guide questions and directions presented to the social workers and nurses, although structured in a programmed format, are not accompanied by a discipline specific guide for interpreting professionally relevant data. Since the investigator is neither a social worker nor a nurse, it proved difficult to translate the actual nurses' and actual social workers' introspections into a meaningful interpretive guide for these professional groups. It was decided to simply provide such professionals with some general structures for evaluating the case data. The collecting and coding of such data by a consulting school nurse or school social worker was not feasible given the setting in which the project was conducted. Whether or not this somewhat differential treatment of social workers and nurses affected the consistency of their diagnostic decisions as compared to other groups will be addressed in chapters four and five.

The stimulus materials presented to the simulated school professionals consisted of the following:

1.) Guide questions and directions to be employed in interpreting and evaluating the professionally
relevant and ancillary data (see Appendix A for details).

2.) Raw data (e.g., actual WISC-R protocols, social assessment, health data, achievements, general information, etc.) from five case studies consisting of professionally relevant and ancillary information.

The presentation of the guide-questions and directions was carefully coordinated with the presentation of the raw case data so that the former could be appropriately and directly employed in the interpretation of the latter.

Simulated MDS conferences were held in a Chicago Board of Education district office setting on two consecutive days. Conferences were held during regular school hours with the approval of the district superintendent who expressed interest in the research being conducted. The experimenter acted as a coordinator-facilitator at these conferences. Professional and general stimulus materials were presented by the experimenter to the subjects for each of the five case studies. The professionally-relevant materials included discipline appropriate raw data.

3 Professionally relevant data were operationally defined as that data base which was employed exclusively and/or primarily by a particular discipline (i.e., psychological protocols by psychologists, social-developmental history by school social worker; medical-health history, etc. by school nurse and achievements by teacher). Ancillary data were operationally defined as that data base which was shared by all disciplines and which included cumulative school records, school personnel reports and general background information on the five particular students.
(psychological protocols, social-development histories, etc.) and interpretive guides which had been previously responded to on an individual basis apart from the group (team) setting for purposes of educational diagnosis. General information (ancillary school cumulative records, etc.) was also presented and was shared by all subjects. Finally, in the role of facilitator, the experimenter attempted to promote, in a neutral manner, a consensus among members relative to the most appropriate educational "placement" for a particular student. When needed, the most directive statement by the experimenter was, "If you had to 'place' this student in a specific educational program tomorrow which best suited his needs, what would that program be (see footnote 2 for an explanation of the distinction between educational placement and educational diagnosis)".

At the individual level, the independent variables were the protocol stimuli or data sheet stimuli (professionally-relevant material), ancillary data and accompanying guide questions and directions obtained from the school professional of record (member of initial actual staffing team). Responses to these guide-questions related to such data by simulated subjects constitutes the dependent variables. At the group (team) level, the independent variables were the same stimulus materials employed within the context of the individual simulated group (team) process and the simulated group outcome decision constituted the dependent variables. The dependent variable expressed in terms of a specific diagnostic description was nominal or categorical in nature.
As a general organizer, the following overall analytic paradigm is presented:

<table>
<thead>
<tr>
<th>Stimulus Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>Simulated</td>
</tr>
<tr>
<td>Team #1</td>
</tr>
<tr>
<td>1. Psychologist</td>
</tr>
<tr>
<td>2. Social Worker</td>
</tr>
<tr>
<td>3. Nurse</td>
</tr>
<tr>
<td>4. Teacher</td>
</tr>
<tr>
<td>X1 X2 X3 X4 X5</td>
</tr>
<tr>
<td>Simulated</td>
</tr>
<tr>
<td>Team #2</td>
</tr>
<tr>
<td>1. Psychologist</td>
</tr>
<tr>
<td>2. Social Worker</td>
</tr>
<tr>
<td>3. Nurse</td>
</tr>
<tr>
<td>4. Teacher</td>
</tr>
<tr>
<td>Simulated</td>
</tr>
<tr>
<td>Team #3</td>
</tr>
<tr>
<td>1. Psychologist</td>
</tr>
<tr>
<td>2. Social Worker</td>
</tr>
<tr>
<td>3. Nurse</td>
</tr>
<tr>
<td>4. Teacher</td>
</tr>
<tr>
<td>Simulated</td>
</tr>
<tr>
<td>Team #4</td>
</tr>
<tr>
<td>1. Psychologist</td>
</tr>
<tr>
<td>2. Social Worker</td>
</tr>
<tr>
<td>3. Nurse</td>
</tr>
<tr>
<td>4. Teacher</td>
</tr>
<tr>
<td>Simulated</td>
</tr>
<tr>
<td>Team #5</td>
</tr>
<tr>
<td>1. Psychologist</td>
</tr>
<tr>
<td>2. Social Worker</td>
</tr>
<tr>
<td>3. Nurse</td>
</tr>
<tr>
<td>4. Teacher</td>
</tr>
</tbody>
</table>
The Y measure represents a particular subjects' educational diagnostic decision for a particular stimulus (actual) case.

The following analytic paradigm illustrates the procedure employed in the presentation of stimulus materials for one professional group (the psychologists in this instance). Similar procedures were employed for all other simulated subjects (social workers, nurses, teachers). For all simulated subjects, stimulus cases were presented for evaluation in sequential order (case 1 before case 2, etc.).

<table>
<thead>
<tr>
<th>Case #1</th>
<th>Case #2</th>
<th>Case #3</th>
<th>Case #4</th>
<th>Case #5</th>
</tr>
</thead>
<tbody>
<tr>
<td>X₁</td>
<td>X₂</td>
<td>X₃</td>
<td>X₄</td>
<td>X₅</td>
</tr>
<tr>
<td>1a</td>
<td>1b</td>
<td>1c</td>
<td>1d</td>
<td>1e</td>
</tr>
</tbody>
</table>

Y (dependent variable)

Where: \( X_1 \ldots X_5 \) (independent treatment variable) represents the relevant stimulus psychological data from each actual team psychologist (five psychologists, five cases) and a set of accompanying guide questions derived from such psychologist's introspections.

1a...le represents all simulated team psychologists pooled (for e.g., 1a = psychologist from simulated team #1 and 1b = psychologist from...
simulated MDS team #2). The Y measure represents a particular psychologist's educational diagnostic decision for a particular case.

Procedures Used For Comparison of the Final Educational Diagnostic Decision Among Individual Subjects and Teams

In order to compare (hypothesis #1) the reliability or consistency of the individual educational diagnosis between the actual and simulated like-professionals (i.e., actual psychologist with simulated psychologist), the percents of agreement of such decisions, before the MDS conference and across five actual case studies were calculated. The decision of the actual subjects was considered to be the criterion decision. To compare the reliability or consistency of the educational diagnosis between the simulated MDS teams and the respective actual teams (hypothesis #2), the percents of agreement of such decisions across five actual case studies were also calculated.

Since the actual MDS teams included a parent participant and the simulated MDS teams did not, a qualitative assessment relative to the effect of the parent in the decision making process was undertaken. Thus, information was gathered via a structured interview from actual team members and parents regarding team members' perceptions of parents' roles, parents' perception of team members' role and parents' perception of their own roles in the decision making process.

The following methodology was employed:

1) Actual team members, as an adjunct to their inter-
view, were asked the following questions regarding their perception of the parents' participation and/or presence at the MDS Conference.

A) Was your decision regarding educational placement at any time influenced by parental input at the MDS conference? If no, explain.

If yes -

- can you describe when such influence occurred?
  That is, at what point in the staffing process did parent contribution have the greatest import?

- can you relate how you were so influenced?
  That is, what was the nature of parent input that impressed you (i.e., was it information to which you could not be privy or of which you could not be aware? Was it parental insight and/or persuasiveness?)?

B) If your decision regarding educational placement was primarily influenced by the physical presence of the parent as opposed to their verbal contribution, please explain.

2) Parents were asked the following questions regarding their perceptions of team members and the MDS process:

A) Was there any team member(s) who influenced your decision regarding educational placement for your youngster
more than other members? If no, explain.

If yes,

- please list him/her by professional title and state briefly why and/or how they so influenced you.

B) What is your opinion regarding the manner in which the MDS conference was conducted? Were the purpose and goals of the conference sufficiently explained?

C) Did you feel your presence was needed? If no, explain.

If yes,

- how do you think you contributed to the final decision? Please try to be specific in your answer. Was it certain factual information concerning your child of which a parent could only be aware? Was it certain insights that only a parent could make that influenced other members? Was it simply your presence or manner at the staff conference?

D) If not already answered in response to section C, please describe how school professionals in general and/or individually made you feel at the staff conference. Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?

It was hoped (despite the sample) that answers to the
above questions would offer some useful qualitative data relative to the effect of parent involvement in the MDS conferences.

To compare the reliability or consistency of educational diagnoses among individual simulated like-professionals across team lines (i.e., simulated social worker with simulated social worker, etc.), the percents of agreement of such diagnostic decisions for five case studies were calculated (hypothesis #3). Likewise to compare the reliability of educational diagnoses among the five simulated teams, the percents of agreement of such diagnostic decisions were calculated (hypothesis #4).
Summary

The present study was designed to test the following: a) the reliability of inter-subject and inter-group decision making across five actual case studies (hypotheses 1-5); b) the reliability of educational diagnoses made on the basis of responses to various stimulus materials across simulated subjects (hypothesis 6); c) the extent to which individual diagnoses based on particular information sources (e.g., psychological protocols, social assessments, health records, ancillary information) were predictive of individual final diagnoses which were based on an integration of all informational sources (hypothesis 7); and d) the relationship between individual team members diagnoses prior to the MDS conference and the final consensual group diagnoses (hypothesis 8). Null hypotheses 1,2,3,4,6 and 7 were tested using the Binomial Test (Hayes, 1973) and null hypotheses 5 and 8 were tested using The Friedman Two-Way, Non-Parametric Analysis of Variance(Kerlinger, 1973).
Chapter Four

Results

In chapter four, the results of this study are systematically discussed by presenting the findings related to each of the eight hypotheses along with an arithmetic or statistical analysis of each. In addition, the findings related to null hypotheses two and seven are qualitatively examined.

Results Related to Null Hypothesis One

To test null hypothesis one (there is no significant relationship (difference) between actual and simulated individual team members' educational diagnoses across the five actual case studies), the investigator computed the percents of agreement in educational diagnoses by case and by discipline between actual and simulated subjects prior to the MDS Conference (see Table 2 for details). In order to arrive at percents of agreement figures for particular disciplines or professional groups, individual team members' diagnoses were pooled.
<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Actual Psychologist</td>
<td>40 100* 20 0 20</td>
</tr>
<tr>
<td>and Simulated Psychologists</td>
<td></td>
</tr>
<tr>
<td>Actual Social Worker</td>
<td>20 100* 40 80* 80*</td>
</tr>
<tr>
<td>and Simulated Social Workers</td>
<td></td>
</tr>
<tr>
<td>Actual Nurse and Simulated</td>
<td>0 100* 0 0 80*</td>
</tr>
<tr>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td>Actual Teacher and Simulated</td>
<td>20 40 80* 20 60*</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
</tbody>
</table>

*P<.05
Agreement between actual and simulated professionals varied as a function of actual case study and professional group. Percentages of agreement scores for the five case studies across all disciplines ranged from zero to one-hundred percent. With the exception of the teacher group, case two showed one-hundred percent agreement in educational diagnoses; whereas, case four, with the exception of social workers, showed the lowest percent of agreement across professional groups.

In order to determine the extent to which the percents of agreement scores obtained might have occurred by chance alone, a Binomial Test (Hayes, 1973) was performed with statistical significance set at the .05 level. The formula utilized was:

$$P(x=k) = \binom{n}{k} p^k (1-p)^{n-k}$$

where: $k$ equals the number of successes or in this case the greatest number of identical educational program (diagnostic) choices among subjects in $n$ independent trials (across five case studies) and $p$ equals the number of possible outcomes or independent educational program choices (i.e., gifted, regular grades, EHM, TMH, LD, BD, can't say). The value of $k$ varied as a function of percent of agreement, $n$ remained constant at five and $p$ remained constant at seven. To illustrate, the likelihood (probability) that forty percent (2/5) agreement in educational diagnoses between actual and simulated psychologists could have occurred by chance alone is expressed in the above formula as follows: $P(x=k=\binom{5}{2} \times (1/2)^2 \times (1-1/2)^3$. In this instance $P$ was found to equal .129. The associated $P$-value of .129 is greater than the specified level of significance of $\alpha = .05$. Thus, forty percent agreement is expected to occur by
chance approximately 13 times out of every 100 and is not significant. With reference to the data presented in Table 2, the percents of agreement which were significant at the .05 level were the percents of agreement between actual and simulated psychologists for case two, the percents of agreement between actual and simulated social workers for cases two, four and five, the percents of agreement between actual and simulated teachers for cases three and five and the percents of agreement between actual and simulated nurses for cases two and five.

Table 3 presents the percents of agreement scores obtained in relation to the testing of null hypotheses one, two, three, four, six and seven along with corresponding values of k and \( p(x=k) \). The percents of agreement at or above sixty percent were statistically significant at the .05 level for \( p=\frac{1}{7} \) or when total possible outcomes or educational program choices were 7 (i.e., the number of independent categorical choices allowed in the present study). Table 3 also presents \( p \) values for \( \frac{1}{5}, \frac{1}{4}, \frac{1}{3}, \) and \( \frac{1}{2} \). A \( p \) value of \( \frac{1}{5} \) assumes equal probabilities among the five categories that were actually used by subjects (i.e., RG, LD, EMH, TMH, BD). \( p \) values of \( \frac{1}{3} \) and \( \frac{1}{2} \) represent the actual range of diagnoses available in a given situation (see related discussion in chapter 5, p. 21-22). A \( p \) value of \( \frac{1}{4} \) is included for continuity. These additional values of \( p \) are presented as an aid in analyzing results depending upon the reader's interpretation of the appropriate \( p \).

With regard to the testing of null hypothesis one, significant levels of agreement between actual and simulated subjects
occurred across professional disciplines in eight out of twenty cases. By employing the Binomial Test in accordance with the formula \( P(x=k) = \binom{n}{k} p^k (1-p)^{n-k} \) where: \( k=8 \), \( n=20 \) and \( p=1/2 \), the probability that eight out of 20 tests of significance could have occurred by chance with \( \alpha < 0.05 \), assuming the tests to be independent and a non-significant result happening by chance alone, was found to be equal to 0.1201 (Hayes, 1973). The associated P-value of 0.1201 is greater than the specified level of significance of \( \alpha = 0.05 \). Thus, null hypotheses one was not rejected. As shown in Table 3, statistical significance of percents of agreement scores are dependent upon reader's interpretation of the appropriate value of \( p \). Present results are subject to such interpretation.
TABLE 3

Percents of Agreement Scores
and Corresponding Values of
k and P in Accordance with
The Binomial Test $P(x=k) = \binom{n}{k}p^k(1-p)^{n-k}$

<table>
<thead>
<tr>
<th>Percents of Agreement</th>
<th>Number of Agreement (k Values)</th>
<th>1/7</th>
<th>1/6</th>
<th>1/5</th>
<th>1/4</th>
<th>1/3</th>
<th>1/2</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
<td>.460</td>
<td>.335</td>
<td>.328</td>
<td>.237</td>
<td>.132</td>
<td>.031</td>
</tr>
<tr>
<td>20</td>
<td>1</td>
<td>.385</td>
<td>.402</td>
<td>.410</td>
<td>.396</td>
<td>.330</td>
<td>.156</td>
</tr>
<tr>
<td>40</td>
<td>2</td>
<td>.129</td>
<td>.161</td>
<td>.205</td>
<td>.264</td>
<td>.330</td>
<td>.313</td>
</tr>
<tr>
<td>60</td>
<td>3</td>
<td>.021</td>
<td>.032</td>
<td>.051</td>
<td>.088</td>
<td>.165</td>
<td>.313</td>
</tr>
<tr>
<td>80</td>
<td>4</td>
<td>.002</td>
<td>.003</td>
<td>.006</td>
<td>.015</td>
<td>.041</td>
<td>.156</td>
</tr>
<tr>
<td>100</td>
<td>5</td>
<td>0</td>
<td>.00001</td>
<td>.0003</td>
<td>.001</td>
<td>.004</td>
<td>.031</td>
</tr>
</tbody>
</table>

Rejection Rule 3, 4, 5 3, 4, 5 4, 5 4, 5 4, 5 0, 5
Reject If k =
Results Related to Null Hypothesis Two:

To test null hypothesis two (there is no significant relationship (difference) between actual and simulated teams' educational diagnoses across five actual case studies), percents of agreement in educational diagnoses between actual and simulated teams were computed for each case study (see Table 4 for details).
TABLE 4

Percents of Agreement Between Actual Team and Simulated Teams for Each Actual Case Study

<table>
<thead>
<tr>
<th>Actual Case</th>
<th>Percent of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>20</td>
</tr>
<tr>
<td>2</td>
<td>100</td>
</tr>
<tr>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>40</td>
</tr>
<tr>
<td>5</td>
<td>80</td>
</tr>
</tbody>
</table>
percents of agreement varied by case and ranged from zero (case 3) to one-hundred percent (case 2). The Binomial Test (Hayes, 1973) was also used to test the significance of the percents of agreement listed in Table 4. Again the matter of primary interest was the probability that the percents of agreement scores obtained could have occurred by chance alone. The only percents of agreement between actual and simulated teams which were significant at the .05 level were the percents of agreement scores for case two (one-hundred percent or $P = 0.0000595$) and case five (eighty percent or $P = 0.00179$). Thus, significant levels of agreement were attained in two out of five cases.

Using the Binomial Test, it was found that the probability of having two out of five tests of significance occur by chance with $< 0.05$, assuming the tests to be independent and a non-significant result happening by chance alone, was equal to 0.3125. The associated $P$ value of: 0.3125 is greater than the specified level of significance of $< 0.05$. Thus, null hypothesis two is also not rejected. (Refer to Table 3 for alternative interpretations of the value of $p$ which may qualify present results.)

Comparing, then, the consistency of decision-making between actual and individual team members (null hypothesis one) and between actual and simulated teams (null hypothesis two) it would appear that the MDS team process did not represent a substantial improvement in the reliability of decision-making.

In order to assess the possible effect of the parent in the decision-making process, qualitative information from actual team members and parent participants following the conferences was
obtained (see Appendix B for details). From a qualitative examination of the information, it appears that the presence and/or participation of the parent at the MDS Conferences had no appreciable influence on the team members' educational diagnostic decisions. Three out of five parents felt that they were needed in the decision-making process, whereas, two felt that the same diagnostic decision would have been made with or without them. Furthermore, whether or not parents' perceived their role as necessary in the decision-making process, there was almost unanimous agreement among team members that the same educational diagnosis would have been made with or without the presence of the parent.

Results Related to Null Hypothesis Three:

To test null hypothesis three (there is no significant relationship (difference) among simulated individual team members' educational diagnoses, across five actual case studies), the percents of agreement in educational diagnostic decisions among simulated like-professionals (intradisciplinary) were calculated. Tables 5-8 present diagnostic decisions by discipline for all simulated team members. Percents of agreement scores among like professionals are listed by case study and percents of agreement by discipline, across the five case studies, are also presented.
TABLE 5

Simulated Psychologists' Individual Diagnostic Decision Prior to The MDS Conferences for Five Actual Case Studies

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Psychologists</th>
<th>Percents of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>*Psy 1</td>
<td>Psy. 2</td>
</tr>
<tr>
<td>1</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>3</td>
<td>EMH</td>
<td>LD</td>
</tr>
<tr>
<td>4</td>
<td>EMH</td>
<td>LD</td>
</tr>
<tr>
<td>5</td>
<td>TMH</td>
<td>EMH</td>
</tr>
</tbody>
</table>

RG = Regular Grades
Psy. = Psychologist

*P<.05
TABLE 6

Simulated Social Workers' Individual Diagnostic Decisions Prior to The MDS Conferences for Five Actual Case Studies

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Social Workers</th>
<th>Social Workers</th>
<th>Social Workers</th>
<th>Social Workers</th>
<th>Social Workers</th>
<th>Percents of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Worker 1</td>
<td>Worker 2</td>
<td>Worker 3</td>
<td>Worker 4</td>
<td>Worker 5</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LD</td>
<td>LD</td>
<td>EMH</td>
<td>RG</td>
<td>CS</td>
<td>40</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>100*</td>
</tr>
<tr>
<td>3</td>
<td>LD</td>
<td>EMH</td>
<td>EMH</td>
<td>LD</td>
<td>EMH</td>
<td>60*</td>
</tr>
<tr>
<td>4</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>80*</td>
</tr>
<tr>
<td>5</td>
<td>EMH</td>
<td>EMH</td>
<td>TMH</td>
<td>EMH</td>
<td>EMH</td>
<td>80*</td>
</tr>
</tbody>
</table>

CS = can't say
RG = Regular Grades
*P<.05
TABLE 7
Simulated Nurses' Individual Diagnostic Decisions Prior to The MDS Conferences for Five Actual Case Studies

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Nurse 1</th>
<th>Nurse 2</th>
<th>Nurse 3</th>
<th>Nurse 4</th>
<th>Nurse 5</th>
<th>Percents of Agreements</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>RG</td>
<td>60*</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
<td>100*</td>
</tr>
<tr>
<td>3</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>RG</td>
<td>80*</td>
</tr>
<tr>
<td>4</td>
<td>BD</td>
<td>BD</td>
<td>LD</td>
<td>LD</td>
<td>BD</td>
<td>60*</td>
</tr>
<tr>
<td>5</td>
<td>TMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>80*</td>
</tr>
</tbody>
</table>

RG = Regular Grades

*P<.05
TABLE 8
Simulated Teachers' Individual Diagnostic Decisions Prior to The MDS Conferences for Five Actual Case Studies

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Teacher 1</th>
<th>Teacher 2</th>
<th>Teacher 3</th>
<th>Teacher 4</th>
<th>Teacher 5</th>
<th>Percents of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>RG</td>
<td>60*</td>
</tr>
<tr>
<td>2</td>
<td>RG</td>
<td>BD</td>
<td>LD</td>
<td>BD</td>
<td>RG</td>
<td>40</td>
</tr>
<tr>
<td>3</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>LD</td>
<td>80*</td>
</tr>
<tr>
<td>4</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>CS</td>
<td>60*</td>
</tr>
<tr>
<td>5</td>
<td>TMH</td>
<td>TMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>60*</td>
</tr>
</tbody>
</table>

RG = Regular Grades
CS = Can't Say
*P<.05
The Binomial Test was used to determine the significance of the percents of agreement scores obtained for the simulated professional groups. Agreement in educational diagnostic decisions among psychologists reached significant levels in cases two (one-hundred percent, P = 0), three (sixty percent, P = .021) and five (eighty percent, P = .002). Thus, in three out of the five case studies, simulated psychologists significantly agreed as to a particular educational diagnosis. Percents of agreement in educational diagnosis among simulated social workers reached significant levels in four out of five cases. For the nurses, percents of agreement were at the .05 significance level in five out of five cases and simulated teachers attained significant levels of agreement in four out of five case studies (see Table 8 for details). The reliability of diagnostic decisions appeared to vary as a function of case study and professional group affiliation. Case two showed one-hundred percent agreement across all professional disciplines except teachers. As noted above, nurses were the only discipline that reached significant levels of agreement across all five case studies.

Overall, with regard to the testing of null hypothesis three, significant levels of agreement in educational diagnoses across simulated subjects occurred in 16 out of 20 cases (see table 5-8 for details). Employing the Binomial Test once again it was found that the probability that 16 out of 20 tests could have occurred by chance with α < .05, assuming the tests to be independent and a non-significant result happening by chance alone, was equal to .0046. The associated P value of: .0046 was
less than the specified level of significance of $\alpha = .05$. Thus, null hypothesis three was rejected. (Refer to Table 3 for alternative interpretations of the value of $p$ which may qualify present results.)

Results Related to Null Hypothesis Four:

To test null hypothesis four (there is no significant relationship (difference) among five simulated teams' educational diagnoses across five actual case studies), the percents of agreement in diagnostic decisions among simulated teams were calculated across the five case studies (see Table 9 for details).
<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Simulated Teams</th>
<th>Percent of Agreement</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Team 1</td>
<td>Team 2</td>
</tr>
<tr>
<td>1</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>3</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>4</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>5</td>
<td>TMH</td>
<td>EMH</td>
</tr>
</tbody>
</table>

RG = Regular Grades

* P<.05
percents of agreement ranged from forty percent (case four) through one-hundred percent (cases two and three). The Binomial Test was applied to the data found in Table 9. Results indicated that the percents of agreement scores among simulated teams were statistically significant at the .05 level in four out of five case studies. A further application of the Binomial Test indicated that the probability (likelihood) that four out of five tests of significance could have occurred by chance with $\alpha < .05$, assuming the tests to be independent and a non-significant result happening by chance alone, was equal to .1562. The associated $P$-Value of .1562 is greater than the specified level of significance of $\alpha = .05$ Thus, null hypothesis four was also not rejected. (Refer to Table 3 for alternative interpretations of the value of $P$ which may qualify present results.)

In summary, the findings of this investigation related to the testing of null hypotheses one through four indicated that consistency in educational diagnosis appeared to vary as a function of case study and professional discipline. That is to say, the likelihood that the percents of agreement scores obtained were greater than chance expectations varied as a function of these two factors. In addition, percents of agreement in educational diagnostic decisions across the five case studies were generally greater among simulated individual subjects and teams than they were between actual and simulated subjects at both the individual and team levels. Significant levels of agreement in educational diagnostic decisions, however, were found only among
simulated subjects which resulted in the rejection of null hypothesis three.
Results Related to Null Hypothesis Five:

To test hypothesis five (there is no significant difference in the reliability of educational diagnoses between the simulated MDS teams across their respective disciplines), a comparison of percents of agreement in educational diagnostic decisions was made between the five simulated teams and their respective component members, grouped by professional discipline. Thus, the question was posed: How did the reliability of educational diagnoses among the four separate professional groups (psychologists, social workers, nurses and teachers) compare to the reliability of educational diagnoses among the five simulated staffing teams?

Table 10 presents a numerical pool of individual team members by professional discipline and compares the performance of these groups with respect to the reliability of educational diagnostic decisions across the five case studies with the performance of the simulated staffing teams. A Two-Way, Non-Parametric Analysis of Variance: The Friedman Test (Kerlinger, 1973) was applied to the data in Table 10. The significance of the difference in percents of agreement among disciplines or groups (columns) and among cases (rows) as rated were analyzed. The percents of agreement for the five groups and the five cases was rank ordered. The higher the rank the greater was the percent of agreement. In accordance with the formula given by Friedman

$$X^2 = \frac{12}{kn(n+1)} \sum R^2 - 3k(n+1)$$

where: $k =$ the number of rankings and $n =$ the number of objects being ranked; the between group $X^2$ was found
equal to 2.96. At four degrees of freedom (n-1) this value was found not significant at the .05 level. The between case $X^2$ was 8.12. At four degrees of freedom (n-1) this value as also found not to be significant at the .05 level. Thus, there appears to be no significant difference in the reliability of decision-making between simulated teams and respective professional disciplines.
TABLE 10

A Comparison of Percents of Agreement in Educational Diagnoses Across Five Actual Case Studies Between Simulated MDS Teams and Their Respective Professional Disciplines

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Disciplines</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Sim. Teams</td>
<td>5 Psychologists</td>
</tr>
<tr>
<td>1</td>
<td>*(1)80(3.5)</td>
</tr>
<tr>
<td>2</td>
<td>(2.5)100(1.5)</td>
</tr>
<tr>
<td>3</td>
<td>(1)100(1.5)</td>
</tr>
<tr>
<td>4</td>
<td>(4.5)40(5)</td>
</tr>
<tr>
<td>5</td>
<td>(2.5)80(3.5)</td>
</tr>
</tbody>
</table>

$\xi^2_R = 11.5 + 18.5 + 15.0 + 12.5 + 17.5 = 71.5$

$\xi^2_R^2 = 21.5^2 + 9.5^2 + 12^2 + 19^2 + 13^2 = 1226.5$

$\xi^2_R^2 = 11.5^2 + 18.5^2 + 15.0^2 + 12.5^2 + 17.5^2 = 1162$

5 Sim. Teams = 5 Simulated Teams

* numbers in parentheses are rank orders
Thus, null hypothesis five was not rejected. In addition, there was no significant difference in the reliability of decision-making as a function of case study (i.e., actual case study one as compared to actual case study two, etc.).

Results Related to Null Hypothesis Six:

To test null hypothesis six (there is no significant relationship (difference) among selected educational diagnoses based on responses to stimulus materials across simulated subjects), the percents of agreement of educational diagnostic decisions made on the basis of various informational sources (particular stimulus materials) were calculated across simulated subjects. Tables 11-14 (see Appendix B for details) present the reliability of decisions made on the basis of particular sources of information. Sources of information for psychologists were divided into individual test records, test records combined (all psychological data integrated), ancillary information and all information (final decision). For the social workers, sources of information were divided into social assessment data, ancillary data, and all information. For the nurses and teachers, informational sources were divided into medical-health data, achievement data, ancillary data, and all information. To illustrate, questions such as the following were posed: How consistent were educational diagnoses among simulated psychologists when such decisions were based on the WISC-R-protocol as compared to the T.A.T. protocol, etc.? Likewise, how consistent were diagnostic decisions among psychologists when such decisions were based on
an integrated summary of all psychological data (various test records or protocols) as compared to ancillary information? As a further example, how consistent were educational diagnostic decisions among social workers when such decisions were based on a particular social assessment as compared to ancillary data?

Table 15 presents a numerical pool of individual team members (simulated subjects) by professional discipline and compares the performance of these professional groups with respect to the reliability of educational diagnoses made on the basis of professional relevant data (i.e., psychological, social, medical, achievement data), ancillary data and a combination of professional and ancillary information.
TABLE 15

Percents of Agreement in Educational Diagnoses Made on The Basis of Different Informational Sources for Each Professional Discipline Across The Five Actual Case Studies

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Study 1</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sources of Information</td>
</tr>
<tr>
<td></td>
<td>Integration of all professionally relevant data</td>
</tr>
<tr>
<td></td>
<td>Psychologist</td>
</tr>
<tr>
<td></td>
<td>Social Workers</td>
</tr>
<tr>
<td></td>
<td>Nurses</td>
</tr>
<tr>
<td></td>
<td>Teachers</td>
</tr>
</tbody>
</table>

*P < .05
TABLE 15 (continued)

Percents of Agreement in Educational Diagnoses
Made on The Basis of Different Informational Sources
for Each Professional Discipline Across
The Five Actual Case Studies

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Study 2</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sources of Information</td>
</tr>
<tr>
<td></td>
<td>Integration</td>
</tr>
<tr>
<td></td>
<td>of all</td>
</tr>
<tr>
<td></td>
<td>professionally</td>
</tr>
<tr>
<td></td>
<td>relevant data</td>
</tr>
<tr>
<td></td>
<td>Ancillary</td>
</tr>
<tr>
<td></td>
<td>Data</td>
</tr>
<tr>
<td></td>
<td>Ancillary &amp;</td>
</tr>
<tr>
<td></td>
<td>professionally</td>
</tr>
<tr>
<td></td>
<td>relevant data</td>
</tr>
<tr>
<td></td>
<td>combined (final</td>
</tr>
<tr>
<td></td>
<td>decision</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Psychologists</th>
<th>Social Workers</th>
<th>Nurses</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>100*</td>
<td>80*</td>
<td>80*</td>
<td>100*</td>
</tr>
<tr>
<td></td>
<td>100*</td>
<td>100*</td>
<td>100*</td>
<td>100*</td>
</tr>
<tr>
<td></td>
<td>100*</td>
<td>40</td>
<td>40</td>
<td></td>
</tr>
</tbody>
</table>

*P < .05
TABLE 15 (continued)

Percents of Agreement in Educational Diagnoses
Made on The Basis of Different Informational Sources
for Each Professional Discipline Across
The Five Actual Cases Studies

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Study 3</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sources of Information</td>
</tr>
<tr>
<td>Psychologists</td>
<td>60*</td>
</tr>
<tr>
<td>Social Workers</td>
<td>60*</td>
</tr>
<tr>
<td>Nurses</td>
<td>60*</td>
</tr>
<tr>
<td>Teachers</td>
<td>80*</td>
</tr>
</tbody>
</table>

*P<.05
TABLE 15 (continued)

Percents of Agreement in Educational Diagnoses Made on The Basis of Different Informational Sources for Each Professional Discipline Across The Five Actual Case Studies

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Study 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Sources of Information</td>
</tr>
<tr>
<td></td>
<td>Integration of all professionally relevant data</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Integration of all professionally relevant data</th>
<th>Ancillary Data</th>
<th>Ancillary &amp; professionally relevant data combined (final decision)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologists</td>
<td>40</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>Social Workers</td>
<td>80*</td>
<td>80*</td>
<td>80*</td>
</tr>
<tr>
<td>Nurses</td>
<td>80*</td>
<td>40</td>
<td>60*</td>
</tr>
<tr>
<td>Teachers</td>
<td>40</td>
<td>60*</td>
<td>60*</td>
</tr>
</tbody>
</table>

*P < .05

119
TABLE 15 (continued)

Percents of Agreement in Educational Diagnoses Made on The Basis of Different Informational Sources for Each Professional Discipline Across The Five Actual Case Studies

<table>
<thead>
<tr>
<th>Disciplines</th>
<th>Case Study 5</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sources of Information</strong></td>
<td></td>
</tr>
<tr>
<td>Integration of all professionally relevant data</td>
<td>Ancillary Data</td>
</tr>
<tr>
<td>Psychologists</td>
<td>80*</td>
</tr>
<tr>
<td>Social Workers</td>
<td>80*</td>
</tr>
<tr>
<td>Nurses</td>
<td>60*</td>
</tr>
<tr>
<td>Teachers</td>
<td>60*</td>
</tr>
</tbody>
</table>

*P<.05
Once again, employing the Binomial Test in accordance with the formula \( P(x=k) = \binom{n}{k} p^k (1-p)^{n-k} \) where: \( k \) = the greatest number of identical educational program (diagnostic) choices in \( n \) independent trials (in this case across the five simulated like-professional subjects) and \( p \) = the number of possible educational diagnoses (seven), the significance of the percents of agreement scores listed in Table 15 were calculated.

Those percents of agreement scores which reached statistical significance (0.05 level) are noted with an asterisk. In brief, the data presented in Table 15 indicate that the nurses and social workers attained significant levels of agreement in educational diagnostic decisions across all sources of information in four out of five case studies. Psychologists showed significant levels of agreement across informational sources in three out of five cases and teachers reached significant levels of agreement in two out of five case studies. All sources of information (i.e., professional, ancillary and professional and ancillary combined) in cases three and five provided a basis for significant levels of agreement among all four categories of professional staff (psychologists, nurses, social workers, teachers). In addition, for all five case studies, the reliability of psychologists' decisions based on an integration of professional relevant data was identical to the reliability of their decisions based on a combination of ancillary data and an integration of professionally relevant data.
With regard to the reliability of psychologists' diagnostic decisions made on the basis of individual test records, (see Table 11, Appendix C for details), the following instruments provided a basis for significant levels of agreement: The WISC-R in four out of five cases in which the instrument was used, the Leiter in one out of one cases in which the instrument was employed, the Peabody Picture Vocabulary Test in three out of three cases, the Bender-Gestalt in one out of four cases, the T.A.T. in one out of one cases and the Draw A Person in three out of five cases. Achievement measures provided the basis for significant levels of agreement in two out of five cases. The Berry-Buktenica was used in two case studies and percents of agreement based on such test record was not significant in either case. In contrast one-hundred percent consistency was attained when the T.A.T. was utilized as a basis for an educational diagnosis. In addition, one-hundred percent consistency was reached in cases two and five when the WISC-R was employed as a basis for an educational diagnosis. It should be noted again that the WISC-R was utilized in all five cases, whereas, the T.A.T. was used only in case two. No other psychological instrument reached a one-hundred percent consistency level and several were employed in all five cases (see Appendix C, Table 11 for details). One-hundred percent consistency among teachers and among psychologists was also attained in cases two and three respectively when achievement measures were used as a basis for determining eligibility for special education.
In summary, percents of agreement in educational diagnosis based on responses to informational sources (stimulus materials) appeared to vary as a function of individual subject, professional discipline, informational source and case study. With regard to psychologists, findings revealed a perfect match across all psychologists between the educational diagnosis chosen on the basis of an integration of professional relevant data and the diagnosis chosen on the basis of professional and ancillary information. In addition, the reliability in decision-making based on professionally relevant data, ancillary data and an integration of the two was relatively greater for case two (see Table 15) than for the other four case studies across professional disciplines.

In terms of testing null hypothesis six, the consistency of educational diagnosis across all simulated subjects made on the basis of responses to particular informational sources (i.e., professional data, ancillary data and the two combined) were found to be statistically significant in 48 out of 60 instances (see Table 15 for details). Employing the Binomial Test (Hayes, 1973) in accordance with the formula \( P(x=k) = \binom{n}{k} p^k (1-p)^{n-k} \) where: \( k=48 \), \( n=60 \) and \( p=1/2 \), the probability that 48 out of 60 tests could have occurred by chance with \( \alpha < .05 \), assuming the tests to be independent and a non-significant result happening by chance alone, was equal to .0000012. The associated P-value of: .0000012 is less than the specified level of significance of \( \alpha = .05 \). Thus, null hypothesis six is rejected. (Refer to Table 3
for alternative interpretations of the value of p which may qualify present results.

With regard to the testing of null hypothesis six then, significant levels of agreement were found among educational diagnostic decisions, across all simulated subjects, when such decisions were based on responses to an integration of professional data, ancillary information or a combination of both.

Results Related to Null Hypothesis Seven:

To test null hypothesis seven (there is no significant relationship (difference) between any one educational diagnostic decision based on an particular informational source and the final decision based on an integration of all the data), the percents of agreement between individual diagnoses based on particular informational sources (professional data, ancillary data) and individual final outcome decisions were tabulated across simulated subjects (i.e., psychologists, social workers, nurses and teachers). The question of primary interest was how predictive of individual final outcome decisions were diagnostic decisions based on various sources of information. Table 16 presents the percents of agreement of professionally relevant data and ancillary data with the final diagnostic decisions across the four professional groups (i.e., psychologists, social workers, nurses and teachers). Table 17 (See Appendix C for details) lists for the psychologists the percents of agreement of individual test records (i.e., WISC-R, T.A.T., Bender-Gestalt etc.) with the final outcome decisions.
TABLE 16

Percents of Agreement of Professional and Ancillary Informational Sources with Final-Outcome Diagnoses Across Psychologists, Social Workers, Nurses and Teachers

<table>
<thead>
<tr>
<th></th>
<th>Psychologists</th>
<th>Social Workers</th>
<th>Nurses</th>
<th>Teachers</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Psy Data</td>
<td>Social Assessment</td>
<td>Medical-Health Data</td>
<td>Achievement Measures</td>
</tr>
<tr>
<td>CASE I</td>
<td>100</td>
<td>20</td>
<td>0</td>
<td>100</td>
</tr>
<tr>
<td>CASE II</td>
<td>100</td>
<td>100</td>
<td>80</td>
<td>40</td>
</tr>
<tr>
<td>CASE III</td>
<td>100</td>
<td>80</td>
<td>20</td>
<td>100</td>
</tr>
<tr>
<td>CASE IV</td>
<td>100</td>
<td>60</td>
<td>0</td>
<td>40</td>
</tr>
<tr>
<td>CASE V</td>
<td>100</td>
<td>80</td>
<td>60</td>
<td>100</td>
</tr>
<tr>
<td>MEAN</td>
<td>100</td>
<td>68</td>
<td>60</td>
<td>28</td>
</tr>
</tbody>
</table>

125
The Binomial Test (Hayes, 1973) continued to be employed in order to determine the likelihood (probability) that the percents of agreement scores obtained and listed in Tables 16 and 17 (Appendix B) could have been arrived at by chance alone. Utilizing the formula once again, 

\[ P = \frac{n!}{k!(n-k)!} p^k (1-p)^{n-k} \]

where: \( K \) = the number of successes or highest number of identical diagnostic decisions among subjects and \( n \) = the number of independent trials or in this case the decision-making across five subjects and \( p \) = the number of possible outcome decisions (seven), the statistical significance of the percents of agreement scores was calculated. Percents of agreement scores which were at the .05 level were those at or above the sixty percent level.

As shown in Table 16, the psychologists diagnoses based on an integrative summary of professionally relevant data (individual test records combined) were found to be in agreement with final diagnostic decisions in five out of five cases. Decisions based on ancillary data showed significant levels of agreement with the final outcome decisions in four out of five cases. Across social workers, decisions based on an integrative summary of professionally relevant data (social assessment) were significant in three out of five cases, whereas, educational diagnoses based on ancillary data were in agreement with individual final outcome decisions in five out of five cases. Across nurses, diagnoses based on medical-health data were significant in one out of five cases. Decisions based on ancillary data alone, however,
attained significant levels of agreement with final outcome decisions in five out of five case studies. For the teachers, diagnostic decisions based on achievement (professionally relevant) data attained significant levels of agreement with individual final decisions in three out of five cases, whereas, decisions based on ancillary data alone were in agreement with final decisions in five out of five cases.

Overall with regard to testing null hypothesis seven, significant levels of agreement between educational diagnostic decisions based on professionally relevant or ancillary information and the individual, final outcome diagnosis based on all available data occurred across all four professional groups in 31 out of 40 instances (See Table 16 for details). In accordance with the Binomial Test, the probability that 31 out of 40 tests could have occurred by chance with $\alpha < .05$, assuming the tests to be independent and a non-significant result happening by chance alone, was found to be equal to .0002. The associated P-value of: .0002 is less than the specified level of significance of $\alpha = .05$. Thus, null hypothesis seven was rejected. (Refer to Table 3 for alternative interpretations of the value of $p$ which may qualify present results.)

A qualitative inspection of the data resulting from the testing of null hypothesis seven suggested that the psychologists' data base (an integrated summary of all psychological data) as compared to the social workers, nurses and teachers data bases (i.e., social-development history, medical-health data and
achievement measures respectively) appeared to yield more consistent predictions of final individual diagnostic decisions. Social workers, nurses, and teachers appeared to give more weight to ancillary data than to professionally relevant information in making a placement decision. Thus, across these disciplines, diagnostic decisions based on ancillary information were in agreement with final decisions more than ninety percent of the time. In the psychologists' group, however, the addition of ancillary information did not change the educational diagnosis that was made on the basis of professional data alone (see Table 18 for details).

A qualitative examination was also made in order to pinpoint in the psychologists' group where in the decision-making process the final criterion diagnosis originated. The question of primary interest becomes: When and how were commitments first made to a particular educational program that was the one to be chosen as the final placement decision? What particular source of information provided the basis for such a commitment? Since a decision to make a student eligible for an EMH, TMH or LD program is usually based in part on an evaluation of intellectual status, it was expected that at least a tentative commitment to a program choice would be made, on the basis of an intelligence test or related measures where appropriate. In the present investigation, after an introductory statement relative to the student's achievement status was offered, the WISC-R protocol was presented followed by other test records. It would seem that suitability for an EMH, TMH or LD diagnosis might first be deduced on the
basis of the WISC-R protocol combined with knowledge of achievement status as reported by the school. In contrast a decision to recommend a BD diagnosis may represent a more complex decision-making process and therefore the first commitment may come later in the decision-making process.

Table 19 presents for each psychologist a listing of those informational sources which provided the basis for a first commitment to an educational diagnosis which was eventually the one chosen.
<table>
<thead>
<tr>
<th>Professional Data</th>
<th>Ancillary Data</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologists</td>
<td></td>
</tr>
<tr>
<td>(all psychological data integrated)</td>
<td>100%</td>
</tr>
<tr>
<td>Social Workers</td>
<td></td>
</tr>
<tr>
<td>(Social Assessment)</td>
<td>60%</td>
</tr>
<tr>
<td>Nurses</td>
<td></td>
</tr>
<tr>
<td>(Medical-Health Data)</td>
<td>28%</td>
</tr>
<tr>
<td>Teachers</td>
<td></td>
</tr>
<tr>
<td>(Achievement Data)</td>
<td>76%</td>
</tr>
</tbody>
</table>

*Percents of agreement listed are the mean percents of agreement scores noted in Table 16 by informational source for each professional group across the five case studies.*
TABLE 19

First Commitments to Final Program
Selections for Psychologists

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Individual Final Program Selection</th>
<th>Informational Source Upon Which First Commitment to Final Program Selection Was Made</th>
<th>Order in Which Informational Source Was Presented</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Psychologist 1</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LD</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>TAT</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>EMH</td>
<td>DAP</td>
<td>5</td>
</tr>
<tr>
<td>4</td>
<td>EMH</td>
<td>PPVT</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>TMH</td>
<td>Bender-Gestalt</td>
<td>2</td>
</tr>
<tr>
<td><strong>Psychologist 2</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>LD</td>
<td>Bender-Gestalt</td>
<td>3</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>Bender-Gestalt</td>
<td>2</td>
</tr>
<tr>
<td>3</td>
<td>LD</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>LD</td>
<td>PPVT</td>
<td>2</td>
</tr>
<tr>
<td>5</td>
<td>EMH</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td><strong>Psychologist 3</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>Regular Grades</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>TAT</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>LD</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Regular Grades</td>
<td>All Psychological Data</td>
<td>8</td>
</tr>
<tr>
<td>5</td>
<td>EMH</td>
<td>WISC-R</td>
<td>1</td>
</tr>
</tbody>
</table>
### TABLE 19 (continued)

First Commitments to Final Program Selection for Psychologists

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Individual Final Program Selection</th>
<th>Informational Source Upon Which First Commitment to Final Program Selection Was Made</th>
<th>Order in Which Informational Source Was Presented</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>EMH</td>
<td>WISC-R</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>BD</td>
<td>TAT</td>
<td>4</td>
</tr>
<tr>
<td>3</td>
<td>Regular Grades</td>
<td>Bender-Gestalt</td>
<td>3</td>
</tr>
<tr>
<td>4</td>
<td>Regular Grades</td>
<td>Leiter</td>
<td>3</td>
</tr>
<tr>
<td>5</td>
<td>EMH</td>
<td>WISC-R</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Psychologist 4

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Informational Source Upon Which First Commitment to Final Program Selection Was Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WISC-R</td>
</tr>
<tr>
<td>2</td>
<td>TAT</td>
</tr>
<tr>
<td>3</td>
<td>Bender-Gestalt</td>
</tr>
<tr>
<td>4</td>
<td>Leiter</td>
</tr>
<tr>
<td>5</td>
<td>WISC-R</td>
</tr>
</tbody>
</table>

#### Psychologist 5

<table>
<thead>
<tr>
<th>Case Study</th>
<th>Informational Source Upon Which First Commitment to Final Program Selection Was Made</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>WISC-R</td>
</tr>
<tr>
<td>2</td>
<td>Bender-Gestalt</td>
</tr>
<tr>
<td>3</td>
<td>All Psychological Data</td>
</tr>
<tr>
<td>4</td>
<td>WISC-R</td>
</tr>
<tr>
<td>5</td>
<td>WISC-R</td>
</tr>
</tbody>
</table>

132
Out of a total of sixteen EMH, TMH, LD decisions, first commitment was based on the WISC-R on ten occasions (62.5% of the time). Out of a total of five BD decisions, first commitment to a BD program was unanimously based on either a projective interpretation of the Bender-Gestalt and/or the T.A.T. protocol. No first commitments were made on the basis of the WISC-R. This seems to be in line with expectancy, whereas, the number of commitments based on the WISC-R in cases involving a final EMH, TMH, or LD decision appears to be below expectations.

Out of a total of four regular grade final decisions, first commitments were based on the WISC-R once, all psychological data integrated once, Bender-Gestalt once and Leiter International once. These sources of information varied from first through eighth in order of presentation and no particular pattern was in evidence.

Results Related to Null Hypothesis Eight:

To test null hypothesis eight (there is no significant difference in educational diagnoses between individual simulated team members' decisions prior to the MDS Conference and the final, consensual, group outcome decision), the percents of agreement between individual team members' (individuals pooled by discipline) educational placement decisions prior to the MDS Conferences and respective final, consensual, group decisions were tabulated. Table 20 presents these percentages by discipline and
by case study. Mean percents of agreement are shown across disciplines. A Two-Way, Non-Parametric, Analysis of Variance (the Friedman Test) was applied to the data in Table 20. The significance of the difference in percents of agreement between disciplines or groups (columns) and between cases (rows) was analyzed and the percents of agreement for the five groups and the five cases were rank ordered. The higher the rank the greater was the percent of agreement. The between group $X^2$ was 1.86. At three degrees of freedom ($n-1$), this value was not significant at the .05 level. The between case $X^2$ was 8.95. At four degrees of freedom ($n-1$), this value was also not significant at the .05 level. Thus, there was no significant difference among simulated subjects representing four disciplines relative to the agreement of their individual decisions prior to the MDS Conferences and the final decisions of their respective teams. On this basis, there was a failure to reject null hypothesis eight. In summary, with respect to null hypothesis eight; no significant differences among psychologists, social workers, nurses and teachers were found relative to the agreement of their individual decisions prior to the MDS Conferences and the final, consensual team decisions. In addition, percents of agreement between prior individual decisions and final team decisions did not significantly vary as a function of case study.
TABLE 20

Percent of Agreement Between Individual Team Members' (Individuals Pooled by Professional Disciplines) Educational Diagnoses Prior to The MDS Conferences and Respective Final, Consensual, Group Diagnoses

<table>
<thead>
<tr>
<th>Case Studies</th>
<th>Psychologists</th>
<th>Social Workers</th>
<th>Nurses</th>
<th>Teachers</th>
<th>( \ell ) R</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>*(3.5)40(4.5)</td>
<td>(3.5)40(4.5)</td>
<td>(1.5)80(3)</td>
<td>(1.5)80(1.5)</td>
<td>13.5</td>
</tr>
<tr>
<td>2</td>
<td>(2)100(1.5)</td>
<td>(2)100(1)</td>
<td>(2)100(1.5)</td>
<td>(4)40(3)</td>
<td>7.0</td>
</tr>
<tr>
<td>3</td>
<td>(1)60(3)</td>
<td>(2)40(4.5)</td>
<td>(4)0(5)</td>
<td>(3)20(4.5)</td>
<td>17.0</td>
</tr>
<tr>
<td>4</td>
<td>(3)40(4.5)</td>
<td>(1.5)60(2.5)</td>
<td>(1.5)60(4)</td>
<td>(4)20(4.5)</td>
<td>15.5</td>
</tr>
<tr>
<td>5</td>
<td>(1.5)100(1.5)</td>
<td>(4)60(2.5)</td>
<td>(1.5)100(1.5)</td>
<td>(3)80(1.5)</td>
<td>7.0</td>
</tr>
</tbody>
</table>

\( \ell R = 11.0 \quad \ell R = 13.0 \quad \ell R = 10.5 \quad \ell R = 15.5 \)

\( \ell R^2 = 13.5^2 + 7.0^2 = 17.0^2 + 15.5^2 + 7.0^2 = 809.5 \)

\( \ell R^2 = 11.0^2 + 13.0^2 + 10.5^2 + 15.5^2 = 640.5 \)

* numbers in parentheses are rank orders
Summary of Results

This chapter presented data descriptive of the reliability of decision-making in educational planning teams. An analysis of decision-making was made at both the individual and group (team) level. Presented below is a summary of the quantitative and qualitative findings of primary importance to the study at hand. Associated hypotheses are indicated where appropriate.

An overview of percents of agreement scores in educational diagnostic decisions across the five stimulus cases between actual and simulated subjects revealed that agreement across all professional disciplines reached statistical significance in eight out of twenty cases (see Table 2 for details). However, overall differences were not found to be statistically significant at the .05 level. Therefore, there was a failure to reject null hypothesis one. Agreement between actual and simulated teams reached statistical significance in only two out of five actual case studies which also resulted in failure to reject null hypothesis two. With regard to simulated subjects, percents of agreement scores reached statistical significance in sixteen out of twenty cases which resulted in the rejection of null hypothesis three and the percents of agreement across simulated staffing teams reached statistical significance in four out of five actual case studies which resulted in a failure to reject null hypothesis four.

A Two-Way, Non-Parametric, Analysis of Variance (The Friedman Test) was used to test null hypotheses five and eight. Tests
indicated that the difference in percents of agreement between simulated MDS teams and their respective professional disciplines was non-significant resulting in a failure to reject null hypothesis five. The difference in the percents of agreement between individual team members' educational diagnostic decisions prior to the MDS Conferences and respective final, consensual, group decisions was non-significant and hence there was a failure to also reject null hypothesis eight.

Findings related to the testing of null hypothesis six indicated that the percents of agreement in educational diagnoses across simulated subjects made on the basis of responses to particular informational sources (i.e., professional, ancillary, or a combination of both) reached statistical significance in 48 out of 60 cases and resulted in the rejection of null hypothesis six. Findings related to null hypothesis seven showed significant levels of agreement across simulated subjects between diagnostic decisions based on professional or ancillary data and individual final-outcome decisions which were based on an integration of all available data. Percents of agreement were significant in 31 out of 40 cases which resulted in the rejection of null hypotheses seven.

In addition, results related to the testing of null hypothesis seven showed that decisions based on the T.A.T. and all psychological data integrated were in perfect (100%) agreement with final individual diagnoses across the five psychologists. For nurses, social workers, and teachers, decisions based on ancillary information were in agreement with respective individual
final decisions more than ninety percent of the time. In this regard for the psychologists' group, the addition of ancillary information did not change the diagnostic decision that was made on the basis of professional data alone.

A qualitative analysis of how and when final diagnoses were made in the psychologists group showed that first commitments to an LD, EMH or TMH program were made in six out of sixteen cases on the basis of other than traditional tests of intelligence (WISC-R protocols). This finding was considered to be below expectancy. In contrast, first commitments to a BD program were consistently made on the basis of projective interpretations of certain test records (T.A.T., Bender-Gestalt). These diagnoses appeared to be made later in the decision-making process as was expected.

Finally, relative to the influence of the parent in the decision-making process, a qualitative analysis of post staffing interviews with parents and actual team members revealed the following: regardless of whether or not parents perceived their role in the MDS Conferences as necessary, there was, with only one exception, unanimous agreement among team members that the same educational diagnosis would have been made with or without the presence of the parent.
Chapter Five

Discussion

Chapter five presents a detailed discussion of the results of the eight hypotheses which were presented in chapter four. In addition, a systematic discussion of the present study's strengths and weaknesses related to the methodology employed in the present study along with suggestions for future research is provided.

Discussion of Hypotheses One - Five

Hypotheses one - five involved an assessment of the reliability of inter-subject and inter-group educational diagnostic decisions across the five actual case studies. Null hypothesis one involved a comparison of educational diagnostic decisions between individual actual, and simulated subjects. It was found that significant agreement across the five case studies between these two groups occurred in only eight out of twenty cases. Prior to their respective MDS Conferences, actual and simulated subjects disagreed in twelve out of twenty cases relative to the most appropriate educational diagnosis across the case studies. This disagreement varied as a function of particular case study and professional discipline. One reason for this discrepancy may have been that the actual subjects went beyond the "information given" in making their respective diagnoses. The actual subjects, unlike the simulated subjects, were the school professionals of record and actually interacted in the school situation with the student, parent(s) and school staff. Thus, it is possible that
the actuals' decisions may have been influenced by among other things, an informal assessment of the student's behavior, personal characteristics, social presence, socioeconomic status and level of language usage (Ysseldyke & Algozzine, 1982). Along with these informal criteria an evaluation of the learning context of the student based on conditions in the school (classroom situation, etc.) and home environment (as reflected by parent demeanor, etc.) may have also influenced the diagnosis of the actual subjects.

These differences in educational diagnostic decisions between actual and simulated subjects might also have reflected the inadequacy or incompleteness of the introspective (expert) model used to organize the actual data for the simulated subjects. This model of evaluation of the case data offered by the actuals (experts) may not have had the effect of providing a means for consistent interpretation of identical case data among like professionals (i.e., actual psychologist to simulated psychologist). However, the individual differences between actual and simulated subjects in interpreting the case data may have also led to the discrepancies in educational diagnoses despite the structure offered by the model. In addition, the actual subjects (experts) did not have the "benefit" of their own model for interpreting the raw data which they dictated to the investigator. The design of the current study did not provide for this program to be set before them as an aid in organizing and interpreting the data as it was for the simulated subjects. The simulated subjects employed the expert model formally, whereas, the experts may have employed their own (expert) model rather generally or informally. Finally
the discrepancy between actual and simulated subjects in educational diagnosis may partly have been due to the inadequacy and/or incompleteness of state guidelines used in defining special education diagnostic categories. In this regard, Petersen & Hart (1978), in studying the consistency among school professionals with respect to the identification of educationally handicapped children, found that special education diagnostic categories "...which are described in the (UTAH state) guidelines in terms of explicit IQ ranges were the most clearly identifiable...". The Illinois state guidelines (employed by subjects in the present study) for the identification of educationally handicapped children do not describe diagnostic categories in terms of explicit IQ ranges (Illinois Rules & Regulations to Govern the Administration and Operation of Special Education, Article IX, Section 9.16). However, if a lack of adequate criteria did exist, present findings suggest that it may not have been as significant a factor relative to its effects upon the reliability of diagnostic decisions among the simulated subjects who worked under highly similar and relatively controlled conditions. Nonetheless, across all subjects who worked within the simulated condition, agreement in final diagnosis reached one-hundred percent in only one out of the five case studies. In addition, non-significant levels of agreement among simulated subjects relative to diagnoses based on various informational sources (see discussion related to hypothesis six) may have been, in part, attributed to a lack of clear-cut criteria to support diagnostic choices.

In summary, it is suggested that the discrepancies in educa-
tional diagnostic decisions between the actual and simulated subjects may be attributed to one or more of the following: a) the actual subjects' basing a decision on more than the basic information provided by the raw case data, b) the borderline nature or marginality of the five stimulus cases in terms of a clear-cut categorical diagnosis, c) the inadequacy of state guidelines as a criteria for categorical diagnosis, d) the inadequancy of the expert model employed by the simulated subjects in interpreting the actual case data, and e) subject variability (individual differences) in interpreting case data which may have tended to disrupt the structure offered by the introspective (expert) model. In addition, the actual subjects did not have use of the written model developed from their work.

Null hypothesis two involved a comparison of educational diagnostic decisions between actual and simulated teams and indicated that significant levels of agreement between these two groups occurred in two out of five case studies. Apparently, parent involvement in the actual team meetings and their absence in the simulated condition does not provide an explanation for this discrepancy in decision-making between actual and simulated teams. In this regard, qualitative data derived from interviews with actual team members revealed that the presence and/or participation of the parent at the MDS Conference had no appreciable influence on the team members' diagnostic decisions (see Appendix B for details). However, even though parental input and/or presence in the actual MDS Conference and their absence in the simulated condition did not seem to account for the discrepancy in
decision-making between actual and simulated teams, the general attitude of team members toward parental involvement in the MDS process is of some interest. The small sample of MDS Conferences and participants does not preclude a discussion of what potentially could be a very sensitive matter. The staff repeatedly perceived the worth of the parent in helping to determine the most appropriate educational program for his or her child to be of limited value. In response to the question, "Was your decision regarding educational placement at any time influenced by parental input and/or presence at the MDS Conference?," responses like the following were typical: "No, it was not....I don't usually think parents' perception of their children are accurate." ....No, the mother was afraid to speak up in front of the group....No, she didn't say anything I didn't already know....Parents generally don't want to understand that children can have learning problems...."

The responses of team members in this study appear to be reflective of a general attitude among school professionals toward parental involvement in the special education planning process, namely, that the parental role should be a limited one (Yoshida et.al., 1978b; Hoff et.al., 1978; Gilliam, 1979; Ysseldyke et.al., 1982; Soffer, 1982).

It appeared to me that a systematic and sensitive attempt should be made to discover what possible insights a parent(s) might have concerning his or her child which might help the group in developing meaningful strategies for teaching that youngsters. I noted that parents were rarely asked for their input. When the
input came it was on their own initiative. As an example, in one instance the issue of hyperactivity of a particular student was before the group. No one thought to ask the parent, "How active is your youngster at home?" The parent, however, offered some information in this regard, "______ is not, how do you call it...hyper at home. He can watch TV and not leave his place on the floor for over an hour. He's calm at home." The group "listened" and went on to discuss how the student is always leaving his seat in the classroom. The parent's commentary about ______ non-hyperactive posture in the home environment was apparently not heeded. Before a meaningful educational plan can be developed, a total picture of the child is vital. Parents, with their knowledge of the child's adaptive behavior outside the school setting, are in a unique position to help complete this picture. However, not all parents may make insightful comments about their children at MDS Conferences or, in fact, have the capability for so doing (Turnbull & Turnbull, 1982). Indeed, some parent(s) may also have their child's "primary handicap." The position taken in the present study, however, is that the vast majority of parents have unique insights which may prove to be valuable contributions to the total diagnostic picture. A future investigation might utilize the interview technique developed for the current study with a greater sample of MDS teams and parent participants in order to obtain a broader picture of team members' perceptions of the parental role in the MDS process.

Further, one might look to certain other situational variables for an explanation of the discrepancy in educational diagnosis.
actual team meetings were held in schools as opposed to the setting of the simulated team meetings, an office building. The actual team meetings were often interrupted by ancillary school personnel not technically a part of the staffing group, by students with messages for team members, and by other distractions (school buzzers, call messages over the intercom, etc.). Also, the actual staffing teams in all instances were composed of other school personnel aside from a psychologist, social worker, nurse and teacher (i.e., school counselors, assistant principals, special education coordinators, etc.). Input from these individuals may have caused the actual team members (psychologist, social worker, nurse, teacher) to go beyond the information they individually collected when making their final decision. Separately or in combination these variables may have contributed to the discrepancy in decision-making between the actual and simulated teams. Furthermore, the actual subjects did not have access to the written model developed from their work.

In comparing the findings related to the testing of null hypotheses one and two, it would appear that the inconsistency in educational diagnostic decisions that existed between individual actual and simulated like-professionals also existed when such individuals made decisions in an interdisciplinary context—the MDS Conferences. The naturalistic conditions under which the actual subjects operated, in contrast to the experimental conditions of the simulated subjects, were factors of primary importance contributing to the discrepancy in decision-making between these two
groups.

The testing of null hypothesis three involved assessing the consistency of decision-making among simulated like-professionals across team lines. Findings indicated significant levels of agreement across all simulated subjects in sixteen out of twenty cases. This finding represented, at least qualitatively, a substantial improvement in the consistency of educational diagnoses over that which was found between the actual and simulated subjects (i.e., eight out of twenty cases or forty percent agreement as opposed to sixteen out of twenty cases or eighty percent agreement). This one-hundred percent increase in the percents of agreement scores among the simulated subjects supports the notion that the actual subjects may have been influenced by factors other than the raw case data when making their educational diagnoses (i.e., physical presence of the student and certain other environmental (naturalistic) considerations) In addition, although the introspective (expert) model may not have served in promoting consistency in diagnostic decision-making between the actual and simulated professionals, it may have had the effect of providing a means for relatively consistent interpretation of identical case data among simulated like-professionals. Despite a small n (i.e., case studies and subjects) and the possibility of alternate diagnoses, like-professional subjects assessing identical case data derived from such studies within a controlled situation (simulated condition) attained significant levels of agreement in sixteen out of twenty cases or eighty percent of the time.

Findings related to the testing of null hypothesis four indi-
cated that the percents of agreement in educational diagnosis among simulated teams across the five case studies reached statistical significance in four out of five case studies. This is contrasted to two out of five case studies when percents of agreement comparisons were made between actual and simulated teams. Although there was a failure to reject null hypothesis four on a qualitative level the relative increase in percents of agreement scores among simulated teams appears worthy of note. Actual MDS teams and subjects behaved in a naturalistic context and may have been collectively influenced by factors beyond the interpretations of the raw case data before them. In addition, simulated team members used the same introspective (expert) guides they employed when making their individual diagnoses. The cumulative effects of these guides may have promoted ordered decision-making within teams and may have resulted in greater consistency of decision-making across teams. Despite the small sample then, it would appear that at both the individual and group (team) levels, educational diagnoses were relatively more consistent among simulated subjects they were was between actual and simulated subjects. That is to say that individual differences among subjects may be less important a factor in the simulated or experimental condition than most people assume.

Findings related to the testing of null hypothesis five indicated that there was no significant difference in the reliability of decision-making between simulated teams and respective professional disciplines. Thus, no significant difference in the reliability of educational diagnoses was found between the five groups.
represented by the four disciplines and the simulated staffing
teams. Although the statistical significance of the percents of
agreement scores obtained varied at both the individual and group
levels as a function of professional discipline and case
study, overall percents of agreement scores among the four disci­
plines and between the simulated teams and the four respective
disciplines were not significantly different. The relatively
small number of subjects and staffing teams may have been primary
factors leading to such results. However, several generalizations
can be made. Apparently, diagnostic decisions made by the MDS
teams (group decisions) did not improve upon the reliability of
decisions made at the individual level prior to the MDS Confer­
ences. These findings might suggest that group decisions tend not
to be superior to individual decisions in terms of their reli­
ability or consistency. However, Hill (1982) found that group
decisions (performance) were generally superior to individual
decisions (performance) when the accuracy as opposed to the reli­
ability of decisions was being investigated and Vantour (1976) &
Pfeiffer (1981c, 1982) found, in studying educational planning
teams specifically, that teams generated significantly less vari­
ability (i.e., error) in their diagnostic decisions than did
individual team members acting independently. Hill (1982) also
found, however, that the accuracy of decisions made by a superior
or highly competent individual was superior to that of a group.
In the present study no one discipline (individuals pooled) showed
a significantly higher consistency in decision-making (expressed
in absolute percents of agreement) than did the staffing team
groups. Thus, superiority in the reliability of decision-making was not evidenced by any one set of individual professionals (psychologists, social workers, nurses, teachers) over that shown by the staffing teams which represented group decisions.
Discussion of Hypothesis Six

Hypothesis six involved an assessment of the reliability or consistency of educational diagnostic decisions made on the basis of responses to various stimulus materials across simulated subjects. One finding related to the testing of null hypothesis six revealed that a perfect match existed across all psychologists between the educational diagnosis chosen on the basis of an integration of professionally relevant data (test records, protocols, etc.) and the final individual diagnosis chosen on the basis of a combination of professional and ancillary information. This was true across all five stimulus cases. The implication here is that psychologists regarded their professional data base of primary importance when making an educational diagnostic decision and were seemingly not influenced by the addition of available ancillary information as appeared to be the case for the other professional disciplines. As compared to other disciplines, it may be assumed that psychologists had relatively more confidence in their data base as a means for effective educational diagnosis. In this regard it should be noted that a psychological evaluation by a school psychologist is required in order to place any child in an EMH, TMH, BD or by implication an LD program (Illinois Rules and Regulations, 1979, 9.09, 3(i)). Team members may have come to expect the outcome of a psychological evaluation necessarily to lead to an appropriate educational diagnosis irrespective of additional information (ancillary data). This is not true with regard to social workers, nurses, or teachers. Finally, the methodology of the current study should not be ignored as a possible expla-
nation. Psychologists were presented with more professionally relevant sources of information. They were exposed to a more highly structured program for the purpose of interpreting such data and the time they spent evaluating the protocols was longer than other groups spent evaluating their respective data bases. Their investment in an educational diagnosis based on professionally relevant data might have been greater. This may have promoted a more rigid commitment which was not easily upset by ancillary information. Thus, despite the fact that final individual outcome decisions varied significantly in two out of the five case studies among psychologists, the educational diagnoses they selected on the basis of professionally relevant information remained in perfect agreement with final individual outcome decisions. One might speculate as to what degree this may be true in actual practice.

With regard to the reliability of diagnostic decisions made on the basis of particular sources of information (test records, etc.), findings indicated one-hundred percent consistency among psychologists when the T.A.T was utilized as a basis for an educational diagnosis (case two) and one-hundred percent consistency with the WISC-R in cases two and five. In addition, one-hundred percent consistency among teachers and psychologists was attained in cases two and three respectively when achievement measures were used. The consistency of the T.A.T. results may have occurred because the program derived for interpretation of the T.A.T. record has greater detail than the programs derived for interpretation of other test records. This may have also been
true of the model employed for interpretation of the WISC-R and achievement measures (see Appendix C for details). Thus, there appears to be further evidence to suggest that the introspective (expert) model promoted consistent decision-making across selected simulated subjects (psychologists and teachers) when the WISC-R, T.A.T. and achievement measures were used as a basis for educational diagnostic decisions. However, the level of reliability attained with such instruments may have also been a function of the case study in which they were employed and/or their general validity as measuring instruments. With regard to reliability as a function of case study, all diagnostic decisions which are based on the T.A.T. were for a behavior disordered (BD) program. The T.A.T. was used in case two, a case in which a differential diagnosis may not have been as difficult as in the other case studies. There was one-hundred percent agreement across the five simulated psychologists in educational diagnosis for case two based on an integrative summary of all professional data (including the T.A.T. protocol), ancillary data and a combination of the two. Educational diagnoses based on these sources were BD without exception (See Table 11, Appendix C for details). Therefore, the consistency in diagnostic decisions based on an interpretation of the T.A.T. may have been influenced by the raw data (T.A.T. responses) which were clearly that of a BD type youngster.

In summary, with respect to the testing of null hypothesis six, findings indicated that in at least three out of the five case studies simulated psychologists, social workers and nurses attained significant levels of agreement in educational diagnostic
decisions across all sources of information. Teachers reached significant levels in two out of the five case studies. Considering the findings related to the testing of null hypotheses three and six, one could conclude that the consistency of educational diagnoses among the individual simulated professionals reached significant levels with respect to final diagnostic selections (LD, BD, EMH, etc.) and also with respect to the educational diagnosis based on various informational sources (i.e., professional data, ancillary information and a combination of the two).
A Discussion of the Findings
Related to Hypothesis Seven

The testing of null hypothesis seven involved an examination of the extent to which individual diagnostic decisions based on separate informational sources were predictive of individual final outcome diagnoses which were based on an integrative summary of all available data. Separate sources of information referred to above might be individual test records or psychological protocols (WISC-R, Bender, etc.) an integrated summary of all psychological data, social assessment data, medical-health data, achievement measures or ancillary data (general information). In brief, relative to the psychologists' group, findings indicated that a diagnostic decision based on an integrative summary of all psychological data was more predictive of individual final diagnoses than any one test record (T.A.T. presenting the only exception) or general informational source. In contrast social workers, nurses and teachers appeared to give more weight to ancillary data than to professionally relevant information. Diagnostic decisions based on ancillary information were in agreement with final decisions ninety-two to ninety-six percent of the time; whereas, in the psychologists' group the addition of ancillary information did not change the diagnostic decisions that were made on the basis of the professional data alone (see Table 16 & 18 for details). A possible inference is that the psychologists' data base is more conducive to categorical diagnoses than the professional data bases of the other school professionals. The possibility that psychologists may be more rigid in their diagnostic decision-
making also remains open to further inquiry.

Overall, the findings related to the testing of null hypothesis seven indicated that a significant relationship did exist between diagnostic decisions made on the basis of single informational sources and the final educational diagnoses made on the basis of all the available data. To some degree then, educational diagnoses appeared to be derived from the available data. All things considered, the subjects in the present study appeared to arrive at educational diagnostic decisions in some ordered fashion and the structure offered by the design of this study may have been a factor in promoting such order.
Discussion of Hypothesis Eight

The testing of null hypothesis eight involved assessing the significance of the difference in educational diagnostic decisions between individual team members' diagnoses prior to the MDS Conferences and the final, consensual group (team) diagnosis. Basically no significant differences among psychologists, social workers, nurses and teachers were found relative to the agreement of their individual diagnoses made prior to the MDS Conferences and final, consensual team, diagnostic decisions. Although the sample in the present study was small, the results obtained do not suggest, as implied by Yoshida (1978), that particular school professionals within the context of the MDS Conference have relatively greater influence in determining the team's final educational diagnosis.

The use of different school professionals from study to study obviously creates a situation wherein group composition and dynamics will also vary. Individual differences in team members' assertiveness, role perception, professional competency, etc. within any one PPS team may affect the degree of influence that any one member will have in determining the team's final educational placement decision. In other words, whether or not one particular member is more influential than another or whether or not a specific pattern of influence is discernible among team members may simply depend on which team is being studied.

In the present study, the imposed format of the simulated MDS
conferences along with the uniqueness and particular interactions of team members may have resulted in no discernible pattern of influence among school professionals. In this regard, Knoff (1983) in commenting upon the contradictory findings relative to the patterns of influences among team members stated, "...Each MT (MDS team) therefore, should be considered as unique, each with team-interactions and patterns of professional influences. Ultimately the team chairperson must analyze the patterns of disproportionality, minimize their effects on group process, and coordinate steps toward acceptable resolutions...".
Summary of the Findings and Suggestions for Future Research

The present study provided an intensive examination of the reliability of educational diagnostic decision-making by professional school personnel charged by P.L. 94-142 with the responsibility of determining appropriate educational programming for students referred for a case study evaluation.

One purpose of the study was to assess the consistency of diagnostic decision-making across five actual case studies among individual school professionals and among those same individuals as they operated within the context of a group setting (MDS team). Consistency (agreement) in educational diagnosis among individual simulated subjects reached significant levels in sixteen out of twenty cases but varied as a function of case study and professional discipline. In contrast, consistency in educational diagnosis between actual and simulated individual subjects reached significant levels in only eight out of twenty cases. Percents of agreement in educational diagnoses between actual and simulated teams reached significant levels in two out of five case studies, whereas, agreement among simulated teams reached significant levels in four out of five actual case studies. No significant difference in percents of agreement scores relative to diagnostic decisions was found among simulated subjects grouped by professional discipline and no significant difference in percents of agreement was found between the simulated MDS teams and their respective disciplines.

Another purpose of the present study was to examine the
utility of particular sources of information (i.e., psychological test protocols, health data, social developmental histories, achievement measures and general information) in facilitating consistency in categorical diagnoses among school professionals. The relative value of such informational sources in determining the final educational diagnosis was also assessed. Findings related to these matters indicated that significant levels of agreement were attained when diagnoses were based on certain sources of information, although the degree of consistency varied as a function of the particular informational sources, the professional discipline employing such source, and the actual case study. In addition, educational diagnoses based on particular informational sources proved to be significantly more predictive of the ultimate individual, final, outcome diagnoses than were diagnoses based on certain other sources of information (see Tables 16 & 18 and Table 17 - Appendix C for details).

Finally, diagnostic decisions made prior to the MDS Conferences by individual team members representing the various disciplines were compared to their respective teams' consensual group diagnoses. This procedure was thought to provide some index as to the relative import or influence that certain school professionals might have had on a group diagnostic decision. With respect to these comparisons, no significant differences among simulated subjects grouped by professional disciplines were found between individual diagnoses and the diagnoses finally made by their respective teams.
The import of parental participation at the MDS Conferences was assessed. The results indicated that team members were almost unanimous in their rejection of the parent as a meaningful contributor in the process of determining the most suitable educational program for their youngster. Future research in this area might employ the interview technique utilized in this investigation with a much larger sample of team members and parents. Depending on the results of future research, further training of school professionals and parents on this matter might be in order.

One major weakness of this investigation is the limitation in generalizability of these findings resulting from the small number of subjects employed (actual and simulated) and consequently the small number of MDS teams. In addition, the small number of case studies utilized for diagnostic purposes may also have been a factor in reducing the generalization that may be drawn from current findings. Future investigations might use the current overall analytic paradigm but substantially increase the n. In addition, subjects who participated in the investigation constituted a sample of convenience although they were randomly assigned to simulated staffing teams. Another serious weakness may have been the use of seven possible diagnostic choices representing seven educational program selections (a can't say choice was included in the seven) when calculating \( P \) in the binomial formula

\[
P(x= k) = \binom{n}{k}p^k(1-p)^{n-k}
\]

where \( p = seven \). In actual practice it is reasonable to assume that most educational diagnostic choice situations reduce to two or three alternatives. Although the design of the present investigation allowed for seven possible
program selections, if three was assigned as the value of p as opposed to seven, significant levels of agreement would not have been reached until the eighty percent level as opposed to the sixty percent level. The results of this study would thereby have changed accordingly and fewer agreement percentages would have been significant (see Table 3 and related discussion in Chapter 4 for further details).

Finally, in using the Binomial Test to determine the significance of percents of agreement scores, the assumption was made that each educational diagnosis (categorical choice) made by each individual subject and team was an independent event. The percents of agreement in diagnostic decisions obtained among individual subjects and teams were derived from these "independent" categorical choices. This assumption of independence required by the Binomial Test, however, may have been violated. In view of the repeated measures procedure employed in the present study which required that each subject or team undergo all experimental treatments or conditions (i.e., review of five stimulus cases in sequence), it may be more accurate to say that the diagnostic decisions were related. Thus, a diagnostic decision made for case one, might have influenced (affected) the decision made for case two, case two affecting case three, etc. To illustrate, if a particular subject made an LD decision for the first three case studies, he/she might then make other than an LD decision for the fourth case because of a tendency not to arrive at the same decision for all four cases. As a further example, if a subject or team found similarities in protocol or general informational data
between two or more cases, the tendency might have been to arrive at similar diagnoses for such cases. As Kerlinger (1973) states, a subject who experienced one or two (or more) trials of an experimental manipulation and is facing a third trial is a different person from the one who faced trial one. In brief, the experimental treatment (i.e., exposure to five case studies in five succeeding trials) may have influenced the categorical diagnosis made on any one trial. If such interaction did occur, the assumption of independence required by the Binomial Test may have been violated, thereby, confounding results obtained. In addition, the assumption of independence requires that each event (categorical choice) is equally likely to occur (i.e., equal probability of each choice being selected). However, if stable child characteristics (for e.g. IQ, achievement levels) exist within any one case study, it would be unreasonable to assume that five different school professionals would be as likely to select, for example, "gifted" as they would "EMH" for the same child. Calculating the probability of selecting any one category given the condition that such categories are not equally likely to be chosen was not within the purview of the current statistical analysis.

Percents of agreement in educational diagnoses among subjects and teams assumed the independence of each diagnosis upon which such percentages were based. To the extent the assumption of independence was violated, the significance of these percents of agreement scores may have been confounded. As Siegel (1956) states, "Certain assumptions are associated with most nonpara-
metric statistical tests, i.e., that the observations are independent and that the variable under study has underlying continuity...". In this regard, Kerlinger (1973) states, "What is important for the researcher to know is that independence is often difficult to achieve and that lack of independence when research operations assume independence can seriously affect the interpretation of data".

The Binomial Test (a nonparametric test) was employed because there appeared to be no other way to analyze categorical data having such a small n. In justifying the use of even biased statistics, Kerlinger (1973) states, "If random sampling cannot be used, and if there is doubt about the independence of observations, calculate the statistics and interpret them. But be circumspect about interpretations and conclusions; they may be in error.... But even when statistical measures are biased, they are usually less biased than authoritative and intuitive judgements".

A major strength of the present investigation lies in the model devised for comparing educational diagnosis between school professionals who were actually involved in the collection and interpretation of a data set within the context of a naturalistic setting and those school professionals who evaluated this same data set in an artificial or simulated condition. Despite the fact that the actual subjects indirectly provided the simulated subjects with a means for interpreting this identical case data (i.e., introspective (expert) model), percents of agreement did not go beyond that expected by chance alone in twelve out of twenty cases (instances). In contrast, subjects that were exclu-
sively involved in the simulated condition showed a substantial increase in diagnostic agreement over that shown between actual and simulated subjects. What is of primary interest here is that the simulated model appeared to be successful in uncovering the above noted discrepancy in educational diagnoses between the school professionals of record and those school professionals who, in an isolated condition, interpreted the data without interacting with the student.

Another benefit which might have accrued from the present investigation was the employment of the expert guides for interpretation of the case data. The structure imposed by these guides may have been a factor in facilitating consistency in diagnostic decision-making among the simulated subjects. The experimental manipulation represented by the use of these guides may have significantly contributed to the relatively high levels of agreement in educational diagnoses among simulated subjects. This would attest to the internal validity of the present design.

Future research might best be aimed at duplicating the simulated condition with a larger sample of subjects in order to discover whether the level of consistency shown in the present investigation would be maintained if the expert model were not employed. Although the guide questions used in this study were not intended as a formula for diagnostic interpretation, their use may be reflective of the need for a more systematic procedure for the interpretation of case data among field professionals. If, in fact, actual school professionals tend to go beyond the basic data
set when making a categorical diagnosis (EMH, LD, BD, etc.), the likelihood of obtaining different diagnostic results on the same student would appear rather high. The obvious question becomes: would actual (field), like-school professionals agree as to an educational diagnosis for a particular student if such comparisons were made? In attempting to answer this question, the design of the present study might have been expanded to include a group of "quasi-actual" subjects who reexamined the five students (subjects of the five actual case studies) six months subsequent to the initial evaluations. This added procedural control might have shed some light on the reliability of diagnostic decision-making among school professionals who actually interacted with the student. In practice school professionals do not usually have the opportunity to formally compare diagnostic evaluations on the same student. For example, school psychologists usually only have the opportunity to compare their diagnostic impressions with like-professionals when they peruse the school folder in order to discover if a colleague who tested the same student several years previously obtained results congruent with theirs. The present investigation attempted to examine consistency in educational diagnoses not only among school psychologists but also among other school professionals who comprise MDS teams.

The individual educational diagnosis of MDS team professionals forms the basis for educational placement decisions made by MDS teams and most importantly provides the basis for the intervention strategies that will be used to teach the student within the context of the overall special education program treat-
ment plans. These decisions are important for handicapped children and would necessitate that educational diagnostic decisions be both valid and reliable. The accuracy of a diagnostic decision, however, may be suspect if such diagnosis changes as a function of the personal characteristics of the school professional interpreting the data. Using a number of procedural controls, the present investigation was designed to assess the degree of reliability in educational diagnostic decision-making across five actual case studies among school professionals.
A Final Note

Computer programs are currently being employed in the evaluation of various psychological test protocols (i.e., the evaluation of responses in the Minnesota Multiphasic Personality Inventory - MMPI). Thus, one way to control for individual differences and thereby enhance reliability in psychological diagnoses would be to use a standard computer program to analyze the raw data. At present, however, this is being accomplished primarily with paper and pencil personality inventories and cognitive tests. The coding, for example, of T.A.T., sentence completion and Rorschach responses into computer programs for educational diagnostic purposes is of course a much more complicated matter. Likewise, it is unlikely that currently available computer programs that might be established for the purpose of categorical educational diagnosis would be effective in capturing all the elements both objective and subjective that go into the selection of a particular special education program. If this were possible, inconsistency in educational diagnosis among school professionals would be greatly reduced. The computer would act as the great equalizer and perhaps diminish the worth of traditional clinical evaluations.

The results of the present investigation suggest that school professionals do tend to go beyond a completely objective analysis of the data when determining eligibility for special education programs. It is suggested that some uniform procedure for interpreting raw case data for the purpose of categorical educational diagnosis should be developed. This might provide field psycholo-
gists, social workers, nurses, and teachers with some meaningful structure for the interpretation of the data they have collected and hopefully will result in consistent decision-making among school professionals. The guides derived from skilled professionals (experts) as presented herein may provide a starting point.

Finally, as footnoted in chapter 3, individual simulated subjects were inadvertently asked to make "educational placement decisions" on the basis of professionally relevant information for five different actual case studies. As per Article IX (Sections 9.15, 9.17b, 9.18a) of Illinois Rules and Regulations to Govern the Administration and Operation of Special Education, an educational placement decision can only be made on the basis of an IEP Conference (multi-disciplinary conference) at which time the child's IEP is developed. Obviously, the subjects in the present study could not legally make an educational placement decision on an individual basis.

This accidental finding may point to the need of determining whether or not school professionals are following the guidelines as set forth in Article IX. Are "educational placement decisions" being made in a multidisciplinary context or are they being made on an individual basis with the IEP being written privately by one individual who proceeds, after the fact, to obtain necessary signatures. The possible "confusion" between individual educational diagnosis and educational placement decisions, if not just peculiar to subjects in this study, may reflect the need for compre-
hensive inservicing relative to the rules and regulations for the administration of special education.
Bibliography


Diana V. State Board of Education. C-70-37 (RFP Dist. N. California, 1970)


Foster, G.G., & Ysseldyke, J.E. Expectancy and halo effects as a result of artificially induced bias. Contemporary Educational Psychology, 1976, 1, 37-45.

Foster, G.G., Ysseldyke, J.E. & Reese, J. I wouldn't have seen it if I hadn't believed it. Exceptional Children, 1975, 41, 469-473.

Gilliam, J.E. Contributions and status rankings of educational planning committee participants. Exceptional Children, 1979, 45, 466-468.


Jolles, I. *A catalog for the Qualitative Interpretation of the House-Tree-Person (H-T-P)*. California: Western Psychological Services, 1971.


Laughlin, P.R., Kerr, N.L., Munch, M.M. Haggarty, D.A. Social decision schemes of the same four-person groups on two different intellectual tasks. *Journal of Personality & Social Psychology*, 1976, 33 80-88.


Pfeiffer, S.I. The problems facing multidisciplinary teams: As perceived by team members. Psychology in the Schools, 1981(a), 18, 330-333.


Pfeiffer, S.I. Special education placement decisions made by teams and individuals: A cross-cultural perspective. Psychology in the Schools, 1982(a), 19, 335-340.

Pfeiffer, S.I. The superiority of team decisions making. Exceptional Children, 1982(b), 49, 68-69.


Steiner, I.D. Whatever happened to the group in social psychology? Journal of Experimental Social Psychology, 1974, 10, 93-108.


Trailer, C.B. Role clarification and participation in child study teams. Exceptional Children, 48, 529-530.


APPENDIXES

APPENDIX A

PROCEDURAL DATA AND BACKGROUND INFORMATION ON EACH OF THE 5 STUDENTS THAT WERE THE SUBJECTS OF 5 CASE STUDIES

GUIDE QUESTIONS AND DIRECTIONS BY PROFESSION FOR SIMULATED SUBJECTS (INCLUDING INTERPRETIVE AIDS, T.A.T. PROTOCOL FOR PSYCHOLOGISTS AND FINAL DECISION PROGRAMS)

APPENDIX B

PARENT AND ACTUAL TEAM MEMBER INTERVIEWS

APPENDIX C

TABLES 11-14 AND TABLE 17
APPENDIX A
APPENDIX A

PROCEDURAL DATA, BACKGROUND INFORMATION,
GUIDE QUESTIONS AND DIRECTIONS

STIMULUS PACKET
(GENERAL)

Please find enclosed background information, educational records and assessment data for each of five students who have recently been the subject of five different actual case study evaluations. All identifying information relative to each student has been deleted. Also included are guide questions and directions to be employed in the evaluation of such studies.

The data file for each case will contain professionally relevant data and general information used in the original assessment and which are presently to be evaluated by answering questions and/or following directions provided. When appropriate, ancillary materials will be provided for assessment purposes.
STUDENT A

Student A, a black female, is 8 years and 3 months of age. She was referred for a case study evaluation because of failure to achieve at expected levels. The school referral form specifically stated, "Very poor thinking skills; very low academic achievement."
STUDENT B

Student B, a black male, is 10 years and 6 months of age. He is currently enrolled in a special education program for the emotionally disturbed (ED). The present referral resulted from a request for a case study reevaluation initiated by the classroom teacher.

She states in her request for a case study reevaluation the following:

"(Student B) often loses touch with reality. He cannot always distinguish between a lie and make believe. He has minimal impulse control and lacks socialization skills."
STUDENT C

Student C, a black male, is 13 years and 9 months of age and at date of referral was enrolled in a Moderate Learning Disability program. Student was referred for a case study reevaluation because previous evaluation was considered to be outdated. The learning disability resource teacher initiated referral and her specific request is as follows:

"Reevaluate to determine proper educational placement."
Student D, a white female, is 9 years and 8 months of age. She was referred for a case study reevaluation because of continued failure to achieve at expected levels and withdrawn behavior.

Student is currently enrolled in an ERA (BD) resource program "due to poor socialization". Her ERA teacher reports that her "attitude and peer relationships have improved somewhat since enrollment in ERA (10-79)".

The current request for a case study reevaluation was initiated jointly by ERA and regular classroom teachers. The regular classroom teacher reports that, "... reading is still 2 years below level. She seems to comprehend only when you face her. She has great difficulty with phonetics but is strong with visual work." Problems in the area of auditory processing (memory, discrimination, etc.) are offered as one possible reason for poor academic performance.

ERA teacher reports that student "... doesn't talk openly, but only in a one to one situation".
STUDENT E

Student E, a black female, is 13 years and 0 months of age. She was referred for a case study reevaluation because the previous evaluation is considered to be outdated. Student is currently enrolled in a special education program for the educable mentally handicapped (EMH).

The current request for a case study reevaluation was initiated by the classroom teacher. Reasons for referral apart from recency of the previous evaluation were as follows:

"Continued failure to participate and achieve at expected levels. Child often seems to be daydreaming and often falls asleep after lunch. Student, however, gets along well with others."

186
Please find enclosed case study social assessments and school records for five actual case studies.

The data file presented for each case contains information actually used in the original assessment. Such data is to be used by answering questions and following directions provided. A brief descriptive statement relative to each student is also provided.

It is understood that all identifying information relative to both student and professional subjects (yourself) will be totally deleted from the records of this investigation.
I. Based on an integration of data collected by social worker of record (Social Assessment) which of the following educational placement categories is most appropriate?

Gifted, Regular Grades, LD, EMH, TMH, BD, can't say

II. Based on all ancillary information presented, i.e., cumulative school records, school personnel reports, achievements, etc., what educational placement category is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, can't say

III. Based on all information (I & II) state program selection.

IV. Briefly list reasons for program selection.

1. 
2. 
3. 
4. 
5.
Please find enclosed protocol materials, achievement data and school records for five actual case studies. Also included are guide questions and directions to be employed in the evaluation of such studies. A brief descriptive statement relative to each student is also provided.

The data file for each case contains test records actually used in the original assessment. Such data base is to be evaluated by answering questions and following directions provided.

It is understood that all identifying information relative to both student and professional subjects (yourself) will be totally deleted from the records of this investigation.
1. Based solely on the full scale IQ which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; Learning Disabilities (LD); Educable Mentally Handicapped (EMH); Trainable Mentally Handicapped (TMH); Behavioral Disordered (BD); Can't say

2. Based solely on the Verbal IQ which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; Can't say

3. Based solely on the Performance IQ which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

4. Based solely on the full scale IQ and the degree of difference between the verbal and performance scales, which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

5. Based solely on the relative performance levels of individual subtests, as represented by intertest scale score scatter, and considering purported factors measured by each test, which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
6. Based solely on intratest scatter (i.e. pass-hard, fail-easy patterning) which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

7. Based on a qualitative analysis of student's verbal productions one might categorize his/her expressive language skills (i.e., vocabulary, fluency, syntax) as most like that of a student in which type of educational program (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

8. Based on a content analysis of verbal responses, test scatter patterning and/or an analysis of response style (i.e., pass-hard, fail-easy; response delay) is there evidence to suggest that emotional factors may have affected task efficiency?

YES / / NO / /

If yes, is emotionality in evidence to such a degree that it reasonably could provide the basis for a specific type of educational program?

YES / / NO / /

If yes, state the program. ____________________________

9. Based on an integration of WISC findings which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
DEVELOPMENTAL TEST OF VISUAL-MOTOR INTEGRATION  
(Berry-Buktenica, 1967)

1. Score test so as to arrive at a visual-motor age equivalent. Employ scoring system provided (Berry, 1967).

2. Note on which form first significant error was made. Does this correspond to chronological age expectancy? Is it below it, above it? Thus, for e.g., if student's CA=8 years and 8 months, and his first error is made on form #17, this would be congruent with chronological test age expectancy (see page 50, Berry, 1967).

3. Note any significant pass-hard, fail-easy test patterning.

4. Make a qualitative evaluation of form reproductions by inspection of the following:
   1) size consistency
   2) evidence of laborious design execution (overworking, reinforced lines)
   3) expansion
   4) general firmness of form construction
   5) symmetry

5. Based on total assessment, which of the following educational placement categories is suggested (circle one)?
   
   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
I. Developmental Considerations

A. Score Bender-Gestalt design reproductions as a developmental test of visual motor perception. Employ Koppitz (1963) developmental scoring system - provided.

B. Based on this assessment and general organization and quality of reproductions and considering student's CA, I would categorize this test record as most like that of a student in the following educational program (circle one).

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

II. Emotional Considerations

A. Employing Bender-Gestalt Test as a projective instrument evaluate test record on the basis of the following ten "Emotional Indicators" (Koppitz, 1975):

1) Confused order
2) Wavy line (figs. 1&2)
3) Dashes Substituted for Circles (fig. 2)
4) Progressive Increase in size (figs. 1,2 & 3)
5) Large Size of Drawings
6) Small Size of Drawings
7) Fine Line
8) Overwork, reinforced lines
9) Second attempt
10) Expansion

NOTE: Circle each individual item only once no matter how many times represented in drawing. Three or more different Emotional Indicators needed (Koppitz, 1975) in order to infer possibility of serious emotional problems.

Definitions for Emotional Indicators are provided.

B. In addition, note degree of variability in pencil pressure and design crowding. The former is thought to be an index to mood fluctuation and adequacy of inner-control; whereas, the latter may be related to interpersonal conflict and issues of self (ego) control.
III. Based on total assessment (developmental and emotional) which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
AUDITORY DISCRIMINATION TEST (Joseph Wepman)

Based on the test record which of the following educational placement categories is suggested (circle one)?

NOTE: According to Wepman's scoring standards (provided) is test valid? What can be inferred from performance?

Gifted; Regular Grades; LD; EMH; TMH; BD; Cant say
Based on Leiter test record which of the following educational placement categories is suggested (circle one)?

NOTE: IQ; success on classification of animals task at year 12; general patterning of successes and failures.

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
1. Based solely on the IQ (MA) level which of the following educational placement categories is suggested (circle one)?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

2. Compare age category as listed on test record (Suggested Starting Points) with established basal item. Thus if basal item is 42, it would correspond to the lower end of age category 7-6 to 9-5 (approximately 7-6). Thus for example if student's CA is 8-6, then student is said to have basaled below CA.

   Regarding present test record, does such information change response to question #1.

   YES / / NO / /

   If yes, to what educational placement category? __________

3. Based solely on range of scatter (basal-ceiling) what educational placement category is suggested (circle one)?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

4. Based solely on response style (pass-hard, fail-easy patterning) which educational placement category is suggested (circle one)?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

5. Based solely on a comparison between expressive language skills as measured by WISC and receptive language skills as measured by PPVT which of the following educational placement categories is suggested (circle one)?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

6. Based on an integration of PPVT findings which of the following educational placement categories is suggested (circle one)?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
DRAW A PERSON

I. Assess the developmental (maturational) level of drawing. As an aid in assessment, the following methods should be employed:

A. Employ the Goodenough-Harris Qualitative Scoring System (provided) in order to arrive at an associated IQ level for drawing.

B. After arriving at associated IQ level, make a further evaluation of the perceptual-motor quality of production by inspection of drawing's:

1) Size
2) location on paper
3) symmetry about midline (comparative quality of left and right half of drawing)
4) degree of distortion at bodily juncture points (head-neck, arm-shoulder, etc.)
5) general degree of distortion

II. Based on developmental assessment and considering student's CA, I would categorize this production as most like that of a student in the following program (circle one).

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

III. Based on a projective analysis of drawing (employ Jolles, 1971), I would categorize this production as most like that of a student in the following program (circle one).

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

IV. Based on total assessment, I would categorize this production as most like that of a student in the following program (circle one).

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
ACHIEVEMENTS

1. Based on grade equivalent of reading comprehension test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant pass-hard, fail-easy patterning.

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

2. Based on grade equivalent of word and letter recognition test (WRAT) and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant patterning of word success and failures. Also attempt to infer the level of word attack skill development. What can be said about phonetic attack skills, sight word vocabulary. Does student rely on one more than the other? If so, what then can be inferred about maturation in this area?

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

3. Based on grade equivalent of spelling test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant patterning of successes and failures, quality of letter construction (firmness, slant and size consistency) and, whenever possible, proficiency and method of word attack skill (level of sight word and/or phonetic approach).

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

4. Based on grade equivalent of arithmetic test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant pass-hard, fail-easy test patterning, quality of number construction (firmness and size consistency) and relative competency in the various computational skill areas.

   Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
ACHIEVEMENTS (cont.)

5. Based on a comparison and integration of all achievement measures which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say
T.A.T. Protocol
Male, CA = 10-7

#1 He is sad Q Lip bleeding, violin sitting down there, some paper. That's all--Hairy nappy look like he been fighting--He's kicked out of band--cause he do something wrong. Q He took his violin with him.

#2 Once upon a time lady and man and a horse and another lady--in farm yard looking for food. Lady had books--this one is pregnant. Man looked over by horse. Hand by the ground. Other (pregnant lady) standing up looking in sky. Q She had her baby. And then in old west Indians fight them and took them their food. And killed em and took pregnant lady with them--these two got killed just took pregnant lady.

3BM Boy was sitting on the floor and crying--keys on the floor Q someone hurt his feelings--someone could have called him a bad name crying.

4. Lady hugging man. Man drunk--trying to get him to go somewhere with him. Looks drunk. Hair nappy. He goin to fight someone. Lady pulling on clothes (Q-his wife) Q He got killed and other man took his wife and he got married (her and other man).

6BM The man and lady were sad; someone must of died and they felt sorry for em. Lady tissue in hand. Man looking down to floor Q (who died)--someone kin to em.

7BM The boy and man--the man (older) is dying. Look his eyes closing--(old) man is drunk--(young man) boy is sad--boy is not helping the old man. So he shouldn't get rewarded cause he didn't help the man. Should lay em on the couch.

8BM The man is dead (under knife) in the hospital and all the doctors examine him. A boy is standing there--boy or lady. The boy! Got on a tie. Taking bullet out of em--man is dead. Q Boy standing there--ain't looking, he's afraid. A indian killed em.

13MF She's naked. The boy was crying cause wife was dead, got raped. Boy's mother got raped in her bedroom. He was at school. He say he know who did it. Not goin to tell--cause he might get it next. So then police took him to a children's home. Buried his mother in New York--brick? Q No mother--daddy died a year ago--buried him in Arkansas.

Note: Reaction time was within normal limits (all cards).
I. Intellectual Considerations

A. Based on T.A.T. responses (all 8 cards) estimate, in IQ terms, student's level of intellectual functioning.

NOTE:

1) The following elements thought to be related to intellectual capacity (Henry, 1956) are to be employed in such assessment:

   a) Inclusive whole concepts that are of good quality.

   b) Well-organized and balanced stories.

   c) Stories that are internally consistent and logical.

   d) Number of elaborations upon concepts that are consistent with the central concept of story.

   e) Elaborations on central concepts that serve to clarify, modify, or otherwise improve the preciseness of the concepts.

   f) An organizational level that (depending upon age of subject) goes beyond static enumeration and description.

   e) Number of original concepts.

   h) Range and variations of content topics discussed, objects mentioned, and an abundance of introduced content rich in images.

   i) Keenness and preciseness of the concepts.

   j) Language, vocabulary and grammatical structure indicative of intellectual grasp of mental abstractions.

   k) Story content that suggests that story told has a broader background of thought and experimental content than is actually verbalized.
2) The following intelligence classification (Wechsler, 1949) are to be employed:

<table>
<thead>
<tr>
<th>IQ</th>
<th>CLASSIFICATION</th>
</tr>
</thead>
<tbody>
<tr>
<td>130 &amp; above</td>
<td>Very Superior</td>
</tr>
<tr>
<td>120 - 129</td>
<td>Superior</td>
</tr>
<tr>
<td>110 - 119</td>
<td>Bright Normal</td>
</tr>
<tr>
<td>90 - 109</td>
<td>Average</td>
</tr>
<tr>
<td>80 - 89</td>
<td>Dull Normal</td>
</tr>
<tr>
<td>70 - 79</td>
<td>Borderline</td>
</tr>
<tr>
<td>69 - below</td>
<td>Mental Defective</td>
</tr>
</tbody>
</table>

Circle one of 7 grades listed above.

B. Based on intellectual assessment (section A parts 1 & 2 above) which of the following educational placement categories is suggested (circle one)?

Gifted; Regular Grades; LD; EMH; TMH; BD; Can't say

II. Emotional Considerations (Projective Analysis)

Method of Scoring

Based on S's responses to cards 1 - 13 MF (8 cards in all) you are to rate areas listed under each card on a scale from 1 (extremely low) to 5 (extremely high). Each rating represents your judgment as to whether this subject is more or less i.e., according to how high or low the rating is, characterized by the particular area in question or by its contrary.

Ratings of 4 & 5 are the high ones; 2 & 1, low. A rating of 3 indicates that the characteristic embodied in the description does not carry the significant weight of either the high or low rated items. It is neutral in significance. Thus ratings proceed in varying degrees from the lack of a particular characteristic (1 & 2) to the manifestation of much of the characteristic (4 & 5).

In rating descriptive categories employ interpretive aids (Key Indicators) listed immediately below areas to be rated.
CARD 1

A. Reality Testing as represented by Associations to Stimulus Properties

Key Indicators: "Lip bleeding, violin sitting . . ."

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

B. Self-Concept (self-worth)

Key Indicators:

1) Self-critical or self-depreciatory remarks, i.e., "Lip bleeding . . . Hairy nappy . . ."

2) Confusion between him as a person and violin, i.e., "... violin sitting down there . . .". Identity may not have well defined boundaries.

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

C. Achievement Striving

Key Indicators: Lack of verbage related to achievement motivation.

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

D. Effectiveness of Social Adjustment as Represented by Personal Reactivity to Perceived Stimuli

Key Indicators:

1) Is S punished for social-moral transgression? YES / / NO / /
CARD 1 (cont.)

If yes, what is the source of punishment (rejection)?

a. Is punishment source external, internal (guilt) or both?

b. How reactive is S to punishment and/or rejection? Recall that S's first response was "He's sad .. .".

2) Is there an appreciation of societal standards of behavior? Recall that S was punished for wrongdoing but tendency to resist external control (accommodate to societal standards) persists, i.e., "... took his violin with him . . .".

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

E. Quality of Interpersonal Interaction

Key Indicator: Negative interpersonal contacts implied in "... fighting... kicked out of band... lip bleeding... ."

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

F. Security and Satisfaction Derived from Family Relationships

Key Indicators: Absence of Parental Figures

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)
A. Reality Testing as Represented by Associations to Stimulus Demands (Properties).

Key Indicators: "... looking for food ... Hand by the ground ... ."

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

B. Self-Concept

Key Indicators: The suggestion of weak identity and/or weak role models, i.e., horse is put in foreground with other three figures. Implication: Horse has same standing as human figures.

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)

C. Security and Satisfaction derived from Family Relationships

Key Indicators:

1) Story characters are described in neutral terms (lady, man) as opposed to being characterized as family members (mother, father, sister, brother, son, daughter).

2) Introduction of Indian figures:
   a) Reactivity to family life (attacks family)
   b) Unreal to him to have family type relationships.

1 2 3 4 5
Extremely low low neutral high extremely high

(Select one. Circle both number and corresponding description)
D. Effectiveness of Social Adjustment as represented by Personal Reactivity to Perceived Stimuli

Key Indicators:

1) Possible social-emotional immaturity evidenced by a preoccupation with pregnancy and food. The dynamic source of such preoccupation may be related to unresolved dependency needs stemming from early childhood or more specifically frustrated oral needs related to food deprivation and/or inconsistent handling and/or neglect in early years.

2) Evidence of hostile-aggressive reactivity and concommittant conflict:

a) "... Indians fight them and took them their food..." (suggestion of initial aggressive reactivity and concommittant ambivalence).

b) "... killed em and took pregnant lady with em... these two got killed just took pregnant lady" (baby still intact). There is a suggestion here of a strong need for self-protection (security, warmth) which arises because of own destructive tendencies and/or an unpredictable and dangerous environment.

1 Extremely low 2 low 3 neutral 4 high 5 extremely high

(Select one. Circle both number and corresponding description)
A. Reality Testing as Represented by Associations to Stimulus Demands (Properties)

Key Indicators: Apparently intact (Unimpaired)

1 Extremely low 2 low 3 neutral 4 high 5 extremely high

(Select one. Circle both number and corresponding description)

B. Effectiveness of Social Adjustment Represented by Personal Reactivity to Perceived Stimuli

Key Indicators: Sensitivity to criticism, i.e., "... crying..." (immature response).

1 Extremely low 2 low 3 neutral 4 high 5 extremely high

(Select one. Circle both number and corresponding description)
A. Reality Orientation (Testing) as Represented by Association to Stimulus Demands (Properties)

Key indicators: Inaccuracy of interpretation of stimulus properties, i.e., "Lady hugging man . . ."

1 2 3 4 5
Extremely low low neutral high extremely high

B. Self-concept

Key Indicators:

1) Pronoun confusion, i.e., "... get him to go somewhere with him . . ." (suggestion of identity confusion).

2) Self-depreciatory remarks, i.e., "... Hair nappy . . .".

1 2 3 4 5
Extremely low low neutral high extremely high

C. Security and Satisfaction Derived from Family Relationships

Key Indicators:

1) Suggestion of weak family ties - only introduced figure is someone who takes man's wife away.

2) Family relationship viewed as disruptive and angry.

1 2 3 4 5
Extremely low low neutral high extremely high

D. Effectiveness of Social Adjustment as Represented by Personal Reactivity to Perceived Stimuli

Key Indicator:

1) Disposition of male characters is disruptive and angry and may be a projection of S's own explosive nature.

2) Disposition of female characters is disloyal (not to be trusted), i.e., "... got married (her and other man)". Such may be a self reference or his view of significant others (not to be trusted).

1 2 3 4 5
Extremely low low neutral high extremely high
A. **Reality Orientation (Testing) as Represented by Associations to Stimulus Properties.**

Key Indicators: In terms of stimulus properties, intact.

1. Extremely low
2. low
3. neutral
4. high
5. extremely high

---

B. **Quality of Interpersonal Interaction**

Key Indicators:

1. Interpersonal communication (meaningful discussion) difficult. The man and lady are engaged in independent activities - not communicating.

2. Suggestion rather of tendency or preference for self-absorbing type activity as opposed to interpersonal contact. In this regard associations to self-stimulation are as follows: "... tissue in hand (Card 6BM); ... lip bleeding (Card 1); ... hand on ground (Card 2). There is in this a suggestion that S has a limited ability to stretch perceptions beyond self (lone activities) so as to include others, i.e., "... Lady tissue in hand. Man looking down to floor...".

1. Extremely low
2. low
3. neutral
4. high
5. extremely high
A. Reality Testing as Represented by Associations to Stimulus Properties

Key Indicators: Here reality testing (orientation) may be expanded to mean person-perception and/or social awareness.

1) Relative to Person-perception, note following associations: "... man is dying ... eyes closing. Man is drunk ...".

2) Social awareness - not superficial reason why man is dying: "... eyes closing ... drunk:

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

B. Quality of Interpersonal Interaction

Key Indicators: No real communication between man and boy.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

C. Effectiveness of Social Adjustment as Represented by Personal Reactivity of Perceived Stimuli

Key Indicator:

1) Is S "punished" for social-moral transgression (not helping old man)? Seemingly yes for boy is sad and unrewarded.

a) Is "punishment" source external, internal or both? Initially seems to punish self for passive stance, i.e., "... boy is sad boy is not helping the old man". "Punishment then appears to expand to external sources, i.e., "... shouldn't get rewarded. ...".

b) Is there an appreciation of societal standards of behavior? Seemingly yes, i.e., "... shouldn't get rewarded ...", but S does not seem to go beyond knowing what is expected, i.e., "Should lay em on the couch (but doesn't)". This may betray an inability to accommodate to societal standards (also see Card 1 section D)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>
A. Reality Testing

Key Indicators: In this instance construed to mean the ability to effectively integrate stimulus properties of picture. In this regard, note inability to effectively integrate boy into story and incongruity of Indian as causal agent.

1. Extremely low
2. Low
3. Neutral
4. High
5. Extremely high

B. Self-Concept

Key Indicators: Sex-role confusion, i.e., "boy or lady".

1. Extremely low
2. Low
3. Neutral
4. High
5. Extremely high

C. Effectiveness of Social Adjustment as Represented by Personal Reactivity to Perceived Stimuli

Key Indicators: Man's death was caused by a human agent (Indian). This is the second reference to Indians as aggressive and destructive characters. Despite its immaturity the Indian association might hypothetically be a denial of aggressive tendencies but at same time a projection of self in Indian activity - way of projecting S's explosive nature.

1. Extremely low
2. Low
3. Neutral
4. High
5. Extremely high
A. Reality Testing as Represented by Association to Stimulus Properties

Key Indicators:

1) Breakdown in organization and logic toward end of story. S seems to be responding to highly uncensored - infantile type cues, i.e., "buried his mother in New York brick . . . buried him (father) in Arkansas".

2) Confusion of man and boy and wife and mother (dynamically may be related to unresolved Oedipal).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extremely low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>neutral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>extremely high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

B. Effectiveness of Social Adjustment as represented by Personal Reactivity to Perceived Stimuli

Key Indicators:

1) Refusal to accommodate to societal standards, i.e., "... not goin to tell. . .".

2) Implication of "He was at school": S may have been blamed for a host of wrongdoing. Statement suggests a readiness to explain transgressions away (a NOT-ME posture).

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extremely low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>neutral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>extremely high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

C. Security and Satisfaction Derived from Family Relationships

Key Indicators: First time S has mentioned mother or father (daddy) per se. They are mentioned here, however, in connection with violence and death. As in card 2 healthy family relationships are perceived as unreal to S. Finally, environment is perceived as a hostile one, as one threatening to self ("...get it next. . .") and to the safety and security of family members, i.e., "mother got raped. . .". This perception of environment might be taken literally.

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Extremely low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>low</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>neutral</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4</td>
<td>high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5</td>
<td>extremely high</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Based on an integrative assessment of TAT responses (all 8 cards) rate the following areas on a scale from one (extremely low) to 5 (extremely high).

A. Intelligence

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

B. Reality Testing

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

C. Self-Concept (self-worth)

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

D. Achievement Striving

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

E. Security & Satisfaction Derived from Family Relationships

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

F. Propensity for Aggressive Behavior and/or Outbursts

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>

G. Propensity for Extreme or Severe Mood Fluctuations

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely low</td>
<td>low</td>
<td>neutral</td>
<td>high</td>
<td>extremely high</td>
</tr>
</tbody>
</table>
H. Propensity for Impulsive, Unstable Reaction to Usual Life Stimuli (Lack of ego or intellectual control).

1 Extremely low  2 low  3 neutral  4 high  5 extremely high

I. General Level of Interpersonal Adjustment (quality of interpersonal interaction and/or awareness).

1 Extremely low  2 low  3 neutral  4 high  5 extremely high

J. General Level of Social Adjustment (adaptation to societal standards)

1 Extremely low  2 low  3 neutral  4 high  5 extremely high

IV Based on total TAT analysis which of the following educational placement categories is suggested?

NOTE: Take into account possible emotional involvement which may have reduced intellectual efficiency, i.e., whole compulsion, detail compulsion, unrealistic fantasy, perceptual distortion, etc.

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say
FINAL DECISION

I. Based on a comparison and integration of all data collected by psychologist of record, protocol and achievement, which of the following educational placement categories is most appropriate?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

II. Based on all ancillary information presented, i.e., cumulative school records, school personnel reports, samples of classroom work, what educational placement category is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

III. Based on all information (I & II) state program selection.

IV. Briefly list reasons for program selection.

1. 
2. 
3. 
4. 
5.
Please find enclosed medical and health data and school records for five actual case studies.

The data file presented for each case contains information actually used in the original assessment. Such data is to be used as a basis for your evaluation by answering questions and following directions provided. A brief descriptive statement relative to each student is also provided.

It is understood that all identifying information relative to both student and professional subjects (yourself) will be totally deleted from the records of this investigation.
I. Based on an integration of data collected by school nurse of record (medical health data) which of the following educational placement categories is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

II. Based on all ancillary information presented, i.e., cumulative school records, school personnel reports, achievements, etc., what educational placement category is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

III. Based on all information (I & II) state program selection.

IV. Briefly list reason for program selection.

1.
2.
3.
4.
5.
Please find enclosed achievement data and school records for five actual case studies.

The data file presented for each case contains information actually used in the original assessment. Such data is to be used as a basis for your evaluation by answering questions and following directions provided. A brief descriptive statement relative to each student is also provided.

It is understood that all identifying information relative to both student and professional subjects (yourself) will be totally deleted from the records of this investigation.
ACHIEVEMENTS

1. Based on grade equivalent of reading comprehensive test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant pass-hard, fail-easy test patterning.

   Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

2. Based on grade equivalent of word and letter recognition test (WRAT) and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant patterning of word successes and failures. Also attempt to infer the level of word attack skill development. What can be said about phonetic attack skills, sight word vocabulary. Does student rely on one more than the other? If so, what then can be inferred about maturation in this area?

   Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

3. Based on grade equivalent of spelling test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant patterning of successes and failures, quality of letter construction (firmness, slant and size consistency) and whenever possible, proficiency and method of word attack skill (level of sight word and/or phonetic approach).

   Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

4. Based on grade equivalent of arithmetic test and considerations noted below what educational placement category is suggested (circle one)?

   NOTE: In making your decision take into account any significant pass-hard, fail-easy test patterning, quality of number construction (firmness and size consistency) and relative competency in the various computational skill areas.

   Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say
ACHIEVEMENTS (cont.)

5. Based on a comparison and integration of all achievement measures which of the following educational placement categories is suggested (circle one)?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say
I. Based on an assessment and integration of achievement data collected by classroom teacher and psychologist of record which of the following educational placement categories is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

II. Based on all ancillary information presented, i.e., cumulative school records, school personnel reports, achievements, etc., what educational placement category is suggested?

Gifted, Regular Grades, LD, EMH, TMH, BD, Can't say

III. Based on all information (I & II) state program selection.

IV. Briefly list reasons for program selection.

1)  
2)  
3)  
4)  
5)
Respondent: Parent #1 (mother)

Question: Was there any team member(s) that influenced your decision regarding educational placement for your youngster more than other members?

Answer: "Yes, the classroom teacher was the most important because she tried to help my daughter. But the testing should have been done in first grade."

Question: What is your opinion regarding the manner in which the MDS conference was conducted? Were the purpose and goals of the conference sufficiently explained?

Answer: "I really didn't know what was going on in that meeting. Was it to staff what grade she was going to be in? Didn't know anything about these tests. Even at the district office (where psychological testing was done) it wasn't explained to me what the tests were about. I guess they were to see what grade she would be in. If that is what they were for they should of done them earlier--in first grade."
Question: Did you feel your presence was needed at the MDS conference?

Answer: "Don't really think it was. They will do what they want anyway. I didn't think I helped in making the final decision."

Question: Please describe how school professionals in general and/or individually made you feel at the staff conference. Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?

Answer: "I felt comfortable but what I had to say was not important to them."

The Psychologist: "Don't know what I think about him. Didn't agree with him. My daughter is not slow. She had a good report card. He wasn't much help."

The Nurse: "Didn't say much... no help."

Classroom Teacher: "I have good feelings about her. She knows my child the best."

School Counselor: "She never explained why (child's name) didn't pass to third grade. She got passing grades on her report card."

Social Worker: (Social worker was not present at conference. His report was read by school counselor. He reportedly signed staffing report a week later and remained in agreement with placement decision.)
Question: Is there anything else about the staff conference you'd like to talk about?

Answer: "It gave me a bad feeling. My child did know enough to go on to third grade. She's 9 years old already and the report card said she passed. She would do better if she passed to third grade. It would make her feel good, get her going. But what I had to say about her going to third grade was not important to them. Did what they wanted to do."

Note: Decision of staffing team was to continue youngster in the regular grades. Child, however, was kept in her current classroom situation where children are functioning at the first and second year levels although chronologically they are 8 and 9 years old.
Actual Team Members'
Perceptions of Parent Participation
and/or Presence at the MDS Conference

Question: Was your decision regarding educational placement at any time influenced by parental input and/or parental presence at the MDS conference?

Respondent: School Psychologist

Answer: "No, it was not. Mother's credibility - Her child didn't walk at 9 months. There is all kinds of evidence for developmental delay. I don't usually think parents' perceptions of their children are accurate."

Respondent: School Nurse

Answer: "Parent's hostility made me feel sort of uneasy but I feel she was important in the decision making process. She sort of swayed group from placing child in EMH when she stated that she did not want her child in a retarded classroom. Parental persuasiveness (pressure) seemed to be the key here."

Respondent: Classroom Teacher

Answer: "Not really. I know (child's name) pretty well and would have made the same decision if Mrs. (last name) hadn't been there. I agree with Mrs. (last name) that (child's name) is not retarded but she's still not ready for 3rd grade work. She's improving all the time though."
Respondent: School Counselor

Answer: "No. Child is just fine in the class we have her in now. We'll monitor her progress and review or re-evaluate if she has trouble in the future."
Actual MDS Conference #2

Parent's Perception of Team Members and the MDS Process

Respondent: Parent #2 (mother)

Question: Was there any team member(s) that influenced your decision regarding educational placement for your youngster more than other members?

Answer: "Well, they all were helpful but if I had to choose I would pick the social worker and classroom teacher. They both said things you know is true about him."

Question: What is your opinion regarding the manner in which the MDS conference was conducted? Were the purpose and goals of the conference sufficiently explained?

Answer: "Well, it was somewhat confusing. Is all this therapy for him they are planning going to help him? You know, that speech therapy and that psychological treatment! ... are we going to have to put him in a special place all his life?"

Question: Was there anything else?

Answer: "Yes. The social worker talked so low I could hardly hear him. It was also a little confusing because of people getting up, making calls and talking to each other and I had trouble hearing some of them."

Question: Did you feel your presence was needed at the MDS conference?
Answer: "Yes, I helped them by just being there in case someone wanted to ask me something."

Question: Please describe how school professionals in general and/or individually made you feel at the staff conference? Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?

Answer: "I felt comfortable but at times they didn't talk loud enough."

Psychologist: "She was talking what was true. But IQ-- didn't know what she meant. I didn't think she explained about that and she didn't ask me questions about it to see if I understood her. She should have been clearer about it. But she is a psychologist so she knows what she's doing, I guess."

Social Worker: "He talked kind of low but he was helpful. He explained things ok."

Nurse: "She was helpful - explained things ok."

BD Representative: "She was helpful and explained things ok."

Classroom Teacher: "She made things crystal clear."

Question: Is there anything else about the staff conference you would like to talk about?

Answer: "Not really, but I know (child's name) is a monster. The only time I rest is when he's asleep."
Actual Team Members' Perceptions of Parent Participation and/or Presence at the MDS Conference

Respondents: School Psychologist
Social Worker
Nurse
BD Representative
Classroom Teacher

Question: Was your decision regarding educational placement at any time influenced by parental input and/or parental presence at the MDS conference?

School Psychologist
Answer: "No, it was not."

Social Worker
Answer: "Not really, although I was glad she was there. It showed her concern for (child's name) and it enabled me to talk to her at length about supplemental therapeutic services for (child's name)."

Nurse
Answer: "No it wasn't. I've talked to the mother several times before the staffing. We all know he is a severe behavior problem. It's sort of open and shut. The real question is do we need more than just a Board of Education placement in a classroom for the
Emotionally Disturbed?"

**BD Representative**

Answer: "My decision was not influenced to any appreciable degree by the parent, although hearing from the mother that he continues to be unmanageable at home was helpful."

**Classroom Teacher**

Answer: "No. Mrs. ________ and myself know (child's name) better than anyone. My decision would be the same even in the mother's absence."
Actual MDS Conference #3
Parent's Perceptions of Team Members and the MDS Process

Respondent: Parent #3 (mother)

Question: Was there any team member(s) that influenced your decision regarding educational placement for your youngster more than other members?

Answer: "The psychologist because like she said, there are a lot of things he doesn't understand about school learning. But he's not slow out of school. I trust her to know what is best because she is a psychologist and she should know."

Question: What is your opinion regarding the manner in which the MDS Conference was conducted? Were the purpose and goals of the conference sufficiently explained?

Answer: "Didn't understand lots of things. The words of the psychologist were too technical."

Question: Did you feel your presence was needed at the MDS Conference?

Answer: "No, I didn't say anything. I didn't feel that what I had to say was important to them. They just went about their business. Everything happened so fast. I'll just see what happens - give EMH teacher a chance."

Question: Please describe how school professionals in general and/or individually made you feel at the staff conference. Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?
Learning Disability Teacher

Answer: "I know her. I'm comfortable with her.

Psychologist

Answer: "You don't understand her too much. She didn't make me feel comfortable."

Nurse

Answer: "She was quiet. Can't say about her."

Social Worker

Answer: "Mrs. ______ is a link between me and the school. She convinced me to come to the staffing—good feeling about her."

Question: Is there anything else on your mind about the meeting that you'd like to talk about?

Answer: "My other son (name's youngster) didn't learn anything when he was in the EMH class. I'm afraid (child's name) won't either. People at the meeting said to me that (child's name) will have a different teacher. You know there's one thing I don't get. (Child's name) gets up every morning at seven o'clock and has a paper route until 7:45 everyday before school. He's a Tribune newspaperboy. He's saving up for a "Moped" and he handles money pretty good. (Child's name) has been having this paper route for two months now. But they say he is slow—EMH. I'll accept their decision and see what happens."
Actual Team Members' Perceptions of Parent Participation and/or Presence at The MDS Conference

Respondents: School Psychologist
Social Worker
Nurse
Classroom Teacher
LD Teacher
EMH Coordinator

**Question:** Was your decision regarding educational placement at any time influenced by parental input and/or parental presence at the MDS Conference?

**School Psychologist**

**Answer:** "No" (reluctant to give an explanation - not questioned further).

**Social Worker**

**Answer:** "No - mother was afraid to speak up in front of the group. It was kind of threatening for her. I knew what she was thinking though."

**Nurse**

**Answer:** "Yes, somewhat. Mrs. ______ made me stop and think when she said that she didn't want (child's name) in an EMH class because her other son did not learn anything in that kind of a room. But aside from her feelings about EMH, mother really didn't bring any new evidence to staffing which would forestall an EMH decision."
Classroom Teacher
Answer: "No. She didn't say anything I didn't already know. I've only had (child's name) as a student for eight weeks. I can't say EMH or not, so I went along with the group EMH.

The thing is he doesn't complete assignments and there is some personality conflict between the two of us. Personally I think the kid is a behavior problem, not EMH."

LD Teacher
Answer: "No, I really was not influenced by Mrs. ________. The youngster needs help. He's only working at the third or fourth grade level. He'll never make high school at this rate. (Child's name) is generally slow and in EMH he will be able to graduate and go on to high school. I agree with the psychologist."

EMH Coordinator (In attendance but not technically a part of staffing team)
Answer: "If I was technically a part of this MDS team, I don't think the parent would have influenced me. Parents generally don't want to understand that children can have learning problems. We are not out to hurt or label them but rather to put them in a situation where they can learn. This mother could not accept that her son is slow."
Actual MDS Conference #4

Parent's Perceptions of Team Members and the MDS Process

Respondent: Parent #4 (mother)

**Question:** Was there any team member(s) that influenced your decision regarding educational placement for your youngster more than other members?

**Answer:** Yes, the psychologist. She knew what she was talking about. I had lots of confidence in her.

**Question:** What is your opinion regarding the manner in which the MDS Conference was conducted. Were the purpose and goals of the conference sufficiently explained?

**Answer:** "Well, I did not understand some terms like E.R.A. and EMH. But all took an interest in my child - that's good. The meeting was orderly and all gave their viewpoints."

**Question:** Did you feel your presence was needed at the MDS Conference?

**Answer:** "Yes. That question about how she acts at home was one that only I could answer. I tried to show that she is not as quiet at home and cooperates and is responsible. She is also a pretty happy child at home."

**Question:** Please describe how school professionals in general and/or individually made you feel at the staff conference. Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?
Answer: "The meeting was helpful. It made me feel that (child's name) would be helped and have more confidence in herself. All the people seemed to care about (child's name)."

Psychologist: "Very competent."

Social Worker: "She can't know her. She only sees her once every two weeks. She wasn't that helpful at the meeting. It might help if she saw her more."

Nurse: "I liked her. She helped with some medical information but didn't help me decide on a program like the psychologist did."

ERA Teacher: "She knows (child's name) so well and (child's name) likes her alot. Mrs. ________ was helpful and wants (child's name) to continue with her. If Mrs. ________ dropped her, (child's name) would feel rejected."

Classroom Teacher: "She mentioned how (child's name) is in class. She agreed with group. (Note: Classroom teacher attempted to point out that student was functioning on a much lower conceptual level than her other students.)"
Actual Team Members'  
Perceptions of Parent Participation  
and/or Presence at the MDS Conference

**Question:** Was your decision regarding educational placement at any time influenced by parental input and/or parental presence at the MDS Conference?

**Answer:** (Consensus of team members' opinions summarized by investigator) Although parent was viewed as receptive (easy to talk to), cooperative and appreciative of the job school professionals were attempting to do in her daughter's behalf, they all agreed that the same decision in terms of educational placement would have been made without parental presence at staffing.
Actual MDS Conference #5
Parents' Perceptions of Team Members and the MDS Process

Respondent: Parent #5 (mother)

Question: Was there any team member(s) that influenced your decision regarding educational placement for your youngster more than other members?

Answer: "The social worker said that the program for (child's name) would be good for her and he said that I can get some help for (child's name) at a special agency. I'm going to talk to him about it."

The psychologist helped too by saying that (child's name) is not as retarded as some people may think. This made me feel good and I trusted what they said about (child's name) and I think they know best how to help her.

Mrs. __________ (Special Ed. Teacher) spends time with her, helps her with school and helps her remember. (Child's name) then remembers what teacher says. I want Mrs. (teacher's name) to keep teaching her in that special class."

Question: What is your opinion regarding the manner in which the MDS Conference was conducted? Were the purpose and goals of the conference sufficiently explained?

(After defining several terms in the question, mother was able to respond.)

Answer: "The purpose and goals were not explained too good. I had a good feeling that everyone was there to help though."
Question: Did you feel your presence was needed at the MDS Conference?

Answer: "Yes, you're in charge but I have the final decision. [Child's name] is my child. Probably would have done a good job if I wasn't at staffing. Because of [student's name], that's why it was important to be there."

Question: Please describe how school professionals in general and/or individually made you feel at the staff conference. Were you comfortable or ill-at-ease? Did you feel that what you had to say was important to them?

Answer: "I felt comfortable after we got into the meeting. I sized everybody up and even if I didn't understand all the time what everyone was saying, I still got the feeling about the person. I knew if the person cared and was concerned with [student's name]. Everyone was helpful and wanted the best for my daughter. They know more than me about school learning and those kinds of things."
Actual Team Members

Perceptions of Parent Participation
and/or Presence at the MDS Conference

Respondents: School Psychologist
Social Worker
Special Education Teacher
Nurse

Question: Was your decision regarding educational placement at any time influenced by parental input and/or parental presence at the MDS Conference?

Answer: (Summarized by investigator)

Although all respondents thought Mrs. (mother's name) was pleasant and cooperative and a caring parent, they consistently felt that neither her verbal input or presence had any significant influence on their educational placement decisions.
APPENDIX C

TABLES 11 THROUGH 14 AND TABLE 17
<table>
<thead>
<tr>
<th></th>
<th>WISC</th>
<th>PPVT</th>
<th>BENDER</th>
<th>DAP</th>
<th>ALL ( \text{PSYCHOLOGICAL DATA INTEGRATED} )</th>
<th>ALL ( \text{ANCILLARY INFORMATION} )</th>
<th>ALL INFORMATION (FINAL DECISION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>LD</td>
<td>EMH</td>
<td>*CS</td>
<td>BD</td>
<td>LD</td>
<td>*CS</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>*RG</td>
<td>EMH</td>
<td>LD</td>
<td>BD</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>*RG</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*RG</td>
<td>*CS</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
<td>*CS</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
</tr>
<tr>
<td></td>
<td>40%</td>
<td>80%</td>
<td>80%</td>
<td>40%</td>
<td>40%</td>
<td>40%</td>
<td>80%</td>
</tr>
</tbody>
</table>

*RG = Regular Grades  
*CS = Can't Say
TABLE 11 (continued)
Percents of Agreement of Diagnostic Decisions Made on The Basis of Various Informational Sources Among Simulated Psychologists Across Five Case Studies

Case 2

Informational Sources

<table>
<thead>
<tr>
<th>WISC</th>
<th>BENDER</th>
<th>DAP</th>
<th>TAT</th>
<th>ACHIEVEMENT</th>
<th>ALL DATA BY PSYCHOLOGIST</th>
<th>ANCILLARY INFORMATION</th>
<th>ALL INFORMATION (FINAL DECISION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
<td>BD</td>
<td>LD</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>EMH</td>
<td>BD</td>
<td>EMH</td>
<td>BD</td>
<td>*RG</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
<td>BD</td>
<td>*CS</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>EMH</td>
<td>LD</td>
<td>EMH</td>
<td>BD</td>
<td>*RG</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>EMH</td>
<td>BD</td>
<td>EMH</td>
<td>BD</td>
<td>*RG</td>
<td>BD</td>
<td>BD</td>
</tr>
</tbody>
</table>

100% 40% 80% 100% 60% 100% 100% 100%

*RG = Regular Grades
*CS = Can't Say
TABLE 11 (continued)

Percents of Agreement of Diagnostic Decisions Made on The Basis
of Various Informational Sources Among Simulated Psychologists Across Five Case Studies

Case 3

<table>
<thead>
<tr>
<th>Informational Sources</th>
<th>WISC</th>
<th>PPVT</th>
<th>BENDER</th>
<th>BERRY</th>
<th>DAP</th>
<th>ACHIEVEMENT</th>
<th>ALL DATA BY PSYCHOLOGIST</th>
<th>ANCILLARY INFORMATION</th>
<th>ALL INFO (FINAL DECISION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>LD</td>
<td>*CS</td>
<td>LD</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>LD</td>
<td>*CS</td>
<td>*CS</td>
<td>LD</td>
<td>BD</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>LD</td>
<td>EMH</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>*CS</td>
<td>EMH</td>
<td>*RG</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>*RG</td>
<td>*CS</td>
<td>*RG</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>*RG</td>
<td>EMH</td>
<td>BD</td>
<td>EMH</td>
<td>BD</td>
<td>EMH</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
</tr>
</tbody>
</table>

60% 60% 40% 40% 100% 60% 60% 60%

*RG = Regular Grades
*CS = Can’t Say
### Case 4

**Informational Sources**

<table>
<thead>
<tr>
<th>WISC</th>
<th>PPVT</th>
<th>LEITER</th>
<th>WEPMAN</th>
<th>BERRY</th>
<th>DAP</th>
<th>ACHIEVEMENT BY PSY.</th>
<th>ANCILLARY INFORMATION</th>
<th>ALL INFORMATION (FINAL DECISION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>*CS</td>
<td>EMH</td>
<td>*CS</td>
<td>*CS</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>*CS</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>BD</td>
<td>*RG</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>*CS</td>
<td>EMH</td>
<td>*RG</td>
<td>*CS</td>
<td>EMH</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>*CS</td>
<td>EMH</td>
</tr>
</tbody>
</table>

| 80% | 60% | 60% | 80% | 40% | 60% | 40% | 40% | 0% | 40% |

*ALL DATA BY PSY. = All data by psychologist
*RG = Regular Grades
*CS = Can't Say
TABLE 11 (continued)

Percents of Agreement of Diagnostic Decisions Made on The Basis
of Various Informational Sources Among Simulated Psychologists Across Five Case Studies

Case 5

Informational Sources

<table>
<thead>
<tr>
<th></th>
<th>WISC</th>
<th>BENDER</th>
<th>DAP</th>
<th>ACHIEVEMENT</th>
<th>ALL DATA BY PSYCHOLOGIST</th>
<th>ANCILLARY INFORMATION</th>
<th>ALL INFORMATION (FINAL DECISION)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>EMH</td>
<td>TMH</td>
<td>*CS</td>
<td>TMH</td>
<td>TMH</td>
<td>TMH</td>
<td>TMH</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>EMH</td>
<td>TMH</td>
<td>EMH</td>
<td>TMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>TMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
</tbody>
</table>

|                | 100% | 40%   | 80% | 40%         | 80%                      | 60%                   | 80%                              |

*RG = Regular Grades
*CS = Can't Say
TABLE 12

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Social Workers Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 1</th>
<th>Case 2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Informational Sources</td>
<td>ALL</td>
</tr>
<tr>
<td>SOCIAL ASSESS-MENT</td>
<td>ALL INFO</td>
</tr>
<tr>
<td>ANCILLARY INFO</td>
<td>FINAL DECISION</td>
</tr>
</tbody>
</table>

| Social Worker 1 | *CS | *CS | LD | BD | BD | BD |
| Social Worker 2 | *CS | EMH | LD | BD | BD | BD |
| Social Worker 3 | EMH | EMH | EMH | BD | BD | BD |
| Social Worker 4 | *CS | *RG | *RG | *CS | BD | BD |
| Social Worker 5 | *CS | *CS | *CS | BD | BD | BD |

| 80% | 40% | 40% | 80% | 100% | 100% |

*RG = Regular Grades
*CS = Can't Say
TABLE 12 (continued)

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Social Workers Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 3 Informational Sources</th>
<th>Case 4 Informational Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>S</strong>OCIAL <strong>A</strong>SSESS- <strong>M</strong>ENT</td>
<td><strong>S</strong>OCIAL <strong>A</strong>SSESS- <strong>M</strong>ENT</td>
</tr>
<tr>
<td><strong>A</strong>NCILLARY INFO</td>
<td><strong>A</strong>NCILLARY INFO</td>
</tr>
<tr>
<td><strong>F</strong>INAL DECISION</td>
<td><strong>F</strong>INAL DECISION</td>
</tr>
<tr>
<td><strong>A</strong>LL INFO</td>
<td><strong>A</strong>LL INFO</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Social Worker 1</th>
<th>LD</th>
<th>LD</th>
<th>LD</th>
<th>BD</th>
<th>BD</th>
<th>BD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker 2</td>
<td>LD</td>
<td>EMH</td>
<td>EMH</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Social Worker 3</td>
<td>LD</td>
<td>EMH</td>
<td>EMH</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Social Worker 4</td>
<td>*CS</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>Social Worker 5</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
<td>BD</td>
<td>BD</td>
<td>BD</td>
</tr>
</tbody>
</table>

60% 60% 60% 80% 80% 80%

*CS = Can't Say
TABLE 12 (continued)

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Social Workers Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 5 Informational Sources</th>
<th>SOCIAL ASSESSMENT</th>
<th>ANCILLARY INFO</th>
<th>ALL INFO FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Social Worker 1</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Social Worker 2</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Social Worker 3</td>
<td>EMH</td>
<td>TMH</td>
<td>TMH</td>
</tr>
<tr>
<td>Social Worker 4</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Social Worker 5</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
</tbody>
</table>

80% 80% 80%

*CS = Can't Say
TABLE 13

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Nurses Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 1 Informational Sources</th>
<th>Case 2 Informational Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>MEDICAL HEALTH DATA</td>
<td>ALL INFO</td>
</tr>
<tr>
<td>MEDICAL HEALTH ANCILLARY DATA</td>
<td>FINAL DECISION</td>
</tr>
<tr>
<td>MEDICAL HEALTH ANCILLARY DATA</td>
<td>FINAL DECISION</td>
</tr>
</tbody>
</table>

| Nurse 1 | *CS | EMH | EMH | BD | BD | BD |
| Nurse 2 | *CS | LD | LD | BD | BD | BD |
| Nurse 3 | *CS | LD | LD | *CS | BD | BD |
| Nurse 4 | *CS | LD | LD | BD | BD | BD |
| Nurse 5 | *CS | *RG | *RG | BD | BD | BD |

100% 60% 60% 80% 100% 100%

*RG = Regular Grades
*CS = Can't Say
TABLE 13 (continued)

Percents of Agreement of Diagnostic Decisions
Made on the Basis of Various Informational Sources
Among Simulated Nurses Across Five Case Studies

<table>
<thead>
<tr>
<th>Informational Sources</th>
<th>Case 3</th>
<th></th>
<th>Case 4</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Medical Info</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medical Health Data</td>
<td>Nurse 1</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Medical Ancillary Info</td>
<td>Nurse 2</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Medical Final Decision</td>
<td>Nurse 3</td>
<td>*CS</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Health Ancillary Final</td>
<td>Nurse 4</td>
<td>LD</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Data Info</td>
<td>Nurse 5</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
</tr>
<tr>
<td></td>
<td></td>
<td>60%</td>
<td>80%</td>
<td>80%</td>
</tr>
</tbody>
</table>

*RG = Regular Grades
*CS = Can't Say
TABLE 13 (continued)

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Nurses Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 5</th>
<th>Informational Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>MEDICAL HEALTH DATA</td>
</tr>
<tr>
<td>Nurse 1</td>
<td>EMH</td>
</tr>
<tr>
<td>Nurse 2</td>
<td>EMH</td>
</tr>
<tr>
<td>Nurse 3</td>
<td>*CS</td>
</tr>
<tr>
<td>Nurse 4</td>
<td>EMH</td>
</tr>
<tr>
<td>Nurse 5</td>
<td>*CS</td>
</tr>
</tbody>
</table>

60% 80% 80%

*CS = Can't Say
**TABLE 14**

Percents of Agreement of Diagnostic Decisions Made on The Basis of Various Informational Sources Among Simulated Teachers Across Five Case Studies

<table>
<thead>
<tr>
<th>Case 1 Informational Sources</th>
<th>Case 2 Informational Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACHIEVEMENT DATA</td>
<td>ACHIEVEMENT DATA</td>
</tr>
<tr>
<td>ANGILLARY INFO</td>
<td>ANGILLARY INFO</td>
</tr>
<tr>
<td>FINAL DECISION</td>
<td>FINAL DECISION</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher</th>
<th>ACHIEVEMENT DATA</th>
<th>ANCILLARY INFO</th>
<th>FINAL DECISION</th>
<th>ACHIEVEMENT DATA</th>
<th>ANCILLARY INFO</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
</tr>
<tr>
<td>Teacher 2</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>*RG</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Teacher 3</td>
<td>LD</td>
<td>EMH</td>
<td>LD</td>
<td>*RG</td>
<td>LD</td>
<td>LD</td>
</tr>
<tr>
<td>Teacher 4</td>
<td>LD</td>
<td>LD</td>
<td>LD</td>
<td>*RG</td>
<td>BD</td>
<td>BD</td>
</tr>
<tr>
<td>Teacher 5</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Teacher</th>
<th>ACHIEVEMENT DATA</th>
<th>ANCILLARY INFO</th>
<th>FINAL DECISION</th>
<th>ACHIEVEMENT DATA</th>
<th>ANCILLARY INFO</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teacher 1</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
<td>*RG</td>
</tr>
</tbody>
</table>

60% 40% 60% 100% 40% 40%

*RG = Regular Grades
TABLE 14 (continued)

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Teachers Across Five Case Studies

<table>
<thead>
<tr>
<th>Informational Sources</th>
<th>Case 3</th>
<th></th>
<th>Case 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>All Info</td>
<td>Final Decision</td>
<td>All Info</td>
</tr>
<tr>
<td>Achieve-Ment DATA</td>
<td>EMH</td>
<td>EMH</td>
<td>EMH</td>
</tr>
<tr>
<td>Ancillary Info</td>
<td>EMH</td>
<td>EMH</td>
<td>*CS</td>
</tr>
<tr>
<td></td>
<td>EMH</td>
<td>EMH</td>
<td>LD</td>
</tr>
<tr>
<td></td>
<td>EMH</td>
<td>EMH</td>
<td>*RG</td>
</tr>
<tr>
<td></td>
<td>LD</td>
<td>LD</td>
<td>*CS</td>
</tr>
</tbody>
</table>

80% 80% 80% 40% 60% 60%

*RG = Regular Grades
*CS = Can't Say
TABLE 14 (continued)

Percents of Agreement of Diagnostic Decisions
Made on The Basis of Various Informational Sources
Among Simulated Teachers Across Five Case Studies

<table>
<thead>
<tr>
<th>Teacher</th>
<th>Case 5</th>
<th>Informational Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>ACHIEVEMENT DATA</td>
</tr>
<tr>
<td>Teacher 1</td>
<td></td>
<td>TMH</td>
</tr>
<tr>
<td>Teacher 2</td>
<td></td>
<td>TMH</td>
</tr>
<tr>
<td>Teacher 3</td>
<td></td>
<td>EMH</td>
</tr>
<tr>
<td>Teacher 4</td>
<td></td>
<td>EMH</td>
</tr>
<tr>
<td>Teacher 5</td>
<td></td>
<td>EMH</td>
</tr>
</tbody>
</table>

60%  60%  60%
TABLE 17

Sources of Information in Agreement With Final Diagnoses Across Psychologists

(Sources marked XX)

---

Case 1

Sources of Information

<table>
<thead>
<tr>
<th>WISC-R</th>
<th>PPVT</th>
<th>BENDER</th>
<th>DAP</th>
<th>ACHIEVEMENT</th>
<th>*ALL PSY. DATA</th>
<th>ANCILLARY DATA</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>LD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>LD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>*RG</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>EMH</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>EMH</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* % of Time 80% 40% 20% 20% 60% 100% 20%

* ALL PSY. DATA = All Psychological Data

* RG = Regular Grades

* % of time = Percent of time – per case – each source of information was in agreement with final diagnosis across psychologists

XX = same decision as final decision
TABLE 17 (continued)

Sources of Information in Agreement
With Final Diagnoses Across Psychologists

(Sources marked XX)

<table>
<thead>
<tr>
<th>Sources of Information</th>
<th>WISC-R</th>
<th>BENDER</th>
<th>DAP</th>
<th>TAT</th>
<th>ACHIEVEMENT</th>
<th>*ALL PSY. DATA</th>
<th>ANCILLARY DATA</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Case 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sources of Information</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>WISC-R</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Psychologist 1</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>BD</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>BD</td>
</tr>
<tr>
<td>% of time</td>
<td>0%</td>
<td>40%</td>
<td>0%</td>
<td>100%</td>
<td>0%</td>
<td>100%</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

* ALL PSY. DATA = All Psychological Data

* % of time = Percent of time - per case - each source of information was in agreement with final diagnosis across psychologists

XX = same decision as final decision
TABLE 17 (continued)

Sources of Information in Agreement
With Final Diagnoses Across Psychologist

(Sources marked XX)

Case 3
Sources of Information

<table>
<thead>
<tr>
<th></th>
<th>WISC-R</th>
<th>PPVT</th>
<th>BENDER</th>
<th>BERRY</th>
<th>DAP</th>
<th>ACHIEVEMENT</th>
<th>*ALL PSY. DATA</th>
<th>ANCILLARY DATA</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>Psychologist 1</td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td></td>
<td>XX</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td></td>
<td>XX</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td></td>
<td>XX</td>
</tr>
<tr>
<td>Psychologist 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td></td>
<td>*RG</td>
</tr>
<tr>
<td>Psychologist 5</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td></td>
<td>XX</td>
</tr>
</tbody>
</table>

* % of time = Percent of time - per case - each source of information was in agreement with final diagnosis across psychologists

XX = same decision as final decision

* ALL PSY. DATA = All Psychological Data

* RG = Regular Grades

* % of time = Percent of time - per case - each source of information was in agreement with final diagnosis across psychologists

258
TABLE 17 (continued)

Sources of Information in Agreement
With Final Diagnoses Across Psychologists

(Sources marked XX)

Case 4
Sources of Information

<table>
<thead>
<tr>
<th></th>
<th>WISC-R</th>
<th>PPVT</th>
<th>LEITER</th>
<th>WEPMAN</th>
<th>BERRY</th>
<th>DAP</th>
<th>ACHIEVE-</th>
<th>*ALL</th>
<th>ANCILLARY</th>
<th>FINAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>PSY.</td>
<td>DATA</td>
<td>DATA</td>
<td>DECISION</td>
</tr>
<tr>
<td>Psychologist 1</td>
<td>XX</td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>EMH</td>
</tr>
<tr>
<td>Psychologist 2</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td>XX</td>
<td></td>
<td></td>
<td>XX</td>
<td>XX</td>
<td>LD</td>
</tr>
<tr>
<td>Psychologist 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>*RG</td>
<td></td>
</tr>
<tr>
<td>Psychologist 4</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td>*RG</td>
<td></td>
</tr>
<tr>
<td>Psychologist 5</td>
<td>XX</td>
<td>XX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>XX</td>
<td></td>
<td>EMH</td>
</tr>
</tbody>
</table>

* All % of time = Percent of time = per case = each source of information was in agreement with final diagnosis across psychologists

XX = same decision as final decision
TABLE 17 (continued)

Sources of Information in Agreement
With Final Diagnoses Across Psychologists
(Sources marked XX)

Case 5

Sources of Information

<table>
<thead>
<tr>
<th>Sources of Information</th>
<th>*ALL PSY. DATA</th>
<th>ANCILLARY DATA</th>
<th>FINAL DECISION</th>
</tr>
</thead>
<tbody>
<tr>
<td>WISC-R</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>BENDER</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DAP</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ACHIEVEMENT</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>* % of time</td>
<td>80%</td>
<td>60%</td>
<td>80%</td>
</tr>
</tbody>
</table>

* ALL PSY. DATA = ALL Psychological Data

* RG = Regular Grades

* % of time = Percent of time - per case - each source of information was in agreement with final diagnosis across psychologists

XX = same decision as final decision
The dissertation submitted by Larry Powitz has been read and approved by the following committee:

Dr. Ronald R. Morgan, Director
Associate Professor, Foundations, Loyola

Dr. Joy Rogers
Associate Professor, Foundations, Loyola

Dr. Todd Hoover
Associate Professor, Curriculum and Instruction, Loyola

The final copies have been examined by the director of the dissertation and the signature which appears below verifies the fact that any necessary changes have been incorporated and that the dissertation is now given final approval by the Committee with reference to content and form.

The dissertation is therefore accepted in partial fulfillment of the requirements for the degree of Doctor of Education.

APRIL 16, 1984

Date

Director's Signature