INFORMATION TO USERS

This reproduction was made from a copy of a document sent to us for microfilming. While the most advanced technology has been used to photograph and reproduce this document, the quality of the reproduction is heavily dependent upon the quality of the material submitted.

The following explanation of techniques is provided to help clarify markings or notations which may appear on this reproduction.

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

2. When an image on the film is obliterated with a round black mark, it is an indication of either blurred copy because of movement during exposure, duplicate copy, or copyrighted materials that should not have been filmed. For blurred pages, a good image of the page can be found in the adjacent frame. If copyrighted materials were deleted, a target note will appear listing the pages in the adjacent frame.

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

4. For illustrations that cannot be satisfactorily reproduced by xerographic means, photographic prints can be purchased at additional cost and inserted into your xerographic copy. These prints are available upon request from the Dissertations Customer Services Department.

5. Some pages in any document may have indistinct print. In all cases the best available copy has been filmed.
Thompson, Ann Wengler

THE ASSESSMENT AND REMEDIATION THROUGH PLAY THERAPY, OF PARENTING COMPETENCIES OF MENTALLY RETARDED MOTHERS

The Ohio State University

University Microfilms International
300 N. Zeeb Road, Ann Arbor, MI 48106

Ph.D. 1984
PLEASE NOTE:

In all cases this material has been filmed in the best possible way from the available copy. Problems encountered with this document have been identified here with a check mark ✓.

1. Glossy photographs or pages
2. Colored illustrations, paper or print
3. Photographs with dark background
4. Illustrations are poor copy
5. Pages with black marks, not original copy
6. Print shows through as there is text on both sides of page
7. Indistinct, broken or small print on several pages ✓
8. Print exceeds margin requirements
9. Tightly bound copy with print lost in spine
10. Computer printout pages with indistinct print
11. Page(s) ___________ lacking when material received, and not available from school or author.
12. Page(s) ___________ seem to be missing in numbering only as text follows.
13. Two pages numbered ___________. Text follows.
14. Curling and wrinkled pages
15. Other

University Microfilms International
THE ASSESSMENT AND REMEDIATION THROUGH PLAY THERAPY, OF PARENTING COMPETENCIES OF MENTALLY RETARDED MOTHERS

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

by
Ann Wengler Thompson, B.A., M.A.

* * * * *
The Ohio State University
1984

Reading Committee: Approved by

Dr. Henry Leland
Dr. Michael Guralnick
Dr. Gerald Winer

Adviser
Department of Psychology
DEDICATION

The effort involved in this study was dedicated to two groups of individuals:

First, my children, Dylan and Lincoln, who suffered with me during this pursuit. Through them, the joys and pains of parenthood have become more meaningful to me, and their love sustained me.

Secondly, this study was dedicated to mothers with mental retardation, those I have known and others I have not. Their love for their children and their willingness to attempt their best with the little life has given them, deserves admiration.
ACKNOWLEDGEMENTS

I would like to thank my former and present committee members for their assistance: Barbara Edmonson, Robert Fox, Michael Guralnick, Henry Leland and Gerald Winer.

I would also like to thank the following women who served as therapists in the study: Dr. Arlene DeRienzo, Jennifer Genutis, Rhonda Lilley, Annick Parker, and Dr. Sandra Phalen; and Dr. Lynne Collins who provided our clinical supervision.

Thanks also goes to Susan Stites, Susan Slattery and Raechel Tigner for their technical assistance with editing, typing, and statistical consultation, respectively.

My special thanks goes to my family and friends whose support throughout this difficult endeavor was essential. I would not have done it alone.
VITA

January 12, 1954. Born, Cincinnati, Ohio
1975. B.A. Ohio State University Columbus, Ohio
1976-1978 Psychology Trainee, Nisonger Center, Ohio State University, Columbus, Ohio
1977. M.A. Ohio State University, Columbus, Ohio
1978-1979 Developmental Disabilities Consultant, Clinton County Head Start Program, Wilmington Ohio
1979-1984 Psychology Intern, Franklin County Board of Mental Retardation/Developmental Disabilities, Columbus, Ohio
1981-1982 Development Disabilities Consultant, Southwest Community Health Center, Columbus, Ohio

PUBLICATIONS
Children's books about developmental disabilities and other childhood problems - an annotated bibliography. (Available from Nisonger Center, 1580 Cannon Drive, Columbus, Ohio 43210), 1978.

FIELDS OF STUDY

Major Field: Developmental Psychology

Speciality: Developmental Disabilities and Mental Retardation

Studies in General Developmental Psychology. Professors Henry Angelino, Fred Damarin, John Harrocks, Dorothy Jackson, George Thompson, Charles Wenar, Gerald Winer

Studies in Developmental Disabilities and Mental Retardation. Professors Barbara Edmonson and Henry Leland.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Chapter</th>
<th>Title</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>DEDICATION</td>
<td>ii</td>
</tr>
<tr>
<td></td>
<td>ACKNOWLEDGEMENTS</td>
<td>iii</td>
</tr>
<tr>
<td></td>
<td>VITA</td>
<td>iv</td>
</tr>
<tr>
<td></td>
<td>LIST OF TABLES</td>
<td>vii</td>
</tr>
<tr>
<td></td>
<td><strong>CHAPTER</strong></td>
<td></td>
</tr>
<tr>
<td>I.</td>
<td>INTRODUCTION</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Problem Statement</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Purpose</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Research Question</td>
<td>5</td>
</tr>
<tr>
<td>II.</td>
<td>REVIEW OF THE LITERATURE</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Mentally Retarded Persons as Parents</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Assessment of Parenting Skills</td>
<td>31</td>
</tr>
<tr>
<td></td>
<td>Parent Intervention Programs</td>
<td>41</td>
</tr>
<tr>
<td></td>
<td>Summary</td>
<td>46</td>
</tr>
<tr>
<td>III.</td>
<td>METHODOLOGY</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Introduction</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Subjects</td>
<td>48</td>
</tr>
<tr>
<td></td>
<td>Design</td>
<td>54</td>
</tr>
<tr>
<td></td>
<td>Instruments</td>
<td>55</td>
</tr>
<tr>
<td></td>
<td>Procedure</td>
<td>60</td>
</tr>
<tr>
<td>IV.</td>
<td>STATISTICAL RESULTS</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Research Questions</td>
<td>71</td>
</tr>
<tr>
<td></td>
<td>Findings</td>
<td>72</td>
</tr>
<tr>
<td>V.</td>
<td>CLINICAL OBSERVATIONS</td>
<td>86</td>
</tr>
<tr>
<td></td>
<td>Case Histories</td>
<td>87</td>
</tr>
<tr>
<td>VI.</td>
<td>DISCUSSION</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Restatement of the Problem</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Limitations</td>
<td>122</td>
</tr>
<tr>
<td></td>
<td>Discussion of Statistical Results</td>
<td>123</td>
</tr>
<tr>
<td></td>
<td>Discussion of the OPCIP Revision</td>
<td>127</td>
</tr>
<tr>
<td></td>
<td>Discussion of Clinical Results</td>
<td>129</td>
</tr>
<tr>
<td></td>
<td>Suggestions for Further Research</td>
<td>133</td>
</tr>
<tr>
<td></td>
<td>Summary of the Study</td>
<td>134</td>
</tr>
</tbody>
</table>
APPENDIXES

A. A Survey of Families With Disabled Parents Residing in Franklin County, Ohio .................... 153
B. Flier Distributed to Community Professionals ....................... 167
C. Descriptive Flier for Prospective Clients ....................... 168
D. Introductory Script to Prospective Clients ....................... 169
E. Consent Form ....................... 170
F. Demographic Date Form ....................... 171
G. The Observation of Parent-Child Interaction in Play (OPCIP) (Original Checklist and Manual) ....... 172
H. Play Materials Used for Administration of OPCIP ....................... 177
I. Original Mother-Child Play Therapy Manual ....................... 178
J. Therapy Record Form ....................... 188
K. The Observation of Parent-Child Interaction in Play (OPCIP) Checklist - Revised Checklist ....................... 189
L. A Manual for the Use of the Experimental Method of Mother-Child Play Therapy - Revised ....................... 195
## LIST OF TABLES

<table>
<thead>
<tr>
<th>Table</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Reasons for Subject Attrition</td>
<td>52</td>
</tr>
<tr>
<td>2. Demographic Data</td>
<td>53</td>
</tr>
<tr>
<td>3. Interrater Reliability on Assessment Instrument</td>
<td>68</td>
</tr>
<tr>
<td>4. Interrater Reliability for OPCIP Items</td>
<td>70</td>
</tr>
<tr>
<td>5. HOME: Group Mean Scores and Standard Deviations</td>
<td>73</td>
</tr>
<tr>
<td>6. HOME Scores: Two-way ANOVA, F-values</td>
<td>73</td>
</tr>
<tr>
<td>7. Parent Behavior Progression: Group Mean Scores and Standard Deviations</td>
<td>74</td>
</tr>
<tr>
<td>8. Parent Behavior Progression Scores: Two-way ANOVA, F-values</td>
<td>74</td>
</tr>
<tr>
<td>9. OPCIP: Group Mean Scores and Standard Deviations</td>
<td>75</td>
</tr>
<tr>
<td>10. OPCIP - Socialization Subscores: Two-way ANOVA, F-values</td>
<td>77</td>
</tr>
<tr>
<td>11. OPCIP - Communication Subscores: Two-way ANOVA, F-values</td>
<td>77</td>
</tr>
<tr>
<td>12. OPCIP - Label Subscores: Two-way ANOVA, F-values</td>
<td>77</td>
</tr>
<tr>
<td>13. OPCIP - Play Subscores: Two-way ANOVA, F-values</td>
<td>78</td>
</tr>
<tr>
<td>14. OPCIP Total Scores: Two-way ANOVA, F-values</td>
<td>78</td>
</tr>
<tr>
<td>15. Comparison of Means from OPCIP: t-values</td>
<td>79</td>
</tr>
<tr>
<td>16. Early Intervention Developmental Profile: Group Mean Scores and Standard Deviations</td>
<td>81</td>
</tr>
<tr>
<td>17. Early Intervention Developmental Profile Scores: Two-way ANOVA, F-values</td>
<td>82</td>
</tr>
<tr>
<td>18. Pearson Correlation Coefficients Between Subjects' Pretest Scores on Assessment Instruments</td>
<td>84</td>
</tr>
<tr>
<td>19. Pearson Correlation Coefficients Between Subjects' Posttest Scores on Assessment Instruments</td>
<td>85</td>
</tr>
</tbody>
</table>
CHAPTER I
INTRODUCTION

PROBLEM STATEMENT

The purpose of this research was to examine the parenting competencies of mentally retarded mothers of young children; to provide a program using an experimental technique in a play setting which is designed to enhance the child's development through improving parenting skills; and to evaluate the effectiveness of the therapeutic program.

The reasons for doing this research were based on several considerations:

1. There are many parents who are mentally retarded in the local community who have been identified as having some difficulties with parenting.

2. In reviewing the literature, there is evidence that persons who are mentally retarded are generally considered poor candidates for parenthood and yet some do an adequate job and others have been shown to benefit from training programs.

3. There are few studies which have carefully defined the methods and results of training parenting competencies to those who are mentally retarded.
4. There were no studies found in which psychological services were provided to parents who were mentally retarded.

The concern regarding the competencies of the mentally retarded person to parent has historically had a major effect on the treatment of the mentally retarded. Sir Francis Galton (1869) is credited with first suggesting the eugenic philosophy of preventing the ills of society by preventing the undesirables of a society from producing offspring. Studies of two families, the Jukes by Dugdale (1877) and the Kalikaks by Goddard (1912) provided further fuel for the eugenics movement. The practice of segregation (keeping males and females apart and keeping the retarded away from normal people) and later sterilization, were common practices in the first half of this century.

The 1960's civil rights movements created an atmosphere for asserting the rights of the handicapped and mentally retarded. The principles of normalization, as presented by Wolfensberger (1972) sparked a new wave of providing training to mentally retarded persons and the deinstitutionalization of many. The right to live independently and even marry have become areas of interest to researchers working with this population. Sterilization is being performed less often and more retarded persons are living in the community where sexual freedom and marriage are possible (Bass, 1963). Many are also taking on the responsibility of having children.
In a survey of service agencies in the local area (Franklin County, Ohio which includes the Columbus metropolitan area) this author found a number of mentally retarded parents of young children (birth to 36 months) who have been identified as having some difficulties in their parenting role. The agency which is legally responsible for child protection reported that there were 73 such families on their client rosters in February 1981. (See Appendix A for the full report).

Hertz (1979) and Mira & Roddy (1980) surveyed literature concerning the parenting competencies of the mentally retarded. Many of the studies reviewed were case studies of families identified as having problems. Most of the results indicated that many of the families were suffering multiple problems related to poor child care and neglect. Surprisingly though, many studies also indicated that many of the parents had at least some competencies and that many were able to benefit from training. Prejudicial treatment by the courts, in the past, has often denied parents who are mentally retarded the chance to benefit from a training program which is usually offered to parents with normal intelligence, who neglect their children.

PURPOSE

According to the reviews cited above, one of the commonly identified strengths of some parents with mental retardation is that of love and affection for their children. And, one of the most
often cited weaknesses of their skills is in the area of providing enrichment and intellectual stimulation for their children. Based on these findings, one of the features of this research program was to use the possible strength of affection for their children to help build the mothers' skills in providing stimulating experiences to enhance the child's development.

Using these features, a technique was developed by this author called the Mother-Child Play Therapy to address the special needs of parents who are mentally retarded. The purpose of the Mother-Child Play Therapy is to provide concrete examples of appropriate behaviors and immediate reinforcement to both mother and child. The therapy is provided in the home play setting where generalization of the behaviors is expected to be greatest. The emphasis of Mother-Child Play Therapy is to improve the mother-child social and emotional interaction, improve communication skills and improve the reading and responding to the cues of the child by the mother.

The purpose of this research was to examine the influence of the experimental treatment called the Mother-Child Play Therapy on the parenting skills of mothers who are mentally retarded and who have young children under 30 months of age. The influence of the Mother-Child Play Therapy was contrasted with the influence of the control treatment of parent counseling.
RESEARCH QUESTIONS

The purpose of this study was to examine and analyze the data pertinent to the following questions:

1. Will experimental treatment of Mother-Child Play Therapy have a greater positive influence than the control treatment on the parenting skills of mentally retarded subjects as evidenced by differences between change scores (from pretest to posttest) of the two groups on a battery of three parenting skills assessment instruments?

2. Will the experimental treatment have a greater positive influence than the control treatment on the rate of development by the children of the mothers who are in this study?

3. Will scores on each of the three assessment instruments of parenting competencies be positively correlated with the scores of each of the other two instruments?

In addition to answering the research questions stated above, relevant descriptive data are provided concerning characteristics of the sample, detailed descriptions of the techniques used in the experimental treatment program, interrater reliability on the assessment instruments and a description of an experimental parenting skills assessment tool called the Observation of Parent-Child Interaction in Play (OPCIP) used in this study.
INTRODUCTION

A review of the literature pertaining to research into the parenting competencies of the mentally retarded will cover the following topics: Sexuality and the sexual rights of the mentally retarded, marriage and having children, parenting competencies and variables affecting those competencies, and training programs for improving them. A review of assessments of parenting skills and some early intervention programs not specifically designed for the mentally retarded will also be presented.

MENTALLY RETARDED PERSONS AS PARENTS

Sexuality and the sexual rights of the mentally retarded

The rights of the mentally retarded to marry and be parents has been a controversial topic for many years. The sexuality of the mentally retarded person and sexuality rights are also important related issues. The state's right to perform involuntary sterilization was declared constitutional by the U.S. Supreme Court in the Buck v. Bell case of 1927 (Vitello, 1978). Sterilization became a regular practice in many institutions in the United States. In 1966, 23 states had laws concerning compulsory sterilization of retarded persons. In many of those states, sterilization
was compulsory for those wishing to be released from the institution. Many marriage licensing laws also prohibited marriage with and between retarded persons (Burt, 1973).

Articles written during the 1940's and 1950's stressed the importance of sterilization and segregation of mentally retarded persons for genetic reasons (producing more defective children) and economic reasons (the cost of caring for the defective children to society), (e.g. Butler, 1945; Gamble, 1946; Hathaway, 1947; and Hill, 1950). By the 1970's, voluntary sterilization with informed consent became the legal standard in most states (Vitello, 1978). Medora Bass was an outspoken advocate of voluntary sterilization, birth control, and sex education for the mentally retarded in the 1960's. Her attitude was that normalization is an easier task for the mentally retarded persons if they (and their guardians or advocates) do not have to be concerned with unwanted pregnancies, (Bass, 1963; Bass & Gelof, 1973; Bass, 1978). In the 1970's, writers such as Gordon (1973, 1977) and Kempton (Kempton, 1975; Kempton & Forman, 1976) presented ways of teaching sex education to mentally retarded and other handicapped persons.

Embedded in these issues pertaining to the sexual rights of the mentally retarded are the rights and needs of the individual with mental retardation and the rights of his or her potential offspring. Many writers such as Vitello (1978), Bass (1978) and Hertz (1979) discuss the rights of the children of parents with mental retardation to be cared for properly. Less often considered
have been the rights of the potential grandparents. Mills (1977) discussed the possible effects on their mentally retarded daughter and themselves if she were to have children. Mills concluded that while he would be supportive of his daughter's marriage for the companionship and independence it would offer her, he thought, she would not be a competent parent without maximum support from others including her parents.

Several authors have also referred to an apparent "need" of persons who are mentally retarded to parent. Edmonson, Wish and Fiecht1 (1977) in a socio-sexual test of 40 adults with mental retardation from both institutions and the community found that 75% wanted to become parents. Gan (1980) reports that of 50 mildly retarded adults, 61% stated in a questionnaire that the retarded should be allowed to have children. Egerton (1967) and Andron & Sturm (1973) report on the anger and resentment of married persons with mental retardation concerning their sterilization. Two of Edgerton's couples of whom only the mother was mentally retarded, had successfully adopted a child. Andron & Sturm reported that three of the seven sterilized couples in their study spoke of wanting to adopt a child. They also discussed the couples' "need to parent." This was visible in such behaviors as excessive expenditure of energy on pets, stuffed animal and doll collections, and volunteering for Head Start. Mills (1977) discusses ways in which his daughter's maternal instincts could be appropriately
sublimated into providing care to others such as the elderly, the
handicapped or young children.

Marriage

While marriage is not a requirement for bearing and rearing
children, it seems relevant to examine the literature regarding
marriage of those who are mentally retarded. It is difficult to
determine the incidence of marriage in this population. Many of the
studies are case studies of subjects who could be located, rather
than random samples of married and single persons. Variables such
as the IQ criterion or the sample, date of study, location,
methodology, and whether the subjects have children, all affect the
comparability of the studies. Some of the studies concerning
marriage of the mentally retarded will be briefly described below,
in chronological order:

- Kaplan (1944) studied 56 (46 females, 10 males) former
residents of a California institution who were married. He found
that 63% of the females and 40% of the males were still maintaining
the marriage and were judged by a social worker to be satisfactory
two years later.

- Halperin (1946) studied the IQ's of family members of
institutionalized mentally retarded persons in northern Ohio. He
found evidence for "assortative" mating (i.e. mentally retarded
persons were more likely to marry other mentally retarded persons).
- Mickelson (1947) also found that test IQ's of married couples all of whom had been institutionalized, were significantly correlated.

- In Bass' 1963 review of the literature on marriage, she reported several studies showing satisfactory adjustment to marriage by mentally retarded persons.

- Peck & Stephens (1965) did a follow-up study of the post-training effects on personal, sociocivic and vocational success on 125 randomly selected mentally retarded males in Texas. Fifteen of the 185 (12%) were or had been married, seven were divorced or separated.

- Edgerton's book, *The Cloak of Competence* (1967) is a well known study of former residents of a California institution. He reported that 30 of the 48 clients studied were married, 12 of them to other mentally retarded persons. A variety of levels of stability were found in the marriages.

- Abbott & Ladd (1970) provided a detailed case study of two couples who received premarital counseling and training at a residential facility in New Jersey. One of the couples decided not to marry and one couple did marry. The tone of the article was one of conservative optimism, as the married couple seemed very dependent on others. In a follow-up report on the same married couple, Bowden, Spitz & Winters (1970) reported on the many difficulties the couple later encountered, including the problems consequent to the birth of two children.
- Mattinson (1971, 1973) conducted a study of 32 former residents of an institution in England. Many of the couples had met in the institution. The marital relationships were rated as satisfactory in 19 of the 32 marriages, 6 had some stress, and 7 were unsatisfactory. Satisfaction was determined by opinions of the investigators regarding affection, support and dependency between the couples.

- Henshel (1972) reported on 109 mentally retarded persons in Texas. 49 of the subjects were single, the other 60 were married (30 couples). Henshel provides a very detailed case study of each of the couples. He found a wide range of level of satisfaction and harmony within the marriages. One interesting finding was that contentment in marriage was significantly related to the reaction of the spouse's parents to the marriage. When the parents were pleased about the marriage, only 9% of the marriages were unhappy; when the parents were unhappy about the marriage, 42% of the couples were unhappy about their marriages (p. 210).

- Scally (1973) in a survey of all mentally retarded persons in Northern Ireland, found that of a total mentally retarded population of 4,631, 342 (7.4%) were married.

- Andron & Sturm (1973) questioned 12 couples in the Los Angeles area of which at least one partner was mentally retarded. Both partners of 10 couples were mentally retarded. Of the 12 couples, two had separated for a time. Half felt they had no marital problems and the other half felt they could solve their own disagreements by talking about them.
Floor, Baxter, Rosen & Zisfein (1975) found that 37% of the former residents of a Pennsylvania institution had married. Of those married, 65% were married to other persons with mental retardation. 15% of the couples were divorced. 31% of the couples were managing a satisfactory relationship, 20% were satisfactory with some stress, and 6% were judged unsatisfactory. Degree of satisfaction was judged by raters on such factors as presence of problems, degree of harmony or fighting, and level of child care.

Myers (1978) described in a biographical book, the relationship, preparation and eventual marriage of a couple, both of whom are mentally retarded. The determination of the couple to acquire the skills and independence needed to marry, and the efforts of family members and professionals to assist them are two important features of the book.

Sitkei (1980) in a two-year follow-up of 1804 residents of group homes across the United States found that only 21 (2.8%) had married and therefore had left the group homes.

Bass (1963) and Fotheringham (1971) discussed attitudes concerning marriage of the mentally retarded. Both suggest that marriage can be beneficial for these persons. The following are some of the positive aspects of these marriages: it provides a socially acceptable outlet for normal sexual activity, it provides companionship, and it often provides for greater competence as the spouses often bring different and complimentary strengths and weaknesses into the relationship. Both authors expressed caution
concerning these couples' ability to provide adequate child care and suggested voluntary birth control.

The Mentally Retarded Having Children

Reliable data regarding the number of persons with mental retardation who have children and the number of children they have are difficult to obtain. As with all of the studies cited above which pertain to marriage, the lack of comparability between studies is a problem. Many studies (e.g. Mickelson, 1947, 1944, Shaw & Wright, 1960, Sheridan, 1956) refer only to married persons who are mentally retarded and who have children. This is already a biased sample because it is likely to have ruled out (depending on the author's definitions) those who have children and are not married and those who have had children (whether married or not) and no longer have custody of them. In addition, change in sterilization laws and practices makes it very difficult to compare older samples with more recent ones. Based on these considerations, it seems fruitless to cite actual figures. However, those studies most relevant to the present investigation of parenting skills will be presented below.

Statistics concerning the number of children in families with at least one mentally retarded parent who is helping in the rearing of children are somewhat easier to examine. Problems of comparability of studies have already been cited. The socioeconomic status variable is an important variable here, because families
with parents with mental retardation are often in the lower economic levels. Estimates for the average number of children range from 1.2 - 6.6 per family in the studies referred to in this paper (Bass, 1963, Mira & Roddy, 1980, Shaw & Wright, 1960).

**Parenting Competencies of the Mentally Retarded**

Mira & Roddy (1980), and Hertz (1979) have analyzed many of the studies concerned with the parenting competencies of mentally retarded persons. Probably the most important general finding was that adequate empirical studies do not exist which carefully control for significant variables such as source of referral (many studies include only families referred for help), and socioeconomic status level (comparing them with middle class standards only, rather than including neighborhood standards). Many of the studies were also very outdated (e.g., many were done in the 1940's), they applied varying standards concerning IQ levels (most included those in the borderline range of intelligence), and they applied differing and usually not well-defined criteria for assessing the competencies. In spite of many methodological flaws, these studies need to be examined as a basis for determining what information is still needed.

Mira & Roddy (1980) and Hertz (1979) described the different dimensions of parenting competencies which have been examined by other investigators and used by the courts to determine adequacy.
For the purposes of this review, the following categories suggested by the above authors will be used: (1) general caregiving, including those studies which discuss neglect; (2) physical care, including health, nutrition and hygiene; (3) love, affection and emotional support; (4) intellectual stimulation (among these will be studies which look at the relative IQ scores of parents and their children, in which the heritability and environmental factors were usually confounded; (5) housekeeping; and, (6) abuse.

As Hertz (1970) reported, there is still prejudicial treatment of the mentally retarded by the legal system in the United States. One problem is that those who are mentally retarded are presumed to be incompetent because of their retardation, and are therefore not usually given the customary chance to prove that they can benefit from training to improve their skills.

**General Caregiving**

Many authors have expressed the opinion that mentally retarded persons should not be parents. Bass (1963) suggested that those with mental retardation should not be parents because their mental age reflects their emotional maturity more accurately than does their chronological age, which makes them too immature to raise children. Hill (1950) stated that mentally deficient persons are not suitable parents for either normal or subnormal children and recommended sterilization. Madsen (1979) said that "The parenting needs of this group are so great that many parents neglect their children without realizing they are doing so." (p. 195).
Mickelson (1947, 1949) in a study of 90 families in Minnesota with one parent who was mentally retarded, found that 39% of the families had one or more child removed from the home. The reasons for removal included neglect and the presence of a mentally retarded child who "needed" institutionalization. The average IQ of the mentally retarded parent was 58.6 points. Mickelson (1947) used the following definitions to classify child care by these parents:

For example, a rating of Satisfactory meant not only the absence of complaints from the community, but positive evidence that the children were kept clean, adequately fed, clothed and supervised, and regular in school attendance. A rating of Questionable indicated some inconsistency or inadequacy of care but not of sufficient degree to justify removal of the children as neglected. A rating of Unsatisfactory meant either that the children had been removed as neglected (there were ten such cases) or that their care was sufficiently poor to justify consideration of such action. (p. 645).

She found that 42% of the families were judged to be giving satisfactory care, 32% questionable care, and 26% unsatisfactory care.

Brandon (1957) reported on 73 women with children who had been residents of Fountain Hospital for the mentally defective in England. IQ levels averaged 60 to 73.5, depending on which intelligence tests had been administered. A social worker familiar with these mothers ranked them on a 5-point scale concerning their adequacy as mothers and housewives. The majority were scored at least average for their neighborhood on these skills.

Shaw & Wright (1960) found that 36% of the children in their study of families with parents who were mentally retarded, had been
removed from the home at least once.

Mitchell (1947) found that only 3 out of the 28 mothers with mental retardation (IQ's below 80) studied in Connecticut, were giving "good" care to their children. There was no definition of what constituted good care.

Mattinson (1971) found that 15% of the group of offspring of former institutional residents in England had been removed from their home for neglect. She found a variety of levels of child care in the homes.

Polansky, DeSaix & Sharlin (1972), although providing no supporting evidence or data, discuss the neglect and poor child care expected from a mildly mentally retarded mother.

Scally studied families with at least one mentally retarded parent in Northern Ireland (1972). Of the 342 families with 720 children, he reported that 62% required some form of child care assistance and that 30% were rearing the children unsatisfactorily (which could be interpreted to mean that 70% were giving satisfactory care with some assistance).

In a 1975 article, Berry and Shapiro state the following:

It is usually assumed, when handicapped individuals are barely managing to survive as a family unit in the community, that children would present an unmanageable burden which would lead to the break-up of the marriage. We found that in most cases the children have formed a very strong binding link holding the marriage together . . . The quality of child care may be poor and many mothers are incapable of running what, by middle-class standards, would be considered an acceptable home. These families are in desperate need of the support given to them by the social services and other agencies and would break down without it. (p. 797).
In Robinson's (1970) study of parental attitudes of those who were mentally retarded, it was reported that the mentally retarded mothers reported more protecting, controlling and punitive attitudes than a control group of college educated mothers. The attitudes assessed were not verified by observations of actual parental behavior. The generally poorer verbal skills and greater acquiescence typical of the mentally retarded may have influenced their responses on these issues.

In conclusion, studies concerned with the adequacy of general child care given by mentally retarded persons seem to agree on only one point: that some are capable of giving satisfactory care and some are not. The percentages falling into each category vary greatly depending upon the population and methodology used. Perhaps the most encouraging finding was that some retarded parents can give adequate care (e.g. Brandon, 1957; and Mickelson, 1947, 1949).

**Physical Care**

Probably the most common assertion of those opposed to mentally retarded persons having children, is that they will be neglectful parents. The topic area of physical care includes many different skills, some of which have been discussed under General Care. Topics specifically included under this heading are: **health care** (obtaining proper medical care and administering medical treatments such as medication); **hygiene** (cleanliness as in bathing, diapering and dental care); **clothing**; **nutrition** (providing proper types and amounts of food); and **safety** (keeping the environment
free of hazards and maintaining proper supervision of the child). While physical care is very important for the well-being of the children, there is little discussion of these topics in the literature reviewed.

Mitchell (1947) found in her study that 9 out of 120 (2.5%) children were suffering from serious health problems. Many of the cases were apparently due to neglectful child rearing practices by the retarded mothers. Brandon (1957) reported on a higher death rate among children of the mentally retarded. Sha & Wright (1960), Mickelson (1947), and Sheridan (1956) discuss the large proportion of mothers in their studies found to be neglectful. Specific behaviors (or lack of them) indicating neglect were not well defined in these studies. Pavenstedt (1971) wrote that mental retardation was present in the largest group of families with whom she worked in a housing project in Boston, for whom concerns regarding child care and health problems were present.

Mattinson (1971) described 34 of a total of 40 children of couples with mental retardation, as being generally in good health and as not appearing malnourished. She also found that 64% of the school-age children were dressed adequately, although they often looked unkempt.

The area of parenting skills which includes the physical care of the children has not been well investigated. No specific conclusions can be made about mentally retarded parents as a group.
Love, Affection and Emotional Support

In reviewing the literature on parenting skills of the mentally retarded, the one most often cited as a strength or positive aspect was the area of love, affection and emotional support. Most of the data is again, anecdotal and poorly defined.

Hertz (1979) reported that in court cases regarding the parental capacities of parents who were retarded, even when the courts have terminated the parents' custody of their children, they acknowledge that the parents were loving and affectionate. Brandon (1957) reported that 20 mothers found to be mentally retarded, were examined by psychologists and psychiatrists regarding the emotional welfare of the children. They found that most of the women with mental retardation exhibited normal mothering behaviors associated with emotional attachment and affection. Several other authors write that the mentally retarded parents' affection for their children is a positive aspect of their skills (Floor et al, 1975, and Sheridan, 1956).

Mitchell (1947) found that 12 of the 28 mothers who were mentally retarded she studied had warm relations with their children. But, 10 of them were found to be lacking in this area. Henshel (1972) in a study of mentally retarded adults in Texas, found that of the 24 subjects who had 66 children, few had warm relationships with their children in terms of physical affection and use of verbal endearments. The author emphasized that the
parents were very concerned about their children and "loved them in their own way" (p. 225).

**Intellectual Stimulation**

The area of intellectual stimulation given by parents who have mental retardation is a complex one. It is impossible to separate the interacting variables of heredity and environment. While heredity is not a factor which can be controlled by the retarded parents, it is nevertheless, an important matter. Studies which were concerned with the hereditary factors of intelligence, and studies which actually examined the parenting skills of mentally retarded parents which are associated with intellectual stimulation, will be examined.

Historically, authors such as Sir Francis Galton (1869), who first discussed eugenics; Dugdale (1877) telling of the Jukes family; Goddard (1912) describing the Kallikaks; and Jenson (1969) all expressed the view that intelligence is a heritable trait. Other authors have stressed the importance of the environment, e.g., Skeels & Dye, (1939), Skodak & Skeels (1949) and Kagen (1969).

There have been many studies done in this century which provide data concerning the incidence of mental retardation in families. Brandon (1957) reviewed those which survey the percentages of mentally retarded children who had mentally retarded parents. The definition of what constitutes being mentally retarded (or defective) varied across the studies. The estimates ranged from
5% to 73%. Brandon (1957) and also Bass (1963) reviewed surveys of the intelligence levels of the children of mentally retarded persons. The figures ranged from 2.5% to 83% of the children who were also mentally retarded.

Authors cited in the above studies (Bass, 1963; Brandon, 1957), using a variety of sampling techniques and definitions of mental retardation have arrived at a wide variety of conclusions. Many of the older studies used the data to support the practices of segregation and sterilization. More recent authors have attempted to define some of the environmental variables which may account for the results (including poor nutrition and health, and poor verbal and intellectual stimulation of the children) (Heber & Garber, 1970; Mira & Roddy, 1980). Many of these studies are as much related to socioeconomic status level as they are to mental retardation.

According to Mira & Roddy (1980) in their review of the literature on the competencies of those who are mentally retarded, very few studies actually observed the parents objectively in parent-child interactions. They reported that studies by Falender & Heber (1975) (the Milwaukee Project) and Ramey & Gowen (1979) taught mentally retarded mothers to improve verbal stimulation skills with their children. They found that positive influences could be made on these parenting skills.

Goldenberg (1974) found that lower-class mothers who had been labelled as mentally retarded showed significantly more competent
parenting in terms of social and cognitive stimulation, when observed in their own homes rather than in a public setting. She attributed this difference to the effect of a social label on the mothers.

**Housekeeping**

Housekeeping is another area which has been examined by those investigating parenting competencies of the mentally retarded. Depending upon definitions, this area also overlaps with the other categories of general child care and physical care. Four studies were found which discussed this. Mitchell (1947) reports that she rated 6 of the 28 retarded mothers in her study as good housekeepers, 11 as indifferent and 11 were rated as poor housekeepers. Sheridan (1956), studied 100 women charged with neglect, who had significantly sub-average intellectual skills, she found them to be "thoroughly incompetent housekeepers" (p. 93), but she provided no supportive data. Brandon (1957) found that 16 of 21 housewives (some with IQ scores above 70) were rated as managing their households on an average or above average level. Berry & Shapiro (1975), in a study of married couples with mental retardation, found that of the 10 couples who had children, their housekeeping was poor compared with middle class standards.

**Abuse**

Abuse, for the purposes of this paper will be defined as the intentional injury of another. This is in contrast to the concept of neglect (this was discussed in an earlier section labeled
"General Caregiving"), which refers to inattention to necessary child care needs due to lack of knowledge, motivation, or judgment (Kempe & Helfer, 1980). Mental retardation has been cited as one factor associated with child abuse (Fontana, 1973, 1980). Other factors associated with abuse which may often be associated with those who are mentally retarded include: poverty, poor education, immaturity, a history of being abused, and prematurity and neurological deficits of the child (e.g. Pelton, 1978; Egeland & Brannquell, 1979; Chase, 1976; and Shorkey, 1978).

Belsky (1980) offers an ecological interpretation of the various theories and approaches to the study of child maltreatment. Using Bronfenbrenner's (1977) framework for the ecological study of human development, he sees child maltreatment as being attributed to interdependent and embedded variables of the individuals (the child and parent), the family (their interaction) the community, and the culture.

No studies were found which specifically studied the relationship between intellectual level and child abuse. Schilling, Schinke, Blythe, & Barth (1981) report that in their casework, mental retardation may adversely affect child rearing skills. But they cautioned against prejudicial condemnation of the mentally retarded parents on the grounds that some do abuse their children. Several other case studies (Crain & Millor, 1978; Bowden, et al, 1971; and Abbott & Ladd, 1970) reported child abuse by some mentally retarded parents.
Henshel (1972) described the mentally retarded couples from Texas as commonly using corporal punishment, but they were not described as being abusive. Their behavior was also not compared with others parents of normal intelligence of the same socio-economic status level. Robinson (1978) found that in an attitude survey, the mothers who were mentally retarded reported more punitive attitudes towards their children. This was not compared with actual observation of their interactions with their children.

Variables Associated With Parenting Competencies

Many variables can be identified which may be related to the parenting skills of individuals. For example, whether it is a single or two-parent family, the extent of marital satisfaction, adequacy of income, the presence of emotional problems in family members, number of children, the education and training of the parent, adaptive behavior skills, and parenting models all may contribute to the parenting skills of any individual. (Hertz, 1979; Mira & Roddy, 1980).

Mickelson (1947), Borgman (1969), Mitchell (1947) and Shaw & Wright (1960) all found that IQ was generally uncorrelated with the level of parenting adequacy when above 50 or 60 IQ points. Below that level, there were significant correlations between inadequate care and intellectual level.
Budd & Greenspan (1983) discuss the important factors of intelligence other than that represented by the IQ score. They stress the importance of social intelligence ("a person's ability to understand and to deal effectively with social and interpersonal objects and events") (p. 16) and "practical intelligence" or adaptive behavior skills.

Mickelson (1947), and Shaw & Wright (1960) found that mentally retarded parents provided better care on the average, if the number of children was few. Economic level (which may also be related to the number of children) was found to be related to level of child care. Shaw & Wright (1960) found, as often seen in other populations, that neglectful mentally retarded parents were more likely to have been neglected by their parents. Brandon (1957) also cites poor parental and family histories of the mentally retarded parents she studied.

Mickelson (1947) found that marital harmony, parents' freedom from physical problems, and good mental health of the parents were all positively correlated with better child care. Budd & Greenspan (1983) discuss the importance of prior experience with children, i.e. those who had little contact with children while residing in an institution vs. those living at home with siblings.
They also cited the important aspect of self-esteem as having an influence on the parents' ability to cope with child-rearing.

Training Parenting Skills To The Mentally Retarded

A number of programs have been done which were designed to improve the parenting skills of mentally retarded parents. The programs vary as to whether the child, the family, or the parent is the focus. The method of presentation also varies, e.g. teaching specific skills, modelling, social case work, counseling, etc.

Mitchell (1947) examined the effectiveness of general social case management being provided to mentally retarded mothers. She classified objectives in five areas: (1) to improve care of child or have child placed, (2) give child outside experience (camp, nursery, etc.), (3) help with budget planning, (4) help with other concrete matters (housing, ADC, etc.), and (5) relieve emotional pressures. She found that 60% of the case achieved at least some of the identified goals. Variables related to success included maternal affection for the children and managerial ability, but not the mother's intelligence level in terms of her IQ score.

Mickelson (1947; 1949) in a rather complicated investigation of 90 couples, one of whom was mentally retarded, examined whether they could be helped to improve child care. Services provided included: family planning, direct services to the children (such as placement, medical care, counseling), counseling, removal of the children, and sterilization. She found three levels of success: (1)
the parents' skills improved so that no further services were needed (21%), (2) the families continued to depend on agency intervention to maintain adequate care of the children (50%), and (3) removal of the children was necessary (29%).

Sheridan (1956) discussed a residential program for 100 neglectful mothers the majority of whom had significantly low IQ scores (average IQ was 79.8). Housekeeping and child care skills were taught, although they were not well defined or described. 76% of the group were observed to benefit from this training.

Jaccobucci (1965) and Polansky, et al, (1972) described social case work with mentally retarded mothers. They discussed in general terms, the need to understand that these women are expected to be rather immature and to need concrete explanations.

Kugel & Parsons (1967) reported on a program used with mentally retarded children who had at least one mentally subnormal parent. Services provided included: medical and dental care, training of mothers in nutrition and food preparation, nursery school for the children, group meetings with mothers and sewing classes for mothers. No objective assessment of parenting skills was done. Success was measured by increased IQ scores of the children.

The Milwaukee Project (Heber & Garber, 1970, Garber, 1975; and Garber, 1973) was described as an infant stimulation and parent training program for low income and mentally retarded mothers (IQ scores below 75). Rather amazing improvements were reported in
terms of verbal skills and IQ scores of the experimental vs. control groups. The mothers in the experimental group also received training in verbal stimulation and homemaking. Several authors have questioned certain methodological problems with the study (Throne, 1976; Sherman, 1981).

Hockey & Bain (1979) described a study in Australia of mentally retarded women with children. A social worker provided prenatal and contraceptive advice to the mothers. Child care training was also provided, but it was not described in any detail. The authors recommended prevention of pregnancy in retarded mothers, whenever possible.

Mira & Cairns (1979) described a parent training program which could be used with mentally retarded parents and other at risk families. Results of the trial program have not yet been published. They identified five important goals for improving the caregiving environment, which relate to later child competence:

1. The presence of a parent who not only makes available appropriate environmental stimuli, but who is also a readily accessible stimulus to the infant, particularly providing direct stimulation through vocalizations (Rheingold, 1967; White, 1972).

2. Parents whose interactions with the child are frequently child-initiated and dependent upon the child's signals (Beckwith et al.; [Beckwith, Cohen, Kopp, Parmalee & Marcy, 1976]; Lewis & Wilson, 1972; Yarrow et al., 1972 [Yarrow, Rubenstein, Pederson & Janowski]).

3. An environment that includes objects to explore, opportunities for floor freedom, and relative freedom from physical restraint (Beckwith et al., 1975; White, 1972).
4. An environment that provides the child with ready opportunity to hear verbal labels (Wachs, Uzgiris & Hunt, 1971).

5. Parental responses that are relatively free from constraining elements such as certain types of questions, commands and criticism, and high in verbal models and attending comments (Bayles, 1974; Hetenyi, 1974; Leifer & Lewis, 1978; Nelson, 1973; Seitz & Reidell, 1974; Whitehurst, Novak & Zorn, 1972).

The program is done on a one-to-one basis with the infant and parents.

Madsen (1979) described a parent training program presented in a group lecture format. It is basically an adaptation of the Red Cross parenting course, which used demonstration and practice of child care techniques. Again, no criteria for success were used, but the author felt it had been helpful.

Project ESPRIT (Educational System in Parenting for the Retarded with Infants and Toddlers), Sherman (1981a, 1981b, Flory, 1981) provided assessments of the parental skills and independent living skills for mentally retarded parents. The assessments were criterion referenced and defined programing goals. This three year study, is currently in process so the results are not yet available. According to Flory (1981) some preliminary results indicate positive effects on the children's developmental skill acquisition.

Rosenberg & McTate (1982) describe a variety of services provided to mentally retarded mothers who were referred for help with "serious parenting problems". Services included weekly home
visits, group meetings to discuss parenting topics, group swimming with babies and mothers together, assistance with acquiring help from public service agencies, and individual counseling. The authors reported success with over half of the families serviced, although empirical data were not presented. The authors noted that one service not provided, but they felt would have been helpful was the opportunity for "parents to have supervised practice in playing with their children in a preschool setting" (p. 37).

Budd & Greenspan (1981) describe a number of unpublished behavioral programs used with mentally retarded parents. They were involved in basic behavioral management training programs which were modified (with more sessions, greater supervising, elimination of the need for reading skills, etc.) for use with mildly retarded parents. The use of parenting salaries such as used by Fleischman (1979) was also described as a successful method.

ASSESSMENT OF PARENTING SKILLS

Parenting skills have been assessed in a variety of ways. Paper and pencil tests of knowledge and attitudes, interview techniques, and observational methods have been employed. Some of these instruments will be reviewed below.
Self-Completed Parent Assessments

Self-completed paper and pencil assessments of parenting skills are probably the least applicable to mentally retarded parent because their reading and writing skills may be limited.

The PARI (Parent Attitude Research Instrument) by Schaefer & Bell (1955) has been used by many researchers in the field of influences of parents on their children (Becker & Krug, 1965). The instrument is completed by the parent by responding to 155 questions on a four-point scale ranging from strongly or mildly agree, to mildly or strongly disagree. Some examples of the items include: "It's best for the child if he never gets started wondering whether his mother's views are right." or "A mother must expect to give up her own happiness for that other child." Attitudes such as hostility, strictness and rejection are examined. The scores appear to have some correlation with observed parent behaviors (Becker & Krug, 1965).

The Mother-Child Relationship Evaluation, Roth (1961) is another self-completed assessment tool. It consists of 48 statements to which the parent responds on an agree-disagree continuum. The items fall into the categories of overprotection, overindulgence, rejection and acceptance. According to the revised manual (Roth, 1979) the instrument is considered a research instrument. Scores are evaluated in terms of percentiles based on a normative sample.
Tymchuck, Hansen, & O'Conner (1980) have recently developed the CPI (California Parental Inventory). It provides responses to 175 true-or-false questions in terms of positive and negative attitudes regarding the child, parenting, one's self, family, marriage, society and developmental differences. It is currently in an experimental form.

The Neonatal Perception Inventory (NPI) developed by Brous- sard, was designed to assess a mother's perception of her newborn as compared with her expectations for an average newborn (Broussard & Hartner, 1971; Erickson, 1976). The comparisons can also be made again when the baby is one month. When the difference between the simultaneously given scales is in a negative direction (i.e., when the mothers sees her own infant as being less adequate than the average newborn) they are identified as "high risk." The instrument is intended for use in a clinical setting by health professionals to help ensure that early attachment and child care are occurring.

**Interview Methods of Parental Assessment**

Many of the assessments which will be discussed in this section include interviewing as one technique to gather information. The following two methods of assessment require only an interview with the parent.

Newberger (1977, 1980), using the dilemma approach of Piaget and Kohlberg, developed the Parent Awareness interview to assess their attitudes and understanding of their children and their own
childrearing beliefs. She proposed a developmental approach to parenting skills:

Level 1. Egoistic orientation: The parent understands the child as a projection of his or her own experience, and the parental role is organized around parental wants and needs only.

Level 2. Conventional orientation: The child is understood in terms of externally derived . . . definitions and explanations of children . . .

Level 3. Subjective-individualistic orientation: The child is viewed as a unique individual who is understood through the parent-child relationship rather than by external definitions of children.

Level 4. Process of interactional orientation: The parent understands the child as a complex and changing psychological self-system. The parent as well as the child, grows in his role . . . . (Newberger, 1980, p. 50).

The interview was field-tested on parents of different economic and educational backgrounds to establish the levels. Normative data have not been published.

Robinson (1978) used an interview method to determine parental attitudes of retarded and normal intelligence mothers. A series of nine questions were used to examine protectiveness, control and punitive attitudes.

Observation Tools

Observation of parenting behaviors has become a very popular method of assessing parental skills. The methods range from detailed analyses of video-taped interactions to the use of general checklists to be completed by a home visitor or trained observer.
These methods vary with respect to the amount of structure imposed by the observer.

Ainsworth, Bell & Stayton (1973) described an observational method first used to examine the concept of stranger anxiety in infants. It involves recording behaviors of mother and infant in several different situations: being alone, with a stranger, after the stranger has left, etc.

Lewis & Goldberg (1973) and Yarrow, Robertson, Pedersen & Jankauski (1973) described a time-sampling technique which has been used by many. This consists of observing the mother and infant at designated time intervals, and recording the coded behaviors of both. Other similar methods are reviewed by Stone, Smith & Murphy (1973).

Stern, Caldwell, Hersher, Lipton & Richmond (1969) discuss a rather complicated study of the mother-infant dyad. They used observation of the mother's and infant's behaviors as two of the measures. They also assessed personality factors of the mother.

Mira & Cairns (1979) used timed play sessions to observe the mother's positive and negative behaviors (such as praising and commanding) and the child's vocal behaviors and compliance. In this method the total number of each class of behavior is tabulated. Parents are instructed in some sessions to direct the child's behavior (the Parent's Game) and in some, to not direct the child (the Child's Game). No data are yet available on results of using
this method, but it has been used in conjunction with a training program with mentally retarded mothers.

Foley, Parco & Evaul (1978) have developed the **Needs Assessment Inventory**. It is used to help provide services to families with a handicapped child. The items are scored by a rater who is familiar with the family. The items cover nine areas: family environment, nutrition, medical needs, parent concept of child, parent's emotional well being, parent as teacher, financial resources, marriage and family, and interview tone.

The **Vulpe Assessment Battery** (Vulpe, 1970) was designed to provide individual programming for the atypical child. It includes criterion-referenced items on developmental skills and the environment. The environment section examines the provision for basic physical, psychological, developmental and social needs of the child, the characteristics of the caregiver, the understanding of caregiving concepts and developmental processes by the caregiver, and teaching and behavior management skills of the caregiver. The tool can be administered by observation and/or an interview. The items are rather general in scope and require observer interpretation of behaviors.

Robertson (1978) designed a short checklist called the **Inventory of Mother-Infant Interactional Behaviors**. It was used with teenage mothers in a parent training program. The seventeen items are scored by an observer who tabulates the total number of
times each category of behavior is observed. Language facilitation and social-emotional and physical development activities are included. No standardization was presented.

Forrester, Hardge, Outlaw, Brooks & Boismier (1971) used a nonstandardized outline of general maternal behaviors which are to be observed by home visitors, in conjunction with their work with low-income mothers and infants in Tennessee. The behaviors assessed include: physical handling and guidance of the infant, reaction towards the infant, maternal teaching practices, selection of age-appropriate play materials, etc. The assessment is to be repeated over time by a home visitor who is quite familiar with the mother and infant.

Lief & Fahs (1979) described a curriculum for parenting education for the first year of life which is to be done in a group setting. A short checklist was used by the instructors to rate the parents on twelve items falling into three categories: experience provided, attitudes and development issues. No standardization was done, but authors recommended various action plans depending on the scores.

The Child Level of Living Scale, by Polansky, Smith, Wing, DeSaix and Borgman is a lengthy assessment of parenting skills and the environment of a child (Polansky, DeSaix & Sharlin, 1972). Total scores were used to define the level of neglect as based on quintile scores of 65 low-income families in North Carolina. Part A (Physical Care) has 87 items falling into 14 subscales: comfort,
safety, state of repair, hygiene, feeding patterns, safety precautions, disease prevention, use of medical facilities, clothing, sleeping arrangements, grooming, home comforts. Certain items such as whether the family has a telephone, sewing machine, type of heating used and whether they have indoor plumbing seem to be culturally loaded. Part B (Emotional/Cognitive Care) which includes 48 items under: cultural artifacts (toys, television), parental play with child, promoting curiosity, consistency in encouraging superego development, level of disciplinary techniques, providing reliable role models (e.g., pride in mother’s cooking and gardening and father’s pride in hunting or building things), and reliable evidences of affection.

Polansky, et al, (1972) also developed a Maternal Characteristics Scale. It looks at the factors of apathy-futility, impulsivity and verbal accessibility. The purpose of the scales is to help case workers assess the family situation and provide services as needed.

Caldwell and Bradley (1978) have spent over 15 years refining an instrument called the Home Observation for Measurement of the Environment (HOME). There are two inventories, the birth to 3 years, and one for 3 to 6 years. As defined by the authors, the purpose of developing the instrument was to examine those processes and variables which are favorable influences in the development of young children.
Both of the HOME Inventories are administered in an interview format in the home, using observation and direct questions. The Birth to 3 Inventory has six subscales: emotional and verbal responsivity of mother, avoidance of restriction and punishment, organization of the physical and temporal environment, provision of appropriate play materials, maternal involvement with the child, and opportunities for variety in daily stimulation. The Preschool HOME has eight subscales: stimulation through toys, games and reading materials, language stimulation, physical environment, pride, affection, and warmth; stimulation of academic behavior; modeling and encouragement of social maturity; variety of stimulation; and physical punishment.

The HOME has been used in a number of research studies reported in Caldwell and Bradley (1978b). Several studies have found scores on the HOME to correlate significantly with later intelligence test scores.

Bromwich, Khoka, Fust, Baxter, Burge and Kass (1978) developed the Parent Behavior Progression (PBP) to assess the development of parenting skills in mothers of high risk infants. The premise of the PBP is based on the theories of bonding and attachment by Ainsworth and others:

When early interactions have not resulted in a mutually satisfying relationship, that is, when bonding and attachment have not been established satisfactorily, the subsequent interactions may fail to lead to the kind of relationship and communication system that will enhance the infant's development. It then becomes the role of intervention to examine or to assess the nature of the interactive process
taking place between parent and infant and to intervene to help make their behavior with each other more reciprocal and their interaction more mutually pleasurable. (p. 9, Bromwich, 1981)

The PBP is in two forms, for developmental ages birth-nine months, and nine-thirty-six months. The PBP is to be scored by a member of an intervention team who is well acquainted with the mother and infant. Scoring is done by checking off behaviors falling into six developmentally sequenced levels. The following levels apply to both forms:

Level I. The parent enjoys her infant.

Level II. The parent is a sensitive observer of her infant, reads his behavioral cues accurately, and is responsive to them.

Level III. The parent engages in a quality of interaction with her infant that is mutually satisfying and that provided opportunity for the development of attachment.

Level IV. The parent demonstrates an awareness of materials, activities, and experiences suitable for her infant's current stage of development.

Level V. The parent initiates new play activities and experiences based on principles that she has internalized from her own experience, or on the same principles as activities suggested to or modeled for her.

Level VI. The parent independently generates a wide range of developmentally appropriate activities and experiences, interesting to the infant, in familiar and new situations, and at new levels of the infant's development.
The PBP score is expected to be scattered across several or all of the levels.

The ESPRIT Project (Sherman, 1981) described earlier, uses several assessment tools designed specifically for use with the mentally retarded mothers in the program. Weekly home visits are made to these families. The assessments they used are:

1. The Parent Questionnaire, which examines the mother's feelings about herself and child. It is done as an interview based on a structured set of questions.

2. The Independent Living Skills Assessment Form which is a criterion-referenced checklist of skills such as: hygiene, house cleaning and maintenance, meal preparation, money management, laundry skills, mobility, and telephone use. These all apply directly to the mother.

3. The Parenting Skills Assessment Form which covers: child nutrition; child hygiene; child health care; child safety; child personality; child discipline; and, child education and stimulation; and,

4. The Safety Checklist to be done by surveying the home.

PARENT INTERVENTION PROGRAMS

Intervention programs with populations other than parents with mental retardation will be reviewed next. Findings from them may provide information useful with parents who are mentally
retarded. General types of early intervention programs can be defined along several different dimensions: (1) target population such as low-income families, high risk children or children with developmental disabilities; (2) type of approach, such as language stimulation, general developmental education; and, (3) type of parent involvement, such as home-based, child-center, parent counseling, etc. Each of these dimensions will be examined further.

The target population of an intervention program can cover a wide variety of groups of people. One of the most common types of populations identified for intervention is that called culturally deprived, disadvantaged or low-income (low SES). The purpose of these programs is to remediate potential deficits in the child's environment due to poor parenting skills of the parent and other problems related to poor education of the parents and limited resources of the family. The effectiveness of this type of program has been rather controversial. Brown (1978) and Bronfenbrenner (1975) review a number of these programs.

Another type of group is that of the disabled. These programs address all types of conditions including mental retardation (such as Down's Syndrome), physical disabilities such as cerebral palsy, sensory handicaps such as blindness and deafness, and other developmental disabilities such as autism. Tjossem (1976) and Friedlander, Sterritt & Kirk (1975) provide collections of reviews of programs such as these. In addition to the published studies,
there are many local educational programs for the mentally retarded and developmentally disabled.

The term "high risk" has been used to apply to any number of types of problems. Some such as Meier (1976), describe a broad definition which encompasses physical, medical, and environmental conditions which might make a child at risk for developmental delay. Some such as Field (1976) refer to high risk as being medically defined such as with neurologically impaired, low birthweight or premature infants. Kass, Sigman, Bromwich & Parmalee (1976) describe the UCLA Infant Studies project which defines "at risk" as prematurity and low birth weight. They work with the infants and mothers in the home.

The type of approach used in early intervention programs relates to the emphasis of the program. Most would say they are interested in improving the developmental rate of the child. The developmental curriculum which is generally a child-centered educational approach has been applied by many. Some studies may emphasize a particular aspect of learning. For example, Hart & Risley (1976) and Cairns & Butterfield (1976) describe intervention programs which emphasize training language skills. Bricker & Bricker (1976) describe a toddler program which uses Piaget's theory of sensorimotor development as a basis for programming. Levenstein (1970) used a Toy Demonstrator to teach mothers how to stimulate their children with play materials.
The type of parental involvement in a program is an important variable in early intervention. Bronfenbrenner (1975) suggested that parent involvement was very important. Beckwith (1976) discusses the importance not only of the parent involvement in terms of learning to do different activities with her child, but also the importance of the basic caregiver-child interaction as seen in attachment behaviors. Parental involvement can be described in many ways, some of the possible types include:

1. A child-centered approach in which a teacher or home trainer works directly with the child.
2. A child-centered approach which includes parents in some of the intervention, often as an observer in the classroom.
3. A parent-centered approach which uses educational techniques to train the parent in parenting skills which pertain to her child.
4. A parent-centered approach which uses counseling.
5. A parent-child interactional model which defines the dyad as the primary focus.

Head Start is an example of the child-centered approach where preschool age children come to a learning center and are taught by a group of trained teachers. Parent involvement is not specifically discouraged in this type of program, but parents are not the primary focus. Bricker & Bricker (1976) and Forrester (1971) describe programs which are child-centered in that they specify
goals in terms of the child's development, but they do include parents in programming decisions and use home-visiting as at least one way of working with the parents.

Parent-centered approaches which use educational, training or counseling methods are reviewed by Noland (1970) and Webster (1976). These are both reviews of programs for parents of handicapped or mentally retarded children. Parent training for normal parents of normal children are commonly found in continuing education and high school programs. Counseling techniques may be specifically focused, such as on behavior problems of a child and how the parents can cope with them, or rather general explorations into the feelings and emotional reactions of families with disabled member.

In an approach similar to that used in the present research, Bromwich (1981) describes the rationale of the interactional model. This approach emphasizes the importance of the mother-child relationship as an important basis for improving the child's individual needs. In the program she describes, an infant curriculum is not used, but rather assessments of mother-child interactions are used to help define goals along with those identified as a problem by mothers of premature infants.

Every early intervention program could be examined along several of the above dimensions. Effectiveness of the programs is difficult to compare. Brown (1978) discusses the problems of methods, samples and especially statistical procedures which may
have a highly significant effect on whether the researcher can provide evidence for program effectiveness. One of the major problems he saw was the researcher's definitions and ways of evaluating the expected results of the interventions.

**SUMMARY**

The results of investigations into the parenting competencies of the mentally retarded were first examined in this chapter. The populations sampled in those studies were often of mentally retarded parents who were identified as having parenting problems. The results, perhaps somewhat surprisingly, were that some of the retarded parents were judged to be competent on at least some skills, and that many were also able to benefit from training programs. The socioeconomic factor was a confounding variable in most studies. It may have been that in some of the studies, the results of negative findings regarding parenting skills were more related to the parents' SES level than to their intelligence level. It must also be remembered that many normal intelligence persons neglect and abuse their children.

Assessment of parenting competencies were reviewed in the following section. Self-completed surveys, interview methods, and observation methods were included. The assessments covered a range of parenting skills, from attitudes; child rearing techniques; levels of understanding the child; analyses of discrete units of
behavior between a mother and child; to global assessments of the total environment provided by the parent.

An overview of early intervention programs which were not specifically designed for mentally retarded parents was also presented. Dimensions such as target populations, types of approach and types of parental involvement along which the programs vary were discussed.
CHAPTER III

METHODOLOGY

INTRODUCTION

The purpose of this research was to study the differential effects of two treatment methods on the parenting skills of mentally retarded mothers of young children. The Experimental Treatment using the Mother-Child Play Therapy and the Control Treatment of parental counseling will be described in this chapter along with details of the methodology used.

SUBJECTS

Criteria

Criteria for the mother-child dyads included in the study were:

1. The mother must have had a problem which was considered to be primarily associated with mental retardation. (Criteria such as having lived in an institution or group home for the mentally retarded or having been enrolled in a special education program were used to determine eligibility.)

2. The child must be under 30 months.

3. The child must not be diagnosed as having severe disabilities or delays. (Children who had received a definite diagnosis of mental retardation or those with obvious physical handicaps were not included.)
4. The mother and child must be living together.
5. The mother must be willing to have someone visit her home weekly for eight to twelve weeks.

Recruitment

Subject referrals were solicited from local agencies in Columbus, Ohio, which were most likely to have contact with mentally retarded mothers. Agencies contacted included: (1) Franklin County Children's Service, which is the primary child protection agency; (2) Franklin County Board of Mental Retardation and Developmental Disabilities, which provides educational and vocational services for birth to retirement age mentally retarded and developmentally disabled individuals; (3) Region 3 Case Management for the Ohio Department of Mental Retardation, which provides case management for retarded individuals in several counties including Franklin County (subjects from Franklin County only were referred); and, (4) two well-child clinics at Children's Hospital and University Hospital, which were most likely to be servicing low-income families with young children.

Professionals in the above agencies were sent fliers (Appendix B) which described the program. They were also sent copies of a pamphlet (Appendix C) which could be given or read to potential clients concerning the program. Subjects were offered, as an inducement to enroll and remain in the program, a selection of five toys for their child. The toys were to be given to the children at the conclusion of the program. Siblings of the target children were also given age-appropriate toys.
Once a referral was received, the author telephoned or made a home visit to explain the program to the mother and to obtain her permission to participate in the program. A sample script of what was told to the mothers is in Appendix D. The information was usually repeated and reworded several times to ensure the mothers' understanding. A sample of the signed consent form is also included (Appendix E). It was read and explained to the mothers with a witness present.

**Sample Selection**

The original sample was to have been twelve mother-child dyads. Referrals to the project came sporadically and many were made following the project deadlines. There were also many subjects who did not complete the entire program. At the end of the original project there had only been 14 actual referrals of subjects who met the five criteria and only six remained in the program to completion. A second group of twelve mother-child dyads were later recruited for the study. Of this group, 15 dyads were involved in the program, but only twelve completed the entire program leaving a total sample size of 18 dyads. Differences in attrition rates for the two different sample groups were related to several factors: 1) there seemed to be an unusually great number of emotionally disturbed mothers and/or very disorganized family situation in the first group 2) the examiner was more discriminating by insisting on only accepting referrals on families who were very interested in participating in the program and 3) the referring agencies were given more time to identify and make
referrals for the second group. There were many inquiries during the referral periods referring mothers who were mentally retarded but who did not meet all of the criteria. The most common was that the mother and child did not reside together because the child had been placed in a foster home due to parental neglect. Caseworkers were hoping that the mothers and children could be brought together for the treatment program in order to acquire skills needed for the child to be returned to the home. There were also inquiries concerning extending the upper age limit of the children included in the study. Reasons for subject attrition are shown in Table 1.

Subjects were originally assigned to the two treatment groups by pairing them according to child's chronological age and randomly assigning one of each pair to each of the groups. When subjects dropped out of the program and additional subjects were included in the study, the later referred subjects were rank-ordered by child's chronological age, paired with other subjects close to their age and assigned to the opposite treatment group.

**Demographic Data**

The demographic data for the 18 mother-child dyads are presented in Table 2. The average age of the children at pretest was 16 months with an average age of 15 months (with a range from 2.5 to 27 months) for the experimental group and 17 months (with a range from 2.5 to 27 months) for the control group. An analysis of variance on the chronological age of the children at the time of pretesting found the difference between the groups not to be statistically significant.
<table>
<thead>
<tr>
<th>Reason</th>
<th>Number of Subjects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child removed from home for neglect</td>
<td>2</td>
</tr>
<tr>
<td>Husband did not want stranger in home</td>
<td>2</td>
</tr>
<tr>
<td>Family moved out of the county</td>
<td>2</td>
</tr>
<tr>
<td>Mother had &quot;no time&quot;</td>
<td>1</td>
</tr>
<tr>
<td>Not interested in program</td>
<td>1</td>
</tr>
<tr>
<td>Child became involved in another program</td>
<td>1</td>
</tr>
<tr>
<td>Family with whom the mother lived did not want stranger in home</td>
<td>1</td>
</tr>
<tr>
<td>Mother voluntarily relinquished custody of child</td>
<td>1</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>11</strong></td>
</tr>
</tbody>
</table>
### TABLE 2

DEMOGRAPHIC DATA

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>female</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>male</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Average age of child</td>
<td>15 months</td>
<td>17 months</td>
</tr>
<tr>
<td>Number of siblings</td>
<td>1.0</td>
<td>1.2</td>
</tr>
<tr>
<td>Age of mother</td>
<td>21.5</td>
<td>26.0</td>
</tr>
<tr>
<td>Marital status</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Married</td>
<td>2</td>
<td>5</td>
</tr>
<tr>
<td>Divorced</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Living together</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Unmarried living apart</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td>Educational History of Mother</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attended public school program for special education</td>
<td>9</td>
<td>5</td>
</tr>
<tr>
<td>Institutionalized</td>
<td>0</td>
<td>4</td>
</tr>
</tbody>
</table>
There were 6 male and 3 female children in each treatment group.

The average age of the mothers was 21.5 years (with a range from 17 to 27 years) for the experimental group and 26.0 (with a range from 17 to 34 years) for the control group. All 18 mothers had been estimated to have intellectual levels in the mild range (I.Q. 55-70) by the referral source. Thirteen of the mothers had attended public school programs for the educationally (mildly) mentally retarded in the Franklin County area. Five of the mothers had a history of living in an institution.

Of the 18 families, 7 couples were married and living together, 4 couples were unmarried but living together as in a common-law marriage, 1 couple was divorced, and the other six couples were unmarried and living apart. All of the latter six had had some contact with the fathers since the children's births. Numbers of siblings in the families ranged from 0 to 3. The average number was 1.1 per family (1.0 for experimental and 1.2 for control).

The fathers, as described by the referring source and/or mothers, were on the average, higher functioning than the mothers. Twelve of the fathers had apparently attended normal public school classes, another five had attended school programs for the educable (mildly) retarded and one had been institutionalized. (For more detailed case histories of the families, refer to Chapter V.)
DESIGN

The 18 subject dyads were matched by child's chronological age, and each dyad was assigned to either the experimental or control group. Each dyad was pretested in an identical manner, and post-testing was done with the same instruments for both groups. The experimental group received a play therapy technique developed to enhance mother-child interaction in play and the control group received counseling regarding parenting issues.

INSTRUMENTS

The instruments which were used in this study are:

A. A demographic data sheet which provided essential information about the mother and child, their family and basic background data. (Appendix F)

B. The Early Intervention Developmental Profile (The "Michigan") (Rogers, D'Eugenio, Brown, Donovan & Lynch, 1977) was used to assess the child's developmental level.

C. The HOME (Home Observation for Measurement of the Environment) by Caldwell & Bradley (1978a), was used to provide clinical data for the home visitor and the scores (pre- and post-) were used to assess the effectiveness of the play technique.

D. The Parent Behavior Progression (PBP) by Bromwich, Khoka, Fust, Baxter & Burge (1978) was used to provide further clinical information concerning mother-infant interaction of the subjects.
E. The **Observation of Parent-Child Interaction in Play** (OPCIP) developed by the present author for the purpose of providing clinical information to be used in the Mother-Child Play Therapy. (Appendix G)

Instruments B, C and D above were administered as instructed in the manuals.

**The Early Intervention Developmental Profile**

The Early Intervention Developmental Profile (Rogers, et al, 1977) is a developmental assessment instrument developed for use with exceptional infants and young children (developmental ages 0-36 months). The items were selected from a variety of standardized infant and early childhood assessment instruments. The items were assigned developmental age ranges by averaging the estimated age ranges from the other scales. Developmental areas covered in the "Michigan" include: perceptual/fine motor (40 items), cognition (33 items), Language (34 items), social/emotional (35 items), Self care (feeding - 29 items, toileting - 7 items, dressing - 12 items), and gross motor (84 items).

Correlations between subscale scores on the "Michigan" and scores on several other standardized tests (Bayley Mental and Motor Scales, Vineland Social Maturity Scale, the REEL, Piaget's Sensorimotor levels), ranged from .33 to .96. Interrater agreement averaged 89%. Test-retest reliability at 3 and 6 months yielded coefficients ranging from .77 to .98. For the purposes of this study, flat scores (total number of items passed) and weighted scores in the form of the
percentage of the number of skills obtained by the child out of the total number of skills expected for his chronological age were used.

The HOME Inventory

The HOME Inventory by Caldwell and Bradley (1978 revised version) is designed to evaluate aspects of the environment thought to be related to the favorable development of the child. It is administered by a person who goes into the child's home. Observation and direct interviewing of the parents are used to collect the information. The Birth to 3 Year Inventory has 45 items which include the following six subscales: Emotional and Verbal Responsivity of Mother, Avoidance of Restriction and Punishment, Organization of Physical and Temporal Environment, Provision of Appropriate Play Materials, Maternal Involvement with the Child, and Opportunities for Variety in Daily Stimulation. The scores of each subscale and total scores are recorded on a graph which delineates five different percentile rankings: lower 10%, lower 25%, middle 50%, upper 25%, and upper 10%.

The HOME INVENTORY (Birth to Three) was standardized on 174 families in Little Rock, Arkansas who represented all SES levels, and including male and female children ages 0 to 36 months. Coefficients for retest stability at 6, 12, and 24 months ranged from .24 to .77 depending on subscales. For the total score, the mean is 31.2, the standard deviation is 7.32 and the standard error of measurement is 2.55.

The validity of the HOME Inventory was assessed by correlating the subscale scores with several socio-economic variables. Parental
education, amount of crowding, and paternal occupation have been significantly correlated with HOME scores. Maternal occupation was not found to be significantly related to HOME scores. HOME scores have been found to be significantly related to IQ scores of the children done concurrently and done later (predictability) (Caldwell & Bradley, 1978b).

**The Parent Behavior Progression (PBP)**

The PBP by Bromwich, et al. (1978) provides evaluation of the mother-child interaction as scored by a member of an intervention team who is familiar with the dyad. The PBP was designed to provide programming information to professionals working with high risk infants and their mothers. The scores are determined by checking off behaviors which fall into six levels: I. The mother enjoys the infant. II. The mother reads and responds to infant's cues. III. The interaction is mutually satisfactory. IV. Suitable activities are provided. V. The mother develops her own developmentally appropriate activities for the infant. VI. The mother anticipates the child's developmental growth. Two different age scales (birth to nine months developmental age, and nine to thirty-six months developmental age) were used in this study.

The PBP is described as a clinical tool and therefore no standardizations have yet been done. The levels have been described by the authors as being "quasi-hierarchical." They report that several factors may influence where a mother is rated at any particular time, such as whether there has been a family crisis, degree of
child's disability, etc. (Bromwich, 1981). Allen, Affleck, McQueeney and McGrade (1982) reported positive correlations between PBP scores and scores on the HOME.

The OPCIP

The Observation of Parent-Child Interaction in Play (OPCIP) was designed by the present author to help identify significant behaviors related to mother-infant interaction. The OPCIP is in a checklist format which provides for tabulation of total number of a specified group of behaviors. It has three categories of behaviors: social/emotional, communication, and play. The purpose of the OPCIP is to provide clinical data which can be translated into therapeutic goals for working with a mother-infant dyad who are at risk for poor parenting skills and developmental delay.

A sample of the checklist and the directions used for this study can be found in Appendix G. The first seven items (eye contact, smiles, positive physical contact, praises child, vocalizations, gestures and labels activities and objects) were scored by recording hash marks and recording the total number of observations at the end of the session. The final five items were scored once for each of three toys with a + (plus) or - (minus) depending on the mother's observed behaviors during the 10 minute session. The items include: allows child to explore materials, assesses child's level of ability and interest level, provides variations with materials, and physical position is appropriate. A total score and subscores for social - emotional, communication, labeling and play skills were tabulated.
PROCEDURE

All subjects were pretested with all of the above described instruments using two experimenters. Following pretesting, the subjects were assigned to either the experimental or control groups. Posttesting was again done with the two experimenters.

Personnel

There were six experimenters, including the author, who carried out the pre- and posttesting and treatments. Five were graduate students in Developmental Psychology-Mental Retardation/Developmental Disabilities program at Ohio State University who had had experience working with children and adults with mental retardation. The third was a senior majoring in psychology who had practicum experience working with mentally retarded clients in play therapy.

Training on the HOME and OPCIP was done in a group for the three experimenters working with the original group of subjects using a normal mother and infant as models. Interrater reliability on the HOME score was 95% and on the individual items of the HOME interrater agreement ranged from 14% to 100%. The additional three experimenters were trained individually by the author on the assessment instruments. Pre-training was not done on the Michigan because it was to be administered with both of the examiners working together using one assessment form with the child. Pretraining on the PBP was done by discussing scoring as a group following individual reading of the manual. As the PBP is a criterion-referenced instrument which
requires familiarity with the subject, reliability was not ascertained.

Training on the experimental and control treatments was done in a group and individually through discussion, role-playing and modeling in addition to individual reading of the manual.

Pretesting

Two of the examiners were randomly chosen to work with each family and made one or two home visits lasting approximately a total of 1½ hours within a one week period. During the home visit(s) the examiners first completed any missing information from the Background Information Sheet (Appendix F) which had been completed at the time of the referral. The HOME was then administered using observation and interview questions as recommended in the manual. This was done first in order for the child and mother to become acquainted with the experimenters. Each experimenter completed a HOME Inventory independently of the other. Following the HOME, an OPCIP Checklist was completed by observing the mother and child interacting with one set of three toys during a ten minute session. The toys were selected for each child which were developmentally appropriate and which were unfamiliar to the child based on observation of the toys shown to the examiners for completing items on the HOME. A list of the toys used for administration of the OPCIP is available in Appendix H. A Michigan was then completed based on skills already observed by the experimenters and on directly administered items. A second OPCIP Checklist was then completed using a different set of three toys for
ten minutes. After returning from the pretesting home visit(s) the two examiners independently completed a PBP checklist on each mother.

One of the two examiners who completed the pretesting on each family was then assigned to do either the experimental or control treatment with each family. Initially examiners were assigned randomly so that each had an experimental and a control family. When families dropped out of the program and new ones added, experimenters were assigned as needed to the new families.

**Experimental Treatment**

The experimental treatment was planned to involve twice-weekly home visits for six weeks (a total of 12 sessions) for approximately thirty minutes each session. Due to the large number of appointments missed due to clients not being home, children being sick, or a variety of other problems due to family disorganization, some of the sessions were combined into one hour sessions. This was done in order to keep the total time elapsed between pre- and posttesting as constant as possible. The average number of weeks for the experimental treatment group was 7.3 weeks. The researchers brought a collection of toys and materials to each session which were individually selected for each child. None of the toys used in the pretesting on the OPCIP were used in therapy, although some were similar (e.g., different types of rattles for a young infant).

The Mother-Child Play Therapy was the treatment method used. A detailed description of the MCPT is provided in Appendix I. The general goals of the MCPT are:
- To increase positive social and emotional interaction.
- To increase positive communication between mother and child.
- Improve observational skills by the mother to assess her child's level of ability and interest, and to help her provide developmentally appropriate stimulation activities.
- And, ultimately, the goal is to improve the child's environment in terms of interaction with the caregiver, to enhance the child's development.

By becoming a better observer of her child's behaviors, it is hoped that the mother would become a better responder. If the mutual satisfaction between mother and child is improved, it is likely that they will interact more and therefore the likelihood of stimulation of the child will be greater. Specific goals for each mother-child dyad were determined by the pretesting results.

The researchers' attitude was one of positive regard for both mother and child and seeing them both as individuals and as an interacting dyad. The therapist, at times, became part of that group and at others times remained a more external agent. The following methods of treatment were used in the Mother-Child Play Therapy:

- Highlighting - The therapist reflects and describes verbally the behaviors of one, the other, or both the mother and child. The therapist will reflect not only observable behaviors, but also probable feelings and the basis of the behaviors. For example, the therapist might say, "Look, he can fit those in the right hole now. He couldn't do that when I first met him." or "See, he can do that game really well."
Modeling - The therapist will provide models of desired behaviors which are not being exhibited by either the mother or child. For example, the therapist might show alternative ways of playing with a toy which the mother had not done. Modeling of praise for the child was done frequently.

Reinforcing - The therapist will provide appropriate positive reinforcement to the mother and child when positive behaviors are presented. For example, the therapist may say, "I like your pretty smile" to the child. (This is also modeling of praise to the mother.) For the mother, more discreet forms of reinforcement, such as nodding the head and smiling when she exhibits behaviors the therapist has modelled were used.

Role-taking - The researcher assumes the role, usually of the infant, to help the mother better read and respond to cues. This was done very frequently to help improve the mothers understanding and response to the child's behaviors. For example, the therapist might say, "Billy is saying 'I want help, Mom' as the child hands a toy to his mother.

Explaining - The researcher, at times, will assume a rather structured role of explaining to the mother the reasons for doing some desired behavior. It is important to note that this is still done in the context of a therapeutic program rather than it becoming a lecture-type program. For example, the child may be crying and the therapist assumes it is because the infant is unable to reach a desired toy, so the researcher may say "Why don't you try holding her like this, so she can get the rattle
easier," or "Look, he knows that toy is hiding in the bag—he can remember things like that now." Explaining is done in terms of positive actions of behavior rather than pointing out past mistakes.

In actual practice, the treatment method, varied greatly with each dyad. Some of the factors which influenced this were 1) number of siblings present, 2) number of other family or household members present and their level of intrusion, 3) the mood of the mother and child, and 4) verbal skills of the mother. When siblings were present during the intervention, they were included when necessary. The therapist would attempt to integrate them into the therapy, keeping in mind their normal relationship with the mother and target child. This became a problem at times when some mothers insisted that the other child not be allowed to play with the toys, which led to hurt feelings. The therapist would then attempt to suggest compromises for sharing toys to provide models for the usual family interaction pattern. Other adults being present at times made it very difficult to focus on the mother and child. When necessary, they were included, or at times a change in location was suggested, such as doing the play therapy on the porch or in another room. When the mother or child appeared to be unhappy or uncooperative at the beginning of the session, the therapist would attempt to ascertain the problem and help the mother make a decision about whether to continue with the session. The verbal skills of the mother influenced how the sessions would be conducted. Some mothers talked constantly and their focus on the child needed to be redirected. When the mothers were reticent, they
were encouraged to engage in conversation with the child and therapist when possible.

Perhaps the best way to describe this therapeutic approach is that it required a great amount of flexibility on the part of the therapist. Having the ability to apply her knowledge and skills related to child development and therapy as it pertained to each dyad required respect for each individual, their abilities and interests. The sessions were very free-flowing, following the lead of the child and mother. Predetermined goals were applied where possible, using the materials and activities chosen by the dyad.

After each therapy session, the researcher recorded on a blank form, the general goals of the session, a brief description of what occurred and an analysis of what worked and did not work in each session. The therapist also defined goals for the next session. (See sample session form, Appendix J).

**Control Treatment**

The control treatment was scheduled in exactly the same manner as the experimental. It was planned to involve twice-weekly home visits for six weeks (a total of 12 home visits) for 30 minutes. Some of these were also combined into 1 hour weekly sessions due to cancellations. Average number of weeks in the control treatment was 7.1. The researcher brought a collection of age appropriate toys for the child. The experimenters in the control homes conducted unstructured counseling sessions concerning child-rearing and parenting issues. The play materials were not the intended focus of the visits
however the toys were usually so interesting to both mother and child that much time was spent playing with the toys by all those present while the researcher and mother talked. These were not conducted as regular individual therapy or counseling sessions however. The mothers were told that these meetings were to help answer questions they had or problems they had regarding their child. Records of the sessions were kept on the same form as used for the experimental treatment (Appendix K).

**Posttesting**

Posttesting was done in a manner similar to the pretesting. All of the assessment instruments were administered during a home visit. The Michigan was administered by both experimenters together. The other instruments were administered independently. For the OPCIP, the same two sets of toys used for the pretesting were used again. (See Appendix 1 for a complete list for each dyad.) The two sets of toys, however, were presented in the reverse order, i.e. Set A which was used as the first set in pretesting was used as the second set for posttesting. All of the assessment instruments were again administered following the instructions of the administration manual of each.

**Reliability**

Table 3 presents interrater reliability coefficients for the assessment instruments. The coefficient values ranged from .74 to .94, all $p < .01$. 
<table>
<thead>
<tr>
<th>Instrument</th>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>HOME</strong></td>
<td></td>
</tr>
<tr>
<td>pretest</td>
<td>.94**</td>
</tr>
<tr>
<td>posttest</td>
<td>.90**</td>
</tr>
<tr>
<td><strong>PBP</strong></td>
<td></td>
</tr>
<tr>
<td>pretest</td>
<td>.88**</td>
</tr>
<tr>
<td>posttest</td>
<td>.80**</td>
</tr>
<tr>
<td><strong>OPCIP Total Score</strong></td>
<td></td>
</tr>
<tr>
<td>pretest</td>
<td>.74**</td>
</tr>
<tr>
<td>posttest</td>
<td>.83**</td>
</tr>
</tbody>
</table>

*p < .05  
**p < .01
Pearson Correlation Coefficients were computed for each of the items on the OPCIP using frequency data (items 1-7) and on the total Play score (items 8-12). They are shown in Table 4. Values ranged from -0.100 to +1.000.
<table>
<thead>
<tr>
<th>TABLE 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>INTERRATER RELIABILITY FOR OPCIP ITEMS</td>
</tr>
<tr>
<td>A Checklist for: Observation of Parent-Child Interaction in Play (OPCIP)</td>
</tr>
</tbody>
</table>

Mother's name ____________ Age ______ State ______ Observer ________ Date ______ Location ______
Child's name ____________ Age ______ State ______

<table>
<thead>
<tr>
<th>Social/Emotional</th>
<th>H ↔ C</th>
<th>C ↔ H</th>
<th>H ↔ C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Eye contact</td>
<td>.616**</td>
<td>.857**</td>
<td>.859**</td>
</tr>
<tr>
<td>(2) Smiles</td>
<td>.930**</td>
<td>.809**</td>
<td>.831**</td>
</tr>
<tr>
<td>(3) Positive physical contact</td>
<td>.884**</td>
<td>1.000**</td>
<td>-.070</td>
</tr>
<tr>
<td>(4) Praises Child</td>
<td>.926**</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Communication</th>
<th>H ↔ C</th>
<th>C ↔ H</th>
<th>H ↔ C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Vocalizations</td>
<td>.865**</td>
<td>.378</td>
<td>.875**</td>
</tr>
<tr>
<td>(6) Gestures</td>
<td>-.124</td>
<td>-.100</td>
<td>.149</td>
</tr>
<tr>
<td>(7) Labels activities &amp; objects</td>
<td>-</td>
<td>-</td>
<td>.787**</td>
</tr>
</tbody>
</table>

Play  
(scores: yes = +, no = -)

| Toy | (8) Allows child to explore materials | - | - | - |
| (9) Assesses child's level of ability w/materials | - | - | - |
| (10) Assesses child's level of interest in activity | - | - | - |
| (11) Provides variations with materials | - | - | - |
| (12) Physical position is appropriate | - | - | - |

Comments:

Play Total: .788**
CHAPTER IV
STATISTICAL RESULTS

RESEARCH QUESTIONS

This research project was designed to look at the effects of the experimental treatment - Mother-Child Play Therapy, on parenting skills. The research questions below pertain to the differential influence of the experimental and control treatments (parental counseling) on the subjects' scores on various assessment instruments.

1. Will there be a significant difference in the change in score from pretest to posttest between the experimental and control groups on the HOME assessment?

2. Will there be a significant difference in the change in score from pretest to posttest between the experimental and control groups on the PBP assessment?

3. Will there be a significant difference in the change in score from pretest to posttest between the experimental and control groups on the OPCIP assessment?

4. Will there be a significant difference in the change in score from pretest to posttest between the experimental and control groups on the Michigan assessment of developmental skills of the children?

Additional statistical information acquired in this study includes correlations between subjects' pretest and posttest scores on each of the assessment instruments.
FINDINGS

The HOME Inventory

Group mean scores and standard deviations on the HOME are shown in Table 5. Mean change scores from pretest to posttest were +5.11 for the experimental group and +0.55 for the control group. Results of a two-way analysis of variance with repeated measures on one factor (ANOVA) are shown in Table 6. The value for the Time x Group interaction which represents the differential effect of the treatment methods was 3.48 (1, 16), p < .08. This value is considered to indicate a trend toward the expected effect. The F-value for the Group effect is not significant. The F-value for the Time effect was significant (p < .03).

The Parent Behavior Progression

Group mean scores and standard deviations on the PBP are shown in Table 7. Mean change scores from pretest to posttest were +12.89 for the experimental group and +5.39 for the control group. Results of a two-way ANOVA are shown in Table 8. F-values for the sources of variance are as follows: Group: F(1, 16) = 0.42, p > .53; Time: F (1, 16) = 22.10, p < .0002; and Time x Group: F(1, 16) = 3.72, p < .07.

The OPCIP

Group mean scores and standard deviations on the OPCIP total scores and subscores are shown in Table 9. Mean change scores for pretest to posttest are: experimental, +21.42, control, +1.09 on the
TABLE 5
HOME\*: Group Mean Scores and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th></th>
<th>Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>27.83</td>
<td>5.54</td>
<td>25.67</td>
<td>8.72</td>
</tr>
<tr>
<td>Posttest</td>
<td>52.94</td>
<td>2.91</td>
<td>26.22</td>
<td>5.85</td>
</tr>
<tr>
<td>Change</td>
<td>+5.11</td>
<td></td>
<td>+0.55</td>
<td></td>
</tr>
</tbody>
</table>

* Total possible score on the HOME is 45

TABLE 6
HOME Scores\*, Two-way ANOVA, F - Values

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>177.78</td>
<td>2.90</td>
<td>p .11</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>61.26</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>72.25</td>
<td>5.39</td>
<td>p .03</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>46.69</td>
<td>3.48</td>
<td>p .08</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>13.41</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Based on average scores
### TABLE 7

**Parent Behavior Progression*: Group Mean Scores and Standard Deviations**

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Pretest</td>
<td>29.78</td>
<td>7.65</td>
<td>30.33</td>
</tr>
<tr>
<td>Posttest</td>
<td>42.67</td>
<td>8.54</td>
<td>35.72</td>
</tr>
<tr>
<td>Change</td>
<td>+12.89</td>
<td>-</td>
<td>+5.39</td>
</tr>
</tbody>
</table>

*Total possible score is 70.

### TABLE 8

**Parent Behavior Progression Scores: Two-way ANOVA, F - Values**

<table>
<thead>
<tr>
<th></th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>91.84</td>
<td>0.42</td>
<td>p &lt; .53</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>217.84</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>751.67</td>
<td>22.10</td>
<td>p &lt; .0002</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>126.56</td>
<td>3.72</td>
<td>p &lt; .07</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>34.01</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
## TABLE 9

**OPCIP:**

Group Mean Scores and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Means</td>
<td>Standard</td>
</tr>
<tr>
<td></td>
<td>Deviations</td>
<td>Deviations</td>
</tr>
<tr>
<td><strong>Socialization</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>16.14</td>
<td>5.59</td>
</tr>
<tr>
<td>Posttest</td>
<td>20.56</td>
<td>6.31</td>
</tr>
<tr>
<td>Change</td>
<td>+4.42</td>
<td>-</td>
</tr>
<tr>
<td><strong>Communication</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>12.11</td>
<td>10.67</td>
</tr>
<tr>
<td>Posttest</td>
<td>22.97</td>
<td>11.67</td>
</tr>
<tr>
<td>Change</td>
<td>+10.86</td>
<td>-</td>
</tr>
<tr>
<td><strong>Label</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>3.56</td>
<td>3.08</td>
</tr>
<tr>
<td>Posttest</td>
<td>6.39</td>
<td>4.48</td>
</tr>
<tr>
<td>Change</td>
<td>+2.83</td>
<td>-</td>
</tr>
<tr>
<td><strong>Play</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>10.14</td>
<td>1.77</td>
</tr>
<tr>
<td>Posttest</td>
<td>13.39</td>
<td>1.01</td>
</tr>
<tr>
<td>Change</td>
<td>+3.25</td>
<td>-</td>
</tr>
<tr>
<td><strong>Total Score</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>41.89</td>
<td>15.70</td>
</tr>
<tr>
<td>Posttest</td>
<td>63.31</td>
<td>19.52</td>
</tr>
<tr>
<td>Change</td>
<td>+21.42</td>
<td>-</td>
</tr>
</tbody>
</table>
Total score; experimental, +4.42, control, +0.33 on the Socialization subscore; experimental, +10.86, control, +0.43 on the Communication subscore; experimental, +2.83, control, -0.80 on the Label subscore; and experimental, +3.25, control +1.09 on the Play subscore.

Results of the two-way ANOVAs (two-way analysis of variance with repeated measures on one factor) are shown in Tables 10-14. The following sources of variance yielded F-values for p < .05: Group, Time and Time x Group for Total scores (Table 14) and Play subscores (Table 13); Time and Time x Group for Communication subscores (Table 11); Time x Group for Label subscores (Table 12); and Group for Socialization subscores (Table 10).

Further analysis of the OPCIP scores was possible for those factors yielding significant interaction (Time x Group) effects. The Waller-Duncan Bayes Exact Test or Bayes' t (Waller & Duncan, 1969) was used to provide the best overall accuracy for paired comparisons of the means. The results of this are shown in Table 15.

For the OPCIP total scores, Label subscores and Communication subscores, significant differences were found between the Therapy group's pretest and posttest mean scores and the Therapy vs. Counseling groups' scores on the posttest. The Counseling group's mean pretest and posttest mean scores and the pretest mean scores for the two groups were not significantly different.

For the OPCIP Play subscore, significant differences were found for the Therapy group's pretest vs. posttest mean scores, pretest Therapy vs. Counseling group's mean scores and posttest scores for
<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>293.72</td>
<td>5.73</td>
<td>p &lt; .03</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>51.25</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>50.58</td>
<td>3.13</td>
<td>p &lt; .10</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>37.68</td>
<td>2.33</td>
<td>p &lt; .15</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>16.17</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>426.28</td>
<td>4.19</td>
<td>p &lt; .06</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>101.80</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>286.86</td>
<td>5.64</td>
<td>p &lt; .03</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>244.82</td>
<td>4.81</td>
<td>p &lt; .04</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>50.85</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>26.99</td>
<td>1.49</td>
<td>p &lt; .24</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>18.17</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>9.33</td>
<td>2.21</td>
<td>p &lt; .16</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>29.65</td>
<td>7.02</td>
<td>p &lt; .02</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>4.22</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
### TABLE 13

OPCIP - Play Subscores: Two-way ANOVA, F - Values

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>62.38</td>
<td>11.72</td>
<td>p &lt; .004</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>5.32</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>42.36</td>
<td>25.86</td>
<td>p &lt; .0001</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>10.51</td>
<td>6.42</td>
<td>p &lt; .02</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>1.64</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

### TABLE 14

OPCIP - Total Subscores: Two-way ANOVA, F - Values

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>2592.51</td>
<td>7.38</td>
<td>p &lt; .02</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>351.33</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Within Groups</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>1139.06</td>
<td>9.07</td>
<td>p &lt; .008</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>930.25</td>
<td>7.40</td>
<td>p &lt; .02</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>125.64</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
**TABLE 15**  
Comparisons of Means from OPCIP:

\(^t_B\) - values*  

<table>
<thead>
<tr>
<th>Mean Scores Compared</th>
<th>(t_B) - value</th>
<th>df</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>OPCIP - Communication Subscores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>3.23</td>
<td>2</td>
<td>(p &lt; .05)</td>
</tr>
<tr>
<td>Control Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>0.13</td>
<td>2</td>
<td>(p &gt; .10)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Groups</td>
<td>0.50</td>
<td>2</td>
<td>(p &gt; .10)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Groups</td>
<td>3.60</td>
<td>2</td>
<td>(p &lt; .05)</td>
</tr>
<tr>
<td><strong>OPCIP - Label Subscores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>2.92</td>
<td>2</td>
<td>(p &lt; .05)</td>
</tr>
<tr>
<td>Control Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>0.83</td>
<td>2</td>
<td>(p &gt; .10)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Groups</td>
<td>0.08</td>
<td>2</td>
<td>(p &gt; .10)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Groups</td>
<td>3.66</td>
<td>2</td>
<td>(p &lt; .01)</td>
</tr>
<tr>
<td><strong>OPCIP - Play Subscores</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>5.39</td>
<td>2</td>
<td>(p &lt; .01)</td>
</tr>
<tr>
<td>Control Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>1.81</td>
<td>2</td>
<td>(p &lt; .10)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Group</td>
<td>2.57</td>
<td>2</td>
<td>(p &lt; .05)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Group</td>
<td>6.15</td>
<td>2</td>
<td>(p &lt; .01)</td>
</tr>
<tr>
<td><strong>OPCIP - Total Score</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>4.05</td>
<td>2</td>
<td>(p &lt; .01)</td>
</tr>
<tr>
<td>Control Group:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest vs. Posttest</td>
<td>0.21</td>
<td>2</td>
<td>(p &lt; .10)</td>
</tr>
<tr>
<td>Pretest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Group</td>
<td>1.29</td>
<td>2</td>
<td>(p &lt; .10)</td>
</tr>
<tr>
<td>Posttest:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experimental vs. Control Group</td>
<td>5.14</td>
<td>2</td>
<td>(p &lt; .01)</td>
</tr>
</tbody>
</table>

*\(t_B\) = Waller-Duncan Bayes Exact Test (Waller-Duncan, 1969)
both groups. The Counseling group's mean pretest and posttest scores were not significantly different (Table 15).

**Early Intervention Developmental Profile**

Group mean scores and standard deviations on the Early Intervention Developmental Profile (Michigan) are shown in Table 16. These scores represent the child's developmental skills. The flat score refers to the actual total number of items passed on the profile. The weighted score was derived by the following formula:

\[ \frac{\text{actual score}}{\text{expected score for age}} \times 100 \]

The weighting was done to provide a way to compare each of the subject's change in score in relation to those of the other subjects (the Michigan provides no standardized score).

The mean change for flat scores was +27.6 for the experimental group and +14.8 for the control group. Weighted scores showed a change of +4.1 for the experimental group and +1.0 for the control group. Both flat and weighted scores showed a significant time effect: \( F(1,16) = 60.75, p < .0001 \) for the flat scores and \( F(1, 16) = 7.05, p < .02 \) for the weighted scores. The effect of the group differences and the main effect of the interaction between time and group were not found to show a significant difference. Table 17 shows the F-values for the two-way ANOVA for the Michigan scores.

**Relationship Between Assessments**

Pearson Correlation Coefficients were computed between subjects' scores on each of the assessment instruments with their scores on each
TABLE 16
Early Intervention Development Profile:

Group Mean Scores and Standard Deviations

<table>
<thead>
<tr>
<th></th>
<th>Experimental</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flatscore</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>160.22</td>
<td>67.76</td>
</tr>
<tr>
<td>Posttest</td>
<td>182.78</td>
<td>61.59</td>
</tr>
<tr>
<td>Change</td>
<td>+22.56</td>
<td>-</td>
</tr>
<tr>
<td>Weighted Score(^a)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>161.11</td>
<td>49.47</td>
</tr>
<tr>
<td>Posttest</td>
<td>120.22</td>
<td>47.06</td>
</tr>
<tr>
<td>Change</td>
<td>+4.11</td>
<td>-</td>
</tr>
</tbody>
</table>

\(^a\)Weighted score derived by:

\[
\text{Weighted Score} = \left( \frac{\text{actual score}}{\text{expected score for chronological age}} \right) \times 100
\]
TABLE 17
Early Intervention Developmental Profile Scores:
Two-way ANOVA, F - Values

<table>
<thead>
<tr>
<th>Source</th>
<th>df</th>
<th>Mean Square</th>
<th>F</th>
<th>Probability</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Flatscores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>361.00</td>
<td>0.04</td>
<td>p &lt; .84</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>8439.69</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Within Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>3136.00</td>
<td>60.75</td>
<td>p &lt; .00001</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>136.11</td>
<td>2.64</td>
<td>p &lt; .12</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>51.62</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Weighted Scores</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Between Groups</td>
<td>1</td>
<td>3844.00</td>
<td>1.57</td>
<td>p &lt; .23</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>2448.56</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>Within Groups</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Time Factor</td>
<td>1</td>
<td>58.78</td>
<td>7.05</td>
<td>p &lt; .02</td>
</tr>
<tr>
<td>Time x Group</td>
<td>1</td>
<td>21.78</td>
<td>2.61</td>
<td>p &lt; .13</td>
</tr>
<tr>
<td>Error</td>
<td>16</td>
<td>8.34</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
of the other instruments. Separate correlations were computed for pretest scores and for posttest scores. The pretest correlations are shown in Table 18. Correlation coefficients for pretest scores were found to be significant at the p < .05 for: OPCIP total score with OPCIP Play, Socialization subscores. Posttest correlations are shown in Table 19. Coefficients significant at the level p < .05 for posttest scores are: the HOME with the PBP, OPCIP Total, OPCIP Play and OPCIP Socialization; the PBP with OPCIP Total and OPCIP Label subscore; the OPCIP Total with all OPCIP subscores, OPCIP Play subscore with OPCIP Socialization and Communication subscores, and OPCIP Communication subscores with OPCIP Label subscores. (See Chapter VI for discussion of these results.)
<table>
<thead>
<tr>
<th>Instrument</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Michigan</td>
<td>-</td>
<td>-.122</td>
<td>-.093</td>
<td>+.279</td>
<td>+.440</td>
<td>+.285</td>
<td>+.274</td>
<td>+.244</td>
</tr>
<tr>
<td>2. HOME</td>
<td>-</td>
<td>+.587</td>
<td>+.489</td>
<td>+.541</td>
<td>+.476</td>
<td>+.290</td>
<td>+.260</td>
<td></td>
</tr>
<tr>
<td>3. PBP</td>
<td>-</td>
<td>+.468</td>
<td>+.567</td>
<td>+.540</td>
<td>+.173</td>
<td>+.333</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. OPCIP Total</td>
<td>-</td>
<td>+.803**</td>
<td>+.788**</td>
<td>+.867**</td>
<td>+.410</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OPCIP Play</td>
<td>Subscore</td>
<td>-</td>
<td>+.822**</td>
<td>+.544</td>
<td>+.097</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. OPCIP Socialization</td>
<td>Subscore</td>
<td>-</td>
<td>+.444</td>
<td>+.095</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. OPCIP</td>
<td>Communication</td>
<td>-</td>
<td>+.097</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. OPCIP Label</td>
<td>Subscore</td>
<td>-</td>
<td>+.097</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

\* - p < .05  \** - p < .01
## TABLE 19

PEARSON CORRELATION COEFFICIENTS BETWEEN SUBJECTS' POSTTEST SCORES ON ASSESSMENT INSTRUMENTS

<table>
<thead>
<tr>
<th>Instrument</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Michigan</td>
<td>-</td>
<td>+.197</td>
<td>+.072</td>
<td>-.155</td>
<td>+.263</td>
<td>-.038</td>
<td>-.265</td>
<td>-.208</td>
</tr>
<tr>
<td>2. HOME</td>
<td>-</td>
<td>+.746**</td>
<td>+.675**</td>
<td>+.807**</td>
<td>+.592**</td>
<td>+.542</td>
<td>+.564</td>
<td></td>
</tr>
<tr>
<td>3. PBP</td>
<td>-</td>
<td>+.512</td>
<td>+.604</td>
<td>+.264</td>
<td>+.473</td>
<td>+.595**</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. OPCIP Total</td>
<td>-</td>
<td>+.735**</td>
<td>+.840**</td>
<td>+.949**</td>
<td>+.798**</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. OPCIP Play</td>
<td>-</td>
<td>+.676**</td>
<td>+.596*</td>
<td>+.548</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. OPCIP Socialization</td>
<td>-</td>
<td>+.665**</td>
<td>+.471</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. OPCIP Communication</td>
<td>-</td>
<td>+.787**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. OPCIP Label</td>
<td>-</td>
<td>+.787**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>* - p &lt; .05</td>
<td>** - p &lt; .01</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER V

CLINICAL OBSERVATIONS

This chapter will present the clinical findings of this study based on the case histories of each of the families. A description of the family and the mother's parenting skills, a summary of the therapy or counseling treatment, and the outcome based on observed behaviors are included. The families in the experimental group E1 to E9, who received the Mother-Child Play Therapy treatment are discussed first, followed by the families who received the counseling treatment (C1 to C9). The Mother-Child Play Therapy goals are to enhance the play interactions between mother and child using appropriate play materials. The counseling treatment provided the mothers with an opportunity to discuss parenting issues and related topics while the child played with the toys brought to the home.
CASE HISTORIES

Family El

This family included the mother, age 17 years and the target child—male, age 3 months. Mother was unmarried but she saw the father occasionally, he was apparently a high school student of normal intelligence. Mother had attended EMR classes, but at the time of the study was not working or going to school. The mother and child lived together in a foster home with foster parents and teenage foster brother. The mother had lived in other foster homes and children's homes due to her parents' inability to care for her and other siblings.

This young mother had adequate personal and adaptive behavior skills. She was very proud of her son and enjoyed watching him. She had little understanding of his developmental needs although she seemed to adequately perform basic child care such as feeding and diapering.

Goals for this mother were to increase verbal interaction and to improve her appropriate use of toys. This mother responded well to modelling and especially to reinforcement. She was very responsive when verbally praised concerning herself and/or child.

During the program this mother showed improvement in her understanding of the use of toys in a variety of ways to stimulate the child's skill development. The baby at both pretest and posttest showed advanced developmental skills for his age. The mother's goals at the end of the study were to find a job and move into an apartment of her own when she turned 18 years. They were also enrolled in a home visitation program.
Family E2

This family consisted of the mother, age 17 years and the target child—male, age 14 months. The parents were not married although they saw each other occasionally. The father was apparently of normal intelligence, the mother had attended EMR classes. The mother and child were living in a foster home with foster parents and two other foster children, ages four and eight. The mother was attending classes to complete her high school requirements and was involved in a work-study program.

The mother depended on the foster mother telling her when to perform routine child care (e.g. diaper changing) with her son. She used many commands and rarely used a teaching style in speaking with or playing with her child. She was very concerned about the child’s welfare and enjoyed his company. This mother had quite a few responsibilities: school, a change in work-study jobs, as well as pressure from her case worker to improve her parenting skills and to curb her social life with peers. She was often preoccupied with these concerns.

Modeling and explaining were used in the therapy with this dyad. Modeling did not usually work well unless first coupled with explaining why the behaviors were important. Emphasis was placed on enhancing language development of the child. The mother consciously tried to copy the behaviors but did not seem to generalize the skills.

This mother showed some minimal gains in her ability to provide stimulating play activities for her child. Following the posttesting
it was learned that the mother had been asked to move to a foster home separate from her child due to conflicts with the foster family. The child made rapid gains in gross motor skills although language skills were still somewhat delayed.
Family E3

The family consisted of: mother-age 27 years married to father-age 26 years, target child-male, age 21 months; sister-age 2 years, diagnosed as having cerebral palsy, seizures, and severe mental retardation; sister-age 3 years; brother-age 6 years, enrolled in an EMR class. Mother and father were both mildly retarded. Neither parent worked outside the home. Father would leave mother alone with the children for several days at a time, this was a source of friction between them.

The mother often used belittling and name-calling along with spanking to discipline the children. She usually spoke to the children giving commands with few labels (e.g. "Get that.") There was a strong affection between mother and target child. She was very interested in having the home visits.

Modeling, reinforcing and highlighting were the techniques most effective with this mother. During the play sessions she quickly picked up on modelled behaviors such as labeling colors and names of objects to the child. This mother also seemed to need encouragement to continue activities that she and the child enjoyed because she did not realize that there was a learning value in addition to the fun they were having. Mother also showed improvement in allowing the child to try different ways of playing with the toys. This increased flexibility was encouraged by highlighting to the mother how much the child enjoyed the alternative activities and what he was learning by doing so.
On the assessments, the mother showed improvement on every instrument. She especially seemed to improve her ability to match her verbal and play interactions to the child's needs. The child showed remarkable gain in his expressive vocabulary and some gains were made in each developmental area.
Family E4

This family included the mother, age 19, father, age 29, target child-male, age 25 months and brother, age 10 months. The parents were married and lived in their own home. They both had many relatives in the community with whom they often visited. The father was employed full-time as a furniture mover and was apparently of average intelligence. The mother was mildly mentally retarded, and had attended public school classes until she dropped out of high school.

This mother showed much concern about her children. She seemed to lack confidence in her parenting abilities and would appear to be disinterested in them at times. She spent much of her time trying to address their money management problems and to help care for several of her younger siblings who often stayed at her home. This mother was also expecting another baby during the study. The children received adequate care, however cleanliness of the home and of the children was a problem.

The goals for this mother-child dyad were to focus on the child's emerging language and symbolic play skills and to encourage longer play interactions. Modeling the labeling of objects and pretend play activities was very successful with this mother and child. She very quickly imitated the skills and generalized them to new materials and situations. During the study, the father required emergency back surgery which caused several appointments to be missed and influenced the mother's ability to attend to the target child near the end of the intervention program.
Both mother and child seemed to benefit from the Mother-Child Play Therapy. The child's language and play skills flourished. The mother gained self-confidence in her play skills with both of her children and she showed a genuine interest in learning as much as possible about child development and play. She also showed an interest in providing more play materials for the children after seeing how much they enjoyed the variety of toys brought to the home each week.
Family E5

This family consisted of mother, age 24, target child-male, age 21 months, and sister, age 5 months. This mother had been living with the father of both children until shortly before the referral to the study was made. She had been asked to leave their apartment and she had then moved into the home of a family with a varied number of children and grandchildren, which she knew through her church. This mildly retarded mother had attended public school classes before dropping out of high school. She was not employed.

At the pretesting, this mother was very reticent and played only briefly with the target child. She did show pride in his recent accomplishment of learning to talk. She was overwhelmed by the change in her living situation and naturally was very focused on those concerns. She enjoyed watching her son play with the play materials.

Goals for the Mother-Child Play Therapy with this dyad were to increase mother's verbal interaction with her child and to improve her ability to engage in appropriate play activities with her son. The mother had difficulty understanding that this program was to help her learn too. She often would remain seated on a couch and watch the therapist and child until she was encouraged to participate. The techniques of explaining and highlighting the child's activities were used with her. Modeling was initially not very successful unless it was paired with an explanation of why she should try the new behavior. During the intervention period conflicts arose between the mother and household members. Through facilitation by the therapist, the mother
was finally able to find more appropriate housing for her family.

At posttesting, this mother seemed better able to play with the child and provide functional activities. Much of the improvement may have been due to the change in living situation. The child had greatly improved his verbal skills, of which the mother was very proud. She also seemed to be more aware of the importance of playing with her children.
Family E6

This family consisted of mother, age 24, and daughter, age 16 months. The parents were divorced and the father was not having any contact with the family. The mother had two older children, ages 3 and 5 years, in foster homes due to neglect. The mother was mildly mentally retarded and had attended public school classes. The father was apparently of normal intelligence and was employed.

This family lived in an sparsely furnished apartment. The mother was able to manage the responsibilities of managing her money and keeping the home in order. She seemed to have problems with feeding and toilet training her daughter, apparently because she had rather unrealistic expectations.

Therapy goals with this dyad were initially for helping the mother set appropriate limits during play and to help her identify-age appropriate expectations for the child. Some of the problems seemed to have been related to the mother's fears about the pretesting situation. She responded well to modeling of basic play activities. She also brought up several counseling issues during the play therapy concerning her relationship with a boyfriend and her need to have some relief from the constant care for her daughter. She missed several appointments because she took a vacation with the boyfriend.

Many gains from pretest to posttest were seen with this dyad. The mother seemed more comfortable and her limit setting was much more appropriate and less punitive. The child had acquired many new words and much more complex play skills by the end of the program. The
mother requested that she and her daughter be re-enrolled in the Mother-Child Play Program.
This family included mother, age 17 and her daughter, age 11 months. They lived with her parents. This was a mildly retarded mother who had attended public school classes. The referring caseworker reported that this mother had a history of prostitution. The mother and her parents were involved in legal action against the alleged father.

This mother relied on her parents for providing food, clothing and shelter for herself and her child. As seen in other teenage parents, this mother seemed to see her daughter as a baby doll. She was very proud of her, she loved to hold her and buy her things, but she had limited awareness of true responsibility for planning for her needs. She also had rather unrealistic expectations of her. The child was developmentally age-appropriate, but seemed to have a detached sense of interaction with her mother.

Therapy with this dyad involved demonstrating a wide variety of play activities which involved direct interaction between the mother and child such as puppet and ball play. As rapport developed, the mother began to show a real interest in learning about child development. When given attention, the child became more animated and interacted more with the adults. Near the end of the study the family confided with the therapist concerning a problem which caused several appointments to be delayed. However they were very appreciative of the advice given to them.
Observable gains were made by this mother during the therapy. She had become more able to focus on her child, to interact more verbally and to provide appropriate play activities. The presence of the play materials brought each week stimulated the family's interest in providing more toys for the child. They made plans to buy more toys following the receipt of the toys given to them by the program.
Family E8

This family consisted of the mother, age 28, father, age 40, target child-male, age 11 months, half-brother, age 9 years who attended special education and half-sister, age 7 years. The parents were not married. The mother was divorced from the father of the two older children. The father had several grown children from a previous marriage. The mother had attended public school classes and the father appeared to be of normal intelligence. He worked as a bus driver for an escort service.

The mother was able to understand the importance of play for her youngest child, but she did not go beyond the presentation of the activities. The target child was very much the favorite child in the family and she devoted much attention to him. She used frequent discipline such as scolding and hand-smacking with him when he attempted to explore the environment.

Play therapy with this dyad focused on helping the mother increase her attention-time to the child during play and increasing her talking with the child rather than to the other adults in the home. Modeling of labeling activities and praising the child for play skills were used with some success. Modeling was also used to help this mother see alternatives to her disciplining the child, such as redirecting him in a positive matter and suggesting child-proofing techniques. The older siblings were often included in the sessions and they were directed to take the role of their mother's helper by showing them how to teach their younger brother to take turns and to
showing them how to teach their younger brother to take turns and to learn new words.

This child was in the process of making rapid gains in gross motor skills during the intervention period. He learned to stand and walk. This was a source of pride for the mother. She also showed some improvement in her being able to redirect the child, and she seemed to have an increased interest in using play materials with him.
Family E9

This family included mother, age 21, and her daughter, age 8 months. The mother and child lived with her parents, brother and sister. The child's father, age 27, and mother had lived together until she was approximately 6 months old. At that time the child was placed in custody of the mother's parents due to neglect. The father visited daily and the couple planned to eventually marry and live as a family in their own apartment. The mother had reportedly been born normal and suffered brain damage at age 6 due to spinal meningitis. She had attended special education classes since then. The father was normal intelligence and was employed as a driver of vans for the handicapped. The baby had been born 8 weeks prematurely and had spent 7 weeks in the hospital.

This mother relied heavily on others in the household for assistance and guidance in caring for her daughter. She enjoyed brief moments of play interaction with her, but had limited verbal interaction at the beginning of the study. She also seemed very uncertain about the child's basic care and routine. The father was a very strong force in this family. He was very protective of the mother and their child. His parenting skills were much superior to hers.

Therapy with this dyad involved providing models of appropriate play skills and interaction skills for mother and child. The therapist worked on demonstrating appropriate positioning of the child for play. Helping the mother focus on the child's attempts at communication and interaction were also a goal. This mother missed many appointments
due to oversleeping and forgetting scheduled times. She seemed less interested than most in the program.

Gains with this mother were minimal. She continued to be very self-centered which made it difficult for her to acquire skills pertaining to parenting her daughter. She did seem to increase her verbal interaction rate with the child and the child was also more responsive. The child showed gains in all developmental areas, however she was still in the process of catching up from her prematurity. The parents were enrolled in a parent education program at the end of the study.
Family CI

This family included the mother, age 20 years, father, age 25 years and target child-female, age 3 months. The parents were not married but shared an apartment and presented themselves as a couple to others. Mother was institutionalized and later lived in a group home for the mentally retarded. Until the birth of her child she worked at a sheltered workshop. The father had attended EMR classes at a local public school. He was employed as a dishwasher.

This mother had difficulties with personal hygiene and her speech was often unclear. She also had a severe weight problem which made it difficult for her to hold and care for the baby. She had a genuine affection for the baby, but lacked many basic child care skills.

Counseling topics centered around: discussing developmental milestones and appropriate activities as the child acquired new skills, the mother's interest in returning to work, appropriate materials to purchase for the child, safety and hygiene. Because the baby was so young the baby was usually held by either mother or therapist during the home visit. Verbal interactions with the child by the therapist were quickly modeled by the mother.

The mother showed an increase in interaction with her infant. She continued to show problems in appropriate play interactions. The child made gains throughout the program, but some developmental delays were apparent. The mother and child were referred to a home visitation program for high risk infants and to an infant stimulation program.
Family C2

This family included mother age 17 years, target child—male, age 21 months, and brother—age 2 weeks born two months prematurely. The father and mother were unmarried but had lived together for a short time. The mother had attended EMR classes and the father was apparently of normal intelligence. The mother had been required, in order to keep her son, to live with her mother. Also in the home were the step-father and their 9 month old daughter. The new baby returned to the hospital after being released once, for failure to thrive, and then was kept by the father and his mother for a short time before returning to the mother's home at the end of the study.

The mother depended heavily on the other adults in the home to tell her what to do with the children, and to help her with their care. While she demonstrated affection for the target child, she usually appeared tired and distant. She generally spoke in short commands to the child.

This mother was very reticent during counseling sessions and seemed uninterested in discussing topics concerning her children or herself. Topics emphasized were language stimulation of the child and his attendance at an early intervention preschool. Interference by her step-father had a negative influence on the counseling.

The child clearly improved in expressive language skills during the program. The mother seemed to have improved her verbal interaction with him also. However, she continued to appear to be de-
pressed and overwhelmed by her situation. The child was enrolled in a preschool program for the developmentally disabled at the end of the program.
Family C3

This family included the mother, age 31, father age 33, target child-male, age 27 months, and brother age 4 years who attended a preschool for the developmentally disabled. The parents were not married, but the father was in the home frequently and the mother reported that they had become engaged to marry near the end of the study. The mother had a history of institutionalization with a diagnosis of being mildly mentally retarded and emotionally disturbed. The father had been in the military and had a steady job.

The mother's housekeeping skills appeared minimally adequate. The children were fed and dressed haphazardly and cleanliness was a problem. The mother was very egocentric and seemed to have minimal emotional investment in her children although she would interact with them in a playful, loving manner at times. She followed through best on medical care for the boys—the target child had seizures and both had frequent ear infections.

She was an extremely talkative mother who constantly turned the conversation to herself. She continually discussed her childhood during which she experienced several very traumatic events. Goals for the counseling with her were to help her use past experiences to help define her goals for her children's needs.

During posttesting, this mother appeared to be able to attend a little more to her child during the assessment. Observable changes were minimal however. At the end of the posttesting it was recommended that the mother be referred to a mental health center, but she
was not interested. The target child had been enrolled in the same preschool as his brother, and both were also attending a day care center for part of each day.
Family C4

This family consisted of mother, age 20, married to father age 23, target child-male, age 25 months, brother, age 4, and sister, age 3. The family lived with the father's parents and brother. The mother was mildly mentally retarded and had attended the same high school as the father. He was an unemployed gas station attendant. The couple had attempted to live independently, but financial difficulties forced them to live with his parents.

This couple was very resourceful. They grew and canned their own vegetables and made use of items discarded by friends by repairing them. The mother was very skilled at directing the children in a non-punitive manner. They were well-behaved and were very interested in the toys brought to the home. The target child showed some delays in language and speech development.

Counseling with this mother focused on her concerns: child rearing issues, her older son's speech therapy, and play skills for her children. The mother was becoming concerned about making independent decisions concerning her family due to interference from other relatives. Support for her related to this was provided. She also had a good awareness of child development and enjoyed discussing differences and similarities among her three children.

This mother seemed to benefit from the opportunity to discuss parenting issues with another parent. She already had a good sense of how to play with her children. She seemed to gain confidence in her skills pertaining to stimulating speech development for both of her
sons. The child continued to show delays in speech development, however he did acquire new skills in all developmental areas during the program. It was recommended that the mother make a referral to the speech therapy program in which the older boy was enrolled if the problem continued.
Family C5

This family included mother, age 34, father, age 40, and target child—male, age 22 months. This couple lived together and chose not to marry because they feared loss of income. The mother had a history of abuse by a number of step-mothers and institutionalization at age 11. She had given birth to another child while living in the institution, and according to the mother, was tricked into signing papers allowing the child to be adopted. She had also been arrested for the theft of small amount of money. The father was also mentally retarded. His relatives all lived in another state. He was occasionally employed as a clerk in a nearby carry-out store. He also claimed to be a recovered alcoholic and took his family to Alcoholic's Anonymous meetings.

These parents were very devoted to their son. With the limited resources they had, they did their best to provide for him. He was enrolled in a program for children with developmental disabilities and they regularly went with him and attended parent education and support groups. They also made every effort to take him for recommended hearing evaluations and other medical appointments. The mother was very aware of the child's abilities and attempted to provide appropriate activities. The child showed signs of delays in language development.

Counseling sessions with this mother had several areas of focus: 1) the child's development, 2) the family's limited resources and needs 3) the mother's hurt and anger about her past and 4) her goals
for her child. She seemed to welcome the opportunity to discuss these topics. She managed to also attend to her child's needs during the sessions.

This mother seemed to especially benefit, for herself, by having the chance to talk about the issues she chose. The positive effects on her self-esteem were observable, however there was little direct evidence of this having an effect on her parenting skills. The child did show improved language skills at the end of the study. The mother also gained support for making her own decisions about child rearing issues such as toilet training.
Family C6

This family included the mother, age 30, married to father, age 30, and target child, female, age 20 months. The family lived the father's mother, step-father, two teenage step-sisters and one step-brother. The mother had been institutionalized as a teenager after having attended a special program for the mentally retarded in another city. She did not have many contacts with her family, but she clung to the idea of some day visiting her father. The target child's father was employed as a dishwasher and was also mentally retarded and had attended public school special education classes.

This mother was only minimally responsible for household duties because there were others in the home. The home was very tidy. She was under constant criticism by all of her in-laws regarding her parenting skills. Her affection for her daughter was strong, however she often had inappropriate expectations of the child and seemed to misinterpret many of her cues. The child showed evidence of developmental delay especially in the areas of communication and social interaction. Her daughter had a history of seizures and both parents shared responsibility for her medical treatment and hospital visits.

Counseling sessions were directed toward the child's developmental and medical needs. The goal was to help the mother focus on what her daughter was actually capable of doing, what she enjoyed doing and ways to help her grow. This mother had difficulty making decisions independently and relied heavily on suggestions of others.
At the end of the study the child continued to show developmental delays and the mother was encouraged to re-enroll her in a program for children with developmental disabilities. The mother showed limited improvement on parenting skills. Concrete suggestions such as talking more to her daughter and play activities for social interaction were made. Her inability to make independent decisions and her in-laws increased interference were unresolved problems. It was recommended that she attend parent education and support groups associated with the program for her daughter.
Family C7

This family included mother, age 25, married to father, age 26, target child, female, age 13 months, brother age 6 who had never attended school, brother, age 4, enrolled in a program for the developmentally disabled with severe language deficits but no known diagnosis, and sister, age 2. The father's mother also lived in the home. She and her son were employed. The mother was mentally retarded and appeared to have evidence of emotional disturbance, she had attended public education classes in another state.

This family's home was in extremely poor condition for repairs and cleanliness. In spite of the inadequate surroundings, the mother had very good skills in her ability to discipline the children and was adequate in her teaching abilities. They had very few appropriate play materials. While not always appropriate, the mother spent much of her time and energy trying to obtain resources and services for her family. The target child was quite small for her age and the mother was attempting to follow through on recommendations for further medical diagnosis of her problem. The child was rather passive and independent, but considering the active nature of her three older siblings this was an adaptive way to behave.

Counseling sessions with this mother were quite chaotic with the four children scrambling for the bag of toys brought to each session. The mother showed remarkable skills at being able to help the children share while she continued to discuss her latest contacts with various service agencies. Her ability to focus on the developmental needs of
the target child was limited due to her many other concerns. Support through suggestions and approval were given for the mother to help her focus on goals most helpful to the entire family.

The target child seemed to make some developmental gains during the study, however she continued to appear to have some delays. Observable parenting skills showed some gains by the mother talking more with the target child. She also seemed to have gained some insight into, and more appropriate methods for working with community agencies. The family was referred to another home visitation program for high-risk infants and mothers.
Family C8

This family included mother, age 24, father, age 29, target child—male, age 11 months and a half-brother, age 4 (the mother's son by another father). This couple was married and lived with his parents and various family and friends (it changed from week to week). The mother had been institutionalized, the father was also mentally retarded. Neither parent was employed. The target child had been identified as being failure to thrive and the family was under constant scrutiny by their case worker and by the social worker at the well-child clinic where he went for weekly check-ups.

This mother was truly concerned for both of her sons and was willing to provide recommended treatments for both (the older boy attended speech therapy). Emotionally, the mother seemed very depressed at times and was then unable to provide much support to the children. She relied on her husband and other family members to help with children's care. When she was able to focus on the children, she did attempt to play with them, however her ability to attend was limited.

Counseling sessions with this dyad focused on the mother's feelings about the interventions by the community agencies concerning the target child's eating problems, and on the child's play activities. This mother seemed to appreciate having a supportive person in the home and having the toys brought for the children. She was very reticent and only minimally participated in a discussion.

Progress with this dyad was very limited. The mother did seem to
be spending more time helping with the target child's feeding and he did begin to gain weight during the program. She also seemed to be more comfortable playing with the children, but her ability to attend remained very short. The child was involved in high-risk home intervention program at the end of the study.
Family C9

This family consisted of mother, age 25, married to father, age 32, target child—male, age 9 months, brother, age 5 who had attended a program for the developmentally disabled, sister, age 4 and sister, age 2. The mother was mildly mentally retarded and had a history of being abused, of running away from home at age 14 and living with a motorcycle gang during which time she reported to have been abused, and became involved in drug and alcohol abuse. The father had a history of alcoholism and had been accused of abusing the mother. All but the target child had been removed from the home at least once by protective services. The parents had become involved in a church about a year before this study. This seemed to have very positive influence on them in terms of seeking counseling, finding a positive support network of friends and reportedly stopping substance abuse. The father was recently unemployed and spent his time doing odd jobs and serving as a lay minister.

This mother was very concerned about her children and she was very good at observing and reporting their behaviors and abilities. She was aware of the target child having some developmental delays and was seeking help for this. She was able, at pretesting, to use play materials in an age-appropriate teaching-style with her children. Her most difficult problem was trying to cope with the demands of caring for four children at once.

The focus of the counseling sessions with this mother was to provide support and recommendations for her attempts to get services
for her children and herself. She had significant medical problems of her own and supporting her in taking care of herself was used. This mother directly requested specific activities for the target child and she quickly generalized many of the suggestions.

This mother showed much concern for all her children throughout the intervention period. Observable gains in parenting skills were not great, because she seemed to have begun with an adequate level. For her, it was positive, considering the number of family problems, that she was able to maintain the level of organization in the family.

The child made minimal gains in developmental skills. He was referred to a program for the developmentally disabled along with the 4 year old sister.
SUMMARY

Based on clinical observations, parents in both groups showed improvement. The Mother-Child Play Therapy was more effective in facilitating observable gains in parenting skills especially those related to play interaction with their children. The counseling treatment was helpful for some mothers, but it tended to influence the mothers more on an individual basis rather than on their observable parenting skills. It is not known however, which method would have the greater long-term impact on mother and child. It was apparent to the therapists, that some of the mothers may have benefited more from receiving the other type of treatment than they were assigned. Most may have benefited from a combination of the two treatments or the addition of a third, more structured treatment, with more direct training of specific skills.
CHAPTER VI

DISCUSSION

RESTATEMENT OF THE PROBLEM

The purpose of this research was to examine the effects of the experimental treatment - the Mother-Child Play Therapy, on the parenting skills of mentally retarded mothers of young children. This experimental treatment was expected to show greater positive effects on parenting skills than the control treatment of parent counseling. Statistical results were expected to show significant differences between the two groups on their scores on four assessment instruments.

The contents of this chapter will include discussions of the limitations of this study, the statistical results, the revision of the Observation of Parent-Child Interaction in Play (OPCIP), the clinical results and implications, and suggestions for future research.

LIMITATIONS

One limitation of the study is the small sample size (eighteen subjects, nine per group). While some statistically significant results were found, more definitive results may have been attained with a greater number of subjects. Demographic characteristics were balanced across the two subject groups except for the educational history of the mother (Table 2). The Control Group had five mothers
with histories of institutionalization, the Experimental group had none. Generally, the pretest scores did not indicate that this difference had an effect on initial skills of the mothers.

Testing time in the study ranged from seven to thirteen weeks. These differences were primarily due to the same reasons these families needed help in the first place. The mothers were at times unreliable in keeping appointments, the necessity of collecting welfare checks and food stamps interfered with keeping appointments, illness in the family, and general disorganization in regard to time also contributed to this problem. The amount of time (6 hours) was kept constant, but in order to minimize the differences in time period elapsed between pretest and posttest, some families received one hour-long session each week rather than twice weekly half-hour sessions.

As this was a pilot study, only six weeks of treatment were planned. While some positive effects were found, it is expected that longer and more intensive use of the Mother-Child Play Therapy might yield greater changes on the parenting skills of mentally retarded mothers. Both with young children and with mentally retarded adults, the number of repetitions might be more significant than the total amount of time spent in treatment.

DISCUSSION OF STATISTICAL RESULTS

Results of the analysis of subject's scores on the HOME found a significant time effect for both the therapy and counseling groups. This means that both treatments were associated with a change in
scores on the HOME. The main effect of time x treatment group showed a trend towards the Play Therapy treatment being more effective, however the results were not statistically significant \((p < .08)\). The between-groups source of variance was not statistically significant, therefore the results were not due to initial differences between groups.

An analysis of variance on the Parent Behavior Progression (PBP) scores resulted in similar findings. Both therapy and counseling treatments had a significant positive effect over time, which was not attributable to initial group differences. A trend showing a differential effect of the play therapy treatment was found, but it did not reach a statistically significant level \((p < .07)\). These results suggest that these mentally retarded mothers were able to make positive changes in their behaviors and attitudes.

One limitation specific only to the PBP was that the scores on this instrument were particularly dependent on the familiarity of the observer with the parent. This may have influenced the results in two ways: (1) during pretesting, those mothers who were more talkative and open in their discussions about their children may have received a higher score and therefore those who were less verbally open may have received a lower score — which did not reflect the actual behavior and attitudes of the mothers; and, (2) the greater familiarity of the observers with the mothers on the posttest may have artificially shown a greater improvement by the mothers than had in fact occurred.
An analysis of variance yielded a significant positive effect by the Play Therapy treatment for the total OPCIP score and all subscores but the Socialization subscore (Tables 7-12). Problems with scoring directions for the socialization items may have influenced this (See OPCIP revision discussion, next section). Further analysis of the means showed more clearly that the groups were not different at pretest, but the Therapy Treatment had a significant positive influence on the OPCIP scores as compared with the Counseling on posttest scores. The Play and Socialization subscores did show a significant difference between groups at pretest. However the main effect was still significantly different for the Therapy Group on the Play subscore.

The results of the OPCIP scores indicate that the Therapy Treatment did have a significant and positive influence on the observed parenting skills of the mothers as compared with the Counseling. The instrument was developed by the present author specifically to assess the influence of the Mother-Child Play Therapy on observable parenting skills seen in play interactions between a mother and young child. The instrument needs further validation and application, but the results suggest that this will be a useful instrument to use in connection with the Mother-Child Play Therapy, and that the therapy can effect positive changes in parenting skills of mentally retarded mothers of young children.

An analysis of variance was used to compare the Therapy and Counseling treatments' effect on the developmental skills of the children as assessed by the Early Intervention Developmental Profile
groups on this measure. This could be attributed to the natural developmental growth of the children, particularly on the flat scores. But, the weighted scores, which were used to control for this effect also yielded significant positive changes in rate of development for both treatment groups.

The scores indicated a trend towards a more positive influence by the Therapy treatment compared to the Counseling treatment. However, statistically significant differences were not obtained. The short intervention period is one possible reason for the results. It would be expected that a longer treatment program might show a greater differential effect.

Correlations between subjects' pretest scores (Table 18) were significant for only scores of the OPCIP (between total scores and subscores). This would be expected because the subscores are directly related to the total score. There were many more significant correlations between subjects' posttest scores (Table 19). Eight of the fourteen were again relationships between total and subscores of the OPCIP. The other significant correlations were between the HOME scores and all the other parenting assessment scores and the PBP scores with OPCIP scores. The Michigan scores, of the children's developmental levels, showed non-significant relationships with the parenting assessment scores.

Interpretation of this is not clear because there are several possible explanations: 1) the treatment methods both had the effect of focusing the parenting skills of the subjects in a positive way, 2) the pretest scores were less reliable than the posttest scores, or 3)
the observers knew the parents better at the posttest and they saw a pattern of parenting skills which was reflected in the scores.

In summary, the most important result of this investigation was that both the Mother-Child Play Therapy and Counseling treatments had a significant positive influence on both parenting skills and the children's developmental skills. The differential effectiveness of the experimental treatment showed a trend towards having a stronger influence on the mothers' and children's skills, however significant differences were obtained only for the OPCIP. The OPCIP is the instrument developed specifically to examine the behaviors and skills which were the focus of the Mother-Child Play Therapy.

DISCUSSION OF THE OPCIP REVISION

The OPCIP is an observational tool designed for use with parents at risk for poor parenting skills. It was developed specifically for in-home observation of a parent and child where unobtrusive and inexpensive measures were required. This instrument was not designed to replicate instruments which use the more technologically advanced methods of video-taping and computer analyses of parent-child interaction.

The revision of items on the OPCIP Checklist was based on two things: (1) interrater agreement based on its use in this study (Table 4); and, (2) the opinions of the observers using the instrument as to the clinical usefulness of the items and the ease with which the items could be scored.
The original OPCIP Checklist included items looking at mother to child behaviors, child to mother behaviors and mother-child reciprocal behavior, for the social/emotional and communication areas. As the OPCIP was being used in this study, it became apparent that the observers were unable to accurately score all of the observational data simultaneously. The mother to child behaviors usually stood out as the most obvious and most important and were scored most often by the observers. Some of the values for interrater agreement were high for the other types of behaviors, but this seemed to be a result of the observers not being able to score the items so that the scores were very low, resulting in artificially high correlation values. Based on these findings, the items were reduced to observation of mother to child behaviors only and these items now include mother-child reciprocal behaviors, which eliminates the confusion which arose from trying to define the two different types of behaviors.

All three of the gestural items were very difficult to score and interrater agreement values were not statistically significant. Therefore the gestural items were dropped from the checklist.

The eye contact, smiling and positive physical contact items were difficult to score using frequency data. This was because it was impossible to define discrete behaviors, for example when a mother would hold the child in her lap the entire time. Therefore, these three items were rewritten to reflect this, using frequency ranges of "constant", "often" or "seldom". These items are now scored at the end of the observational period by circling the most appropriate
description of the mother-to-child behavior.

The Play items generally seemed to provide much useful information, and interrater agreement was sufficient (83.3% on posttesting) so that these items were left as they were on the original Checklist. Item 12, "Position is appropriate," seemed to provide little useful information and was therefore not included on the revised OPCIP Checklist.

The organization of the Checklist was also revised so that the frequency data, which require the most attention from the observer, were placed at the top of the page. The original OPCIP and Checklist and the revised versions are included in Appendices G and K, respectively. It is expected that the revised OPCIP will enable the observers to collect more accurately useful information which can be used to assess and provide remediation for parenting skills of at-risk parents.

DISCUSSION OF CLINICAL RESULTS

Positive effects of the Mother-Child Play Therapy on the parenting skills of the experimental group mothers were found based on clinical observation of the subjects (Chapter V). These gains were seen in such behaviors as increases in verbal interaction with the child, increases in use of descriptive labels of objects and actions, increased use of verbal praise, decreases in ridicule of the child, and generalization of new skills. There also seemed to be a greater appreciation by the families receiving the Play Therapy for the importance of play and the value of toys. Many more of these families
began to ask questions about appropriate toys to get for their children, even though they knew they would be receiving free toys at the end of the study. The long-term effect of this change in attitude would be interesting to examine in later research.

The therapists who participated in the program generally found that with the Mother-Child Play Therapy, the very immediate and concrete effects of modelling and highlighting were particularly important aspects of the technique. These mothers generally were interested in the play therapy sessions and consciously made an effort to imitate behaviors of the therapist. In the counseling sessions this was much less apparent. Having the opportunity to see the play activities and to hear the therapist talking with her child did seem to have a positive effect on most of the Therapy treatment mothers.

Some positive effects were also found with the control group which received parent counseling. Several dyads seemed to benefit from discussions regarding the child's development. Others seemed to benefit from support and guidance provided regarding their access to community services and agencies. Several others, especially those who had unhappy backgrounds such as having been institutionalized, seemed to benefit from the opportunity to discuss their past in a supportive atmosphere. The effectiveness of the counseling may be more evident as long term effects by improving the mental health of the family as a whole. The mothers who made the least gains may have benefitted more from the experimental treatment method because they seemed to need more concrete and more structured assistance with parenting skills.

One thing that was apparent to those involved in the study was
that there were not always very clear lines demarcating the Therapy and Counseling treatments. With the toys present for both, some playing with the toys and appropriate modelling by the therapist occurred during the Counseling sessions. During the Therapy sessions, although focused much more on the play materials and activities, parents would bring up issues more appropriate for counseling, which could not be entirely ignored.

Ideally, the gains for both groups should have been greater. More intervention should be provided in terms of greater number of weeks. These families would probably also benefit if the interventions were more intensive (greater number of hours per week). Several important questions, which remain unanswered, are whether these newly acquired skills will continue after the completion of the study, whether they will generalize to other children in the family and whether they will generalize to new developmental levels of the target child.

All of the families in the study would have benefitted from better organized social service delivery. They were more often inundated with services which were not well-coordinated enough to meet their needs than they were lacking in services. These families do need a variety of services but they also need support in sorting out the various types of help being given them. It might be best if one agency in the local area took primary responsibility for case management and advocacy for families which include parents with mental retardation. The concept of normalization is important and yet these families often seem lost in the social service system with none of the agencies taking a well-defined approach suited for their special abilities.
It would also seem important, based on the experiences of some of the families in this study, that social service agencies provide inservice training to staff who may come in contact with these families. Caseworkers, homemakers, public health nurses, etc., need help in developing realistic expectations of these clients. These professionals may unwittingly be feeding into the feelings of acquiescence and low self-esteem many of the parents may be feeling. The service workers may expect too little of the clients with mental retardation and either develop a highly authoritative manner with them and take away their right to make decisions concerning their families, or become overly protective and do things for the clients which they can do themselves. They may also expect too much of the parent, seeing her as lazy or non-compliant rather than unable to do something due to her specific disabilities.

Several services which are lacking in this community are recommended. The first is the need for supervised apartment living for families already experiencing failure such as those described in Appendix A who have lost custody of their children. This might be arranged in a manner similar to semi-independent living apartments for single adults who are mentally retarded. Additional services needed include support groups for these mothers. They are often socially isolated and lack the family support system other families have. They also would benefit from supervised play groups along with their children, and supervised recreational activities such as baby swimming classes described by Rosenberg and McTate (1982) in which mother-child
interaction and child care skills such as dressing, hygiene and diapering are positively modelled and reinforced.

In conclusion, mentally retarded mothers did show some improvement in parenting skills as observed by the therapists during the Mother-Child Play Therapy sessions. Control subjects receiving parent counseling appeared to make fewer gains. One reason for the differences could be attributed to the more structured and concrete approach of the Mother-Child Play Therapy as compared with the counseling group. The Mother-Child Play Therapy treatment appears to potentially be beneficial in treating mentally retarded parents who are at-risk for poor parenting skills. However, it is not a panacea. Many other services are needed by these families to ensure healthy development of the children. Especially important is the need for well-coordinated use of the programs and services already available in the community.

SUGGESTIONS FOR FURTHER RESEARCH

Suggestions for future research will be discussed for two topic areas. The first is for further validation of the use of the Mother-Child Play Therapy and the OPCIP Checklist with mentally retarded mothers of young children. The second is other areas of research needed concerning the parenting skills of mentally retarded mothers.

The effectiveness of the Mother-Child Play Therapy in improving parenting skills needs to be evaluated in a study with a larger and more representative sample. The limitations of the present study need
to be more carefully controlled. Balancing of subjects based on significant characteristics of the mother and child and based on pretest scores on parenting skills assessments needs to be done. In addition to a contrast treatment such as the parent counseling used in this study. A true control condition should be used where no treatment is given during the experimental portion of the research. The control and contrast group subjects could be offered the more structured Mother-Child Play Therapy treatment following posttesting. It is also recommended that future research use a longer and more intensive treatment period and that long term effects of the intervention, including generalization to other siblings, be studied.

Much further research is needed in the study of parenting skills and parenting skills training of parents with mental retardation. Criterion referenced assessment instruments such as the OPCIP developed in this research and those by Sherman & Flory (1981) which look at more basic child care behaviors (such as bathing and feeding), need to be further developed and validated so that accurate assessment of the effects of parenting skills training can be done. Researchers need to identify with more accuracy, the types of services which are the most effective in remediating which types of problems experienced by these families. The ultimate goal of further research in this topic area should be to prevent the cycle of cultural-familial mental retardation often seen in these families.

SUMMARY OF THE STUDY

Eighteen mother-child dyads, of which the mother had been
diagnosed as having mental retardation and the child was under 30 months were assigned to two treatment groups. The experimental group received the Mother-Child Play Therapy in which mother and child are engaged in play activities with developmentally appropriate toys in the home. General goals of the treatment method are to enhance positive interaction and communication between the mother and child and to enable the mother to provide appropriate learning activities to the child. The mothers were encouraged to change their behaviors through modeling, highlighting, role-playing, explaining, and reinforcement of positive behaviors exhibited. Control families received parent counseling in the home with toys provided to the child during the sessions.

Evaluation of the relative effectiveness of the two treatment methods was done using four assessment instruments: the HOME, the PBP, and the OPCIP evaluated parenting skills of the mothers, and the Michigan (Early Intervention Developmental Profile) was used to evaluate the developmental level of the child. Statistically significant improvement was found on all assessment instrument scores by both treatment groups. A trend towards the Play Therapy treatment having a greater positive effect on the scores for parenting skills and the children's developmental skills was seen. Significant differences for the Therapy treatment's positive influence was seen only on the OPCIP scores. The OPCIP was the instrument designed specifically to assess observable parenting skills such as the ones identified as important in the Mother-Child Play Therapy technique.

Limitations of the study included small sample size, lack of
controls on the number of weeks from pretest to posttest and a treatment period which was too brief. The clinical observations by the therapists were that greater improvements were made by the mothers who received the Mother-Child Therapy. Implications of the findings were that community services needed to be better organized and offer a greater variety of specialized services for mentally retarded parents. Further research is needed in the area of training parenting skills to parents with mental retardation. The effectiveness of the Mother-Child Play Therapy should be examined with a larger population using a longer and more intensive treatment period.
BIBLIOGRAPHY

Abbott, J. M., & Ladd, G. M. "any reason why this mentally retarded couple should not be joined together,". Mental Retardation, April 1970, 8, 45-48.


Bass, M. S. Surgical contraception: A key to normalization and prevention. Mental Retardation, December 1978, 16 (6), 339-403.


Child Behavior and Development Consultants, 5411 Oak St., 1979.)


Begab, M. J. Unmet needs of the mentally retarded in the community. American Journal of Mental Deficiency, 1958, 62, 712-723.


Budd, K. S. Factors contributing to successful interventions with mentally retarded parents. Paper presented at American Association on Mental Deficiency, Boston, June 1982. Available from Meyer Children's Rehabilitation Institute, University of Nebraska Medical Center, 42nd and Dewey Sts., Omaha, Nebraska 68105.


Burt, R. A. Legal restrictions on sexual and familial relations of mental retardates-old laws, new guises. In F. F. de la Cruz

Butler, F. O. A quarter of a century's experience in sterilization mental defectives in California. American Journal of Mental Deficiency, 1945, 49, 408-413.


Fotheringham, J. B. The concept of social competence as applied to marriage and child care in those classified as mentally retarded. Canadian Medical Association Journal, May 8, 1971, 104, 813-816.


Goldstein, W., & Weiss, F. C. The effects of training a retarded mother to implement a token reinforcement procedure on her son's compliance. Unpublished manuscript, 1981. (Available from Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, Massachusetts 02154).


Gordon, S. Sex education for the handicapped. In M. S. Bass & M. Gelof (Eds.) *Sexual rights and responsibilities of the mentally retarded* (2nd. Ed.), Proceedings of the conference of the American Association of Mental Deficiency, Region IX, October 1927.


Hamilton, J. The retarded adolescent—a parent's view. Family Planning Perspectives, 1976, 8 (6), 257.


Mills, N. Our daughter's happiness depends on her being sterile. Exceptional Parent, April 1977, 7 (2), 2-4.


Ramey, C. T., Mills, P., Campbell, F. A., & O'Brien, C. The infant's home environment: a comparison of high risk families and families from the general population. American Journal of Mental Deficiency 197, 80, 40-42.


Robb, W., & Weiss, F. Training retarded parents as behavior change agents. Unpublished manuscript, 1981. (Available from Eunice Kennedy Shriver Center, 200 Trapelo Road, Waltham, Massachusetts 02154).


Rosen, M., Clark, G. R., & Kivitz, M. S. Habilitation of the handi­


Program, Department of Psychiatry, University of California, 1980.


APPENDIX A

A Survey of Families With Mentally Retarded
or Developmentally Disabled Persons Residing in
Franklin County, Ohio

By

Ann Wonglor Thompson

1981
A survey of families with mentally retarded or developmentally disabled parents residing in Franklin County, Ohio

By Ann Honglor Thompson

A survey was conducted by this author from November 1980-February, 1981 in Franklin County, Ohio. The purpose of the survey was to acquire information regarding the number of families in the area which consisted of at least one mentally retarded or developmentally disabled parent with whom there was at least one pre-school age child residing in the home. Two versions of a written survey were sent to five community agencies which deal with mentally retarded or developmentally disabled clients. The ultimate purpose of the study was to determine whether there existed in the area a population large enough to justify doing a research project aimed at assessing and training parenting skills to mentally retarded and developmentally disabled parents.

The original survey (Appendix A) was sent to the following agencies: Association for Developmental Disabilities (A.D.D.), the Franklin County Board of Mental Retardation and Developmental Disabilities (F.C.B.R.D.D.), the Franklin County Children Services (F.C.C.S.), the Institute for Human Services (I.H.S.), and the Region 3 of the State Division of Mental Retardation and Developmental Disabilities (Region 3). F.C.C.S. requested that the survey be rewritten so that it could be completed more quickly by the case workers. The revised survey was completed by only the F.C.C.S. case workers (see Appendix B). The agencies will be described in more detail below.

A.D.D. is a private agency which provides residential services for adults and a day care center for developmentally disabled children and their siblings. The social worker for the day care completed the survey. There were approximately 35 children enrolled at the day care center at the time of the survey.
F.C.D.M.R./P.P. during the period this agency was renamed, it was originally called the Franklin County Program for the Mentally Retarded (F.C.P.M.R.). This is a county agency providing educational and training services to mentally retarded and developmentally disabled clients of all ages. Home-based training, infant stimulation classes, preschools, community classes for moderately retarded school-age children, and sheltered workshops are provided. The six home-based specialists who work primarily with the preschool-age children were surveyed. They are also responsible for completing the initial intake process for all new referrals. There were 471 children enrolled in the FCPM/R Early Childhood Education program in November 1990. Of the 471 children, 165 were receiving only home-based services and were therefore most familiar to the home-based specialists. The other 306 were enrolled in preschool classes for children birth to six years.

F.C.C.S. is the local agency concerned with child protection. Children and families are referred for a variety of problems and services including: abuse and neglect, protective care, foster care and adoption, homemaking services, unruly youth, unmarried parents, etc. Many clients are referred by the courts. The agency was serving approximately 2000 clients, 605 of which were being served because of some parental condition or situation which has led to the children to be lacking proper care or support. There were 10 case managers who reported a summary of the caseloads of caseworkers in their units on the survey.

I.H.S. is a private agency which began providing services in April 1980 to assist families with developmentally disabled children in finding and using existing community services.

Region 3 is a State agency providing case management of any mentally retarded/developmentally disabled individuals in a nine county region including Franklin County. The three case managers working with clients in Franklin County were surveyed. Each of the case manager's responsibilities include locating appropriate
community services, including residential placements. Many of the clients are former residents of institutions for the mentally retarded.

The survey requested the following information: the number of families with a mentally retarded or developmentally disabled parent with whom a preschool-age child was residing; the number of children in the families; the classification of adults (mildly or moderately retarded or developmentally disabled); other agencies involved with the families; the number of families which had a mentally retarded or developmentally disabled parent which had lost custody of their children; and on the original survey, respondents were asked to rank order a list of child rearing skills needed by parents.

A summary of the information collected is presented in Table I. Because of the differences between the two different surveys, some of the information is non-equivalent. For example, F.C.C.S. case managers reported only on families with children ages 0-36 months. Question Number 6 on the original survey and Number 5 on the F.C.C.S. survey were intended to provide a means for correcting for families which are involved with several agencies so that they would not be counted more than once. The results indicate a significant discrepancy between reciprocal agencies' totals. Therefore, the reliability of this information cannot be considered acceptable. This makes it impossible to provide a single total for all of the agencies. Descriptive data from each agency is provided.

For the purposes of this survey, mildly mentally retarded was defined as: the adult having attended classes for the educable mentally retarded (E.M.R.) which is intended for those persons with I.Q. scores between 50-70. Moderately retarded was defined as being those who attended community training classes for the moderately retarded (I.Q. scores below 50). Developmentally disabled was defined on the surveys as referring to those persons with significant emotional or personal adjustment problems and/or has received regular mental health care.
A.D.D. reported three families with at least one mentally retarded/developmentally disabled parent and at least one child in the home under age 36 months, and six families with children 37-60 months. There were a total of ten children in the six families. Four of the adults were classified as mildly mentally retarded and two as developmentally disabled.

Data from the PCHRA/DD shows that there were eleven families with twelve children 0-36 months and nine families with eleven children 37-60 months. There was a total of eighteen families and twenty-three children under 60 months. Fifteen of the parents were classified as mildly mentally retarded, four as moderately mentally retarded, and two as developmentally disabled. This indicates that three of the eighteen families consisted of both parents being mentally retarded or developmentally disabled.

I.H.S. reported three families with three children under 36 months and three families with a total of three children 37-60 months. Of the six families, three had parents who were mildly mentally retarded, one was moderately mentally retarded and two were described as developmentally disabled.

Region 3's case managers reported twelve families with a total of twelve children 0-36 months, and eight families with a total of eight children 37-60 months. This yielded a total of twenty families with twenty children. Eight of the parents were mildly mentally retarded, nine were moderately mentally retarded and three were described as developmentally disabled.

The F.C.C.S. case managers reported seventy-three families with ninety-four children ages 0-36 months. The adults were described as being mildly mentally retarded in twenty-seven cases, moderately mentally retarded in twenty cases and thirty-six were described as developmentally disabled. These numbers indicate that there were 10 families in which both parents were handicapped. Considering the fact that all of the families involved with this agency have been identified as having some difficulty with child rearing, these figures indicate that there
are a significant number of such families needing assistance with parenting.

Another important set of data concerns the number of families with one or more parents who are mentally retarded or developmentally disabled and with children under 36 months who have been removed from the parents custody due to poor parenting skills (i.e. in foster placement). F.C.C.S. who is legally responsible for most of these children, indicated that there were fifty-six families fitting the above description. The other four agencies combined, reported ten families as described. It is likely that these were included in the F.C.C.S. figure.

Ten of the surveys respondents on the original survey rank-ordered nine child-care needs. Their responses were combined into a composite rank order with the most important listed first, as follows:

1. Providing a clean and safe environment for the child
2. Basic child care (feeding, diapering, hygiene).
3. Money management
4. Enhancing healthy social and emotional development of the child
5. Child development (providing appropriate play activities)
6. Obtaining appropriate health care.
7. Food buying and preparation (nutrition)
8. Discipline techniques
9. Obtaining specialized services for physical and/or intellectual handicap of the child.

It is important to note that this data is not generalizable to the total population of mentally retarded/developmentally disabled parents in Franklin County. All of these families have been identified as having some needs in the area of parenting or because there is a mentally retarded/developmentally disabled child in the family requiring special services. This survey does not provide information concerning the number of mentally retarded/developmentally disabled parents who are functioning independently of specialized community service agencies.
The number of families reported which had a mentally retarded/developmentally
disabled parent who had lost custody of the children due to poor parenting skills
in significant (fifty-six from F.C.C.S. and ten from the other four agencies). It
would be interesting to evaluate the cost effectiveness of providing foster care
as compared with providing direct services to the families to assist in keeping
the children in the natural home. Financial as well as emotional costs to the
parents and their children who are separated should be examined.

In summary, data from the F.C.C.S. case managers indicates that there are at
least seventy-three families in Franklin County which consist of at least one men-
tally retarded or developmentally disabled parent with at least one child under
36 months living with them. Of the seventy-three families, there are ten in which
both parents have a disability. Forty-seven of the parents were classified as
mildly or moderately retarded. In addition, four other community agencies report
that there are forty-five families with a mentally retarded or developmentally
disabled parent with at least one child under 60 months. There are forty-four
adults in those families who have been classified as either mildly or moderately
retarded. Most of those families also have at least one mentally retarded or
developmentally disabled child in the family (those from D.B.D., F.C.B.H.R./D.D.
and I.H.S.). Those numbers would seem to justify the need to develop a program
designed to provide those families with greater support for enhancing their par-
centing skills.
### Table 1

Summary of results from a survey of families with mentally retarded or developmentally disabled parents

<table>
<thead>
<tr>
<th>Agency</th>
<th>0 families reporting</th>
<th>0 families with children 0-36 mos.</th>
<th>0 families with children 37-50 mos.</th>
<th>0 families with children 51-56 mos.</th>
<th>Total 0 families with children 0-56 mos.</th>
<th>Classifications of adults</th>
<th>Other agencies working with the families</th>
<th>0 families with MB/DD parents, children removed from home</th>
</tr>
</thead>
<tbody>
<tr>
<td>A.D.D.</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>0</td>
<td>6</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>P.C.O.H.O./D.D.</td>
<td>6</td>
<td>11</td>
<td>12</td>
<td>9</td>
<td>11</td>
<td>10</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>I.G.S.</td>
<td>1</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>3</td>
<td>6</td>
<td>6</td>
<td>2</td>
</tr>
<tr>
<td>Region 3</td>
<td>3</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>0</td>
<td>17</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>P.C.C.S.</td>
<td>10</td>
<td>73</td>
<td>96</td>
<td>22</td>
<td>27</td>
<td>20</td>
<td>35</td>
<td>3</td>
</tr>
</tbody>
</table>

**Note:** N=not applicable, see pp. 1-2 for description of agencies, b=see p. 3 for definitions.
APPENDIX A

FRANKLIN COUNTY

PROGRAM for the MENTALLY RETARDED

Dear Professional,

I am a Psychology-Intern at Franklin County Program who is interested in working with mentally retarded parents of preschool-age children. I have found that these parents are usually lacking a wide variety of parenting skills. In order to develop a research program, I need to get an estimate of the number of such clients living in Franklin County. I am also interested in your opinion as to how to prioritize their needs. I would appreciate it greatly if you could take a few minutes to complete the enclosed questionnaire. I am asking only for approximate numbers of clients at this time. No names or personal identifying data are needed, therefore, there will be no breach of confidentiality. If the response to the survey is favorable, I may eventually be asking for referrals from your agency for clients who are interested in learning parenting skills.

Please send your response back to me in the enclosed, pre-stamped envelope.

Thank you for your time.

Sincerely,

Ann Wagner Thompson, M.A.
Psychology-Intern
SURVEY OF FAMILIES WITH MR/DD PARENTS

(Plano free to write comments beside any questions.)

1. At which agency are you employed?  
   - F.C.C.S.  
   - F.C.P.H.E.  
   - Region 3

2. How many families do you know of and work with, which consist of at least one mentally retarded or developmentally disabled* parent, and there is or at least one child under age 3 currently living with them?  

3. Approximately how many of the total number of children in all of the above families are:  
   - Birth-12 months?  
   - 13-24 months?  
   - 25-36 months?  
   - 37-40 months?  
   - 41-40 months?  
   - 69-60 months?

4. Do you know of any families who fit all of the criteria in 02 except that the children are not now living with the parents due to poor parenting skills (i.e. voluntary or involuntary placement of the children in another home)?  
   - Yes  
   - No

   If you, approximately how many families?  

5. Of the total number of families listed in 02, on what is your information based that the adult(s) are MR/DD? (Please put total numbers of clients on all lines which apply.)

   - You have written records stating that the adult was diagnosed as being mildly mentally retarded or attended EMR classes.
   - You have been told by the adult that he/she is EMR or attended EMR classes.
   - Based on your professional judgment the adult is mildly mentally retarded.
   - You have written records stating that the adult was diagnosed as being moderately retarded or has attended EMR classes or workshops.
   - You have been told by the adult that he/she has been labeled EMR or attended community EMR classes or sheltered workshop.
   - Based on your professional judgment the adult is moderately mentally retarded.
   - You have written records stating that the adult has been diagnosed as being developmentally disabled, such as due to significant emotional adjustment problems.

*Developmentally disabled refers to any problems which significantly affect the person's level of functioning such as emotional disturbance.
Survey of Families

---

You have been told by the adult that he/she is D.D.

Based on your professional judgment, the adult is developmentally disabled.

Other:

6. Of the families listed in 02, how many are also receiving services from the following other agencies? (Please put an X by your agency and total number of families by the others.)

- F.C.C.S.
- A.D.B.
- P.C.P.H.E.
- I.H.S. (Institute for Human Services)

Region 3

7. (For FCPHR only) Of the total number of children listed in 02, how many are enrolled in the following:

- Infant Class
- Early Training
- Preschool
- Home Based Only

Not on FCPHR roster (those would be siblings of your clients who are under age 5)

6. (For Region 3 only) Of the families listed in 02, how many live in Franklin County? Please list any other counties where such families are located.

9. How would you prioritize the following needs, based on the number of children you now serve who would benefit, and also on the degree of importance for the children's benefit? (Please use 01 as most important and 09 and 010 as least important.)

- Basic child care (feeding, diapering, hygiene)
- Food buying and preparation (nutrition)
- Money management
- Providing a clean and safe environment for the child
- Child development (providing appropriate play activities)
- Discipline techniques
- Enhancing healthy social and emotional development of the child
- Obtaining appropriate health care
- Obtaining specialized services for physical and/or intellectual handicap of the child
- Other(s):

10. In order to contact you later regarding referrals of clients to a training program, I would appreciate having your name and business phone.
11. Any additional comments or suggestions regarding provision of services for those families?

Thank You!
Dear Professional,

I am a Psychology-Intern at Franklin County Program for the Mentally Retarded who is interested in working with mentally retarded parents of preschool-age children. I have found that those parents are usually lacking a wide variety of parenting skills. I will eventually be asking for referrals from your agency of clients who are interested in learning parenting skills. In order to provide this service, I first need to know an estimate of the number of such clients in Franklin County. I would appreciate it greatly if you would take a few minutes to complete the enclosed questionnaire. I am asking only for approximate numbers of clients at this time. No access or personal identifying data are needed, therefore, there will be no breach of confidentiality.

Please send your response back to me in the enclosed self-addressed envelope.

Thank you for your time.

Sincerely,

Ann Wagnor Thompson, M.A.
Psychology-Intern

ATT: Rock
SURVEY OF FAMILIES WITH MR/DD PARENTS
by F.C.C.S. Caseworkers

(Please feel free to write any additional comments)

1. How many families have been on your caseload in the last three (3) months who fit all of the following criteria?
- At least one parent is mentally retarded or developmentally disabled.
- There is at least one child under age three (3) living with them

______ (Please list total number of families)

2. Of the families listed in #1, what is the total number of children who are under three (3) years? ________

3. Do you know of any families who fit all of the criteria of #1 except that the children are not now living with the parents due to poor parenting skills (i.e. voluntary or involuntary placement of the children in another home)? _______ yes _______ No

If yes, approximately how many families? ________

4. Of the total number of adults included in #1, how would you classify their disability? (Please put total numbers of adults by each.)
- Mildly retarded (i.e. attended HSR or Special Ed classes)
- Moderately retarded (i.e. attended TER or community classes and/or has attended sheltered workshops)
- Developmentally disabled (i.e. the adult has significant emotional or personal adjustment problems, and/or has received regular mental health care)

5. Of the families listed in #1, how many have members receiving services from the following other agencies?
- A.B.D. (Association for the Developmentally Disabled)
- Institute for Human Resources (Project Linkage)
- F.C.P.H.R. (including home-based, infant, preschool, community classes, and workshop programs)
- Region 3 (Department of H.R.)

* (Please use your professional judgment as to degree of the person's disability developmentally disabled refers to any problems which significantly affect the person's level of functioning such an emotional disturbance.)

In order to contact you later regarding referrals of clients to a training program, I would appreciate having your name and business phone.

______________________________

THANK YOU!
APPENDIX B

FLIER DISTRIBUTED TO COMMUNITY PROFESSIONALS

ATTENTION: Case managers, home trainers, nurses, and other direct care staff.

ANNOUNCING

THE MOTHER-CHILD PLAY PROGRAM

WHO IS ELIGIBLE?

- The children must be socially retarded (such as examined speech- and other disabilities and living in an environment for the retarded) and be having difficulty with personalization.
- The children must have a child 26 months of younger living with them.

WHAT IS IT?

The Mother-Child Play Program is a research program designed to improve mother-child interaction and to improve the mother's stimulation of her child. Each mother-child dyad will receive twice weekly home visits by an experienced play therapist who will work directly with them using play materials and activities to model appropriate skills. Depending on which group the family is assigned, they will also receive parent counseling.

The following observations will also be done of the home environment of the mother's parenting skills, of the mother-child interaction, and of the child's development.

For participation in the program, each child will be given 3 individually colored hours so keep at the end of the program.

WHO WILL ATTEND? The program will begin in September 1981 and last 16-18 weeks.

CO-ORDINATOR: MRS. JULIE M. ASBURY

WHO ARE YOU Sponsoring? The therapists will all be graduate students who have had experience working with emotionally retarded children and with providing therapy to children. They will all be supervised by a licensed psychologist. The program is part of the dissertation research of the director of the program, Dr. Jennifer Thompson, who is a Ph.D. candidate in developmental psychology at CU and is on the psychology staff of the Franklin County Board of DD/DD.

IF YOU HAVE QUESTIONS OR POSSIBLE Sponsors, PLEASE CALL TODAY:

Dr. Jennifer Thompson
203-1252, or 679-5550

(If you wish to have the client's permission to release their name, address and phone number to us, or you may give them one of the enclosed pamphlets and have them read themselves.) PLEASE do not give these pamphlets to parents who are not qualified for the program.}

THANK YOU!
APPENDIX C

DESCRIPTIVE FLYER FOR PROSPECTIVE CLIENTS

* Flier is in pamphlet form.
The following is a script of what was told to solicit participation in the Mother-Child Play Program:

The Mother-Child Play Program is to help you learn new ways to play with your baby to help your baby learn new things. The first week we will be testing your baby to see how he is developing—what he can do that other children his age are doing. We will also be watching you and the baby play together for about 10 minutes on both days. We will also be asking you questions about what kinds of toys your baby has, what he does during the day and what you do with him. After the testing is over, I will be coming to your home two times a week for one-half hour each time for a couple months. Sometimes you and I will be talking about the baby and things that can help you with taking care of him/her. Other times the three of us will play together and I will be showing you ways to help your baby learn new things and be showing the baby new toys and new ways to play with them. When my home visits are over, we will pick out five toys for your baby to keep. If you want to stop being in the program at any time you may.

Do you have any questions? Does this make sense to you? Do you think you would like to be in the program? (If yes, consent form is signed.)
## Appendix E

**CONSENT FORM**

The Ohio State University

**Department of Education**

**Dr. Henry Smith**

**Subject:**

**Date:**

**Parent/Doctor:**

**Child:**

**Form no.:**

**Program:**

**Location:**

---

<table>
<thead>
<tr>
<th><strong>I. Introduction</strong></th>
</tr>
</thead>
<tbody>
<tr>
<td>Learning how developmental milestones and my child.</td>
</tr>
</tbody>
</table>

---

| **II. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **III. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **IV. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **V. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **VI. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **VII. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **VIII. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **IX. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **X. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **XI. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |

---

| **XII. Learning how to develop skills and my child.** |
|---|---|
| 1. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
| 2. | My child needs specific stimulation to help my child learn new skills and to help me do so. |
APPENDIX F

DEMOGRAPHIC DATA FORM

<table>
<thead>
<tr>
<th>BACKGROUND INFORMATION SHEET</th>
</tr>
</thead>
<tbody>
<tr>
<td>Source of referral: Name____________________ Agency ____________________________</td>
</tr>
<tr>
<td>Date __________________ Phone ___________________ Address __________________________</td>
</tr>
<tr>
<td>CHILD'S Name ____________________________ Promontal history: ______________________</td>
</tr>
<tr>
<td>Sex __________________ D.O.B. ___________ Age ______________________________________</td>
</tr>
<tr>
<td>Birth order ____________________________ Birth history: ____________________________</td>
</tr>
<tr>
<td>Siblings ______________________________ Developmental history: ______________________</td>
</tr>
<tr>
<td>________________________________________ Any medical problems or diagnosis: __________</td>
</tr>
<tr>
<td>MOTHER</td>
</tr>
<tr>
<td>Name__________________________</td>
</tr>
<tr>
<td>D.O.B. _______________ Age __________</td>
</tr>
<tr>
<td>Address________________________</td>
</tr>
<tr>
<td>Phone_________________________</td>
</tr>
<tr>
<td>Education: ______________________</td>
</tr>
<tr>
<td>Employment: _____________________</td>
</tr>
<tr>
<td>Other training: __________________</td>
</tr>
<tr>
<td>Additional history: ______________</td>
</tr>
<tr>
<td>Diagnosis: _______________________</td>
</tr>
<tr>
<td>Source of Information: __________</td>
</tr>
</tbody>
</table>

171
APPENDIX G

THE OBSERVATION OF PARENT-CHILD INTERACTION IN PLAY

(OPCIP)

(Original Checklist and Manual)

The Observation of Parent-Child in Play (OPCIP) was designed by the present author to help identify significant behaviors related to mother-infant interaction. The OPCIP is in a checklist format which provides for tabulation of total number of a specified group of behaviors. It has three categories of behaviors: Social/emotional, communication, and play. The purpose of the OPCIP is to provide clinical data which can be translated into therapeutic goals for working with a mother-infant dyad who are at risk for poor parenting skills and developmental delay.

The items of the OPCIP have been intentionally designed so that they are phrased in a positive manner. This makes it possible to use the results (i.e., whether the mother is exhibiting particular behaviors or not) to define therapy goals. Most of the items are mother-centered. The reasons for this are that in the therapy, the mother is the primary agent for change, although the intended global goals of the therapy are to enhance the development of the child. A sample checklist of the fifteen items is provided in Appendix H.

Administration

The OPCIP is intended for use with mothers and their birth to thirty month children. The observer must be someone who is
familiar with normal and abnormal infant development, and normal and abnormal mother-child interaction. The OPCIP is to be administered in a play setting. For the purposes of this study it will be done in the family's home. This is recommended, because mothers and infants both are presumed to be more comfortable in a familiar setting.

For the purposes of this study, three developmentally age-appropriate toys (based on Michigan results) will be presented to the mother and infant. The mother will be instructed to play with her infant as she normally would, using the toys provided. The mother is asked to interact only with the child for ten minutes.

Scoring is done by marking check of hash-marks for each discreet unit of behavior observed which falls under the twelve categories. It should be noted that observer's interpretation of behaviors is often necessary. Total scores are recorded at the end of each row.

The five items: eye contact, smiles, positive physical contact, vocalizations and gestures are scored in a similar manner. All five have been divided into three categories of scores: (a) mother child, (b) child mother, and (c) mother child. These are interpreted as meaning that either (a) the mother and child are exhibiting the behavior in an interactive manner (e.g., mother smiles at infant, infant smiles back), (b) the child directs the behavior at the mother,
but the mother does not respond in kind, or (c) the mother exhibits the behavior, but the infant does not respond in the same manner (e.g. the mother smiles at the infant and the infant looks away).

The remaining ten items require the observer to define specific units of interaction rather than scoring every possible behavior. For example, in scoring Praises child, the mother may say "good girl Susan, I like it when you put your blocks in the can." This would be scored as one incident on item #4. The items under the Play heading are also related to global units of behaviors. They should be scored based on the entire set of behaviors associated with a particular activity. For example, the following might occur:

Mrs. A reaches for a ball, hands it to Bobby and asks him to throw it to her. He looks away and begins to chew on it. Mrs. A watches for a while, then suggests he throw it into a box. He still does not respond, so she asks if he would roll it to her. He smiles and begins rolling it, she rolls it back and they continue for a short time.

If the observer were to look only at the initial behavior of the mother, she would have received no score. But by the end of the segment, she had allowed the child to explore, assessed the child's level of interest and ability, and provided variations. (One score for each.)

When using the OPCIP in the clinical setting, it is recommended that baseline data of at least two different sessions with different sets of toys be used to compare with later assessments. In this, the mother serves as her own control. The amount
of change, i.e., total numbers of each item from one administration to the next, may give some indication of the effectiveness of a therapeutic program.

Some variables which would be expected to affect variation in the score would be: age of child (different ways of interacting change with the child's developmental level and changing interests), types of materials (some toys seem to naturally elicit more verbalizations than others), infant and mother's state (i.e., alert or sleepy, positive or negative mood), sex of the child, and general personality and style of the parent and child.
A Checklist for: Observation of Parent-Child Interaction in Play (OFCIP)

**Mother's name, Age, State, Observer, Age, State, Date, Location**

<table>
<thead>
<tr>
<th>Social/Emotional</th>
<th>H ↔ C</th>
<th>C ↔ H</th>
<th>H ↔ C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(1) Eye contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(2) Smiles</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(3) Positive physical contact</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>(4) Praises Child</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Communication**
(Score total number)

<table>
<thead>
<tr>
<th>H ↔ C</th>
<th>C ↔ H</th>
<th>H ↔ C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(5) Vocalisations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(6) Gestures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(7) Labels activities &amp; objects</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Play**
(score: yes = +, no = -)

<table>
<thead>
<tr>
<th>H ↔ C</th>
<th>C ↔ H</th>
<th>H ↔ C</th>
</tr>
</thead>
<tbody>
<tr>
<td>(8) Allows child to explore materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(9) Assesses child's level of ability w/materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(10) Assesses child's level of interest in activity</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(11) Provides variations with materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>(12) Physical position is appropriate</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Comments:

**Play Total:**
Materials and Source

Chiming rattle, Protecto
Cat rattle, manufacturer unknown
Plastic keys, Protecto
Jingle bells on plastic handle, manufacturer unknown
Cylindrical cage with bell, Brio
Butterfly rattle, Fisher-Price
Squeaky rubber bear, manufacturer unknown
Flower rattle, Fisher-Price
Rabbit ring rattle, Reliance Product Corporation
Monkey rattle, Fisher-Price
6-ring rocking stacker, Fisher-Price
Drum with balls, Playskool
Graduated peg board, Brio
Telephone, Fisher-Price
Push'n'go fire engine, Tomy
Wooden peg roller, Creative Playthings
Shape sorting mailbox, Playskool
Farmer Says-See'n' Say, Mattel
5" sponge ball, Nerf
Star Guitar, Tomy
Chatterpal camera, Mattel
Stop'n'go Clock, Playskool
Dapper Dan zip and button doll, Playskool
Busy Bubble, Playskool
Clack'n'Clatter dog, Playskool
Bop'n bottle, Shellcore
Nesting cups, Child Guidance
APPENDIX I

ORIGINAL MOTHER–CHILD PLAY THERAPY MANUAL

A MANUAL FOR THE USE OF
THE EXPERIMENTAL METHOD OF
MOTHER–CHILD PLAY THERAPY

By

Ann Henglor Thompson

July 1981
The Mother-Child Play Therapy is an approach developed for use with mothers who are developmentally disabled or mentally retarded, and their young children (under three years) to enhance the child's development through improvement in the mother-child interaction system. The procedure is conducted in a play environment, using a variety of therapeutic techniques.

Purpose

The goals for the mother in the therapy are three-fold: 1) to enhance positive social and emotional interaction; 2) to enhance positive communication between mother and child; and 3) to improve observational skills by the mother, to assess her child's level of interest and ability in activities, and to help her provide developmentally appropriate stimulation activities. The first goal relates to bonding and attachment. If the infant and mother do not enjoy each other and do not have a positive feeling towards each other, the more complex behaviors of communicating and reading cues may be difficult to obtain.

Communication between mother and infant is another essential goal. If a mother is smiling at a child who does not smile back, or vice versa, the smiling will probably soon cease. It is important that both the mother and child respond to each other when communicating through vocalizations, verbalizations, gestures, and facial expressions.

The final goal is based on having acquired some of the skills described in the first two goals. At this point, the mother needs to refine her observational skills of reading her child's cues, interpreting them accurately and responding appropriately.

The above goals are here described in very general terms. As in any therapeutic approach, specific individual goals will be defined for each mother-child
dyad. It is expected that any mother would have some basic skills in each of the areas. The purpose of the therapy then, is to identify the individuals' or dyads' strengths and weaknesses in each of the areas, and to promote growth in each.

**Rationale**

The rationale for using a therapeutic play technique with mentally retarded mothers and their children is based on several considerations. The use of a play setting provides an appropriate milieu for the child and mother to interact. It also allows for immediate reinforcement of appropriate parenting behaviors, for direct observation of modeled new behaviors and the chance to practice newly acquired behavior patterns. In an educational setting such as a group lecture, or in an individual counseling session, a retarded mother may say that she understands what is said, but may not be able to go home and generalize the concept in actual practice with her child. Therefore, the generalization of newly learned skills may be greater in a therapeutic setting with the child than in an educational setting.

**Philosophical Background**

Some of the basic assumptions behind the Mother-Child Play Therapy are derived from a developmental viewpoint of the continual growth potential in individuals, and the humanistic philosophy regarding the dignity and worth of each individual.

The Mother-Child Play Therapy is rooted in the concept of life-span development. That is, the individual, whether normal or subaverage in intellectual skills, continues to have the potential to grow in personal strengths and abilities throughout a lifetime. This applies to the potential growth of the child, the adult, the adult as parent, and even the therapist. The humanistic, or
client-centered approach of Carl Rogers is based on the concept of self-actualization—that each individual's primary drive is to grow and develop potentialities. The therapeutic method requires that the therapist communicate acceptance, honesty and understanding to the client (Oasow, Walsh & Tooi, 1980).

Conceptions of the development of the parental role by Nowberger (1977) and Bromwich (1981) have also been integrated into the Mother-Child Play Therapy approach. Nowberger describes a four-level developmental concept of parental awareness based on some of the concepts of Jean Piaget. The levels range from the parent seeing the infant only in light of the parent's wants and needs, to finally seeing the child as a completely separate individual with needs and abilities perhaps different from those of the parent. The goal of improving the mother's observational skills is related to this. By encouraging the mother to observe her child and to try to understand the reasons for the child's behavior, the mother's understanding of her child's individuality may be increased.

Bromwich describes a quasi-hierarchical set of six levels of parent behaviors. It begins with the mother's enjoying her infant, communicating with her infant, and finally, by Level 6, understanding and anticipating the child's developmental needs. These levels of parenting are also reflected in the items of the Observation of Parent-Child Interaction in Play (OPCIP) which is used in conjunction with the Mother-Child Play Therapy.

Some of the basic of the Mother-Child Play Therapy were derived from the play therapy technique described by Leland and Smith (1965) which is used with mentally retarded children. While their technique is not designed for use with adults, because the play milieu is not a normal one for an adult, some of the basic techniques used in the Mother-Child Play Therapy are also used by Leland and Smith. The use of a client-centered approach of allowing the client to determine the course of the therapy session to some degree, is also used.
Personnel

It is recommended that persons attempting to use the Mother-Child Play Therapy with mentally retarded mothers and their young children have received training in the following areas:

- normal and abnormal child development
- the study of mental retardation and developmental disabilities
- and, experience in therapeutic techniques with the MR/DD population, such as play therapy with MR/DD children, parent counseling with parents of MR/DD children or counseling with adult MR/DD clients.

The characteristics of acceptance of the worth of each individual, honesty and empathy are desirable traits for therapists. It is important that the therapist be willing to assume a number of roles within the therapy, including: that of a friend and support person to the mother, that of an advocate for the child, and that of a member of a group. Additionally, the therapist’s role will fluctuate between one of low structure where observation, reflection, and reinforcement are provided, and, for short periods, that of an agent external from the mother-child dyad, who provides insightful data to the clients.

METHOD

Apparatus

The Mother-Child Play Therapy is done in a play setting, preferably the home, using play materials selected for each dyad. Due to the child’s young age, therapy sessions should be no longer than thirty minutes. The toys should cover a range of development, below and above the actual developmental level of the child. They should provide a variety of experiences, and if possible, there should be some overlap with toys available in the home. New materials should
also be introduced to ensure continued interest by all those involved. Common, simple and inexpensive toys are generally recommended over expensive or difficult to find toys. This is because it is hoped that presenting toys which are interesting to the mother and child will encourage her to acquire or make similar materials for her child. Those that are simple and inexpensive are more likely to be copied. Toys are provided because they offer concrete experiences for the mother and child. But, it is also recommended that age appropriate activities which do not require specific materials be introduced as well (e.g., peek-a-boo, pat-a-cake, songs).

Introduction

The mother and child are introduced to the therapy session by saying that the purpose of the program is to help the mother learn new ways of playing with her child and to help her child learn new skills. The mother is told that the therapist believes that play is a child's way of learning and that it is important for the child to learn to play in many different ways. It should be explained to the mother that the therapist will be playing with the mother and child, but at times she will only watch them play. In either circumstance, the mother is to continue to play with her child in a way which she feels most comfortable.

The initial session is recommended to be used for the purpose of observation of the normal patterns of mother-child interaction by the dyad, and to make the initial steps in developing rapport. The (Observation of Parent-Child Interaction in Play) OPCIP is an informal observational tool developed by the author, which can be used to help identify strengths and weaknesses of the dyad. In addition, assessment instruments such as Caldwell & Bradley's (1978a) HOME Inventory, and the Parent Behavior Progression by Bromwich, et al (1978) can be used to identify strengths and weaknesses. Information from all of these can
then be incorporated into goals for the mother and child. It is also recommended that throughout the therapy program, records be kept of what occurred in each session with some analysis of techniques that worked and which did not. These are of course confidential records of the therapist.

Description of the Therapeutic Techniques

Throughout the therapy sessions the therapist must be an attentive listener and observer. There will also be a regular flow of conversation using the following techniques: reinforcement, highlighting, role-taking, modeling, and explaining.

REINFORCEMENT

Reinforcement is an essential part of the Mother-Child Play Therapy. The reinforcement codes are verbal and gestural. For the child, the positive reinforcement will be more overt than with the mother. For the child, smiles, hand clapping, verbal praise, cheering, patting or hugging may be used, depending on individual preference of the therapist and clients. For the mother, it is important that she retain her dignity as an adult and as a peer of the therapist. Therefore, more subtle positive reinforcers will be used, such as: smiling, nodding the head and providing verbal praise by highlighting a good response through the reaction of the child.

Example: If a mother interacts in a happy peek-a-boo session with her child, the therapist may highlight this by saying, "Kathy is just loving that game." The mother is not being directly reinforced in the above example, as compared with the therapist saying the following: "Good job Betty (the mother), you made her laugh." The effect of either statement will serve to tell the mother she has done well, but in the second example, the reinforcement seems to be more mother-only centered, and rather demeaning, while the first example highlights
the positive effect she is having on her child.

HIGHLIGHTING

Highlighting is done by the therapist by reflecting on, or verbally describing, the behaviors of either the mother, the child, or both. Insights into probable meanings of the behaviors (such as the emotions exhibited) and probable causes of the behaviors will also be provided. It is important to note that, in general, insights which reflect negatively on the mother or child should not be presented.

Some examples of highlighting:

1) The mother pulls a toy away from the child and the child cries.
   Rather than saying "Billy is mad because you took his toy."
   the therapist might say, "I think Billy is trying to tell you he wants to play with the toy a little longer."

2) The mother verbally praises the child for stacking some blocks and the child smiles. The therapist may say "Look how proud and happy Debbie is when you call her a good girl!"

3) If the child accomplishes a skill and the mother smiles but does not respond with verbal praise, the therapist may say to the child, "Your mom looked happy when you found the toy."

ROLE-TAKING

Role-taking is an accentuated form of highlighting where the therapist assumes the position (verbally) of either the mother or child. In most instances, it will be taking the child's viewpoint to help the mother improve her ability to read the child's cues and respond appropriately. For example, the therapist may say, while watching a child happily mouth a rattle, "If I were Amy, I think I would be saying that chewing makes my gums feel good and I like to feel..."
different things in my mouth." This type of response might be used if the mother has been consistently discouraging mouthing by a child for whom it is age-appropriate.

MODELING

Modeling is done when desired behaviors are not being exhibited by the mother or child. The therapist demonstrates and then immediately encourages the target person to imitate or practice. This technique should not become so regular a technique or so structured that the therapy becomes a lecture-demonstration. Rather, it should fall into the general flow of interaction. It is naturally expected that a great amount of modeling will be going on throughout the sessions. But, the more direct form of trying to elicit immediate imitation should be limited in use.

EXPLAINING

Explaning is used when it appears that a loose structured or less direct approach is not likely to work. At this point, the therapist assumes a role similar to a teacher's. The difference being that the explaining episode generally lasts for only a brief period and it is reinforced by other therapeutic methods. The reason this technique is to be used with caution is that the teacher-student role is imply a rather authoritarian attitude which is generally not acceptable in therapy where egalitarian principles apply.

The explaining is similar in form to highlighting or role-taking, but it is in a more direct form of address to the mother. For example, if after several attempts to model a more suitable position for holding an infant, the therapist may say, "Sometimes it helps to hold Karan like this", (the therapist models) "There, now she can see you and she can practice smiling better." The therapist may also model smile elicitating behaviors at this point, and when the
infant smiles, say "See how much she likes it. Why don't you try now."

Summary of Method

The definitions and example above illustrate not only the specific techniques, but also illustrate the overlap between the various methods. It is important for the therapist to not become overly concerned with analysis of which specific technique is being used. It should instead be a natural flow of ways of interacting with the mother and child, providing assistance in ways which are most beneficial to all three members of the group.
APPENDIX J

THERAPY RECORD FORM

A Record of a Mother-Child Play Therapy Session

Mother’s name ___________________ Therapist __________________

Child’s name ___________________ Date ____________________

Child’s Age ____________________

Goals of Session:

Summary of Session:

Analysis of what did and did not work:

Goals for Next Session:
APPENDIX K

The Observation of Parent-Child Interaction in Play (OPCIP) Checklist

Revised Checklist

by

Ann Wengler Thompson

1982

Introduction

The OPCIP was designed to help identify significant behaviors related to mother-child interaction. It is in checklist format which provides for tabulation of the observed behaviors. There are three categories of behaviors examined: Communication, Social/Emotional, and Play. A sample checklist is provided on page 6. The purpose of the OPCIP is to provide clinical data which can be translated into therapeutic goals for working with a mother-child dyad who are at risk for poor parenting skills and developmental delay.

The OPCIP is an experimental assessment instrument. No normative data or reliability has been established for the revised version. It is a clinical tool intended to provide some structured guidelines for observation of mother-child interaction in play by an experienced professional.
Administration

The OPCIP was originally intended for use with mothers and their birth to thirty month old child. It may be used with children up to 5 years of age. The observer must be someone who is familiar with normal and abnormal child development, and normal and abnormal mother-child interaction. The OPCIP is to be administered in a play setting. The family's home is recommended, because mothers and children both are presumed to be more comfortable in a familiar setting.

Three developmentally age-appropriate toys are presented to the mother and child. The mother is then instructed to play with her child as she normally would using the toys provided. It is recommended that toys selected have a variety of uses or ways of playing with them and that they can be enjoyed for a broad range of developmental levels. Toys which are unfamiliar to the mother and child are also recommended to help insure that interest level is high and to prevent ritualized play activities which the mother and/or child may have already established with a familiar toy. Books with words are not recommended as this will confound the Communication data which is aimed at spontaneous conversational communication.

The time-limit used for the purposes of the author's research was ten minutes. The mother is asked to interact only with the child for the observation period. A longer time limit might be more useful for those clinicians using the checklist for purposes other
than research. A longer time might also be more useful with older children who have longer attention spans and more complex play skills.

Scoring

The communication items (1-3) are scored by direct observation of discreet units of behaviors and marking a hash-mark for each under the appropriate category. A total number, at the end of the observation period is then recorded. Item 1. - Vocalization (parent to child) refers to discreet units of vocalization. Examples of a unit includes: a complete thought expressed in a phrase, a sentence, a word or group of words or non-verbal vocalizations such as imitation of the child's babbling sounds. Determination of discreet units of vocalization depend entirely on their context in which they are used.

Item 2. - Verbal Praise (Parent to Child) is scored in a similar manner to the Vocalization item. Units of verbal praise refer to complete thoughts rather than to individual words. If a mother, repeats the word "Good" three times in a row, in response to the same behavior by the child, it is scored as one hash mark on the checklist. As another example, the phrase "That's good. I really like that." would also receive a score of one. If "That's good" is stated once when a child puts a puzzle piece in and then repeated when a second piece is found and placed correctly, these would be scored as two separate instances of verbal praise. Again, contextual cues define how to score the observer behaviors.
Item 3. - refers to labeling of objects by name and description and labeling of actions. Examples of labels include:

Names of objects: ball, truck, car, shoe (not included are words such as "that" or "it.")

Descriptions of objects: blue, tall, wet, round.

Descriptions of actions: run, play, push, wash (words such as "do", "go", or "come" are excluded).

Items 4, 5, and 6 (Eye Contact, Smiles, and Positive Physical Contact) are recorded at the conclusion of the observation period by circling the frequency (constant, often, or seldom) which best described the parent's interaction with the child. Having experience in working with children and their mothers in this age group and practice in administering the checklist will aid the observer in making a judgment as to how to score these items.

The four Play items (7. Allows child to explore materials, 8. Responds to child's level of interest in materials, 9. Activities are appropriate to child's ability, and 10. Provides variations with materials) are scored as they pertain to each of the three toys presented to the mother and child for the observation period. The first two items tap the mother's understanding of the pleasure value in play for the child. The final two items refer to the mother's ability to use play materials to teach new skills to the child. These four items are scored as a + (plus) or - (minus) at the end of the entire observation time for each of the three toys. The sum of the total number of pluses is recorded in the Total box.
The Play items refer to global units of behavior. They should be scored based on the entire set of behaviors associated with a particular activity. For example, the following might occur:

Mrs. A reaches for a ball, hands it to Bobby and asks him to throw it to her. He looks away and begins to chew on it. Mrs. A watches for a while, then suggests he throw it into a box. He still does not respond, so she asks if he would roll it to her. He smiles and begins rolling it, she rolls it back and they continue for a short time.

If the observer were to look only at the initial behavior of the mother, she would have received no score. But by the end of the segment, she had allowed the child to explore, assessed the child's level of interest and ability, and provided variations. (One + score for each.)

Summary

The OPCIP provides a structured method of observing and describing behaviors of a parent and child interacting during the play. The Checklist examines three areas of interaction: Communication, Social/Emotional and Play. The items are scored based on a limited observation period during which the parent and child play with three toys individually selected for the child's developmental level and previous experience with play materials. All of the items are presumed to represent significant behaviors for parent-child interaction. Items which receive low scores may indicate areas for which remediation through clinical intervention with the dyad may be beneficial.
<table>
<thead>
<tr>
<th>OPCIP Checklist (Revised)</th>
<th>(Observation of Parent-Child Interaction in Play)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Parent's name</td>
<td>age</td>
</tr>
<tr>
<td>Child's name</td>
<td>age</td>
</tr>
<tr>
<td>Observer's name</td>
<td>Date</td>
</tr>
</tbody>
</table>

**COMMUNICATION**

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Vocalizations Parent Child</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Verbal Praise</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Labels activities (actions and objects, descriptions)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**SOCIAL/EMOTIONAL**

<table>
<thead>
<tr>
<th></th>
<th>Frequency (circle one)</th>
</tr>
</thead>
<tbody>
<tr>
<td>4. Eye Contact Parent Child</td>
<td>Constant</td>
</tr>
<tr>
<td>5. Smiles</td>
<td>Constant</td>
</tr>
<tr>
<td>6. Positive Physical Contact</td>
<td>Constant</td>
</tr>
</tbody>
</table>

**PLAY (yes=1, no=0)**

<table>
<thead>
<tr>
<th></th>
<th>Toy</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>7. Allows child to explore materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Responds to child's level of interest in materials</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Activities are appropriate to child's ability</td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Provides variations with materials</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Play Total Score

Additional observations:
APPENDIX L

A Manual for the Use
of the Experimental Method
of Mother-Child Play Therapy

by
Ann Wengler Thompson
Revised 1982
The Mother-Child Play Therapy is an approach developed for use with mothers who are developmentally disabled or mentally retarded, and their young children (under three years) to enhance the child's development through improvement in the mother-child interaction system. The procedure is conducted in a play environment, using a variety of therapeutic techniques.

Purpose

The goals for the mother in the therapy are four-fold: (1) to enhance positive social and emotional interaction; (2) to enhance positive communication between mother and child; and (3) to improve observational skills by the mother, to assess her child's level of interest and ability in activities; and, (4) to help her provide developmentally appropriate stimulation activities. The first goal relates to bonding and attachment. If the infant and mother do not enjoy each other and do not have a positive feeling towards each other, the more complex behaviors of communicating and reading cues may be difficult to obtain.

Communication between mother and infant is another essential goal. If a mother is smiling at a child who does not smile back, or vice versa, the smiling will probably soon cease. It is important that both the mother and child respond to each other when communicating through vocalizations, verbalizations, gestures and facial expressions.
The final two goals are based on having acquired some of the skills described in the first two goals. At this point, the mother needs to refine her observational skills of reading her child's cues, interpreting them accurately and responding appropriately.

The above goals are here described in very general terms. As in any therapeutic approach, specific individual goals will be defined for each mother-child dyad. It is expected that any mother would have some basic skills in each of the areas. The purpose of the therapy then, is to identify the individuals' or dyads' strengths and weaknesses in each of the areas, and to promote growth in each.

**Rationale**

The rationale for using a therapeutic play technique with mentally retarded mothers and their children is based on several considerations. The use of a play setting provides an appropriate milieu for the child and mother to interact. It also allows for immediate reinforcement of appropriate parenting behaviors, for direct observation of modeled new behaviors and the chance to practice newly acquired behaviors patterns. In an educational setting such as a group lecture, or in an individual counseling session, a retarded mother may say that she understands what is said, but may not be able to go home and generalize the concept in actual practice with her child. Therefore, the generalization of newly learned skills may be greater in a therapeutic setting with the child than in an educational setting.
Philosophical Background

Some of the basic assumptions behind the Mother-Child Play Therapy are derived from a developmental viewpoint of the continual growth potential in individuals, and the humanistic philosophy regarding the dignity and worth of each individual.

The Mother-Child Play Therapy is rooted in the concept of life-span development. That is, the individual, whether normal or subaverage in intellectual skills, continues to have the potential to grow in personal strengths and abilities throughout a lifetime. This applies to the potential growth of the child, the adult, the adult as parent, and even the therapist. The humanistic, or client-centered approach of Carl Rogers is based on the concept of self-actualization, that each individual's primary drive is to grow and develop potentialities. The therapeutic method requires that the therapist communicate acceptance, honesty and understanding to the client (Osipow, Walsh & Tosi, 198).

Conceptions of the development of the parental role by Newberger (1977) have also been integrated into the Mother-Child Play Therapy approach. Newberger describes a four-level developmental concept of parental awareness based on some of the concepts of Jean Piaget. The levels range from the parent seeing the infant only in light of the parent's wants and needs, to finally seeing the child as a complete separate individual with needs and abilities perhaps different from those of the parent. The goal of improving the mother's observational skills is related to this. By
encouraging the mother to observe her child and to try to understand the reasons for the child's behavior, the mother's understanding of her child's individuality may be increased.

Some of the bases of the Mother-Child Play Therapy were derived from the play therapy technique described by Leland and Smith (1965) which is used with mentally retarded children. While their technique is not designed for use with adults, because the play milieu is not a normal one for an adult, some of the basic techniques used in the Mother-Child Play Therapy are also used by Leland and Smith. The use of a client-centered approach of allowing the client to determine the course of the therapy session to some degree, is also used.

Personnel

It is recommended that persons attempting to use the Mother-Child Play Therapy with mentally retarded mothers and their young children have received training in the following areas:

- normal and abnormal child development
- the study of mental retardation and developmental disabili-
ties
- and, experience in therapeutic techniques with the MR/DD population, such as play therapy with MR/DD children, parent counseling with parents of MR/DD children or counseling with adult MR/DD clients.

The characteristics of acceptance of the worth of each individual, honesty and empathy are desirable traits for thera-
pist. It is important that the therapist be willing to assume a number of roles within the therapy, including: that of a peer and support person to the mother, that of an advocate for the child, and that of a member of a group. Additionally, the therapist's role will fluctuate between one of low structure when observation, reflection, and reinforcement are provided, and, for short periods, that of an agent external from the mother-child dyad, who provides insightful data to the clients.

METHOD

Apparatus

The Mother-Child Play Therapy is done in a play setting, preferably the home, using play materials selected for each dyad. For a young child, therapy sessions should be no longer than thirty minutes. Older children may be able to tolerate longer sessions up to one hour. The toys should cover a range of development below and above the actual developmental level of the child. They should provide a variety of experiences, and if possible, there should be some overlap with toys available in the home. New materials should also be introduced to ensure continued interest by all those involved. Common, simple and inexpensive toys are generally preferred over expensive or difficult to find toys. This is because it is hoped that presenting toys which are interesting to the mother and child will encourage her to acquire or make similar materials for her child. Those that are simple and inexpensive are more likely to be copied. Toys are provided because they offer concrete experiences for the mother and child. But, it is also recommended that age appropriate
activities which do not require specific materials be introduced as well (e.g., peek-a-boo, pat-a-cake, songs).

Introduction

The mother and child are introduced to the therapy session by saying that the purpose of the program is to help the mother learn new ways of playing with her child and to help her child learn new skills. The mother is told that the therapist believes that play is a child's way of learning and that it is important for the child to learn to play in many different ways. It should be explained to the mother that the therapist will be playing with the mother and child, but at times she will only watch them play. In either circumstance, the mother is to continue to play with her child in a way which she feels most comfortable.

The initial session is recommended to be used for the purpose of observation of the normal patterns of mother-child interaction by the dyad, and to make the initial steps in developing rapport. The (Observation of Parent-Child Interaction in Play) OPCIP is an informal observational tool developed by the author, which can be used to help identify strengths and weaknesses of the dyad. In addition, assessment instruments such as Caldwell & Bradley's (1978a) HOME Inventory, and the Parent Behavior Progression by Bromwich, et al (1978) can be used to identify strengths and weaknesses. Information from all of these can then be incorporated into goals for the mother and child. It is also recommended that throughout the therapy program, records be kept of what occurred in each session with some analysis of techniques that
Description of the Therapeutic Techniques

Throughout the therapy sessions the therapist must be an attentive listener and observer. There will also be a regular flow of conversation using the following techniques: reinforcement, highlighting, role-taking, modeling, and explaining.

REINFORCEMENT

Reinforcement is an essential part of the Mother-Child Play Therapy. The reinforcement modes are verbal and gestural. For the child, the positive reinforcement will be more overt than with the mother. For the child, smiles, hand clapping, verbal praise, cheering, patting, or hugging may be used, depending on individual preference of the therapist and clients. For the mother, it is important that she retain her dignity as an adult and as a peer of the therapist. Therefore, more subtle positive reinforcers will be used, such as: smiling, nodding the head and providing verbal praise by highlighting a good response through the reaction of the child.

Example: If a mother interacts in a happy peek-a-boo session with her child, the therapist may highlight this by saying, "Kathy is just loving that game." The mother is not being directly reinforced in the above example, as compared with the therapist saying the following: "Good job Betty (the mother), you made her laugh." The effect of either statement will serve to tell the mother she has done well, but in the second example, the reinforcement seems to be more mother-only centered, and rather demeaning, while the first example highlights the positive effect she is having on her child.
HIGHLIGHTING

Highlighting is done by the therapist by reflecting on, or verbally describing, the behaviors of either the mother, the child, or both. Insights into probable meanings of the behaviors (such as the emotions exhibited) and probable causes of the behaviors will also be provided. It is important to note that, in general, insights which reflect negatively on the mother or child should not be presented.

Some examples of highlighting:

1) The mother pulls a toy away from the child and the child cries. Rather than saying "Billy is mad because you took his toy.", the therapist might say, "I think Billy is trying to tell you he wants to play with the toy a little longer."

2) The mother verbally praises the child for stacking some blocks and the child smiles. The therapist may say "Look how proud and happy Debbie is when you tell her she's a good girl!"

3) If the child accomplishes a skill and the mother smiles but does not respond with verbal praise, the therapist may say to the child, "Your mommy looked happy when you found the toy."

ROLE-TAKING

Role-taking is an accentuated form of highlighting where the therapist assumes the position (verbally) of either the mother or child. In most instances, it will be taking the child's viewpoint to help the mother improve her ability to read the child's cues and
respond appropriately. For example, the therapist may say, while watching a child happily mouth a rattle, "If I were Amy, I think I would be saying that chewing makes my gums feel good and I like to feel different things in my mouth." This type of response might be used if the mother has been consistently discouraging mouthing by a child for whom it is age-appropriate.

**MODELING**

Modeling is done when desired behaviors are not being exhibited by the mother or child. The therapist demonstrates and then immediately encourages the target person to imitate or practice. This technique should not become so regular a technique or so structured that the therapy becomes a lecture-demonstration. Rather, it should fall into the general flow of interaction. It is naturally expected that a great amount of modeling will be going on throughout the sessions. But, the more direct form of trying to elicit immediate imitation should be limited in use.

**EXPLAINING**

Explaining is used when it appears that a less structured or less direct approach is not likely to work. At this point, the therapist assumes a role similar to a teacher's. The difference being that the explaining episode generally lasts for only a brief period and it is reinforced by other therapeutic methods. The reason this technique is to be used with caution is that the teacher-student roles imply a rather authoritarian attitude which is generally not acceptable in therapy where egalitarian principles apply.
The explaining is similar in form to highlighting or role-taking, but it is in a more direct form of address to the mother. For example, if after several attempts to model a more suitable position for holding an infant, the therapist may say, "Sometimes it helps to hold Karen like this", (the therapist models) "There, now she can see you and she can practice smiling better." The therapist may also model smile eliciting behaviors at this point, and when the infant smiles, say "See how much she likes it? Why don't you try now."

Common Problems and Possible Solutions

As with all client-centered therapeutic methods, the individual needs of the clients must be examined to determine the actual techniques used. In the Mother-Child Play Therapy, the therapist must consider both the needs of the mother and the child. At times there will be conflicts. When attempting to solve a particular problem it is recommended as a general rule, that the therapist first review strengths of each of the clients and then examine the problem in the light of the strengths.

Materials used can have a significant effect on the outcome of a therapy session. It is important to examine, for both the mother and child, what behaviors tend to be elicited by which types of toys. Using this information may be helpful in determining alternative therapy plans. For example, in one session, a mailbox sorting toy was used. The child insisted on putting the shapes into the storage compartment (a simple fill and empty task). The mother
was determined that the only way to use the toy was to put the shapes in the appropriate holes at the top of the toy. Possible solutions to this problem could include: (1) highlighting to the mother how the child is enjoying the game he has initiated, (2) use explaining with the mother to help her understand why the child's game is valuable (3) remove the mailbox and supply a pail so the child may continue to do the fill-and-empty game while modeling to the mother how to follow the child's cues as to interest and ability or, (4) remove the mailbox and the shapes.

The individual personality style of both mother and child will naturally have a significant effect on the outcome of therapy. One important principle to remember when conflicts develop is that this therapeutic mode is not intended to be confrontive. More important gains may be made if the mother or child is helped to develop new skills which reduce the need to return to less desirable behaviors. For example, a retarded mother who has had little chance to experience success or receive praise may be helped to reduce physical punishment and ridicule of her child by giving her an extra heavy dose of praise and reinforcement. Having experienced success and the rewarding experience of being praised, she may be more apt to use the modeled behaviors with her child.

Some specific problems which have occurred in working with mentally retarded mothers will be addressed below. They include: the mother wanting to play with the toys herself, intrusion into the therapy session by others in the home, the mother seeing the
therapist as the child's teacher, and punishment, restriction and name-calling by the mother.

Both the therapist and mother will be expected to try out new materials to see how they work and to model different uses to the child. Retarded mothers who have themselves had a deprived childhood with few playthings and especially those who are young, may become so engrossed in play with the toys that they lose sight of the purpose of the play therapy. These mothers may have to be given some extra time to engage in parallel play with their child before the therapist structures the play for interacting with the child. The selection of toys should be also examined if this is a problem. Those toys which are simple and common such as blocks and stacking rings may be less interesting to the mother than toys with many parts or having complex mechanisms. Also toys which require at least two persons, such as ball play, may help to encourage the desired interaction. Reminding the mother of the purposes of the therapy and the therapist's expectations of her may be necessary if less intrusive methods fail.

When the Mother-Child Play Therapy is being done in the family's home, it is likely that there will be other members of the household at home. The first solution would, of course, be to help arrange a time so that interruptions will be at a minimum. If absolutely necessary, additional family members may be included in the therapy for a session. It is important to remember that these individuals are likely to be regularly involved with the mother and
Similar techniques used with the mother and child can be extended to the others to accomplish goals for the dyad. As an example: siblings who were regularly at school during therapy were home because they had colds. As it was impossible to keep them out of the living room, they were included in a game with the mother and target child where they all pushed a car back and forth between them. It was explained to the siblings that they were to help teach the child how to play the game, and language stimulation techniques were also modeled.

Another common problem seen with retarded mothers was that they were often overly dependent on the therapist. When one considers that acquiescence and low self-esteem are common personality traits of those labeled retarded (Rosen, Clark & Kivitz, 1977) and that the professionals with whom they may have had experience (such as case workers who have authority over whether the mothers may keep their children), it is understandable that the mothers may see the therapist as an authority figure who is a threat to her. These feelings are likely to be conveyed by the mother remaining aloof and not participating in the play activities, and allowing the therapist to take the lead in playing with the child. It is very important for the therapist to convey a sense of respect for the mother as a person who is doing the best she can given her circumstances. Verbal praise of the mother for interacting with the child in the play activities should be helpful. Highlighting and taking the role of child by letting the
mother know how much the child enjoys playing with his mother and how valuable it is may also be used.

As is seen with other lower socio-economic class parents, retarded mothers may be apt to use punishment, striction and name-calling with their children. While it is not likely that these behaviors by the mother will be completely eliminated, modeling of more positive approaches is suggested. For example, if a mother calls her child "dummy" for not doing a puzzle correctly, the therapist might provide another toy which guarantees success for the child and repeatedly model and praise the child with such comments as "Look how smart you are!" or "You're good at that one.", etc. The very concrete and visible display of reinforcement by clapping for positive behaviors might also be useful. In a situation where a mother is restricting mouthing of objects when it is developmentally appropriate, the therapist might use highlighting and role-taking to help the mother see the pleasure and exploratory value the mouthing has for the child. As an illustrative example of punishment where the mother smacks the child for saying "No!" after being asked to do something, the therapist needs to first become sensitive to situations which are likely to cause the mother to punish. The therapist might then use (1) role-taking to show the mother the child's needs to establish independence, (2) model positive redirection of the child, or (3) avoid using certain materials or activities which are particularly difficult for the mother and child to handle until they have
developed new skills.

SUMMARY

The Mother-Child Play Therapy is a technique developed for use with mentally retarded mothers and their young children. The principles of positive regard for the clients and respect for each of the individuals in the group are important aspects of the therapy. It is done in a play setting using toys and play materials appropriate for the child's age. The techniques of reinforcement, highlighting, role-taking, modeling and explaining are used in the therapy to help to enhance social-emotional and communicative interaction of the dyad. Additional goals are to help the mother improve her ability to read the child's cues and to provide developmentally appropriate activities for the child. The primary goals for the child are to improve positive interaction with the mother and enhance the rate of developmental skill acquisition. The Mother-Child Play Therapy is expected to be used along with other intervention techniques with families where the mother is mentally retarded.

References:
Caldwell & Bradley, 1978 a & b
Leland & Smith 1965
Newberger, 1977
Ocipow, Walsh, & Toci, 1980