

IMPACT OF LEISURE COUNSELING OF PARENTS OF MENTALLY  
RETARDED CHILDREN ON THE LEISURE FUNCTIONING  
OF THOSE CHILDREN: A STUDY USING  
RATIONAL EMOTIVE IMAGERY

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A DISSERTATION  
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## TABLE OF CONTENTS

ACKNOWLEDGMENTS . . . . .	iii
LIST OF TABLES. . . . .	vi
Chapter	
I.      ORIENTATION TO THE STUDY . . . . .	1
Introduction. . . . .	1
Statement of the Problem. . . . .	4
Purpose of the Study. . . . .	6
Hypotheses of the Study . . . . .	6
Definitions and/or Explanations of Terms. .	7
Limitations of the Study. . . . .	8
II.     A REVIEW OF RELATED LITERATURE. . . . .	9
III.    PROCEDURES FOLLOWED IN THE DEVELOPMENT OF THE STUDY. . . . .	26
Introduction. . . . .	26
Preliminary Procedures. . . . .	26
Instrumentation . . . . .	27
Procedure for the Selection of the Subjects . . . . .	28
Data Collection Procedures. . . . .	29
Organization and Treatment of the Data . . . . .	29
Preparation of the Final Written Report. . . . .	32
IV.     PRESENTATION OF THE FINDINGS. . . . .	33
Introduction. . . . .	33
Description of the Subjects . . . . .	33
Hypotheses Testing. . . . .	45
Summary . . . . .	54
V.      SUMMARY, DISCUSSION, AND RECOMMENDATIONS. . .	56
Summary . . . . .	56
Discussion. . . . .	59
Recommendations for Further Research. . . .	66

## APPENDICES

A.	Letter to Parents . . . . .	69
	Summary of the Study to Parents . . . . .	70
	Approval Statement from Parents . . . . .	71
B.	Data Recording Form (Log) . . . . .	72
C.	Tabulation of Frequency and Time Spent in Leisure Activities of Mentally Retarded Children of the Experimental and Control Groups for Six Weeks. . . . .	74
REFERENCES. . . . .		107



## LIST OF TABLES

### Table

1.	Ages of Mothers. . . . .	35
2.	Ages of Fathers. . . . .	36
3.	Number of Siblings in the Family . . . . .	37
4.	Ages of Siblings in the Family . . . . .	38
5.	Annual Income of the Families. . . . .	40
6.	Age of the Mentally Retarded Children. . . . .	41
7.	IQ of the Mentally Retarded Children . . . . .	42
8.	Level of Education of Mothers. . . . .	43
9.	Level of Education of Fathers. . . . .	44
10.	Sex of the Mentally Retarded Children. . . . .	46
11.	Analysis of Frequency Scores of Leisure Activities . . . . .	49
12.	Analysis of Time Spent in Leisure Activities . . . . .	51
13.	Analysis of Types of Leisure Activities . . . . .	53

CHAPTER I  
ORIENTATION TO THE STUDY

Introduction

The main emphasis of the past and present practice of leisure counseling of the mentally retarded is centered around their attitudes and behaviors as individuals. The studies of Paul Wehman (1977), Wehman and Marchant (1978), and Corcoran and French (1977) focused primarily on leisure functioning of the mentally retarded as separate individuals from their families. No studies have been done concerning the leisure functioning of the mentally retarded child within the total leisure functioning of the family. Koch and Dobson (1976) indicated that the approach of community based care of the retarded child placed considerable importance on the family unit. Therefore, mental retardation should be viewed as a family problem with counseling directed towards the needs and concerns of the total family unit. In most instances, the family influence is even greater on a retarded child, due to the extended dependency on the family for care. The retarded child requires the same basic nurturance as normal individuals. Much of the nurture is best provided by the family unit. Meeting the retarded child's needs depends mainly on the

abilities and capacities of the parents to provide the essential ingredients of affection, responsive interaction, and the care and training to develop the child's social skills. The nature of the environment in which the retarded child grows and develops is shaped by the emotional reactions of the family to the child's unique needs. This points to the need of placing primary emphasis on the counseling of parents of the mentally retarded child. Adams (1960) indicated that modern social services have been moving steadily away from gearing services around persons with specific disabilities towards perceiving these individuals within the context of the family. The author suggested that services for the mentally retarded child should primarily be family centered. Kelman (1958) described the significance of the family of the retarded child:

The retarded child must be viewed as an integral part of his family and as having distinct relationships to its members. The retarded child and the parents mutually influence one another's functioning and contribute their respective influence to the dynamics of the family's social functioning as one unit. (p. 35)

Mogford (1976) emphasized the fact that the family is the most influential social system in the child's life.

The author stated that the nature of family relationships and interaction influence the total development of the mentally retarded child. The investigator focused on the need of parents to see that their children have opportunities to participate in leisure activities. A study by Rubenstein (1967) suggested that it was maternal attentiveness that encouraged exploration in children. The author's study revealed that children would successfully achieve grasping a rattle earlier in a social environment rather than in a nonsocial condition. In playful interaction, the mother becomes involved in complex reciprocal interaction courting the child's attention and complementing the child's attempts at reaching. A study by Pawlby (1976) on infant imitation described how social games were developed by the mother initiating the child's repertoire of movement. The author found that recreation activities were effective in helping parents to interact with their mentally retarded children and that this interaction assisted in the child's healthy development. This focus on the family as an influential unit in the development of the mentally retarded child and the lack of studies in this area points to the need of research in this area, this study examines the impact of leisure counseling of parents of mentally retarded children on leisure functioning of those children. The significance

of this study is to provide information regarding the benefits of involving the family in leisure activities with their mentally retarded children.

#### Statement of the Problem

The present study investigated the impact of leisure counseling of parents of mentally retarded children on the leisure functioning of those children. Data were collected during the spring of 1982. The subjects were 16 families and their mentally retarded children between the ages of three and 10 years with IQ's between 35 and 65 who were served by the Arlington Independent School District. Eight of these families were assigned randomly to an experimental group. Eight families that match the demographic characteristics of the eight families of the experimental group were assigned to a control group.

Parents of the experimental group received rational emotive imagery as a leisure counseling method for one hour once a week for six weeks, while parents of the control group did not receive leisure counseling. Parents and children of the experimental group and the children of the control group also engaged in leisure activities for one hour once a week for six weeks. Rational emotive imagery consists of the following process:

1. Exploring parents' values towards recreation.

2. Assessing boundaries of the parental subsystem if it is rigid or overprotective.

3. Restructuring boundaries of the parental subsystem by helping parents to generate flexible boundaries that enhance their participation in leisure activities with their mentally retarded children.

4. Involving the mentally retarded child in the session with his parents to express his desired leisure activities.

5. Helping parents to do rational emotive imagery through mentally rehearsing their participation in these desired leisure activities with their children.

6. Actual engagement of parents and their mentally retarded children in the child's desired leisure activities.

The total frequency of participation in leisure activities and the length of time spent in these activities by the mentally retarded children of the experimental and the control groups were compared after six weeks by means of dependent and independent T tests. Because of the matching procedure utilized in the study and the possibility of correlation between the experimental group and control group scores, both dependent and independent T tests were completed. If the experimental-control correlation was not significant, the independent T test could be retained. In

view of a possible correlation between the main variables of interest (i.e., number of activities and time spent in those activities), a multivariate t test, Hotelling's T-square was performed. This test recognizes covariation among dependent variables and can reveal patterns or combinations of variables in which groups may differ. The activities may be categorized, that is, they might be combined into group oriented activities versus individually centered activities. Chi squares were conducted in these categories in order to detect any significant tendency for either experimental group or control group subjects to engage in a particular category of activity.

#### Purpose of the Study

The purpose of the study was to determine the impact of leisure counseling of parents of mentally retarded children on the leisure functioning of those children.

#### Hypotheses of the Study

The following hypotheses were examined at the .05 alpha level of significance.

1. No significant differences exist between the experimental and control groups on the frequency of leisure activities recorded.

2. No significant differences exist between the experimental and control groups regarding the time spent participating in leisure activities.

3. No significant differences exist between the experimental and control groups in regard to the types of leisure activities in which the mentally retarded children participated.

#### Definitions and/or Explanations of Terms

For the purpose of clarification, the following definitions and/or explanations were established for use in the study:

Leisure Counseling. A helping process which facilitates interpretive, affective and behavioral changes in the individual that enhance the individual's physical, emotional, mental, and social development (Sessions, 1977).

Rational Emotive Imagery. A process of helping parents to gain cognitive insight through mentally rehearsing the participation of their mentally retarded children in leisure activities (Maultsby, 1975).

Mental Retardation. Sub-normal intellectual functioning which originates during the developmental period and is associated with impairment of either learning and social adjustment or maturation or both (DSM-II, 1968).



Leisure Functioning. The frequency of participation and the length of time a mentally retarded child engages in leisure activities.

Limitations of the Study

The proposed investigation is subject to the following limitations:

1. The 16 families and their mentally retarded children between the ages of three and ten years with IQ's between 35 and 65 randomly selected from those families served by the Arlington Independent School District.
2. The degree to which the participants record the leisure participation of their children.
3. The extent to which the sample is representative of the population from which they are drawn.
4. The degree of truthfulness with which participants respond and record their leisure activities.

## CHAPTER II

### A REVIEW OF RELATED LITERATURE

The literature reviewed includes studies which are deemed to be of assistance to the researcher in the following areas: family social interaction and children's recreational attitudes, rational emotive therapy, recreation and the mentally retarded and leisure counseling.

Studies show that persons in a family unit function on a higher level in recreation activities and achieve greater vocational success than unattached persons. Colton (1976) conducted a study on family socialization and the learning of outdoor recreation use patterns. The purpose of the study was to examine the transmission of outdoor recreation behavior from parents to their children. The researcher studied thirty families and their children. The study did not mention the method of selecting the families. Three outdoor recreation activities were selected for the study: picnicking, camping, and hunting. Past parental hunting behavior seems to provide some mold for children. Over 62% of the children displayed recreational use patterns similar to their parents in hunting, camping, and picnicking. The majority of the children hunted the same animals that their parents hunted. The study revealed that there

was a positive relationship between parents' recreation behavior and their children's recreation behavior. Parents' behavior could therefore be an important factor in modifying recreation behavior as transmitted from parents to their children. The study emphasized the fact that parental support related to participation in recreation activities is an important factor in developing the recreation behaviors of the child.

Neff (1959) found success in employment associated with recreation activities and positive family interactions when studying the employment status of 217 former clients of the Jewish Vocational Service in Chicago. Age, intelligence, disability, and previous employment experiences were unrelated. Clients who were rated high on likelihood of employability at the time the program was completed and who were known to have family recreation activities and high family support, were employed in greater numbers a year later. Those clients with lower predicted employability, but with high family interactions, were more successful in gaining employment than those without family support.

McPhee and Magleby (1960) in a study involving 288 clients of the Montana Bureau of Vocational Rehabilitation four to nine years after termination of the program found

significant differences between the substantially employed, the unsubstantially employed, and the minimally employed in the areas of education, motivation, age, recreation activities, and family relationships. More of the substantially employed than the unsubstantially employed and the minimally employed were married, had children, lived with and supported their families, participated in recreation activities with family members and had greater feelings of accomplishment related to the family. Similar findings linking family interaction with success in employment were evident in the follow-up study of 163 discharged tuberculosis patients treated at Cook County Suburban Hospital in Chicago (Weiner, 1964).

Olshansky and Beach (1975) examined the characteristics of a group of physically disabled persons who could not secure employment subsequent to training at the Community Workshop in Boston. The investigators found a heavy incidence of separated, divorce, and widowed persons.

Galloway and Goldstein (1971) provided rational emotive therapy to families of 40 clients in rehabilitation programs and studied its impact on clients in an experimental group as contrasted with a control group of families of 40 clients who did not receive rational emotive therapy. Ratings of clients on factors such as work organization,

perseverance, productivity, work adjustment, and family recreation activities were significantly higher for the experimental group in the first four months of the program. At the end of the first year, more experimental group clients were participating in advanced school, training programs and recreation activities. The clients reported increased understanding on the part of their parents and greater satisfactions at home.

Paul Wehman (1977) conducted two studies on leisure time with the severely developmentally disabled. The purpose of the studies was to ameliorate the leisure time problems of a population of institutionalized severely and profoundly retarded children participating in a sheltered workshop. The first experimental study was done with 3 severely retarded children who showed little or no interest in recreational activities. During the baseline period, play materials and toys were presented to the clients. Client A began to receive social reinforcement (praise) and attention from the trainer for playing with the toys. During the intervention with Client A, the other two clients received no attention or reinforcement from the trainer. After Client A demonstrated increased play actions, Client B was included in the reinforcement intervention. Finally, all three clients were receiving social

reinforcement for actions with play objects and/or cooperative peer interactions.

The role of experimenter or trainer in the play sessions was usually enacted by the author. At times, graduate students in the Department of Studies in Behavior Disabilities at the University of Wisconsin-Madison acted as trainers. Often, there were two trainers in the play session working with the clients.

The teaching method relied heavily on physical and verbal prompting of new types of actions on different toys. Trainers frequently modeled different play behaviors. The focus was on presenting the participants with some alternative play behaviors rather than on developing sophistication in one play skill. The trainer tended to "go with" the play response and toy selection of the client with social and physical reinforcement given contingently for appropriate play and cooperative social interaction.

Client A displayed considerable variability in play behavior during the baseline. This client also displayed a consistently low level of peer interaction during the pretreatment period. Client A was observed to act on the play materials at an increased rate of 70% and interaction with peers increased slightly after social reinforcement interaction was provided.

An analysis of Client B's play behavior indicated a very low level of action on toys and peer interaction through the baseline period. Social reinforcement increased the play behavior to an average of about 70% in most of the sessions. Client B also demonstrated an increased frequency of interaction with the other clients to an average of 65%.

Examination of pretreatment data of Client C revealed a low frequency of play behavior and consistently zero level of peer interaction. Client C was observed to exhibit a greater frequency of play behaviors after social reinforcement and attention for appropriate play was oriented. There was also an increase in peer interactions initiated by Client C.

The second experimental study was done with three severely retarded children. The three children exhibited a high rate of independent and isolated play behavior. However, little social interaction between the clients was observed. Hence the primary focus of the study was to increase the frequency of social interactions (cooperative play) between clients.

Data were collected on social interaction between peers, physical action with play materials, and on stereotypic behavior. Identical behavior definitions and observation methods were utilized as in experiment one. A multiple baseline design across subjects was also employed to assess

sequentially the experimental effects of the social reinforcement intervention strategy on each client. During a baseline period for all clients, toys and play materials were presented with no physical or verbal prompting or instruction. Intervention consisted of one or more trainers who were graduate students in the Department of Studies in Behavior Disabilities at the University of Wisconsin-Madison. Multiple trainers were used in an effort to develop generalization of play skills in the presence of different trainers.

Modeling, which has been effectively demonstrated as a facilitator of treatment with the retarded, was used extensively with verbal cues to develop interaction skills in clients. Block-building, playing catch and engaging in simple games were some of the methods used to encourage social interaction. Physical prompting was used only when necessary with the general goal of enhancing spontaneous interaction.

Initially, two clients were brought together and prompted to interact through cooperative play. However, only Client A was socially reinforced for peer interaction. The other two clients received no reinforcement or attention. After the first client demonstrated increased peer interactions, the social reinforcement contingency was



also extended to the next client. This procedure was continued until all clients were interacting at an increased rate. Reliability checks were carried out 8 times during the course of the program by a second independent observer. Agreement was checked interval by interval and was calculated by dividing the total number of agreements plus total disagreements. These scores ranged from 94% to 100% and averaged 96%. Analysis of data observed for Client A revealed considerable pretreatment variability in both frequency of peer interaction and in play behavior. Once the intervention of a reinforcing trainer was introduced, the rate and consistency of peer interaction increased dramatically. Action on play materials also increased to a higher rate and became more stable.

Client B displayed a consistently low level of peer interaction, and a high level of play behavior during the baseline period. Client B also exhibited a significant increase in cooperative interaction with the other clients when social reinforcement was delivered by the trainers. Play behaviors remained at a high rate but showed greater variability through the duration of the program.

Analysis of data for Client C revealed excessive variability in play behaviors and in peer interactions during the pretreatment period. An increase in frequency

of social interactions was observed with the social reinforcement contingency. Little change was noted in the rate of play behaviors.

Client C (the female subject) was also observed to decrease the frequency of stereotype self-abusive head-hitting with the social reinforcement intervention. Previously, this client had been observed to display self-abusive behavior at a rate of 30% to 40% of the time. Through social reinforcement for cooperative interaction and play, Client C decreased the frequency of self-abuse to approximately 10%. At the end of the three-month period, the social interaction of each child of the two groups increased significantly. The results of these two studies suggested that direct teaching intervention via modeling, physical activities and expressive praise are necessary for the development of leisure skills of mentally retarded children.

Aloia, Beaver, and Pettus (1978) conducted a study that examined methods of increasing the initial interaction among integrated educable mentally retarded students and their non-retarded classmates in a game playing situation. The sample consisted of 304 intermediate school students attending regular classes who were selected randomly.

The entire administration of the instrument lasted approximately 15 minutes per group. All testing was done by the same experimenter who was introduced to each group of students by their respective physical education teacher. All subjects responded to the questionnaire independently.

Subjects were told that the experimenter was interested in seeing how students selected partners and opponents for playing a simple game called the "Bean Bag Game." The rules of the game were explained to each group prior to the testing situation.

The initial explanation consisted of three parts. First, the rules of the game were clearly explained and demonstrated to the subjects by the experimenter. The "Bean Bag Game" consisted of the subject tossing three bean bags over a screen to targets on the floor that varied in value from two to five points, with a miss counting as one point. Fifteen was the highest score for three tosses; three was the lowest possible score. After the explanation, the experimenter questioned the subjects to ensure that they clearly understood the rules of the game.

Second, the experimenter explained the two ways in which the Bean Bag Game could be played. The first method was to select a partner and have each one toss three bean bags, attempting to accumulate a total of 15 points to win the

game. The experimenter emphasized the importance of cooperation between the partners in order to win the game. The second method of playing the game was to select someone as an opponent. Each person tossed three bean bags, and the one who obtained the highest score was declared the winner. This time the experimenter emphasized competing against someone in order to win the game.

Third, subjects were told that they would observe two pairs of students of the same sex who were ready to begin playing the Bean Bag Game, and then would be asked to make some selections. The first pair served as the experimental pair. All subjects observed both sets of pairs under the same condition.

The control pair consisted of two students who did not attend school in the same district as the subjects and were thus completely unknown to the subjects prior to testing. The experimental pair consisted of one randomly selected educable mentally retarded student of matching grade and sex from the special education class who was also assigned to one of the physical education classes.

The instrument employed consisted of three parts. The first section answered by all students consisted of a series of questions to determine the general degree of knowledge, if any, that they had about the pair of subjects

they were observing. Each pair member wore a letter (A or B) for easy identification. The data had been coded so that the letter A was always associated with the EMR child in the experimental pair.

The next section of the instrument contained the treatment condition that described one of three levels of competency. Each subject was randomly assigned to one of the three conditions. The competency statement indicated how well the pair members performed in playing the game. The three conditions were described as follows:

Condition 1. Students A and B equal: Both Students A and B played the Bean Bag Game. When Student A played the game, he got a score of seven points, which is average. When Student B played the game, he got a score of seven points, which is average.

Condition 2. Student A superior: Both Students A and B played the Bean Bag Game. When Student A played the game, he got a total score of 11 points, which was very good. When Student B played the game, he only got a score of 5 points, which was a little below average.

Condition 3. Student B superior: Both Students A and B played the Bean Bag Game. When Student B played the game, he got a total score of 11 points, which was very good. When Student A played the game, he only got a score of five points, which was a little below average.

Finally, the subjects were asked to select either Student A or Student B as a partner or select either Student A or Student B as an opponent. For each selection, the subjects were reminded that the partner they selected should help them win the game, and the opponent they selected would be defeated for them to win.

The data consisted of selection frequencies for each of the pair members as a partner and as an opponent together with a score assessing prior knowledge of each pair member by individual subjects. The information relating to prior knowledge was used as a covariate in the analysis to assess whether past knowledge of a student would influence the selection of a partner or an opponent, independent of any competency statement about the student.

The control pairs consisted of students attending schools in districts different from that of the subjects, the corresponding prior knowledge scores were both zero. Therefore, an analysis of covariance was performed on the selection frequencies obtained for the experimental pairs only, using prior knowledge as the covariate. This initial analysis indicated that prior knowledge of the experimental pair members did not significantly influence subjects' selection of a partner or an opponent to play the game.

The results revealed that by presenting information to the non-retarded students regarding the educable mentally retarded students competency, in addition to providing them with more than one game playing situation in which to participate, the frequency of the expressed desire for initial interaction with educable mentally retarded students increased significantly. This indicates that the initial interaction between educable mentally retarded children and their non-retarded peers can be facilitated, thereby increasing the opportunity for further social interaction and social acceptance of the mentally retarded children.

Wehman and Marchant (1978) conducted a study of improving the free play skills of severely retarded children. Two boys and two girls participated in this study. Their IQ scores ranged from 15 to 24 and each child was six years old with no more than a seven-month age difference between them. All the children were nonverbal and received daily instruction in self-help, language, and motor skills. During free play periods, little social play was observed. Most of the children either played alone or engaged in stimulatory actions such as body rocking or finger flicking. Play sessions were given each morning in 15-minute periods, 4 days each week, for a total of 42 sessions.

Free play was defined in this study as any action or combination of actions with objects in which the child engaged for the apparent purpose of fun. Autistic play was defined as any destructive physical action with toys or as no physical action. Independent play was considered as physical action with any of the toys but performed by the child alone and with no interaction with other children or adults. Social play was defined as imitation of social interaction between two children or a child and teacher. Typical social play behaviors included sharing a toy or playing together with play materials.

The three categories or levels of free play were selected in order to facilitate assessment of progress. Each category was sufficiently different so that independent observers could reliably discriminate between the different levels of play.

A partial-interval time-sampling method was used to assess behavior for every session. An observer watched the children play the first 20 seconds of each minute in the 15 minute session; for the next 40 seconds the data were recorded. The observation cycle was then repeated. A minus was recorded for autistic play, a plus for independent play, and two pluses for social play. Percentages for the levels of play were computed by dividing the number of



minuses, single pluses, or double pluses by the total number of observation cells and multiplying by 100.

Once a week a second independent observer also collected data in order to assess reliability of agreement. Reliability was computed by dividing the total number of agreements and disagreements and multiplying by 100. The mean reliability score for the entire study was 95 percent. Observers were trained in behavior observation methods and frequently included other aides within the school. A reversal design was used to evaluate results. In the reversal design, the baseline level of the target behavior was assessed and then followed by a treatment program. Once the target behavior showed a substantial change from the baseline level, the treatment program was temporarily withdrawn. This was done to verify a direct relationship between the independent variable(s) and response measure. The treatment program was then reinstaged. Baseline data were collected for each child on the percentage of time in which they exhibited autistic, independent, and social play. An instructional program designed to improve the free play skills of the children was implemented once a stable response level was attained for each child. A return to the baseline period was then begun in order to establish the relationship between instruction and the

different levels of play. After a brief assessment of the children's play behavior, the instructional program was then repeated. The results of this study indicated that instructions, modeling, physical guidance and verbal reinforcement were necessary to improve the free play and social interaction skills of severely retarded children.

It is evident from the literature review of studies on leisure and the mentally retarded that the majority of studies focused primarily on leisure functioning of the mentally retarded as separate individuals from their families. This points to the need of conducting this study that focuses on the involvement of families in recreation activities with their mentally retarded children.

CHAPTER III  
PROCEDURES FOLLOWED IN THE DEVELOPMENT  
OF THE STUDY

Introduction

The purpose of this study was to determine the impact of leisure counseling of parents of mentally retarded children on the leisure functioning of those children.

The procedures used in the development of the study are described in this chapter in the following sections: (a) Introduction, (b) Preliminary Procedures, (c) Instrumentation, (d) Procedure for the Selection of the Subjects, (e) Data Collection Procedures, (f) Organization and Treatment of the Data, and (g) Preparation of the Final Written Report.

Preliminary Procedures

Prior to the collection of data, certain preliminary procedures were followed. A tentative outline was developed and presented to the Dissertation Committee. Suggestions made by the Dissertation Committee were incorporated into the revision of the outline. The revised outline was filed in the form of a Prospectus in the Office of the Provost of the Graduate School of the Texas Woman's University. Permission to conduct the study was secured from

the Human Subjects Review Committee of the Texas Woman's University. Research clearance was obtained from the Arlington Independent School District, Arlington, Texas. Letters were mailed to parents of mentally retarded children who were served by the Arlington Independent School District. The letters explained the purpose of the study and the parents were asked to sign an approval statement if they agreed to participate in the study. The parents were also asked to include the following data on the approval form: parents' age; number and age of children in the family; educational level of parents; annual family income; age, sex, and the IQ of the mentally retarded child (Appendix A). A meeting was held with the parents who agreed to participate in the study in order to describe the procedures to be utilized in the investigation. Each family was asked to maintain a log, and to record the daily leisure activities of their mentally retarded children for six weeks. Parents and the mentally retarded children chose their leisure activities. The role of the investigator was to facilitate the engagement of parents and the mentally retarded children of the experimental group in their desired leisure activities. The dates and times of leisure activities were decided by the parents and their mentally retarded children according to the time that was convenient

to each family. The leisure activities were performed in a public park in the City of Arlington. These leisure activities were nonstructured in order to allow parents to concentrate on teaching their children the basic skills required for their chosen leisure activities.

### Instrumentation

The literature was reviewed to determine appropriate instruments for the study that were: (a) valid, (b) reliable, (c) objective, (d) feasible to administer, and (e) normal for the group. No instruments suitable for the study could be found, and it was necessary for the investigator to construct a Data Recording Form, "Log," for use in the collection of the data. The log (Appendix B) was designed to record:

1. Date that the leisure activity was performed.
2. The type of leisure activity performed.
3. Name of participants in each leisure activity.
4. The time spent in each of the leisure activities.

### Procedure for the Selection of the Subjects

The subjects were 16 families and their mentally retarded children who were served by the Arlington Independent School District, Arlington, Texas. An original pool of 48 families responded to the letter that was sent to parents of mentally retarded children in the Arlington

Independent School District. Eight families were selected randomly to serve as the experimental group. Following selection of the experimental group, eight families that matched the demographic characteristics of the experimental group were assigned to the control group. This assignment was based on the following criteria: (a) age of parents, (b) family income, (c) educational level of parents, (d) number of children in the family, (e) age of children in the family, (f) age of the mentally retarded child, (g) sex of the mentally retarded child, and (h) IQ of the mentally retarded child. A code was assigned to each family in both groups to assure confidentiality. Codes A to H were assigned to the families of the experimental group. Codes I to P were assigned to the families of the control group.

#### Data Collection Procedures

Each family from the experimental group and control group was asked to record in the log, the daily leisure activities of their mentally retarded children for six weeks. Items to be recorded for each leisure activity included: (a) date of participation, (b) description of the activity, (c) name of the participants, and (d) the time spent participating in each activity. The frequency of leisure activities of mentally retarded children that had been supervised by the investigator were tabulated

separately from the non-supervised leisure activities (Appendix C).

### Organization and Treatment of the Data

In order to compare the experimental and control groups in regard to frequency of leisure activities, time spent participating in leisure activities and type of leisure activities of mentally retarded children, the following three null hypotheses were tested at the .05 alpha level of significance:

1. No significant differences exist between the experimental and control groups on the frequency of leisure activities recorded.

2. No significant differences exist between the experimental and control groups regarding the time spent participating in leisure activities.

3. No significant differences exist between the experimental and control groups in regard to the types of leisure activities in which the mentally retarded children participated.

The treatment of the data for each hypothesis was as follows:

#### Hypothesis One

A T test was performed to compare the two groups in regard to frequency of leisure activities. Because of the

matching procedure utilized in the study and the possibility of a correlation between the experimental group and control group scores, both dependent and independent T tests were performed. In view of a possible correlation between the main variables of interest (i.e., number of activities and the time spent in those activities), a multivariate T test, Hotelling's T-square, was performed. This test recognizes covariation among dependent variables and can reveal patterns or combinations of the variables upon which groups may differ. The hypothesis was tested at the .05 alpha level of significance.

#### Hypothesis Two

A T test was performed to compare the two groups in regard to the time spent participating in leisure activities, as in hypothesis one, because of the matching procedure utilized in the study and the possibility of a correlation between the experimental group and control group scores, both dependent and independent T tests were performed. In view of a possible correlation between the main variables of interest (i.e., number of activities and the time spent in those activities), a multivariate T test, Hotelling's T-square was performed. This test recognizes covariation among dependent variables and can reveal patterns or combination of the variables upon which groups



may differ. The hypothesis was tested at the .05 alpha level of significance.

#### Hypothesis Three

A Chi-square test of association was performed between the experimental and control groups on the type of activities they participated in which were classified as either group oriented activities or individually centered activities. The hypothesis was tested at the .05 alpha level of significance.

#### Preparation of the Final Written Report

Findings of the study were analyzed, interpreted, and summarized in order to draw appropriate conclusions. Implications of the findings and recommendations for further research were included in the written report which was submitted to the dissertation committee for suggestions. The report was revised in accordance with the recommendations. The final report was submitted to the Office of the Provost of the Graduate School at the Texas Woman's University.

## CHAPTER IV

### PRESENTATION OF THE FINDINGS

#### Introduction

The purpose of the study was to determine the impact of leisure counseling of parents of mentally retarded children on leisure functioning of those children. The data were collected by means of logs in which families of the experimental group and control group recorded the frequency of participation and the time spent in leisure activities by their mentally retarded children.

The purpose of this chapter is to present the findings of the study. The data obtained from the logs that indicated the frequency of participation and the time spent in leisure activities by the mentally retarded children of the experimental and control groups are presented in tabular and narrative form.

#### Description of the Subjects

The subjects used in the study were 16 families and their mentally retarded children. Eight families were selected randomly for the experimental group from 48 families who were served by Arlington Independent School District. Following the selection of the experimental group, eight families were assigned to the control group

that matched the demographic characteristics of the experimental group. Table 1 shows the mean, mode, median, and the standard deviation of age of mothers of the experimental and control groups. The table reveals that the mean age of mothers in the experimental group was 30.6 years and the mean age of mothers in the control group was 30.4 years. The median age of both groups was 28.5. All mothers in both groups were between ages 24 and 37 years.

A study of Table 2 shows that there were three single parent families in both the experimental and control groups. The mean age of fathers in the experimental group was 33.4 years and the mean age of fathers in the control group was 34.0. All fathers in both groups were between ages 28 and 38 years.

Table 3 indicates that the mean number of siblings in the family in both groups was 2.3. It is evident that the two groups were homogeneous regarding the number of siblings in the families of both groups.

As shown in Table 4, the mean age of siblings in the family of the experimental group was 8.4 years and the mean age of siblings in the family of the control group was 8.5. The ages of all siblings in the families of both groups were between 4 and 13 years.

Table 1  
Ages of Mothers

Age	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
24	0	0	1	12.5
25	1	12.5	1	12.5
26	1	12.5	0	0
27	1	12.5	1	12.5
28	1	12.5	1	12.5
29	0	0	0	0
30	0	0	0	0
31	0	0	0	0
32	0	0	1	12.5
33	1	12.5	0	0
34	0	0	1	12.5
35	2	25.0	0	0
36	1	12.5	1	12.5
37	0	0	1	12.5
Total	8	100.0	8	100.0

Mean = 30.6; Mode =  
35.0; Median = 28.5;  
S.D. = 4.6.

Mean = 30.4; Mode =  
None; Median = 28.5;  
S.D. = 5.0

Table 2  
Ages of Fathers

Age	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
28	0	0	1	20.0
29	2	40.0	0	0
30	0	0	0	0
31	0	0	1	20.0
32	0	0	0	0
33	0	0	0	0
34	0	0	0	0
35	1	20.0	0	0
36	0	0	1	20.0
37	2	40.0	1	20.0
39	0	0	1	20.0
Total	5	100.0	5	100.0

Mean = 33.4

Mode = 37.0 and 29.0

Median = 35.0

S.D. = 4.1

Mean = 34.0

Mode = None

Median = 36.0

S.D. = 4.3

Table 3  
Number of Siblings in the Family

Number	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
0	0	0	0	0
1	1	12.5	1	12.5
2	4	50.0	4	50.0
3	3	37.5	3	37.5
Total	8	100.0	8	100.0

Mean = 2.3

Mean = 2.3

Mode = 2.0

Mode = 2.0

Median = 2.3

Median = 2.3

S.D. = 0.7

S.D. = 0.7

Table 4

## Ages of Siblings in the Family

Experimental Group		Control Group											
		Age											
Subject	n	4-5	6-7	8-9	10-11	12-13	Subject	n	4-5	6-7	8-9	10-11	12-13
A	3	1	0	1	1	0	I	3	0	1	1	0	1
B	2	0	0	1	0	1	J	2	0	0	1	0	1
C	2	0	1	1	0	0	K	2	0	1	0	1	0
D	3	0	1	0	1	1	L	3	0	1	0	1	1
E	2	0	1	1	0	0	M	2	0	1	0	1	0
F	1	0	1	0	0	0	N	1	0	1	0	0	0
F	2	0	1	1	0	0	O	2	1	1	0	0	0
H	3	0	1	0	1	1	P	3	0	1	0	1	1
Total	18	1	6	5	3	3	Total	18	1	7	2	4	4

Mean = 8.4; Mode = 7.0;

Mean = 8.5; Mode = 9.7;

Median = 8.2; S.D. = 1.3

Median = 8.7; S.D. = 1.8.

The data contained in Table 5 reflects that the mean annual income of the families in the experimental group was \$16,375 and the mean annual income of the families in the control group was \$16,500. The annual income of 6 families (75%) in the experimental group was between \$15,000 and \$22,000. The annual income of 6 families (75%) in the control group was between \$14,000 and \$22,000.

A study of Table 6 shows that the mean age of the mentally retarded child in both the experimental and control groups was 7.9 years. The ages of all the mentally retarded children in both groups were between 6 and 10. The two groups were homogeneous regarding the age of the mentally retarded children.

Table 7 indicates that the mean IQ of the mentally retarded child in the experimental group was 50.6 and the mean IQ of the mentally retarded child in the control group was 51.3. The IQs of all mentally retarded children in the experimental and control groups were between 40 and 60.

Table 8 reveals that five mothers in the experimental group (62.5%) were high school graduates; two mothers (25%) had two years of college education; and one mother (12.5%)



Table 5  
Annual Income of the Families

Income	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
\$10,000	1	12.5	0	0
11,000	0	0	1	12.5
12,000	1	12.5	0	0
13,000	0	0	1	12.5
14,000	0	0	1	12.5
15,000	1	12.5	0	0
16,000	1	12.5	1	12.5
17,000	0	0	1	12.5
18,000	2	25.0	0	0
19,000	0	0	1	12.5
20,000	1	12.5	0	0
21,000	0	0	2	25.0
22,000	1	12.5	0	0
Total	8	100.0	8	100.0

Mean = \$16,375

Mode = \$18,000

Median = \$16,500

S.D. = \$3,997.8

Mean = \$16,500

Mode = \$21,000

Median = \$16,500

S.D. = \$3,703.3

Table 6  
Age of the Mentally Retarded Children

Age	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
6	2	25.0	2	25.0
7	2	25.0	2	25.0
8	1	12.5	1	12.5
9	1	12.5	1	12.5
10	2	25.0	2	25.0
Total	8	100.0	8	100.0

Mean = 7.9

Mean = 7.9

Mode = 6.0

Mode = 6.0

Median = 7.0

Median = 7.0

S.D. = 1.6

S.D. = 1.6

Table 7  
IQ of the Mentally Retarded Children

IQ	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
40	2	25.0	1	12.5
45	1	12.5	2	25.0
50	1	12.5	0	0
55	2	25.0	4	50.0
60	2	25.0	1	12.5
Total	8	100.0	8	100.0

Mean = 50.6

Mode = 40.0

Median = 52.5

S.D. = 8.2

Mean = 51.3

Mode = 55.0

Median = 53.8

S.D. = 6.9

Table 8  
Level of Education of Mothers

Level	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
High School Diploma	5	62.5	5	62.5
1 Year College	0	0	0	0
2 Years College	2	25.0	0	0
3 Years College	0	0	0	0
Bachelor's Degree	1	12.5	3	37.5
Total	8	100.0	8	100.0

Mode = High

School Diploma

Mode = High

School Diploma

Table 9  
Level of Education of Fathers

Level	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
High School Diploma	3	60.0	3	60.0
1 Year College	1	20.0	0	0
2 Years College	0	0	1	20.0
3 Years College	0	0	0	0
Bachelor's Degree	1	20.0	1	20.0
Total	5	100.0	5	100.0

Mode = High

Mode = High

School Diploma

School Diploma

had a bachelor's degree. Five mothers of the control group (62.5%) were high school graduates and three mothers (37.5%) had bachelor's degrees.

Table 9 describes the level of education of fathers in the experimental and control groups. Three fathers (60%) in the experimental group were high school graduates; one father (20%) had one year of college education; and one father (20%) had a bachelor's degree. Three fathers (60%) in the control group were high school graduates; one father (20%) had two years of college education; and one father (20%) had a bachelor's degree.

Table 10 shows that there were six male and two female mentally retarded children in both the experimental group and the control group. The two groups were homogeneous regarding the sex of the mentally retarded child.

A step-wise regression was conducted on the experimental and control groups on all matching characteristics. No significant correlates were produced, suggesting that matching on these characteristics was complete and that treatment differences on dependent variables cannot be attributed to group differences on personal characteristics.

#### Hypotheses Testing

The following section presents the tests of the three hypotheses and a summary of the results for each hypothesis.

Table 10  
Sex of the Mentally Retarded Children

Sex	Experimental Group		Control Group	
	<u>n</u>	%	<u>n</u>	%
Male	6	75.0	6	75.0
Female	2	25.0	2	25.0
Total	8	100.0	8	100.0

Mode = Male

Mode = Male

### Hypothesis One

No significant differences exist between the experimental and control groups on the frequency of leisure activities recorded.

In addition to the descriptive statistics performed on the demographic data, inferential statistics were performed on the experimental and control groups in regard to:

(a) Frequency of leisure activities, (b) Time spent in leisure activities, and (c) A comparison of frequency of types of leisure activities.

In regard to frequency of leisure activities, the total frequency of engagement in leisure activities was computed for each experimental and control subject. The frequency scores were then correlated between the two groups using the Pearson Product-Moment correlation coefficient. The resulting correlation value was .153, which was not significantly different from zero ( $p > .05$ ). The decision was made, therefore, to treat the experimental and control groups as independent samples, even though the groups were carefully matched.

An independent cast t-test was performed between the experimental and control groups on the total frequency score. The Levene test was performed on the two group variances as a check on the homogeneity of variance



assumption. The Levene test was significant  $F(1,14) = 15.49, p < .001$ ), thus the t-test based on separate variance estimates was used. The resulting t-test between groups indicated significantly more engagement in leisure activities for the experimental group over the control group ( $t(7) = 10.62, p < .001$ ), (see Table 11). The Omega-square effect size coefficient computed for this t-test result was equal to .87, indicating 87% of the variance in frequency scores is accounted for by group membership, that is by a treatment effect favoring Rational-Emotive Imagery counseling. The results do not support hypothesis one; therefore, the hypothesis was rejected. The results of the testing of the first hypothesis are presented in Table 11.

#### Hypothesis Two

No significant differences exist between the experimental and control groups regarding the time spent participating in leisure activities.

In regard to time spent in leisure activities, the total time spent participating was computed for each experimental and control subject. The time scores were then correlated between the two groups using the Pearson Product-Moment correlation coefficient. The resulting correlation value was .193, which was not significantly different from zero ( $p > .05$ ). The decision was made, therefore,

Table 11  
Analysis of Frequency Scores of  
Leisure Activities

Experimental Group		Control Group	
Subject	Frequency	Subject	Frequency
A	27	I	6
B	21	j	7
C	17	K	6
D	16	L	6
E	19	M	6
F	24	N	7
G	22	O	6
H	26	P	6
Total	172	Total	50

Mean = 21.50

S.D. = 4.04

S.E. = 1.43

Mean = 6.25

S.D. = .46

S.E. = .16

to treat the experimental and control groups as independent samples, even though the groups were carefully matched.

An independent case t-test was performed between the experimental and control groups on the total time score. The Levene test was performed on the two group variances as a check on the homogeneity of variance assumption. The Levene test was significant ( $F(1,14) = 11.32, p < .005$ ), thus the t-test based on separate variance estimates was used. The resulting t-test between groups indicated significantly more time spent in leisure activities for the experimental group over the control group ( $t(7) = 12.60, p < .0001$ , see Table 12). The Omega-square effect size coefficient computed for this t-test result was equal to .91, indicating 91% of the variance in time scores is accounted for by group membership, that is by a treatment effect favoring Rational-Emotive Imagery counseling. The results do not support hypothesis two; therefore, the hypothesis was rejected. The results of the testing of the second hypothesis are presented in Table 12.

### Hypothesis Three

No significant differences exist between the experimental and control groups in regard to the types of leisure activities in which the mentally retarded children participated.

Table 12  
Analysis of Time Spent in  
Leisure Activities

Experimental Group		Control Group	
Subject	Total Time in Minutes	Subject	Total Time in Minutes
A	1,415	I	360
B	1,135	J	390
C	930	K	360
D	930	L	360
E	975	M	360
F	1,170	N	400
G	1,075	O	360
H	1,195	P	360
Total	8,825	Total	2,950

Mean = 1,103.13

S.D. = 164.93

S.E. = 57.99

Mean = 368.75

S.D. = 16.42

S.E. = 5.81

In a related analysis both the total frequency and total time scores were submitted to a multivariate t-test, the Hotelling T-Squared test between the experimental and control groups. The resulting T-Squared value was 168.48, with an associated approximate F-value of 72.21,  $p < .0001$ . This multivariate result was followed by a discriminate function analysis between the two groups on both frequency and time variables, in search of an interpretable pattern of differences between the groups. The analysis resulted in one significant discriminant function containing only the time variable (Chi-square [1] = 33.93,  $p < .001$ ). Due to (a) an extremely high correlation between the time and frequency variables ( $r = .93$ ,  $p < .001$ ), and (b) the largest group differences occurring on the time variable, the frequency variable added nothing unique to the discrimination or separation between groups and was therefore not necessary. Univariate and multivariate tests correspond in suggesting that both time spent in, and frequency of engagement in leisure activities is dramatically enhanced by the Rational-Emotive Imagery counseling procedure.

In regard to comparison of frequency of types of leisure activities, the Chi-square test of association was performed between the experimental and control groups on the number of activities engaged in which could be classified

as either Group-Oriented or Individually-Centered (see Table 13). Subjects in the Rational-Emotive Imagery treatment tended to select group oriented activities at a markedly higher rate than control subjects (Chi-square  $[1] = 95.74, p < .001$ ). The results do not support hypothesis three; therefore, the hypothesis was rejected. The results of the testing of the third hypothesis are presented in Table 13.

Table 13  
Analysis of Types of Leisure Activities

	Experimental	Control	Marginal
Group Oriented Activity	150 (122.4)	8 (35.6)	158
Individual Activity	22 (49.6)	42 (14.4)	64
Marginal	172	50	Total 222

The analysis of inferential statistics suggests that rational emotive imagery counseling of parents of mentally retarded children does significantly affect the frequency of preparation in leisure activities by the mentally retarded children, the time they spent in leisure activities, and the type of leisure activities they choose.

### Summary

Chapter IV has presented the results of the investigation to determine the impact of leisure counseling of parents of mentally retarded children on leisure functioning of those children.

A tabular and narrative presentation of the descriptive statistics of the eight families of the experimental group and the eight families of the control group revealed that the average age of mothers in the experimental group was 31 and the average age of mothers in the control group was 30. The average of fathers in the experimental group was 33, and the average age of fathers in the control group was 34. The average family annual income in the experimental group was \$16,400, and was \$16,500 for the control group. The average educational level of fathers and mothers in both groups was high school graduate. The average number of children in families in both groups was two. The average age of the children in families of the experimental group was eight years and in the control group was eight point five years. The average age of the mentally retarded children in the experimental and control groups was eight years. Six of the mentally retarded children in each of the experimental group and control group were male and two were female. The average IQ of the mentally retarded

children in the experimental group was 50, and was 51 for the control group.

Inferential statistics were performed on the data. T tests were used to compare the experimental and control groups in regard to: (a) frequency of leisure activities and (b) time spent in leisure activities. A Hotelling's T-Square test was then performed on the results in order to reveal patterns or combinations of the variables upon which groups may differ. The Chi-square test was performed to compare the types of leisure activities that the subjects of the experimental and control groups participated in, which were classified as either group-oriented or individually centered activities.



## CHAPTER V

### SUMMARY, DISCUSSION, AND RECOMMENDATIONS

#### Summary

The purpose of the study was to determine the impact of leisure counseling of parents of mentally retarded children on leisure functioning of those children. Sixteen families were studied in order to determine the impact of leisure counseling of parents of mentally retarded children on the leisure functioning of those children. The leisure counseling method used was rational emotive imagery. Eight families were randomly selected for the experimental group from 48 families who were served by the Arlington Independent School District. Eight other families were assigned to the control group that matched the demographic characteristics of the eight families of the experimental group. The 16 families in the experimental and control groups used a log to record the frequency of leisure activities of the mentally retarded children, time spent in leisure activities, and types of leisure activities for six weeks. The parents in the experimental group received rational emotive imagery one hour a week for six weeks. The parents and children of the experimental group and the children of the control group participated in leisure activities one hour a week for six weeks. At the completion of the study, the logs of both

groups were tabulated in regard to: (a) frequency of leisure activities, (b) time spent in leisure activities, and (c) a comparison of the frequency of types of leisure activities. Demographic data were analyzed for both groups.

The analysis of the demographic data revealed that the experimental and control groups were closely matched. The average age of mothers in the experimental group was 31 years and the average age of mothers in the control group was 30 years. The average age of fathers in the experimental group was 33 years, and the average age of fathers in the control group was 34 years. The average family annual income in the experimental group was \$16,400 whereas in the control group the average family annual income was \$16,500. The average educational level of fathers and mothers in both groups was high school graduate. The average number of children in the families of both groups was two. The average number of children in the families of both groups was two. The average age of the children of the families in the experimental group was eight, while in the control group the average number of children was eight point five. The average age of the mentally retarded children in the experimental and control groups was eight. There were six male and two female mentally retarded children in each group. The average IQ of the mentally retarded children in the experimental group was 50, while the average IQ in the control group was 51.

An analysis of the frequency of leisure activities of the experimental and control groups revealed that the ratio of frequency of leisure activities of the experimental group to the frequency of leisure activities of the control group was three point five to one. An analysis of the time spent in leisure activities of the experimental and control groups revealed that the ratio of the time spent in leisure activities of the experimental group to the time spent in leisure to activities of the control group was three to one. An analysis of the types of activities of the experimental group and control groups revealed that the ratio of group oriented activities of the experimental group to the group oriented activities of the control group was 19.5 to one. The investigator has reached the following conclusions based on the findings of the study:

1. Mentally retarded children whose parents received the rational emotive imagery counseling method participated in leisure activities more frequently than mentally retarded children whose parents had not received the rational emotive imagery counseling method.

2. Mentally retarded children whose parents received the rational emotive imagery counseling method spent more time in leisure activities than mentally retarded children whose parents had not received the rational emotive imagery counseling method.

3. Mentally retarded children whose parents received the rational emotive imagery counseling method were more likely to choose group activities over individual activities than mentally retarded children whose parents had not received the rational emotive imagery counseling method.

### Discussion

Results of the study support that rational emotive imagery counseling of parents of mentally retarded children does significantly affect the frequency of leisure activities of mentally retarded children, the time they spend in leisure activities, and the type of leisure activities they choose. Based on the findings of the study, the three hypotheses concerned with the significance of frequency of leisure activities, the time spent in leisure activities, and the types of leisure activities in which the mentally retarded children participated, were rejected.

The analysis of the frequency of leisure activities of the experimental group to the frequency was three point five to one. In the family sessions with the parents of the experimental group, the parents became increasingly aware of the role they played in reinforcing their children's dependency on them. Rational emotive imagery enabled the parents to perceive objectively the strengths and the abilities of the children. During the family sessions, the investigator

assessed the family leisure functioning by organizing the family into two main subsystems: (a) parental subsystem, and (b) sibling subsystem. The assessment of the boundaries of the parental subsystems revealed that all parents of the experimental group were overprotective in terms of not allowing their children to do things on their own. The investigator attempted to reduce the parents' defensiveness of being overprotective of their children. One of the techniques the investigator used was relabeling the negative label, "overprotective," to a more positive one "very concerned." The positive relabeling "very concerned about your children," produced parents' positive responses. The positive communications facilitated the establishment of a close relationship between the parents and the investigator. The investigator used the positive relationship with the parents to restructure the boundaries of the parental subsystem by helping parents become aware of the consequences of their protective attitudes toward their children. At the end of the first family session, all parents of the experimental group became aware of the importance of involving the mentally retarded children in making decisions about their own desired leisure activities. The investigator facilitated the interaction of parents with their children by suggesting that parents and children establish eye

contact when they talked to one another. The other suggestion made was that no interruption be allowed when family members talked to one another. The enhancement of family interaction was illustrated when one of the mentally retarded children of the experimental group told his parents in the family session, "I feel closer to you, you play with me, and I feel that I can do the things I enjoy doing." The parents gave a supportive response by stating, "We know now that you can make your own decisions, and we are proud of you." The positive interaction reinforced the self-confidence of the mentally retarded child. The investigator observed that the parents and the children of the experimental group seemed to be happier and more relaxed in the way they related to one another. Whenever the mentally retarded child participated in his desired leisure activities, the parents provided him with emotional support. The investigator reinforced the positive family interaction of the experimental group by praising both parents and children for their responsiveness to one another in order to develop the family supportive system. The purpose was to support the new positive attitudes of the mentally retarded children toward recreation activities.

It was interesting to the investigator to observe the contrast between the recreation attitudes of mentally

retarded children of the experimental group and of the control group. The mentally retarded children of the control group manifested isolated play behavior. This was illustrated by their engagement in individually centered leisure activities such as playing with toys and drawing pictures. The investigator felt that this might relate to the lack of family supportive system that reinforced the children's feeling of alienation. The investigator also observed that the mentally retarded children of the control group had a tendency to avoid group activities and withdrew from interacting with other children.

The analysis of the time spent in leisure activities of the mentally retarded children of the experimental and control groups revealed that the ratio of the time spent in leisure activities of the experimental group to the time spent in leisure activities of the control group was three to one. In the family sessions with the parents of the experimental group, the investigator attempted to model an effective way of communicating through active listening and responding. As the family sessions progressed, parents were able to listen and respond to their children's recreation needs. This was illustrated when the parents encouraged their mentally retarded children to engage in their desired leisure activities. In this respect, parents provided

support to their children by their actual participation in the children's desired leisure activities. The investigator encouraged the parents of the experimental group to teach their mentally retarded children the basic skills required for the leisure activities that their child had chosen. This interaction between the parents and the children eliminated the passive dependent relationship that existed between them prior to the family leisure counseling sessions. The transference of the negative dependent relationship to an interactive relationship between parents and children of the experimental group enabled the children to further develop their social skills. This was illustrated when one of the children of the experimental group, during his participation in playing soccer with his parents, stated, "I am a soccer star, everyone is looking at me; I like that." The parents responded in a supportive way by stating, "We are happy to see you playing very well; you are a good boy." The parents' verbal response was highly regarded by their child. He ran towards his parents and hugged them. It was an emotional moment in which parents and their mentally retarded child shared emotional closeness. The investigator observed that parents and the mentally retarded children of the experimental group were able to share their personal feelings and thoughts in a



supportive and rewarding way. It appeared that this sharing on affective and cognitive levels enabled the mentally retarded children to elicit their parents' recognition of their strengths and abilities.

The investigator experienced a different situation with the mentally retarded children of the control group. These mentally retarded children appeared to be lacking motivation to participate in group leisure activities. This might relate to their feeling of isolation from their families. The feeling of isolation was illustrated when one of the children of the control group stated, "No one noticed me. I am drawing a picture of my family and they do not know what I am doing." The investigator responded by complimenting him on the picture he had drawn. It was interesting to the investigator to see that the child drew his father, mother, brother, and sister standing at a distance from him. The investigator's impression was that the picture expressed the feeling of alienation of the child from his family. If this was true, the feelings of alienation might have contributed towards his withdrawal from group recreation activities.

The analysis of types of leisure activities of the mentally retarded children of the experimental group and control group revealed that the ratio of group oriented

activities of the experimental group to the group oriented activities of the control group was 19.5 to 1. The investigator was impressed by the increasing development of the social skills of the mentally retarded children of the experimental group. It appeared that rational emotive imagery counseling of parents of the experimental group enhanced parents' motivation to participate in leisure activities with their children. The family interaction also facilitated the development of the social skills of the mentally retarded children. This was illustrated when all children of the experimental group showed initiative in planning recreation activities. The children's assertiveness indicated the development of their autonomy and independency. The investigator observed that the parents and children of the experimental group appeared to enjoy their interaction through leisure activities. The family interaction was supported in one of the family sessions by the following statement of parents, "We enjoy our interaction with our children. It is a joy to see our children have the ability to make their own decisions; we are proud of what they are doing." In the last family session, the investigator was touched by the following parents' statement: "It was a gratifying and enjoyable learning experience for us and for our children."

### Recommendations for Further Research

In view of the findings of the study, the suggestions for further research are as follows:

1. Replication of the present study using a larger sample of parents of mentally retarded children of different ages, educational level, and income level.
2. Investigate the impact of counseling parents of mentally retarded children using rational emotive imagery on the self concept of the mentally retarded child.
3. Investigate the relationship of counseling parents of mentally retarded children using rational emotive imagery to the development of the mentally retarded child's social skills.
4. Investigate the relationship of counseling families of mentally retarded children with rational emotive imagery, and attitudes of mentally retarded children toward leisure activities.
5. Investigate the relationship of counseling the parents of mentally retarded children using rational emotive imagery and the degree of adjustment of the child to the mentally handicapping condition.

## APPENDICES

## APPENDIX A

1. Letter to Parents
2. Summary of the Study to Parents
3. Approval Statement from Parents

January 8, 1982

Dear Parent,

We are assisting in a study which will involve mentally retarded children and their parents participating together in leisure time activities. The director of the study is Kamal El-Din. He will provide family leisure counseling and leisure activities in coordination with our staff, free of charge, including free transportation.

The benefits of participating in the study include opportunities to:

- Increase interaction between the families and their mentally retarded children
- Help the child to develop social skills through participation in family leisure activities
- Help the child to develop a sense of pride of accomplishment with the emotional support of his family
- Improve communications and understanding between the families and their children.

A home visit may be included at the beginning of the study in order to assess the family's leisure interests. A summary of this study is attached. Kamal El-Din will be contacting you within the next few days upon your written approval for participation in this study. If you agree, please sign and return the enclosed approval statement to your child's teacher.

With your participation in this study, you could make a meaningful contribution for your children and for our community.

Sincerely,

Arlington Independent School  
District

Enclosures

## SUMMARY OF THE STUDY

The purpose of this experimental study is to determine the impact of leisure counseling of parents of mentally retarded children on the leisure functioning of those children.

The subjects will be composed of 16 families and their mentally retarded children who are served by Arlington School District. Eight of these families will be assigned randomly to an experimental group. Eight families that match the demographic characteristics of the 8 families of the experimental group will be assigned to a control group.

Parents of the experimental group will receive leisure counseling for 1 hour once a week for 6 weeks, while parents of the control group will not receive leisure counseling. Parents and children of the experimental group and the children of the control group will engage in leisure activities for 1 hour once a week for 6 weeks. Family leisure counseling consists of the following process:

- A. Exploring parents' attitudes toward recreation.
- B. Helping parents to be aware of their children's recreation needs.
- C. Involving the mentally retarded child in the session with his parents to express his desired leisure activities.
- D. Actual engagement of parents and their mentally retarded children in their desired leisure activities

The total frequency and the length of time spent in leisure activities of the mentally retarded children of the experimental and the control groups will be compared after 6 weeks by means of a "t" test to determine if there is a significant difference in the frequency and length of time spent in leisure activities.

If you have further questions, please call me after 6 p.m. at (214) 264-0553.

Kamal El-Din

## APPROVAL STATEMENT

I, \_\_\_\_\_, parent of \_\_\_\_\_

\_\_\_\_\_ agree to participate with my child in recreation activities of our choice, free of charge including free transportation. These recreation activities will be provided by Mahmoud Kamal El-Din and his staff for one hour a week for six consecutive weeks at a time and place convenient for us, beginning January 29, 1982. I understand that AISD will not be involved in these recreation activities.

\_\_\_\_\_  
Signature of Parent

\_\_\_\_\_  
Date

After signing the above approval statement, please fill out the following form in order to assign eight families to the control group that match the demographic characteristics of the eight families of the experimental group.

Mother's Age	Father's Age	Number of Children	Age of Children	Education of Parents	
				F	M

Family Income	Age of Mentally Retarded Child	I.Q. of Mentally Retarded Child	Sex



## APPENDIX B

### DATA RECORDING FORM (LOG)

# DATA RECORDING FORM

## (LOG)

NAME: \_\_\_\_\_

[illegible]

APPENDIX C

TABULATION OF FREQUENCY AND TIME SPENT IN LEISURE  
ACTIVITIES OF MENTALLY RETARDED CHILDREN OF THE  
EXPERIMENTAL AND CONTROL GROUPS  
FOR SIX WEEKS

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject A

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Volley Ball Soccer	3
Second Week	Soccer	Soccer Bowling Football	4
Third Week	Soccer	Soccer Soccer Football	4
Fourth Week	Soccer	Soccer Soccer Soccer Football	5
Fifth Week	Soccer	Soccer Soccer Soccer Bowling	5
Sixth Week	Soccer	Soccer Soccer Bowling Football Soccer	6
Total			27

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject B

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer	2
Second Week	Soccer	Soccer Bowling	3
Third Week	Soccer	Soccer Bowling	3
Fourth Week	Soccer	Soccer Soccer Bowling	4
Fifth Week	Soccer	Soccer Soccer Soccer	4
Sixth Week	Soccer	Soccer Soccer Soccer Football	5
Total			21

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject C

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer	2
Second Week	Soccer	Soccer	2
Third Week	Soccer	Soccer Bowling	3
Fourth Week	Soccer	Soccer Bowling	3
Fifth Week	Soccer	Soccer Football	3
Sixth Week	Soccer	Soccer Soccer Soccer	4
Total			17

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject D

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer	2
Second Week	Soccer	Soccer	2
Third Week	Soccer	Soccer Bowling	3
Fourth Week	Soccer	Soccer Football	3
Fifth Week	Soccer	Soccer Soccer	3
Sixth Week	Soccer	Soccer Football	3
Total			16

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject E

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer	2
Second Week	Soccer	Soccer Bowling	3
Third Week	Soccer	Football Soccer	3
Fourth Week	Soccer	Football Bowling	3
Fifth Week	Soccer	Soccer Football Bowling	4
Sixth Week	Soccer	Soccer Soccer Soccer	4
Total			19



## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject F

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer Bowling	3
Second Week	Soccer	Football Football	3
Third Week	Soccer	Football Bowling Soccer	4
Fourth Week	Soccer	Bowling Soccer Soccer	4
Fifth Week	Soccer	Football Soccer Soccer Soccer	5
Sixth Week	Soccer	Soccer Soccer Football Soccer	5
Total			24

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject G

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer	2
Second Week	Soccer	Soccer	2
Third Week	Soccer	Football Soccer	3
Fourth Week	Soccer	Soccer Soccer Bowling	4
Fifth Week	Soccer	Soccer Volleyball Soccer Bowling	5
Sixth Week	Soccer	Soccer Soccer Bowling Soccer Soccer	6
Total			22

## EXPERIMENTAL GROUP

## Frequency of Leisure Activities of Subject H

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Football	Soccer Volleyball	3
Second Week	Soccer	Football Football	3
Third Week	Soccer	Bowling Soccer Volleyball	4
Fourth Week	Soccer	Soccer Bowling Volleyball Football	5
Fifth Week	Soccer	Soccer Soccer Bowling Soccer	5
Sixth Week	Soccer	Bowling Soccer Football Football Soccer	6
Total			26

## CONTROL GROUP

## Frequency of Leisure Activities of Subject I

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Kicked a ball by himself	0	1
Third Week	Playing with toys	0	1
Fourth Week	Playing with toys	0	1
Fifth Week	Kicked a ball by himself	0	1
Sixth Week	Kicked a ball by himself	0	1
Total			6

## CONTROL GROUP

## Frequency of Leisure Activities of Subject J

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Playing with toys	0	1
Third Week	Kicked a ball by himself	0	1
Fourth Week	Playing with toys	0	1
Fifth Week	Kicked a ball by himself	0	1
Sixth Week	Playing with toys	Kicked a ball by himself	2
		Total	7

## CONTROL GROUP

## Frequency of Leisure Activities of Subject K

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Playing with toys	0	1
Third Week	Playing with toys	0	1
Fourth Week	Kicked a ball by himself	0	1
Fifth Week	Playing with toys	0	1
Sixth Week	Playing with toys	0	1
		Total	6

## CONTROL GROUP

## Frequency of Leisure Activities of Subject L

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Playing with toys	0	1
Third Week	Drawing pictures	0	1
Fourth Week	Kicked a ball by himself	0	1
Fifth Week	Kicked a ball by himself	0	1
Sixth Week	Playing with toys	0	1
Total			6

## CONTROL GROUP

## Frequency of Leisure Activities of Subject M

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Kicked a ball by himself	0	1
Third Week	Kicked a ball by himself	0	1
Fourth Week	Playing with toys	0	1
Fifth Week	Playing with Toys	0	1
Sixth Week	Kicked a ball by himself	0	1
Total			6



## CONTROL GROUP

## Frequency of Leisure Activities of Subject N

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Kicked a ball by himself	0	1
Third Week	Playing with toys	0	1
Fourth Week	Kicked a ball by himself	0	1
Fifth Week	Kicked a ball by himself	Playing with toys	2
Sixth Week	Kicked a ball by himself	0	1
Total			7

## CONTROL GROUP

## Frequency of Leisure Activities of Subject O

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Playing with toys	0	1
Third Week	Playing with toys	0	1
Fourth Week	Kicked a ball by himself	0	1
Fifth Week	Playing with Toys	0	1
Sixth Week	Kicked a ball by himself	0	1
Total			6

## CONTROL GROUP

## Frequency of Leisure Activities of Subject P

Date	Leisure Activities		Total Number of Activities
	Supervised	Unsupervised	
First Week	Volleyball	0	1
Second Week	Playing with toys	0	1
Third Week	Kicked a ball by himself	0	1
Fourth Week	Kicked a ball by himself	0	1
Fifth Week	Kicked a ball by himself	0	1
Sixth Week	Playing with toys	0	1
Total			6

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject A  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	75	185
	Volleyball	50			
Second Week	Soccer	60	Soccer	50	215
	Bowling	60	Football	45	
Third Week	Soccer	60	Soccer	55	205
	Soccer	50	Football	40	
Fourth Week	Soccer	60	Soccer	55	260
	Soccer	45	Football	50	
	Soccer	50			
Fifth Week	Soccer	60	Soccer	45	260
	Soccer	50	Bowling	60	
	Soccer	45			
Sixth Week	Soccer	60	Football	40	290
	Soccer	50	Soccer	30	
	Soccer	50	Bowling	60	
Total					1,415

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject B  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	50	110
Second Week	Soccer	60	Bowling	60	165
	Soccer	45			
Third Week	Soccer	60	Bowling	60	170
	Soccer	50			
Fourth Week	Soccer	60	Soccer	50	210
	Soccer	40	Bowling	60	
Fifth Week	Soccer	60	Soccer	50	215
	Soccer	50	Soccer	55	
Sixth Week	Soccer	60	Soccer	55	265
	Soccer	50	Football	50	
	Soccer	50			
Total					1,135

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject C  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	55	115
Second Week	Soccer	60	Soccer	50	110
Third Week	Soccer	60	Bowling	60	170
	Soccer	50			
Fourth Week	Soccer	60	Bowling	60	165
	Soccer	45			
Fifth Week	Soccer	60	Football	60	170
	Soccer	50			
Sixth Week	Soccer	60	Soccer	50	200
	Soccer	45	Soccer	45	
Total					930

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject D  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	60	120
Second Week	Soccer	60	Soccer	50	110
Third Week	Soccer Soccer	60 50	Bowling	60	70
Fourth Week	Soccer Soccer	60 60	Football	60	180
Fifth Week	Soccer Soccer	60 60	Soccer	55	175
Sixth Week	Soccer Soccer	60 55	Football	60	175
Total					930

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject E  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	50	110
Second Week	Soccer	60	Bowling	50	150
	Soccer	40			
Third Week	Soccer	60	Soccer	60	160
	Football	40			
Fourth Week	Soccer	60	Bowling	60	165
	Football	45			
Fifth Week	Soccer	60	Football	30	190
	Soccer	40	Bowling	60	
Sixth Week	Soccer	60	Soccer	40	200
	Soccer	50	Soccer	50	
			Total		975



## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject F  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Bowling	50	150
	Soccer	40			
Second Week	Soccer	60	Football	50	155
	Football	45			
Third Week	Soccer	60	Bowling	45	190
	Football	45		Soccer	
Fourth Week	Soccer	60	Soccer	40	200
	Bowling	50	Soccer	50	
Fifth Week	Soccer	60	Soccer	45	230
	Football	40	Soccer	40	
			Soccer	45	
Sixth Week	Soccer	60	Soccer	50	245
	Soccer	50	Football	40	
			Soccer	45	
			Total		1,170

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject G  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Soccer	50	110
Second Week	Soccer	60	Soccer	60	120
Third Week	Soccer	60	Soccer	45	145
	Football	40			
Fourth Week	Soccer	60	Soccer	40	190
	Soccer	40	Bowling	50	
Fifth Week	Soccer	60	Soccer	45	230
	Soccer	45	Bowling	40	
	Volleyball	40			
Sixth Week	Soccer	60	Bowling	50	280
	Soccer	40	Soccer	45	
	Soccer	40	Soccer	45	
Total					1,075

## EXPERIMENTAL GROUP

Length of Time of Leisure Activities of Subject H  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Football	60	Volleyball	40	150
	Soccer	50			
Second Week	Soccer	60	Football	55	155
	Football	40			
Third Week	Soccer	60	Soccer	40	190
	Bowling	50			
Fourth Week	Soccer	60	Bowling	40	220
	Soccer	40	Volleyball	40	
			Football	40	
Fifth Week	Soccer	60	Soccer	40	230
	Soccer	45	Bowling	45	
			Soccer	40	
Sixth Week	Soccer	60	Football	30	250
	Bowling	45	Football	35	
	Soccer	40	Soccer	40	
Total					1,195

## CONTROL GROUP

Length of Time of Leisure Activities of Subject I  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Kicked a ball by himself	60			60
Third Week	Playing with toys	60			60
Fourth Week	Playing with toys	60			60
Fifth Week	Kicked a ball by himself	60			60
Sixth Week	Kicked a ball by himself	60			60
Total					360

## CONTROL GROUP

Length of Time of Leisure Activities of Subject J  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Playing with toys	60			60
Third Week	Kicked the ball by himself	60			60
Fourth Week	Playing with toys	60			60
Fifth Week	Kicked a ball by himself	60			60
Sixth Week	Playing with toys	60	Kicked ball by himsefl	30	60
			Total		390

## CONTROL GROUP

Length of Time of Leisure Activities of Subject K  
(In Minutes)

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Playing with toys	60			60
Third Week	Playing with toys	60			60
Fourth Week	Kicked a ball by himself	60			60
Fifth Week	Playing with toys	60			60
Sixth Week	Playing with toys	60			60
Total					360

## CONTROL GROUP

## Length of Time of Leisure Activities of Subject L

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Playing with toys	60			60
Third Week	Drawing Pictures	60			60
Fourth Week	Kicked a ball by himself	60			60
Fifth Week	Kicked a ball by himself	60			60
Sixth Week	Playing with toys	60			60
Total					360

## CONTROL GROUP

## Length of Time of Leisure Activities of Subject M

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Kicked a ball by himself	60			60
Third Week	Kicked a ball by himself	60			60
Fourth Week	Playing with toys	60			60
Fifth Week	Playing with toys	60			60
Sixth Week	Kicked a ball by himself	60			60
Total					360



## CONTROL GROUP

## Length of Time of Leisure Activities of Subject N

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Kicked a ball by himself	60			60
Third Week	Playing with toys	60			60
Fourth Week	Kicked a ball by himself	60			60
Fifth Week	Kicked a ball by himself	60	Playing with toys	40	100
Sixth Week	Kicked a ball by himself	60			60
			Total		400

## CONTROL GROUP

## Length of Time of Leisure Activities of Subject O

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Playing with toys	60			60
Third Week	Playing with toys	60			60
Fourth Week	Kicked a ball by himself	60			60
Fifth Week	Playing with toys	60			60
Sixth Week	Kicked a ball by himself	60			60
			Total		360

## CONTROL GROUP

## Length of Time of Leisure Activities of Subject P

Date	Leisure Activities	Length of Time in Minutes	Leisure Activities	Length of Time in Minutes	Total Time in Minutes
First Week	Volleyball	60			60
Second Week	Playing with toys	60			60
Third Week	Kicked a ball by himsself	60			60
Fourth Week	Kicked a ball by himself	60			60
Fifth Week	Kicked a ball by himself	60			60
Sixth Week	Playing with toys	60			60
Total					360

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