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EVALUATION OF THE USE OF A SYSTEMATIC TRAINING
FOR EFFECTIVE PARENTING PROGRAM MODIFIED FOR
LOW-INCOME PUERTO RICAN PARENTS OF PRE-SCHOOLERS

A Dissertation Presented

By

NICOLE GILLETTE

Submitted to the Graduate School of the University of Massachusetts in partial fulfillment of the requirements for the degree of

DOCTOR OF EDUCATION

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School of Education
EVALUATION OF THE USE OF A SYSTEMATIC TRAINING FOR EFFECTIVE PARENTING PROGRAM MODIFIED FOR LOW-INCOME PUERTO RICAN PARENTS OF PRE-SCHOOLERS

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NICOLE GILLETTE

Approved as to style and content by:

Ena Vazquez Nuttall, Chairperson

Nylia Ansari, Member

John W. Wideman, Member

Marilyn Haring-Hidore, Dean
School of Education
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A mes parents,
qui m'ont donné le désir d'apprendre;

A ma fille, Elise,
qui commence ses études universitaires quand les miennes s'achèvent.
ABSTRACT

EVALUATION OF THE USE OF A SYSTEMATIC TRAINING FOR EFFECTIVE PARENTING PROGRAM MODIFIED FOR LOW-INCOME PUERTO RICAN PARENTS OF PRE-SCHOOLERS SEPTEMBER 1989

NICOLE Y. GILLETTE, B.S., UNIVERSITY OF PARIS, FRANCE M.ED. UNIVERSITY OF MASSACHUSETTS ED.D. UNIVERSITY OF MASSACHUSETTS DIRECTED BY PROFESSOR ENA VAZQUEZ NUTTALL

Research in parent training programs has shown that STEP (Dinkmeyer and McKay, 1976) can be presented in less than nine weeks, but little information exists with regard to its use with populations other than middle-class parents, and no studies have focused on presenting the program to low-income Puerto Rican parents.

To test whether the STEP program (Spanish translation) would work with Puerto Ricans, twenty-four low-income Puerto Rican volunteer mothers of three and four year olds from a pre-school were randomly assigned to one control and one experimental group. Beside the "group" condition with subjects taking the training in consecutive weeks, there was, based on convenience to parents, an "individualized" condition in which subjects had individual appointments and rescheduled as needed. The modified program was taught in
four sessions; the cuts involved focusing on the skills and omitting the discussions.

A T-test revealed a significant improvement in experimental mothers' knowledge of the course material ($T = -2.58$, $p = .033$). A two-way ANCOVA showed a significant change in mothers' attitudes regarding their child behavior on an adapted APACBS ($F = 4.7$, $p = .048$) but not on the 32-item APACBS scale ($F = .033$, $p = .85$). A qualitative analysis revealed clinically significant changes of behaviors. Six of the ten experimental mothers when asked at post-test what they were doing regarding the target behavior they selected for their child focused on their own parental behavior and limitations. In contrast, control group parents focussed strictly on punishment or its absence. Some parents prefer to join large groups while others wanted the program on an individual basis. Very high interest for the program and training was expressed.
# TABLE OF CONTENTS

<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>ACKNOWLEDGEMENTS</td>
<td>iv</td>
</tr>
<tr>
<td>ABSTRACT</td>
<td>vi</td>
</tr>
<tr>
<td>LIST OF TABLES</td>
<td>x</td>
</tr>
<tr>
<td>Chapter</td>
<td></td>
</tr>
<tr>
<td>I. STATEMENT OF THE PROBLEM</td>
<td></td>
</tr>
<tr>
<td>Rationale</td>
<td>1</td>
</tr>
<tr>
<td>Significance of the Study</td>
<td>2</td>
</tr>
<tr>
<td>Limitations</td>
<td>4</td>
</tr>
<tr>
<td>Definitions</td>
<td>5</td>
</tr>
<tr>
<td>Summary</td>
<td>6</td>
</tr>
<tr>
<td>II. LITERATURE REVIEW</td>
<td></td>
</tr>
<tr>
<td>Introduction</td>
<td>8</td>
</tr>
<tr>
<td>Part I: Parent Training Programs and STEP</td>
<td>11</td>
</tr>
<tr>
<td>Part II: STEP Studies Outcome</td>
<td>23</td>
</tr>
<tr>
<td>III. METHODOLOGY</td>
<td></td>
</tr>
<tr>
<td>Population</td>
<td>38</td>
</tr>
<tr>
<td>Organization and Procedure</td>
<td>38</td>
</tr>
<tr>
<td>Treatment</td>
<td>40</td>
</tr>
<tr>
<td>Research Hypotheses</td>
<td>48</td>
</tr>
<tr>
<td>Instrumentation</td>
<td>55</td>
</tr>
<tr>
<td>Research Design</td>
<td>56</td>
</tr>
<tr>
<td>Data Analysis</td>
<td>65</td>
</tr>
<tr>
<td>IV. RESULTS</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>69</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>69</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>73</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>75</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>78</td>
</tr>
<tr>
<td>Qualitative Analysis</td>
<td>81</td>
</tr>
<tr>
<td>V. DISCUSSION AND CONCLUSIONS</td>
<td></td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td>94</td>
</tr>
<tr>
<td>Hypothesis 2</td>
<td>94</td>
</tr>
<tr>
<td>Hypothesis 3</td>
<td>95</td>
</tr>
<tr>
<td>Hypothesis 4</td>
<td>97</td>
</tr>
<tr>
<td>Hypothesis 5</td>
<td>100</td>
</tr>
<tr>
<td>Significance of the Research</td>
<td>101</td>
</tr>
<tr>
<td>Limitations</td>
<td>104</td>
</tr>
<tr>
<td>Conclusions and Suggestions for Future Research</td>
<td>109</td>
</tr>
</tbody>
</table>

viii
APPENDICES

A LETTER TO PARENTS & CONSENT FORM

B INSTRUMENTS

C POST-TRAINING LETTER TO THE PARENTS

D PILOT STUDY

BIBLIOGRAPHY
LIST OF TABLES

2.1 PARENT-CHILD PROBLEM SOLVING .......................... 31

2.2 PARENT TRAINING AND GROUP COUNSELING ON CHILDREN FUNCTIONING IN ELEMENTARY SCHOOL ........... 32

2.3 PARENTS' USES OF BEHAVIOR MODIFICATION TO ENHANCE THEIR CHILDREN'S SELF-CONCEPT OF ABILITY AND ACADEMIC ACHIEVEMENT .................. 33

2.4 COMPARISON OF A FAMILY'S MICROTRAINING PROGRAM AND A READING PROGRAM TO ENHANCE EMPATHIC COMMUNICATION BLACK PARENTS WITH YOUNG CHILDREN ........ 34

2.5 COMPARISON OF THREE PARENT EDUCATION PROGRAMS: STEP, PAT, EP ON PERCEPTIONS AND INTERACTIONS OF HEADSTART MOTHERS AND THEIR PRE-SCHOOL CHILDREN .... 35

2.6 EFFECTS OF ONE-VERSUS TWO-PARENT PARTICIPATION IN PARENT TRAINING ........................ 36

2.7 EFFECTS OF PARENTAL PARTICIPATION IN A STEP COURSE UPON CLASSROOM BEHAVIORS AND READING ACHIEVEMENT OF TITLE I CHILDREN ......................... 37

3.1 DEMOGRAPHIC CHARACTERISTICS OF THE SAMPLE ........................ 47

4.1 T-TEST OF CONTROL AND EXPERIMENTAL GROUPS MEAN TOTAL SCORES ON THE CONCEPTS QUESTIONNAIRE .................. 70

4.2 T-TEST BETWEEN ACHIEVEMENT TEST MEAN SCORES OF CONTROL AND EXPERIMENTAL MOTHERS AT PRE-TEST ............................ 71

4.3 PERCENTAGES OF CORRECT RESPONSES ON THE FOUR WEEKLY ACHIEVEMENT TESTS (EXPERIMENTAL GROUP) ........ 72

4.4 ANALYSIS OF CO-VARIANCE BETWEEN CONTROL AND EXPERIMENTAL GROUP AND DIFFERENCES OF PARENT ATTITUDE TOWARD THEIR TARGET CHILD (APACBS SCALE) .......... 74

4.5 ANALYSIS OF CO-VARIANCE BETWEEN CONTROL AND EXPERIMENTAL GROUPS AND THE PARENTAL ATTITUDE TOWARD THE TARGET CHILD BEHAVIOR (ADAPTED APACBS) ......... 75

4.6 SELECTED PROBLEM BEHAVIORS AND REPORTS OF CHANGE BY PARENTS ........................ 77

4.7 EXPERIMENTAL GROUP PARENTS' SESSIONS' RATINGS OF THE CHANGE IN ONE PROBLEM AREA SELECTED AT PRE-TEST (N=10) ....... 78
4.8 DEGREE OF POSITIVE PARENT PERCEPTIONS REGARDING INTERACTIONS WITH THE TARGET CHILD "MOST OF THE TIME," "OFTEN," AND "SOMETIMES" ........................................ 80

4.9 RESPONSES OF PARENTS REGARDING THEIR LEVEL OF INTEREST WITH THE PROGRAM (ALL GROUPS, AT POST-TEST) ........................................... 82

4.10 PARENTS' RESPONSES EXPRESSING LEVEL OF INTEREST IN THE CLASS—IN THE WEEKLY QUESTIONNAIRE (EXPERIMENTAL GROUP) ........................................ 83

4.11 EXPERIMENTAL GROUP: AVERAGE SUB-GROUP SCORES ON ALL MEASURES ..................................................... 92
CHAPTER I

STATEMENT OF THE PROBLEM

The lack of information and research is still hampering efforts to effectively reach and serve low-income Puerto Rican families, but their high level of needs has become increasingly apparent. The linguistic obstacle is a major factor that prevents low-income Puerto Rican parents from gaining access to, or better using services available in the schools and the community at large. There are also other important obstacles: the loss of natural support systems as a result of immigration or uprooting, cultural differences, poverty, racism, and the fact that very young parents often are the single head of large families (Rosado, 1980; Christensen, 1975; Delgado, 1982). All these factors can create emotional instability and disruption, which in turn impact heavily on the children's life in general and their schooling in particular.

Schools offer some help to these families; it is a serious responsibility that the schools share with the parents when the children reach school age. Bilingual programs have multiplied, with various levels of success; however, many low-income parents are themselves rarely able to communicate with their children about the skills and content that their children learn. The parents' very lack of familiarity with the schools' ways makes it difficult for them to get involved, and the information to do so is
not easily communicated. For children who are failing as pupils, and this is true for large proportions of Puerto Rican children from low-income families (Rogler, Grossman, Cooney, Constantino, Gurack, Malgady, Rodriguez, Vazquez, 1984; Mizio, 1981) many factors play a part: the parents' lack of knowledge to provide adequate emotional support and stimulation, their lack of knowledge with the educational system, and their own lack of success as students. All these are crucial obstacles for many of these children to benefit as much as they could from their school experience.

**Rationale**

Parent training programs have been well received by the mainstream population since the 1970's. Often provided by the schools, they represent a service which allow parents to feel more effective in their parenting role. The principles put forth in parent training programs and particularly though not exclusively in STEP (Systematic Training for Effective Parenting, Dinkmeyer and McKay, 1976) are the promotion of a sense of responsibility and independence in the children, improved communication between parents and children, and a greater understanding of principles underlying many of the democratic ways and skills needed to replace the autocratic traditional parenting approaches that can affect negatively a child's self-concept and self-confidence. For parents who do not possess the skills there are many barriers to acquiring
them, especially in a new culture with a different lan-
guage, unless appropriate training is made available.

The structure of the STEP program makes it efficient
to teach the skills, which can be learned in a few weeks.
The group facilitator uses the program itself as the
"authority" and thus can demonstrate the democratic
principles to replace the autocratic ones.

STEP was initially designed to serve middle-class
parents like those who first gathered regularly in the
1930's to learn more about parenting with Adler and his
followers. The interest in the program's applications to
more diverse populations is recent. It is becoming valued
as a treatment or prevention approach to improve the
general mental health in the parent-child(ren) relationship
(Hill & Raley, 1982; Hitchcock, 1988; Alvy & Rubin, 1981;
Henry, 1981). It has been implemented in various countries
and cultures: Canada (Brook, Spearn, Rice, Crocco,
Hodgins, Vander Schaaf et al, 1988), South Korea (Hwang,
1988), Mexico (Borboa-Badilla, 1985); with a group of Urban
Chicano mothers (Villegas, 1977).

STEP has been compared very favorably with other
parent training programs (Schultz, Nystul and Law, 1980,
Larrivee, 1981). The STEP program which is typically
taught in nine weeks, sometimes in eight (Sellick, 1979;
Smith, 1985) has also been used in six (Wantz and Recor,
1984), in a week of intensive daily workshops for parent
trainers (Wantz & Recor, 1984) and condensed over a one-day
workshop (Osborne, Teets, Spjut, Kennedy, 1984). Other parent training programs have been beneficial when their duration was as brief as four weeks (Creswell-Betsch, 1979) or when the parents learned the skills in very small groups, such as dyads (Bizer, 1978). All of these examples suggest extreme differences in conditions under which parent training programs, and STEP in particular, have been offered and have been successful with parents.

The necessity of presenting the STEP training in a shortened number of sessions resulted from research systematically reporting attrition as a serious obstacle to experimental research with low-income, low-SES participants (Larrivee, 1982; Conway, 1979; De Sherbinin, 1981; Weaver, 1981).

Keeping in mind the high level of needs of young low-income Puerto Rican parents, and the fact that STEP has been well reviewed by researchers while parents have reported high level of satisfaction from their learning experience with the program, this study offers a PECES (STEP) program to be taught in four training sessions to a population of low-income Puerto Rican mothers of very young children.

Significance of the Study

Little is known relative to STEP being implemented with low-income, Spanish-speaking populations and no studies are reported on low-income Puerto Rican parents in
particular. Recommendations endogenous to the Puerto Rican culture are becoming available (Garcia-Preto, 1982; Longres, 1974; Badillo-Ghani, 1977). In addition the authors of STEP (Dinkmeyer & McKay, 1976) as much as other researchers are emphasizing the need to apply STEP to other populations, and in particular to low-income populations.

There are also very few studies that have demonstrated the effects of STEP with populations of different socio-economic levels, (Weaver, 1981; Cronauer, 1981) but it may be that reports of the populations' demographic characteristics, especially with regards to their social status, has not been sufficiently emphasized in the past (De Sherbinin, 1981).

**Limitations**

The small size of the sample used in this study is a limitation affecting generalization of the results to a large population. The necessity of selecting material in the program does not make it exactly comparable to other STEP studies which have included the full program. However, extreme care was used to include all crucial material. Another limitation in the study comes from measuring parents' change of attitudes with an instrument that was not validated to be used for "yes" and "no" answers as was necessary to get consistent responses from the low-income Puerto Rican parents in this study. However, the author in his validation study of the APACBS
as a 7-point scale recommended that it be researched with other populations than the mainstream group he had used with his co-author (McKay and Hillman, 1979).

The difficult conditions in which the experimentation took place might also bear on the quality of the data. The "nuisance" problems of attempting experimental research with a low-income population have been reported by researchers (Weaver, 1981; Larrivee, 1981). The unpredictability in the respondents' life, the high incidence of illness and catastrophic events, as well as the lack of such necessities as transportation, telephone (only 60% did) and adequate help with childcare are the most common obstacles and occurrences.

Definitions

In this research we will refer to PECES (Padres Eficaces Con Entrenamiento Sistematico) which is the program in Spanish, translated word-for-word from the English, and which was used with the Spanish-speaking parents in this population. Reference will be made to low-income or low-SES population referring to a group whose source of income is typically welfare benefits and therefore live at the poverty level.

Summary

This research will investigate how the modified PECES (STEP) applied to a low-income, culturally-different
population compares with the nine-week STEP training on typical outcome measures. What culturally-appropriate modifications need to be made to ensure participation in the training by the parents of this special population is also of interest in this study.
CHAPTER II

LITERATURE REVIEW

Introduction

Parent training programs refer to systematic and conceptually-based programs intended to impart information, awareness or skills to the participants on aspects of parenting (Fine, 1980) and are to be placed in the large context of parent education in general. Child-rearing precepts have been articulated since the times of Socrates and Plato in fourth and third century B.C. Greece. Closer to our times, John Locke and Rousseau in 17th and 18th Century Europe, John Dewey and Maria Montessori in modern times North America and Italy are part of the tradition of educators and liberal thinkers concerned with the appropriate ways of raising a child.

Starting in the 1800's in North America, parent education took the form of maternal associations created in Maine where mothers met to discuss their childrearing problems. By the end of the century, the Child Study Association of America was created which emphasized child study groups (Brims, 1959; De Sherbinin, 1982; Vesper 1984; Clarkson 1978). The late 1920's and early 1930's like the late 1960's and early 1970's were times of great change in the field, with John Dewey promoting the parent education groups across the country and the more recent concerns for
children's rights that lead the federal government to fund Headstart for children of underprivileged families.

In more recent times, the focus of parents' concerns shifted and they have been meeting in groups to improve their relationships with their children. The packaging of parent training programs in the last 20 years was prompted by a preoccupation to make the learning by parents more efficient. What presently is needed however is how to make this efficient for populations who might greatly benefit from such programs, but that are harder to reach and who may not readily show their motivation to be included.

Parent training programs will be presented in the first part of this literature review. The programs reviewed have in common their structure which typically consists of a sequence of sessions, usually nine or ten. Parents come to learn one or more skills or concepts that will help them in their parenting role. However, beyond the support and help it brings to parents, the intention is also to see an impact on the children's behavior. It is in these areas of evaluation of the change achieved or not in a child, as well as in understanding how the program impacted on the parents in the first place, that clarification has been most challenging.

In the last 20 years, educational researchers have been interested in this issue. Croake and Glover, writing on the history and evaluation of parent education reported that they "were discouraged about the available data on
parent education program effectiveness" (Croake and Glover, 1977). They found that the literature in this area had been "historically very inadequate both in terms of amount and quality" (Croake and Glover). To deal with the need for adequate evaluation, Kaplan advocated the "continuing and careful reporting of the characteristics of participants, description of program assessment devices and program operation, as well as successes and failures of goal attainment" (Kaplan, 1980).

Experimental research like that reviewed here is not usually concerned with the immediate use of the information derived from the data (Bloom, Hastings and Madaus, 1971; Burk, 1978; Nuttall and Ivey, 1978). However, it is data from these studies, and the "careful reporting" (Kaplan, 1980) of the researchers that make it possible to analyze the data further, with a focus on the results achieved as well as the absence of results. Researchers in their studies emphasize the necessity to describe the population, the procedures and outcome of the program in careful detail.

In this literature review, the widely used Systematic Training for Effective Parenting program, STEP (Dinkmeyer and McKay, 1976) and other similar parent training programs will be described, followed by a review of STEP research outcomes. Following those descriptions the research review will place emphasis on the current focus of STEP research.
in terms of its flexibility of presentation, the limits of the findings, and the research questions it generates.

Part I: Parent Training Programs and STEP

In most of the parent training programs reviewed, the material to be taught was organized in chapters, or units (STEP, Dinkmeyer and McKay, 1970; PET, Gordon, 1970; PAT, Becker, 1971) so as to correspond to sessions of one and one-half hours (EP, Headstart Bureau, 1978). In the case where this was not so, the researchers presented material that they adapted to meet the needs of a session (Micro-training in Empathic Communication, Creswell-Betsch, 1979). Alternatively, the material compiled was presented in a series of workshops (Enhancement of Self-Concept of Ability, Conway, 1971). Still another technique to structure the sessions was to use a gameboard to practice what the research presents as "the four basic components of problem-solving" (Parent-Child Problem-Solving, Bizer, 1978). Activities besides discussions and presentation of the concepts (Clarkson, 1978; Conway, 1971; De Sherbinin, 1981; Larrivee, 1982; Levinger, 1982) included role-play, modeling and teaching of skills (Creswell-Betsch, 1979; Bizer, 1978; Larrivee, 1982), and use of video and audiotapes to record parent/children interactions.

Often parents prepared for the session by reading ahead one of the units or chapters. It was not so, however, in the EP training; nor was it so in the study on
problem-solving skills (Bizer, 1978). In the latter project, homework was included but in the form of a contract implemented at home for a limited time period and audio-recorded at the dinner table. Usually the other form of homework consisted of yet additional readings (Levinger, 1982; Larrivee, 1982; De Sherbinin, 1981).

The courses based on STEP (Dinkmeyer and McKay, 1976), PET (Gordon, 1970) and PAT (Becker, 1971) were usually completed in nine weeks. Important variations, however, existed. EP was taught in 20 weeks of two-hour sessions (Larrivee, 1982); and parent training in Empathic Communication was taught in four sessions (Creswell-Betsch, 1979). Videotaping was used in several studies especially in the 1970's; it was often mentioned by the researchers as being included in their research. It usually permitted additional measurement of the training outcomes on a weekly basis (Bizer, 1978) or at pre- and post-test times (Larrivee, 1982), but on the whole it has not seemed so far to fulfill the promise of more objective scrutiny of the change in behaviors. One assumption is that it is obtrusive.

Those programs teaching a defined set of skills (empathic communication, enhancement of self-concept, problem-solving) used a behavioral approach to learning. But other theories in counseling and psychology are represented in the studies: Adlerian (STEP, Dinkmeyer and McKay, 1976) and Rogerian (PET, Gordon, 1970). While
researchers came from distinct theoretical orientations, certain notions are found across most of the programs. They include in particular notions such as reinforcement, active listening, and acknowledgment of feelings.

The following is a summary of several parent training programs which hold in common a similar duration (four to twenty weeks), a small group size (from four to about twelve), didactic content to provide parenting skills and concepts and by and large sharing precepts founded in democratic principles applied to child-rearing.


This general parent education program was introduced by Headstart which developed it to meet its own needs. It teaches mothers how to be parents to their pre-school children. The program addresses parenting issues very broadly with unrelated weekly topics such as:

a. how young children view the world

b. how Haim Ginott or Thomas Gordon advise responding to children

c. helping children deal with fear

d. artwork

e. discipline

f. handicaps

g. stress

h. prevention of accidents

i. effects of discrimination on human potential
j. portrait of the "ideal child"

k. nurturance/independence

These topics are presented to parents in any of the two-hour sessions taught by the Headstart staff. The humanistic perspective is reflected in the list of topics discussed and in the teaching that takes the form of guided discussion groups. No homework or activities are assigned between the weekly discussion meetings. This federal program was prepared to help parents among those least privileged socioeconomically in the country.

2. Microtraining: Enhancing Empathic Communication. E.M. Klock, 1977. The microcounseling in empathic communication developed by Allen Ivey (1968) is an example of very structured teaching in basic attending skills, including reflection of feelings and summarization. Such a program "breaks down complex behavioral skills into single units of behavior" (Creswell-Betsch, 1979), which can be taught, modeled, practiced by the students. Empathic communication is defined as sensitivity to the thoughts, feelings and behaviors of the other person, and the facility to verbally and non-verbally communicate such sensitivity (Klock, 1977).

The units of behavior can be taught, modeled and practiced by the students. Training includes reading descriptions of appropriate behaviors, viewing videotapes of effective and less effective behaviors, feedback and reinforcement, final review of the skills. Meaningful
behaviors associated with empathic communication that were observed to measure results of the training included: eye contact, verbal following, reflection of feelings, and summarization of feelings. Klock (1977) developed and tested the microtraining program which aims to enhance empathic communication between parents and their young children. Central to the research is the rationale that the ability of parents to communicate empathically with their child is one of the important variables in helping families cope with child rearing (Creswell-Betsch).

Three basic responses ensue from utilizing empathic communication; they include: (1) feelings of closeness or companionship; (2) behaviors more appropriately adapted to the needs of others; and (3) insight and understanding of the other person (Dymond, 1950; Klock, 1977; Mead, 1934; Rogers, 1961). The training can be completed, as it was by Creswell-Betsch (1979), in four sessions of two hours each.

This is one of the programs that came out of the behaviorist school, an approach in psychology particularly associated with the work of B.F. Skinner and J.B. Watson. It has been among one of the earlier programs to come out and it is available as a manual with lessons and questions. The whole parent training program can be taught in ten sessions of only one hour each. As might be expected from a program based on a behavioral model, the emphasis of the training is on behaviors which can be weakened or
reinforced. The parents are trained to observe their own responses to their children, as well as follow behaviors of interest. The training includes selecting and using reinforcers and punishers. Praise is advocated over criticism, along with the importance of remaining calm to handle issues, and ignoring certain behaviors; the use of rules and reason is stressed. Helping children decide between alternatives is also presented. Specific skills taught include charting of behavior and time-out.

In PAT parents are seen as responsible for their children's behavior and misbehavior, since they have the power to reinforce the behavior or not, and they have the ability to use reason, rules and reminders to alter the behavior. Weekly homework activities are discussed at the beginning of the sessions. This reinforces each skill and concept taught, as well as adds structure and continuity to the meetings.

A nice feature, according to the researchers who have used the program, is that specific information is included regarding keeping parents involved in the program on how to organize the lessons, and enhance group discussions. However, these materials seem specific to Anglo-American culture. Definitions are included in the manual, along with exercises to learn the behavioral concepts and vocabulary (Larrivee). The material of the training program includes a leader's guide and the PAT test, making it very easy to use and affordable.
4. Parent Effectiveness Training (PET). Thomas Gordon, 1970. Gordon derived this method from his beliefs in Rogerian client-centered therapy. As such, his approach teaches parents to rely on three major skills: silence, "door openers" or open-ended questions, and active listening (also called reflective listening). What goes on between two people is the focus of the work. Parents are to respect their children in the manner that they respect any other person. For instance, many people believe that if they make a critical remark that puts down an adult, that person will be hurt and the relationship damaged. But they may also believe that the same is not true for the child. The child would not be hurt, nor will put-downs do damage to the relationship.

In addition to mutual respect, the PET credo includes value statements on friendship, love, and peace. The parent lets the child know that the relationship is valued and tries to genuinely accept the child's needs and problems as well as help to find solutions. When the child's behavior bothers the parent, it has to be said so that the child will recognize the parent's needs. Participation of children in a democratic way is a key element of the PET philosophy. The techniques are heavily based on verbal competency and skills, and as such reflect its orientation to middle-class values. As such, both parents are assumed to be present and available and are
urged to take the course together. (This method has been very widely read in the U.S. and abroad, as well.)

5. Systematic Training for Effective Parenting (STEP). Don Dinkmeyer and Gary D. McKay, 1976. The authors of STEP based the preparation of this parent training program on the principles of Alfred Adler and Carl Rogers. In keeping with the beliefs and approaches of these educators, the approach, therefore, advocates a democratic child-rearing attitude that is based on mutual respect between parents and children, on free choice (within limits), and the application of natural and logical consequences. A democratic context means that the child is brought up with rights and with responsibilities (Clarkson, 1978). Rewards and punishments are replaced by natural and logical consequences; this implies paying attention to, and being aware of, one's feelings.

The feelings are the crucial clues that guide parents' interactions with their children. To promote increased responsible interactions, the program advocates the use of family meetings where all views are aired. The parents learn to encourage their children and value them as individuals "who deserve love and respect" (STEP, Leader's Manual). The parents' attitudes in turn permit their children to behave similarly (Larrivee), and they can become responsible adults.

The authors of the program, therefore, believe that there is a larger context within which parents training has
its place. The following represents a key belief upon which the program is based: "... most people do not understand the democratic assumptions which underlie mutual respect, equality, rights, and responsibilities for both parents and children. Until parents acknowledge the bankruptcy of both autocratic and permissive approaches, they are not motivated to study and become trained in a new approach" (STEP, Leader's Manual, 1976). STEP was prepared over a period of two years, and field-tested in four states with 14 parent study groups and 18 field-test group leaders. The program is now presented in a bilingual, multi-media kit, that includes, beside the leader's and parents' manual, five cassettes of the lessons and large posters in bright colors.

Lessons include the following major topics: understanding child behavior and misbehavior, emphasizing positive listening, encouragement (rather than praise), exploring alternatives and expressing your ideas and feelings, developing responsibilities, natural and logical consequences, the "family meetings", and developing confidence and using your potential. Thus, the manual is taught to groups of parents much in the form of Adlerian parents study groups, where concepts are discussed and the parents present examples from their personal experience; the leader becomes a facilitator. The teaching is done usually in a series of nine weekly sessions of one and one-
half to two hours. The parents are assigned a chapter to read at home before the next lesson.

6. Training in Problem-Solving Techniques: The Family Contract Game. E.E. Blechman, 1974. "The Family Contract Game" (Blechman, 1974) is a procedure which helps family members progress through four basic stages of family problem solving. These stages are: identification of the problem, informing the other family member of what you want him/her to do in place of the present behavior, choosing a reward that is contingent on a pleasing response, and designing a contract" (Bizer, p. 67).

In the game, each family member in the selected parent-child pair selects two "problem" cards and one "reward" card from two pre-printed card decks. Each can also generate their own problems and rewards. The goal is to reach a solution agreeable to both for each problem presented. Each agreement results in a bonus, but failure to reach it results in penalty and the players return to the step which created difficulty. The contract is written by the person who presents the problem; this step ends the game part of the training (Bizer, p. 67).

The time sequence is strictly specified to meet research design needs. Each player gets five minutes to present the problem to the other person in the dyad. Altogether there were 10 minutes for the problem and reward card selection, 10 minutes for the "talk" task, two minutes for self-evaluation, and two 15-minute periods for the
game, during which each player has an opportunity to present his/her problem; feedback was of 15 minutes in the verbal condition, and of 20 to 25 minutes in the verbal plus video condition. The players have to decide first of all who will first present the problem. A timer was used.

The game, the training and the research design are based on a behavioral approach. A systematic use of verbal feedback, and verbal plus video feedback complemented the procedure set up to play the game. The feedback was made possible through direct observation and additional observational "probes" (trained observers rating the behaviors at specific times for specific durations). There were two settings: a lab setting (where videotaping was done for training as well as for research purpose); and the home setting (where audiotapes were used).

Mother and child (as it were) worked at home on the contracts written during the game. The verbal feedback is "directed towards helping the families clearly and briefly state the problem and towards increasing both the quality and proportion of time engaged in the desired behaviors (solution behaviors)" (Bizer). In the video feedback condition, the parent-child pair was played back the "talk" task of the game (or selected portions of it); they could stop it, and replay it as needed.

The time involved according to the particular research design used was of 67 minutes in the verbal feedback condition. It was of 77 minutes in the verbal and video
condition. At home, a 30-minute audiotape was used. Altogether, this meant a session of one and one-half to two hours—as in other programs. The training itself lasted six sessions to which must be added four more, needed for research purposes.

7. Behavior Modification to Enhance Self-Concept of Ability. Compilation by W.W. Purkey, 1967. This is a course set up to test the efficacy of behavior modification principles and techniques to enhance the self-concept of ability and its effects on academic achievement with low-income parents. It was taught in a series of nine workshops of one and one-half hours each involving parents directly.

The sequence of the course was as follows:
1. identification of a behavior to promote a more positive self-concept of ability
2. learning to count and chart behavior
3. understanding of reinforcement and how to use it

The course was organized to have the parents experience positive reinforcement, and to encourage fathers to participate. Child care money was paid to parents who attended. Bonus money per session attended was paid at the last class based on the number of sessions attended. A rose was offered to parents at each session. There were, as in all other parent training programs, beverages and snacks offered before and after training.
Part II: STEP Studies Outcome

In this second part of the literature review, STEP outcomes are reviewed to clarify what they usually are. When the information exists on outcomes with special populations or low-income parents this will be outlined in this section.

There are only a few specific outcomes that researchers have been examining in STEP research as the following sections will indicate.

**Parent Satisfaction.** When parent satisfaction was examined by means of questionnaires or interviews, or simply reported by researchers a positive outcome was usually confirmed (Gould, 1979; Wilmes-Reitz, 1983; Levinger, 1982; Janiczek, 1986; Krieg, 1985; De Sherbinin, 1982; Clarkson, 1978; Cournoyer, Smith and McKenna, 1987). When the participants were parent trainers invited in the late 1970's to an intensive week of one-day workshops to learn or be trained in the program, their satisfaction was also confirmed and they reflected that satisfaction in their work. At a six-month post-test, these trainers reported having used systematically their new skills and to what extent they were doing it (Alvy & Rubin, 1981).

It has been noted, however, that mixed feelings can came out of a STEP program that may not be due to the program but to the facilitators (Wilmes-Reitz, 1983). In the latter study, two treatment modalities were used:
alone, and STEP plus role-playing with a total of eight experimental groups and one control; the need to select trainers more carefully was emphasized. In the STEP plus role-playing condition, the dissatisfaction with the program was found to affect, in particular, a variable such as attendance, in addition to being noted by children who were giving ratings of their parents' behaviors. In that instance, the children reported an increase in "firm control" by their parents. This rating was traced to the parents' behavior having been impacted on by the trainers.

The importance of effective facilitation in determining the outcome of a STEP program has in recent years brought some researchers to question a statement made by the authors of STEP who state in the manual that the skills are easily taught by someone with limited training, even though it is also added "provided that they learn the program intensively." These last two issues regarding facilitation are actually reflected in the nuanced recommendations of the largest STEP research reported at this time. In his study for the Cornell Cooperative Extension, Janiczek (1986) who reported on the five-year old project, specified that it provided STEP classes to over 1,000 individuals in New York State counties. A group of over 25 facilitators have been working with the project, who offer varying personalities, experience and leadership styles. The report suggests that for the most part the results in
the study were achieved more or less notwithstanding the differences between facilitators. Yet Janiczek recommends that facilitators have to be aware that not all small group interactions will be positive or pleasant, and that they should continue to develop their facilitator skills so the benefits of the training can be maximized. The experience by the CCE project regarding the issue of group facilitation is valuable because of the numbers of individuals represented, but it is not conclusive. Future research may look more into this.

**Acquisition of Parenting Knowledge.** Increase in child-rearing knowledge and parenting skills is a variable often found in STEP programs. Studies measuring change in this area usually confirmed that indeed parents learned the concept taught as measured by instruments especially designed by the investigators (Janiczek, 1986; Grosvenor and Steele, 1984; Larrivee, 1982).

However, this general finding was not universally confirmed, in particular when an instrument aiming at showing a global change in child-rearing knowledge was the measure. When Villegas (1977) measured differences in child-rearing knowledge on the Parental Competency Instrument, she found no increase in knowledge took place. There were otherwise significant changes found regarding mothers' attitudes toward their child's behavior. Of course, it is not likely that parents immediately after they end training will have generalized the concepts and skills learned, to
any area of knowledge that relates to child rearing. Concept testing instruments therefore ought to be more appropriate to examine what parents have learnt in a program.

Parents' or Teachers' Change in Attitudes or Perception Toward the Target Child Behaviors. Parents' opinions and attitudes are other variables most often used to measure if a STEP program has been beneficial to parents or children. A number of studies confirmed positive findings, using a variety of instruments, and most often reflecting a change in the mother (Krieg, 1985; Kozlowski, 1979; Summerlin and Ward, 1981; Dinkmeyer, 1981; Cronauer, 1981; Grosvenor & Steele, 1984; Hammett, Omizo and Loffredo, 1981; Hwang, 1988; Vesper, 1984). Yet a significant change on this variable has not always been confirmed (Hill and Raley, 1982; Krieg, 1985; Jackson, 1983; Vesper, 1984; Dodley, 1981). Researchers have been interested also in measuring the effect of the training on the couple (Levinger, 1982) or on each spouse. In his research, Vesper found (1984) that indeed mothers and fathers do not respond similarly; on a measure of change of attitudes, mothers alone scored significantly higher as a result of a STEP training, while the fathers' perception of the child did improve significantly.

Self-Reported Change. Outcome of the studies can be challenged on the grounds that too often measures available come from the parents statements alone. While it cannot be
denied that results need to be analyzed taking this into account, the self-ratings of parents motivated to effect change in themselves cannot be lightly disregarded.

A researcher recently focussed on this issue. Hwang (1988) is a researcher who also hypothesized a change in mothers' attitudes toward their children, and she used McKay's APACBS scale in an astute and efficacious design. As an adjunct to the self-report approach with its clear methodological limitations, she thoroughly complemented the mother's ratings with outside observations of the children's behaviors. There were two groups of 43 observers, (a total of 86 observers) for the 43 mothers in the sample: the "primary" observers (the fathers of the kindergartners whose mothers took the training) and "secondary" observers (who were university students). The mother and child's interactions were observed by two separate observers and their ratings confirmed the mothers' self-reports. Though this is an important finding in a field where self-ratings by parents are a major mode of gathering information, it still will need to be confirmed by other studies. However, this outcome reinforces the merit of self-ratings by parents who are volunteers motivated to learn new parenting skills.

Change in Self-Concept of Parents or Children.

Outcomes of those studies are mixed: they were negative for many (Meredith & Benninga, 1979; Bauer, 1978; Cronauer, 1981; De Sherbinin, 1982; Esters and Levant, 1983; Jackson,
1983), but not for all (Hammett, Omizo and Loffredo, 1981; Gould, 1979; Dobson, 1979; Saltzer, 1987). In the latter study, a significant positive outcome was found in both children (as measured by the Piers-Harris Children's Self-Concept Scale) and their parents (Tennessee Self-Concept Scale).

**Academic Achievement/Attendance/Reading Scores/Locus of Control/Problem Behavior in Children/Improved Interactions.** These are other variables used to measure outcome in STEP research but they have not yielded as many results as those reviewed above. Bauer (1978) who compared a process-oriented STEP versus a didactic presentation of the program found the interactions with the children improved (as measured by two separate scales) for parents who were in the process-oriented STEP, but there was no improvement in the parents' self-concept also measured. Taylor and Hoedt (1974) found a decrease in problem behavior in the group of 372 children with behavior problems but this result was not replicated by other researchers who attempted to confirm their findings (De Sherbinin, 1981; Clarkson, 1978). On the whole, results on the above-listed variables are extremely difficult to measure for lack of sensitive instrumentation; and the studies usually report negative findings (Gould, 1979; Wilmes-Reitz, 1983; De Sherbinin, 1982).
STEP and Special Populations

In the last few years, researchers have been exploring the outcomes of STEP with different populations. Successful results have been reported when the program was taught to parents of learning-disabled children (Hammett, Omizo and Loffredo, 1981; Krieg, 1985; Williams, 1984). The parents of the learning-disabled children who took the STEP program changed in their child-rearing attitudes and became more accepting and trusting. STEP was recommended to abusive parents cited in a Utah Court system and the researcher reported a significant change in perception of the children behavior by their parents (Moline, 1979). Other less well-controlled studies were attempted with very small groups: battered mothers in a shelter (satisfaction with the program was reported); a group of physically-abusive parents (Hitchcock, 1987) were administered STEP. The study mentions that the outcome was generally positive. Brooks et al.'s study (1988) in Ontario province, in a mental health setting was a larger study, as compared to most in the field: parents attitudes toward their children's behavior significantly improved.

There are very few reported studies of low-income populations. Larrivee (1982) compared three different programs (STEP, PAT and EP) and showed that STEP was probably the most effective, though each program had its own merits. He found that both STEP and PAT program parents changed their perception of their child more than
was the case in the EP program. He reported improved interactions with STEP program participants as compared to the other two programs. Parents in all three programs learned the concepts using criterion type tests. Larrivee (1982) like Conway (1971) had great difficulty in obtaining parents' responses to all the instruments and had to use such techniques as phone calls, monies, gifts, babysitting.

Attrition and the size of the groups was a major concern, as it was for De Sherbinin (1981) whose sample was composed of essentially low-income parents. That characteristic, however, was not particularly focused on in the study. Weaver (1981) compared the results of the STEP program for high and low status mothers. She found generally more positive effects among the high status group. However, some effects were observed in the reporting of low status children indicating that the parents' negative behavior was improved.

Methods and procedures for this research will be presented in the following chapter.
## Table 2.1 Parent-Child Problem Solving

<table>
<thead>
<tr>
<th>Sample Size/Population</th>
<th>Program Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Four mother/child pairs</td>
<td>Four mother/child pairs</td>
<td>Multiple baseline procedures with two settings: (1) verbal feedback and (2) verbal and video feedback.</td>
<td>Two of the four dyads had extended baseline conditions scored by the 2 coders blind to the experimental conditions who were trained to code the audiotapes.</td>
</tr>
<tr>
<td>About 1/2 hca.</td>
<td>About 1/2 hca.</td>
<td>(Bleichman et al., 1974)</td>
<td>Two independent coders blind to the experimental conditions trained to code the audiotapes.</td>
</tr>
<tr>
<td>12 weekly sessions</td>
<td>4-week interval</td>
<td>Training plus passage of time</td>
<td>The behavior description behavior scores were found to be primary factors in reducing problem behavior.</td>
</tr>
</tbody>
</table>
| Cost-effectiveness and generalization of training in a laboratory-type setting and practiced at home. | Follow-up: at a 2-week longer baseline. | Problem Description Behavior: | The behavior described behavior scores were found to be primary factors in reducing problem behavior.

The skills taught to the pairs were organized in 3 categories: (1) discrimination of the problem, (2) stating or writing a precise behavior, and (3) self-recording.

Two of the four dyads attended all of the sessions. A fifth dyad was left after the session 7.
<table>
<thead>
<tr>
<th>Sample Size Population</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 parents volunteers and their 67 elementary school children</td>
<td>Parents: 1-1/2 hrs. weekly for 9 weeks</td>
<td>Parents were taught STEP (Dinkmeyer &amp; McKay, 1976) while children received counseling as part of the regular school curriculum using DUSO (Dinkmeyer, 1973)</td>
<td>Three treatment conditions and one control were formed in the children population</td>
<td>No statistically significant changes</td>
</tr>
<tr>
<td>Regular as well as special needs students were included and not treated in separate groups</td>
<td>Children: 1/2 hour three times a week for 8 weeks</td>
<td>Instruments: (1) Gates McGinitie Reading Test, 1965. (2) Devereux Elementary School Behavior Rating Scale (DESBRS, Spivack &amp; Swift, 1967). (3) Self-concept Inventory by the Instructional Objective Exchange (1970). (4) Adlerian Parental Assessment of Children Behavior Scale (McKay, 1976) (5) Two questionnaires filled out by parents at post-test and follow-up.</td>
<td>Data was collected at pre- and post-test, and at a 3-months follow-up.</td>
<td>Non-statistically significant results: parents reported perceiving more positively their children's behavior. Parents also reported changes in their own behavior and improved relationships with their children.</td>
</tr>
</tbody>
</table>
TABLE 2.3
PARENTS' USES OF BEHAVIOR MODIFICATION TO ENHANCE THEIR
CHILDREN'S SELF-CONCEPT OF ABILITY AND ACADEMIC ACHIEVEMENT

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>60 6th-graders with special needs scoring 1 standard deviation below the mean</td>
<td>9 weekly sessions of 1-1/2 hrs. each</td>
<td>Enhancement of children's self-concept of ability as a result of their parents learning to use behavior principles and techniques</td>
<td>Three children groups: (1) Experimental (n=19), (2) Placebo (n=6), (3) Control (n=19)</td>
<td>Significant academic achievement gains at .05 level of significance</td>
</tr>
<tr>
<td>Their 23 parents of low socioeconomic means took the training; 25 were in the placebo group</td>
<td>Additional time was given to parents who needed to practice (in group) reading the words needed for assessing the outcome of training</td>
<td>Course centered on 4 key notions: (1) observations of a selected behavior, (2) learning to chart behavior, (3) understanding and using reinforcement, (4) evaluation of results</td>
<td>Measures: (1) GPA, (2) Attendance, (3) SAT scores, (4) Self-concept of ability, (5) IQ. Data collected at pre-, post-, and at 3-mos. follow-up</td>
<td>Non-statistically significant results: the parents trained perceived more positively their children's behavior</td>
</tr>
</tbody>
</table>

Weekly telephone calls, monetary and other incentives given regularly

Materials used: videotaping; programmed learning

Additional readings from Living with Children (Patterson & Gullion, 1968)

State Parental Perception of Children Scale (to measure parents' perception of their children), (2) Michigan Self-Concept of Ability Scale, which was administered to the children, (3) Otis-Lennon test of mental ability, to measure IQ level and check on the equivalence of the 3 student groups, (4) Stanford Achievement test, (5) Questionnaire, videotaped
TABLE 2.4

COMPARISON OF A FAMILY'S MICROTRAINING PROGRAM AND A READING PROGRAM TO ENHANCE EMPATHIC COMMUNICATION BLACK PARENTS WITH YOUNG CHILDREN

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>20 middle class parents of black families who volunteered</td>
<td>6 week duration included 4 2-hr. microtraining sessions and 4 videotaping sessions of 15 minutes</td>
<td>Comparing effectiveness in teaching empathic communication to parents toward their children</td>
<td>Two groups: Experimental group (n=10); Control group (n=10). Data collection: pre-, post-, and 2-month follow-up.</td>
<td>Enhancement of empathic communication comparing two approaches: (1) the microtraining program, (2) mailings of readings</td>
</tr>
</tbody>
</table>

- Instruments: (1) Empathy Scale by Stover, Guerney & O'Connell (1971), modified by Kloch (1977). It was used to rate the videotaped interactions. (2) Parent Response Questionnaire, 1976 and Parent Responses Taxonomy to score written responses (Kloch, 1977). (3) Interviews at follow-up rated with the Mann-Whitney U-Test.

- Parents in the microtraining and reading groups both increased their knowledge in empathic communication behavior.
<table>
<thead>
<tr>
<th>Sample Size Population</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>38 Headstart parents and their 18 children between the ages of 3-5</td>
<td>STEP: 9 weekly sessions of 1-1/2 hrs. for a total of 14 hrs. of training</td>
<td>One researcher and 2 volunteers taught the material and videotaped the sessions to some of the parents from each of the 3 groups (5 in each group)</td>
<td>3 Treatment Groups; STEP: n=6, PAT: n=7, EP: n=5</td>
<td>Interactions between parents/children were found to have improved the most in the STEP group. Parents in STEP and PAT perceived their children's behavior more positively than did their EP counterparts</td>
</tr>
<tr>
<td>18 parents completed the training</td>
<td>PAT: 10 sessions of 1-1/2 hrs. each for a total of 15 hrs. of training</td>
<td>Homework and reinforcers were used for each (the latter to promote attendance and prevent attrition)</td>
<td>Measures: (1) Acquisition of parent education information by the parents; (2) Parents' perceptions of their children's behavior; (3) Parent-child interactions in the &quot;lab&quot; context</td>
<td>Instruments: (1) Parent questionnaire (adapted from Fears, 1976), (2) Response-Class Matrix (Mash, Terdal &amp; Anderson, 1973)</td>
</tr>
</tbody>
</table>
### Table 2.6

**Effects of One-versus Two-parent Participation in Parent Training**

<table>
<thead>
<tr>
<th>Sample Size</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 parents of 25 3 &amp; 4 year olds took the training. In the fall 12 parents (4 couples, 3 wives w/o their husbands, and 1 husband w/o his wife). In the Spring 2 couples and 5 mothers</td>
<td>9 weekly sessions of 1-1/2 hours</td>
<td>STEP (D&amp;M, 1976) Teaching of STEP (Dinkmeyer &amp; McKay, 1976) and homework to couples as well as to single parents without his/her spouse. Additional reading: Liberated Parents, Liberated Children, Faber &amp; Mazlish, 1974</td>
<td>Two experimental groups: the wait-control group of the Fall became the treatment group in the Spring. Data Collection: pre-, post-, and 6-month follow-up</td>
<td>No statistically significant differences between any of the groups (joint or single, participants or non-participants) could be found. Instruments: (1) Questionnaire APACBS (McKay, 1976) modified combined with Blum's Long Form Family Interview (1975); (2) Interviews (audio-taped) by means of open-ended questions No harm was reported with regards to the possibility of the missing spouse being negatively affected by not attending the course In the Fall group there was a statistically significant difference in the parents' satisfaction with their children noted at follow-up There was no increase in the use of the skills learned</td>
</tr>
</tbody>
</table>
### TABLE 2.7

**EFFECTS OF PARENTAL PARTICIPATION IN A STEP COURSE UPON CLASSROOM BEHAVIORS AND READING ACHIEVEMENT OF TITLE I CHILDREN**

<table>
<thead>
<tr>
<th>Sample Size Population</th>
<th>Program Duration</th>
<th>Content</th>
<th>Research Design</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>22 parents of 21 children from a Title I group of children in a N.E. school</td>
<td>10 weekly meetings of 2 hrs. each</td>
<td>Teaching of STEP (Dinkmeyer and McKay, 1976)</td>
<td>Two groups: Experimental (n=11) parents of 10 children; Control (n=11) parents of 11 children. Data collection: pre-, post-, 8-week follow-up</td>
<td>Non-statistically significant difference in parents' satisfaction</td>
</tr>
</tbody>
</table>

- Reinforcers were used to prevent against attrition or low attendance rate

- Instruments: (1) Devereux Elementary School Behavior Rating Scale (DESBRS, Spivak & Swift, 1967); (2) Gates McGinitie Reading Tests (1965); (3) McDaniel-Piers Young Children's Self-Concept Scale (McDaniel et al., 1974); (4) Preschool and Primary Nowicki-Strickland Internal-External Control Scale (PPNSIE) by Nowicki and Duke, 1973; (5) Adlerian Parental Assessment of Child Behavior Scale (McKay, 1976); (6) Questionnaire; (7) Interview Variables: (a) Classroom behavior, (b) Reading achievement, (c) Children's perception of their own self-esteem, (d) Children's perception of their locus of control, (e) Parents' perception of their children's behavior

- No statistical difference, on any of the variables
CHAPTER III

METHODOLOGY

In this chapter the methods and procedures implemented to test the hypotheses of the study will be presented. It includes discussions regarding the population, hypotheses, instruments, design and data analysis.

The study aims to respond to a dual question: is a modified PECES (STEP, [Systematic Training for Effective Parenting Program], Dinkmeyer and McKay, 1976) applicable to a special population such as low-income Puerto Rican parents and what will be the effectiveness of the modified program? The collection and analysis of data will primarily provide information regarding parents' gains in child-rearing knowledge, parents' change of attitudes toward the behavior of the target child, change in a target problem behavior, and interest in the program expressed by participants.

Population

The sample was drawn from a population of first or second generation low-income Puerto Rican mothers who were parents of three and four year olds enrolled in a preschool program. These parents live in a small New England city which was at some point in the 19th century a model of industrialization. In the early 1970's recession hit the
city creating poverty in the area and bringing certain changes in the population. In 1974, the city which counted 46,790 inhabitants also recorded that the student population was 15 percent Hispanic, four percent Black, and 80 percent White. In 1988 in the Early Childhood Center that included 367 students, 57 percent were Hispanic, five percent Black, two percent Asian, and 37 percent White, but the city's population, according to the 1985 census, counted 41,300 inhabitants.

For the schools, the emphasis was then on the necessity to serve the increased population of children whose parents came from Puerto Rico and from South and Central America where employment conditions were even harder. In 1985, the city restructured the kindergarten and pre-school programs and in 1987, an Early Childhood Center (ECC) was created. A staff of 65 was serving the 367 students during the fall of 1988.

The ECC offers a mosaic of pre-school services under one roof, for children one year old and up (an Early Intervention class exists for children ages one to three who are handicapped) and up to five and six year olds (there are 14 all-day kindergarten classes, of which seven are bilingual and seven are "mainstream"), included are four pre-school Special Education classrooms and three language-based classrooms for kindergarten children with language development lags as well as a Headstart class. Also, part of the ECC are Chapter 188 services in the form
of two classes for three and four year old children of Puerto Rican parents, and two parent education classes for their parents. This is a pilot program with emphasis on language development and parent involvement. From this latter group comes the population in the study.

As a requirement for participation in the Chapter 188 class, the parents in this pilot program meet with the Parent Education teacher in a two-hour weekly parent education class. These are parents who live in the neighborhood and agree to attend the compulsory parent education class so their child will be in the pre-school four half-days in the week. Through reminders made weekly, parents on the whole follow up on their commitment to the program.

Organization and Procedure

The city of Holyoke was selected as one with a high concentration of young parents; this is a group that can most benefit and use a parent training program given the importance of the early formative years and the greater effectiveness of changes made when individuals are young. It was anticipated that participation on a regular basis, even for a four-week program, would not be easy in spite of the parents' demonstrated ability to follow through on a commitment that benefits the family.

The difficulty to enlist low-income Puerto Rican parents in education or self-help type groups was a
dimension of importance to be dealt with. A very small response was, therefore, anticipated. It did not seem likely that a group of eight or ten would be obtained, though it is a regular size for STEP groups conducted in English. In the Spring of 1988 the director of the ECC was contacted and responded very positively to the purpose of the research. She pointed out that the two Chapter 188 classes with the Puerto Rican Spanish-speaking parents would probably be quite appropriate, which combined young low-income parents, with children three or four years old from the average population of Spanish-speaking Hispanic children in the neighborhood. Permission was sought from the city of Holyoke Board of Education to conduct the research. In mid-November, after permission was obtained and contact made with the relevant staff in the school, the targeted group of parents was informed of the coming parent-training program. At the end of a workshop prepared for them by the school's psychologist, the researcher, the STEP program and the study were introduced. The parent education teacher urged the parents in the group to sign up for the class right away and to give their addresses and phone numbers. From her experience, she was acutely aware of the importance of having this done while a substantial group of parents was present. About half of the parents were in the workshop on that particular day and twelve signed up as volunteers interested to be part of the parent training program and study.
Given this initial success and keeping the issue of attrition in mind another procedure was initiated to contact the rest of the parents. A letter was handed out by the children's pre-school teacher as parents came to bring and pick up their children. The letter provided more detail regarding the program and the instructor; it also served as a reminder of the announcement made earlier by the parent education teacher. There were no responses from the parents in the next three days that followed.

Interviews were simultaneously set up for the 13 parents who had already expressed interest in the program, while a further procedure was tried. It consisted of handing out the letter in person and explaining it to the remaining eight parents from the classes who had not yet been contacted. It was a more effective way of ensuring that the parent would know the content of the letter. The letter also specified that parents who could not be included in the four-week class starting in late November might have the opportunity to attend it in February next year if another group was to be formed.

This last approach was most effective. All the parents contacted individually responded favorably. The positive response from all parents had not been anticipated and a certain group effect seems to have contributed; however the parents also seemed genuinely curious on the whole and interested if not eager to acquire skills that they thought would benefit their child.
The group of 21 parents from the morning and afternoon classes permitted randomization. Parents were assigned to experimental and control group by a drawing of names (Odell, 1946). An experimental group was set up larger (n=13) than the control (n=8), to account for attrition which, it was thought would be higher for the group with the most commitment (the experimental group). Pre-testing was completed in mid-December. Three parents were included later (February and March) while the study was under way as they newly registered their child in the two pilot preschool classes; and three dropped out of the experimental and control group each. The new parents were all added to the control group since that group by then had become smaller than anticipated.

Pre-testing confirmed the difficulty of having parents follow through with scheduled commitments. Parents rarely gave prior notice that they would not show up. There was also a difficulty with finding a time for the class that would be suitable for most parents. It became obvious that two or three training groups would have to be scheduled. Parents who brought their child in the morning wanted a morning class; the same with "afternoon" parents. The school had the most space on Fridays, but on that day no classes were held for the children or their parents, and few parents were interested in coming to the schools on Fridays.
It appeared necessary to demonstrate flexibility at that stage and accommodate the parents to ensure their participation. As the three groups were scheduled in mid-December, parents did not show up with any consistency. Typically, two showed up in each group (Thursday AM, Thursday PM, Friday AM) but only two did so two weeks on a row.

Classes were cancelled until after the holiday period to start at the end of January. December and January are not suitable for starting groups with a Puerto Rican population because of the bad weather and the holidays. It became clear that attrition would be severe. On that basis, a "group" treatment condition was established, together with and "individualized" condition which, in itself, formed a group. In the "group" treatment were parents who completed the training in four consecutive weekly meetings. In the "individualized" treatment, the parents were able to reschedule as needed, on an average one session every three weeks, and to be administered the independent variable at the location of their choice, namely their home. Of the parents who started in the "group" condition, only one finished, as such; the others preferred the "individualized" modality. The obstacle was the pace of the weekly commitment which is very difficult to maintain for most parents in this population.

At the end of pre-testing, the sample consisted of 24 mothers of three and four year old children. Within the
experimental condition, the parents were in the "group" or "individualized" condition on the basis of convenience to them. After attrition, the control group included eight parents, and the experimental groups had three parents in the "group" condition, and seven in the "individualized" condition.

In summary, pre-testing lasted two weeks: from late November to the first part of December (except when three parents were added to the control group in February and March). Three scheduled groups were interrupted after the second week of treatment (in December) in view of the erratic participation, and only one was continued: this "group" condition was administered as scheduled from late January to mid-February. It was complemented by the "individualized" condition which lasted two and a half months: from the moment the "group" ended in February till the end of April. Post-test lasted one month: from the end of March until the end of April.

Demographic Characteristics of the Sample

The participating mothers were between the ages of 19 and 34, with the majority in their early 20's and two were very young grandmothers taking care of their daughter's three or four year old children. They were AFDC recipients and unemployed. In the experimental group, five participants had husbands (50 percent for that group) and five also did in the control (62.5 percent); in the "dropped
All mothers in the "drop out" group two of six (33 percent) did. All mothers in the experimental group reported at least one person helping them with the children; five of the six mothers who dropped out had similar help; and six of eight in the control group.

The demographic data revealed differences between individuals in the experimental group. From this data four sub-groups emerged: two within the "individualized" condition based on the level of education of individual mothers, and two resulting from the two treatment conditions.

Level of education: mothers who had not completed a high school degree included: six mothers in the experimental group (60 percent), two in the control group (25 percent), and two in the "drop out" group (33 percent). No experimental mothers from the "group" condition completed a high school degree; they had an average 9.3 years of schooling; in the "individualized" condition the average years in school were 11.2, with three reporting University training who became a sub-group in themselves. Of the spouses who did not have a high school degree, five were in the "drop out" group (83.3 percent); four were in the experimental group (40 percent); and one from the control group (12.5 percent). Five spouses had at least one year of university, four were from the experimental group (40 percent) and one from the control (12.5 percent). The average number of children was three per family.
<table>
<thead>
<tr>
<th>Characteristics</th>
<th>Dropped Out n=6 (%)</th>
<th>Experimental n=10 (%)</th>
<th>Control n=8 (%)</th>
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<td>3-4</td>
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<td>Grade 8-11</td>
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Attendance

There were four sessions; parents were included in the data analysis who completed the pre- and post-tests and attended no less than three of the sessions (75 percent). Out of ten parents who filled out the questionnaires and instruments, nine attended the four training sessions, and one attended at 75%.

Treatment

Mothers in the experimental group learned the modified STEP in its translation (PECES: Padres Eficaces con Entrenamiento Sistematico) modified to be presented in four sessions. STEP is rooted in Adlerian psychology and combines elements of the Rogerian humanistic beliefs and principles. Based on the philosophy and techniques of these psychologists, the authors of STEP promote democratic child-rearing skills to replace the traditional autocratic ones. The skills aim to make the children responsible, independent and competent; acknowledgement of feelings, mutual respect, allowing children to make their own experiences and mistakes by the application of natural and logical consequences are key notions reinforced throughout the chapters.

The training was presented in Spanish. The translation published in 1979 is in Venezuelan Spanish which differs somewhat from Puerto Rican Spanish. The language being non-colloquial, it differs further from the everyday
language of the parents in the population. But it is a word-for-word translation, and this permitted the parents to be trained with the exact English term equivalents.

Since the program was to be presented in four sessions instead of nine, cuts were made; they affected the theoretical discussions while the concrete skills were all left intact; priority was also given to leaving time for examples. Emphasis was, therefore, on being more concrete, practical, and on promoting active participation of the parents.

In addition, the decision to focus on the concepts and skills placed the accent on careful selection of the examples that would be included in the average two-hour session. Research had indicated that examples in the manual are not always perfectly relevant to the group (Clarkson, 1979).

The goal was to have the parents capable of practicing the skills in the training, and on their own that very day. The researcher's experience with the STEP program had indicated that too often parents go home without having clarified how to use the new skills. Hence, they may attempt using them but will not be successful; this of course prevents parents from using the skills and, unfortunately they can doubt their effectiveness or their own ability to succeed with them. No reading was given to the parents, since experience earlier with a similar group, as well as research, had indicated that low-SES parents do not
usually have time or the organization to do readings. This was confirmed in the study; however, when the class ended parents asked for written material.

Mothers in the experimental group attended the four two-hour sessions of the modified PECES (STEP). Three of the ten experimental group parents completed the four sessions as one group in consecutive weeks from late January to February; there was one more "group" participant that was not pre-tested when the class started (she was hard to reach) or post-tested, and could not be included in data analysis. The other participants completed the training with individual appointments at various times of their choice, which averaged one every three weeks. Parents who did not join the group sessions usually gave personal reasons as to why they could not join one or the other group and why they needed to reschedule; illness in the family, medical appointments, or the weather were the reasons.

It is the impression of this researcher that parents who were only available for individual sessions were in no way less motivated than those who participated as a group. They were either not available when the groups met or were ill at ease in the institutional setting. (Further data regarding differences between parents in the two groups are in Appendix.)

The four sessions were organized as described below.

**Session 1:** The material for this first session
condensed the first four chapters in the manual. (In the manual, each PECES (STEP) chapter corresponds to a different session). The first chapter, called "Understanding of a Child's Behavior and Misbehavior," focuses on the need for children to be given attention. The ways in which children get positive attention or negative attention are discussed. The second chapter, "Understanding How Children Use Emotions to Involve Parents and the 'Good' Parent," introduces general considerations regarding emotions, the family atmosphere, sex differences, lifestyles, and parents' mistakes are considered from the point of view of what "good" parenting is as opposed to "bad" parenting. The third chapter, "Encouragement," treats various aspects of parents' behavior that do not promote a healthy self-concept in the children and it describes some that do. The fourth chapter, "Communication: Listening," is the first chapter to provide concrete skills: what parents can do to listen better to their children. In particular, parents learn to "stop" rather than "react;" instead of their habitual, but ineffective and humoristically-presented, behaviors they learn to use "reflective listening;" to do the latter, they practice recognizing feelings that children express in non-verbal, as well as verbal, communication. Visual aids were brought that reinforced what the manual presents in this respect: parents practiced recognizing feelings from photographs cut out from maga-
zines and newspapers; a photocopy listing just feelings was given for them to practice at home.

The cuts made in the material for this first session were the most extensive as compared to the following three sessions. The parents went home with skills to practice, instead of a mosaic of information and issues that they might not always be clear about or in agreement with.

Session 2: The class started with a summary of the concepts, terms and skills used in the first session. The session covered Chapter 5 of the manual, "Communication: Exploring Alternatives and Expressing Your Ideas and Feelings to Children;" the training itself focussed on defining who "owns" a problem. If the child alone has the problem, then "reflective listening" is in order; if it is the parent(s) with the child or children (i.e. the parents are annoyed by the child's or children's behavior), then "I-messages" are needed. The emphasis is, therefore, on acquiring this latter--and second--skill, and on maintaining a positive stand in the face of issues that occur normally between parent and child.

Session 3: This session starts with a summary of the two previous sessions. "Natural and Logical Consequences" were explained in this session. In the manual, the skills are discussed in two chapters. In the first chapter, "Developing Responsibility," the approach is explained together with its benefits over "rewards and punishments."
In the second chapter, "Decision Making for Parents," various typical examples are explained.

In this third session, both chapters were condensed; the examples of the manual were used if they were relevant to the parent(s). The emphasis of the session is to present the difference of approaches, whereby the parents feel responsible for most of their children's behavior, versus the children learn with guidance from the parent(s) to become responsible for their own behavior. The consequences of the approach are discussed: the children can become increasingly independent and also they improve their self-confidence. Parents are taught the positive ways to communicate to their children when problems arise between them, and they teach their child(ren) how to define solutions, make choices, and follow through with decisions to solve the problems.

Session 4: All information regarding the Family Meeting is discussed in this fourth session: definition, purpose, basic rules. A summary of the skills learned during the previous three sessions was provided: the skills build on each other from chapter to chapter, and all are needed to lead successfully the "Family Meeting" (Chapter 8). Chapter 9, "Developing Confidence and Using your Potential," reinforces earlier chapters that discussed positive communication, and because it overlapped with concepts treated before it was not included in the modified program. In the last session, more time was available for
discussion; parents had the opportunity to bring in more personal examples or clarify certain points of the program. Throughout the sessions, participants' personal examples were given priority over examples from the manual. Parents were not asked to do any reading.

**Group Trainer**

The PECES (STEP) sessions were conducted in Spanish by the researcher. She is a school psychologist and a parent who also practiced family therapy for four years with the population. She co-facilitated STEP once and PECES once, and subsequently analyzed PECES so it could be presented in a reduced amount of time. The material, thus modified, was prepared, and its presentation, as well as the procedures, were carefully followed so the group and individuals received the same content.

**Justifications for the Modifications in the STEP Program**

Two reasons guided the changes and cuts made. First, on the basis of preliminary work, reports of other investigations, and general experience with the population it could not be expected that these low-income parents could attend more than four sessions at the pace of one a week without risking substantial attrition (Conway, 1971; Larrivee, 1982; De Sherbinin, 1981). Consultation with professionals working with this population indicated that a substantial percentage have had a negative experience with
school; they express a lot of apprehension with learning situations and fear they will appear ignorant.

By adapting the format of the class so they could attend it, their chances of learning and being successful at completing the program would be increased. Research has shown that there are satisfactory outcomes for parents who attend a parent training program as short as four weeks (Creswell-Betsch, 1979). Thus, a choice was made between high rates of attendance and a limited number of sessions, over low rates of attendance and many sessions, making it more possible for the subjects to successfully complete the program.

In addition, given the decision to reduce the number of sessions, it became preferable to provide parents with new skills that they could start practicing the same day versus discussing the detailed premises underlying the whole program. It made the learning more concrete than theoretical.

Research Hypotheses

Five hypotheses were formulated in the study.

Hypothesis 1. Low-income Puerto Rican parents of preschoolers in the experimental group who take the four-week modified PECES (STEP) training will improve their parenting skills significantly, as compared to the group of low-income Puerto Rican parents in the control group.
Hypothesis 2. Low-income Puerto Rican parents of preschoolers in the experimental group who take the modified PECES (STEP) program will significantly improve their view of their children's behavior, as a result of training, as compared to parents in the control group.

Hypothesis 3. Low-income Puerto Rican parents of preschoolers in the experimental group who take the four-week modified PECES (STEP) will report a significant change in one targeted problem behavior, as compared to parents in the control group.

Hypothesis 4. Low-income Puerto Rican parents of preschoolers in the experimental group who take the four-week modified PECES (STEP) Training will report significant improvement in their interactions with their target child, as compared with parents in the control group.

Hypothesis 5. Low-income Puerto Rican parents taking the modified STEP will report significantly high level of satisfaction with the program.

Instrumentation

To collect the necessary data and measure change in the areas selected, the instrumentation included one instrument and several additional measures. The instrument was the Adlerian Parental Assessment of Child Behavior Scale (APACBS, McKay, 1976) that measures changes in parents' attitudes regarding their target child behavior. The additional measures included: a four-part, pre-test
questionnaire, four brief achievement tests, four evaluation forms, and a five-part, post-test questionnaire (in Appendix).

The Adlerian Parental Assessment of Child Behavior Scale (APACBS)

This scale was especially developed to measure the outcome of STEP programs (McKay, 1976) with regard to parents' perceptions of their children's behavior. It was subsequently modified so it could apply also to preschoolers (Levinger, 1981). For the purpose of this research with a Spanish-speaking population, it was the modified APACBS that was translated by a psychologist so it could be administered to the sample at pre- and post-test.

The scale includes 32 items that describe appropriate and inappropriate behaviors of children three and four years old. Parents rate the behaviors and it is, therefore, the perception of the parents regarding their target child behavior that is rated in the following areas: independence, respect or resistance toward the parent, communication and relationships, and ability to contribute and participate in the family (in Appendix).

In the original use of the scale, parents rate their target child behavior on a seven point Likert-type scale ranging from 1 ("never") to 7 ("always"). The 32 items in the scale are designed for parents of elementary school children.
To make the scale suitable for pre-schoolers, Levinger modified eight of the 32 items (1982), so the level of skills and responsibilities listed correspond to what young children are capable of achieving.

When the seven-point scale was field-tested for this research with a population similar to that in the sample, there was a surprising absence of response. Even after each item was read to parents, and after repeated explanations, the parents could not use the seven-point approach to give their response. The scale was then administered individually so that parents who cannot read well do not have to be faced with the embarrassment of requesting help in front of peers and was not more successful. Eventually, the questions were read to the parents and a "yes-no" answer noted by the experimenter.

Among the 32 items are skills that young children are not usually capable of mastering. These items are included to control for response set so that parents who might otherwise make guesses and tend to respond positively as often as possible will not so easily be able to do so. When the behavior is obviously beyond the reach of the child, they realize that negative answers are in order. Parents' attitudes toward the desirability of a child achieving as many of the skills as possible will affect the score. Conversely, a parent with a more tolerant attitude, or less high expectations, will tend to acknowledge more easily what it is his or her child cannot do. The reverse
scoring which exists for 17 of the 32 items then gives the highest score to the parent's response that acknowledges the target child not achieving the specific behavior; the other 15 items give the highest score if the child is indeed able to achieve the behavior.

To compute the parents' "yes-no" ratings, a value of two was given to "yes" responses and one to "no" responses, and that scoring was reversed following the author's specifications. The higher the score, the more positive is the parent's perception of the child's behavior.

The reliability of the original instrument was tested in a field study by McKay and Hillman (1979): The Cronbach alpha test for internal consistency ranged from .90 to .91, in McKay's study. In Levinger's field testing it was .81 to .89. With regard to the Pearson r-test for stability over time, the coefficient in the original study was .97, and it was .83 after modifications of the items in Levinger's study. With regard to content validity, three judges familiar with Adlerian-based programs determined it was satisfactory. In the present study, the 32 items used in a "yes-no" fashion were field-tested but no validation study was conducted. Generalization of outcome on this measure needs, therefore, cannot be made without great caution. It should be noted that in their 1979 validation study, the authors recommend that the scale be used with other populations to further establish the scale's validity and reliability.
Subsequently, an adaptation of the APACBS was also used in the data analysis, which shortens it to a 16-item instrument. This adapted scale is composed of items for which the parents' answers seemed less obviously determined by cultural or societal norms, and thus likely to be more sensitive to the parents' personal attitudes; in that sense they appear to be more culture-free items. The responses on the 16 items instruments were also computed on the basis of "yes-no" answers. No validity study was conducted on this adaptation of the APACBS scale.

Additional Measures

Pre-Test Questionnaire

The interview schedule included the following:

(1) Demographic data questions (Questions 1-8). They included: number of children, language fluency, level of education of mother and father, number of persons helping with the children;

(2) Rating of mother/child interactions. The participants rated their interactions with their target three or four year old child, in response to the question, "How would you qualify your interactions with your child?" One rating was needed along each of the four dimensions: "Most of the time", "Often", "Sometimes", "Never," to match the five possible choices: "Very difficult," "difficult," "average," "pleasant," "very good."
The parents were able to give the first two ratings, but had to be asked to try and respond to the last two. Their responses on these last two items were often nonsensical (i.e. many parents who had defined their interactions as "Often very good" also rated them as "Never very good;" or they rated them "Most of the time average;" as well as the "Never average."). The "never" dimension seems to have been very confusing, and data analysis in this respect could not be performed.

(3) Target problem behavior. Five questions focussed on the identification and selection of the problem behavior: "What are some behaviors of your child that you find difficult?"; "Which would you like to change the most? Select one that you will focus on in the class"; "What have you tried so far?"; "How are you going to eliminate the behavior?"; "Each week we will talk about this behavior and how it is going; would you prefer that we tape or write down your response on the form?"

(4) Concepts Testing. This was a short test with seven possible "yes-no" answers. It was constructed so that the parents' basic knowledge in concepts that are central to the STEP program was tested prior to starting the training.

Paper-to-pencil data collection. Based on the literature (Holyoke-Chicopee Research Project, 1988) and a pilot study with the target population, paper-to-pencil data collection was not to be taken for granted. The "yes-
no" approach communicated verbally initially by means of the pre-test APACBS 32 items, and the seven concepts test questions trained the parents to respond to questions when this format was used.

One fill-in question was introduced on the fourth (and last) achievement test. Only two mothers responded: one (out of seven) from the "individualized" treatment condition who responded correctly, and one (out of four) from the "group" condition who did not respond correctly.

The true-false approach in the form of a "yes-no" answer requested was, therefore, the only type of question included in the questionnaire so that the participants' responses would be most likely to test the participants' knowledge rather than their ability to respond to various kinds of test questions. (The test is in the Appendix, translated from the Spanish.)

Achievement Tests

Before the end of each of the four training sessions, a brief achievement test, including six to ten questions and requiring "yes-no" responses, was filled out by each participant. The questions were central to each session's skills and concepts presented that day. (See description of modified STEP chapters in Chapter 3 and tests in Appendix B.)
Evaluation Form

Before the end of each of the four training sessions, and following administration of the achievement tests, an evaluation form was also submitted to the parents. The same questions were asked each time, and the responses provided a systematic assessment in several areas:

(1) "Interest" in the training. Along five possible options "extremely," "very," "fairly," "not helpful," "a waste of time," the mothers rated how helpful the session was.

(2) Aspect(s) of the training that were of interest to them. The mothers selected one or several of nine possible options: "group learning," "the time," "the session," "the sessions' plan," "the duration," "the location," "the training in four sessions," "the size of the group," "other."

(3) Aspect(s) of the training that was not of interest to them; the options were the same as above.

(4) Changes in the problem behavior: "With regard to the target problem behavior, what have you done differently since the last time we met?" One brief sentence was requested that could be written down for or by the parent, or taped if they preferred. Parents did not choose the taped approach, though a few had at pre-test, when it was put to them and their consent requested; a few parents had specified that they did not wish to use any taping and this approach to record the data was not pursued.
(5) What type of change have you noted? "much," "some," "very little," or "no change."

(6) Comments. This open question did not generate usable data.

Post-Test Questionnaire

This was a five-part questionnaire, which like the pre-test questionnaire was administered together with the APACBS. It was, essentially, a repetition of the questionnaire administered at pre-test but for the following differences: the questions regarding demographic data and identification or a problem-behavior were obviously omitted, and three questions were added to measure interest in the program. These questions were:

(1) Mothers were asked what to respond to the question "A parent training program is": "extremely interesting;" "very interesting;" "fairly interesting;" "it is not helpful;" "it is a waste of time."

(2) They were asked to state their preference with regard to several options: "a group in a school or in any other public building;" "individually at home;" "at home with a group;" "with family or friends also interested in the subject;" "with family or friends outside home."

(3) Mothers in the experimental group were asked to select one of the five options: "extremely," "very," "fairly," "not helpful," and "a waste of time," to respond to the question, "How helpful was the class?"
Research Design

The research design was a standard pre-test/post-test control group design (Campbell and Stanley, 1963). The modified PECES (Padres Eficaces con Entrenamiento Sistematico) program was the independent variable. The dependent variables were:

1. The individual scores of control and experimental subjects on the concepts instrument administered at pre-test and post-test and the weekly scores on the four achievement tests;

2. The individual scores of each subject in all groups at pre-test and post-test on the APACBS scale, as well as on the adapted APACBS scale.

3. The individual changes in the problem behavior reported at pre-test and post-test by all subjects, and reported weekly by experimental subjects alone.

4. The individual changes in parent-child interactions for each subject, measured by items in the pre-test/post-test questionnaire.

5. The individual ratings of each subject in the sample regarding interest with the program measured at pre-test and post-test, and the weekly evaluation form for experimental subjects alone.

Data Analysis

T-tests were used to measure change in mean total scores on the concepts instruments between control and
ANCOVA was applied to the treatment of the APACBS scale data with the pre-test means of each parent in the two groups as covariates. Descriptive statistics, such as number of children, marital status, change in behavior together with inferential statistics (including means, medians and ranges) were used with the additional measures.

The data from all subjects in the sample was included in the demographic data analysis to allow for comparisons between parents who completed the training and those who did not. For the purpose of describing the characteristics of the six subjects who did not complete the training, they were called the "drop out" group as opposed to experimental and control groups. In addition, the experimental mothers were analyzed as mothers in the experimental "group" condition or in the "individualized" condition. Their data was computed separately when it was relevant.

Data Collection Procedures and Timeline

A six-month period was necessary to complete the four-week modified STEP training from contacting the parents and obtaining a sample, to completion of post-testing. One assistant who was kept blind to the goals of the research helped with data collection at post-test. She was a Latin-American native speaker, with a three-year college education in public relations and a career in a large urban hospital. For the purpose of this research she was given a
three-hour initial training so that identical procedures would be maintained and there was on-going communication in the process of reaching participants.

**Pre-Testing.** All parents in the sample were administered the interview schedule which included the APACBS as part of a four-part, 14 question, pre-test questionnaire. This was administered by the researcher. The interview lasted up to one hour and was individually administered. Pre-testing was completed in two weeks starting at the end of November, except, as discussed earlier in Chapter 3, for the three parents added gradually to the control group (February and March).

**Sessions' Post-Testing.** There were four sessions' post-tests for all experimental mothers (in the "group" or in the "individualized" condition). The measures were filled out before the end of each training session and included: one brief achievement form and one evaluation form. It took ten minutes to fill out the forms. Parents in the "group" condition completed the training in four consecutive weeks; parents in the "individualized" condition completed the training at an average rate of one session every three weeks, though weekly contact was maintained if only to reschedule. Parents in the "group" condition completed the training in mid-February, while those in the "individualized" condition completed the training in mid-April.
Final Post-Testing. Post-testing following the last training session was administered by an assistant in person or over the phone during a one-month period from the end of March to the end of April. Post-testing included the APACBS questionnaire, in addition to the concepts questionnaire. Its administration took about twenty minutes.

Efforts were made to avoid contamination of the data when parents did not respond to the assistant's attempts to meet them. In a few instances the researcher contacted personally the parents who could not be reached by phone and then completed the post-testing at that time. This applied for three of the experimental mothers and four of the control group mothers.
CHAPTER IV

RESULTS

The purpose of this data analysis was to evaluate the effectiveness of a four-session PECES (STEP) program, modified to be presented to a population of low-income Puerto Rican parents. The design is a standard experimental pre-test post-test control group design. Five research questions guided the data analysis.

The chapter presents data for each of the hypotheses in a systematic fashion using descriptive and inferential statistics. It is followed by a qualitative analysis organized by control and experimental groups and by the sub-groups in the experimental condition.

Hypothesis 1

Low-income Puerto Rican parents who join in the four-week, modified PECES (STEP) program will learn the concepts presented, as measured by achievement tests especially tailored for this investigation.

Two instruments were used to test this hypothesis: (1) pre-test and post-test achievement tests administered to the whole sample; and (2) weekly achievement tests at the end of each of the four sessions of the program.

(1) The pre-test and post-test achievement tests were comprised of seven questions that tested the participants'
prior knowledge of parenting principles or techniques central to the program. The parents responded in a "yes" or "no" manner.

The results of a T-test comparing the differences between mean scores at pre-test and post-test for the control and experimental groups can be seen in Table 4.1.

**TABLE 4.1**

**T-TEST OF CONTROL AND EXPERIMENTAL GROUPS**

**MEAN TOTAL SCORES ON THE CONCEPTS QUESTIONNAIRE**

<table>
<thead>
<tr>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-Test (n=8) Post-Test</td>
<td>Pre-Test(n=9) Post-Test(n=10)</td>
</tr>
<tr>
<td>Mean</td>
<td>4.6</td>
</tr>
<tr>
<td>SD</td>
<td>.535</td>
</tr>
<tr>
<td>T-value</td>
<td>.55</td>
</tr>
<tr>
<td>p</td>
<td>.604</td>
</tr>
</tbody>
</table>

The experimental groups' means of 3.7 at pre-test and 5.2 at post-test, indicated a T-value of -2.58 and p = .033. This significant difference between pre-test and post-test mean scores was for the experimental group only. There was no change between the pre-test and post-test scores for the control group (T-value = .55; p = .604). Nevertheless, given the fairly sharp difference in mean scores between the groups at pre-test (experimental group:
3.6; control: 4.6) a T-test was done to check for a possible lack of equivalency between the two groups.

As can be seen in Table 4.2, some difference between the groups does seem to exist (T-value = 1.5; p = .14), but it does not reach significance; this suggests that the groups were equivalent and confirms that randomization was achieved.

<table>
<thead>
<tr>
<th>Variable:</th>
<th>Control Group</th>
<th>Experimental Group</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=7</td>
<td>n=10</td>
</tr>
<tr>
<td>Mean</td>
<td>-.75</td>
<td>.9</td>
</tr>
<tr>
<td>SD</td>
<td>1.8</td>
<td>2.6</td>
</tr>
<tr>
<td>T-value</td>
<td></td>
<td>1.5</td>
</tr>
<tr>
<td>p</td>
<td></td>
<td>.14</td>
</tr>
</tbody>
</table>

(2) The second instrument was a concepts questionnaire administered weekly to the experimental group. It permitted to further evaluate the performance of parents in the experimental group. Descriptive statistics including mean scores for each of the four training sessions are displayed in Table 4.3.
TABLE 4.3
PERCENTAGES OF CORRECT RESPONSES ON THE FOUR WEEKLY
ACHIEVEMENT TESTS (EXPERIMENTAL GROUP)

<table>
<thead>
<tr>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Average</th>
</tr>
</thead>
<tbody>
<tr>
<td>n=9</td>
<td>n=10</td>
<td>n=10</td>
<td>n=10</td>
<td>Percentage</td>
</tr>
<tr>
<td>87%</td>
<td>78%</td>
<td>85%</td>
<td>78.5%</td>
<td>82.1%</td>
</tr>
</tbody>
</table>

The number of questions on the weekly achievement test varied slightly; hence the weekly maximum score changed as one point was given per correct question. All respondents achieved above the mean in each test. The average percentage of correct responses was 82 percent. The lowest individual score was 58 percent of responses correct over the four tests. Other parents scored 60 percent correct (one), 70 percent (one), 80 percent (four), and 90 percent (three). Seven of the ten parents learned 80 percent of the concepts correctly which is a notable result for the group. In addition, the questions were not simple. They were based on the key notions of the program, and the exact terminology was used.

Thus, the data in Tables 4.1 through 4.3 support the first hypothesis, and confirms that a significant difference in achievement took place for the experimental group alone. The weekly scores confirmed the amount of learning done, which was high.
Hypothesis 2

Parents will acquire a more positive view of their children as a result of the four-week modified PECES (STEP) class as measured by the APACBS scale.

The modified APACBS scale (McKay, 1976; Levinger, 1981) was used to analyze the data provided by parents answering in a yes-no manner to the 32 items of the scale. The scale gives a measure of parents' positive attitude toward their targeted child. The data was computed by giving a value of two to "yes" answers and one to "no."

An analysis of co-variance, which controls for a possible lack of equivalency between groups was again employed to test Hypothesis 2. No significant difference could be found between the mean scores of the two groups for the full scale ($F = .033; p = .85$), with pre-test means used as co-variates. (Table 4.4 presents the data.) The group means of 61 (control) and 61.8 (experimental) were not different from pre-test to post-test (59.6 and 59.25). The range of scores was 44-76 (maximum score possible: 96); the higher the score, the more positive the parent's perception of the child's behavior.
TABLE 4.4
ANALYSIS OF CO-VARIANCE BETWEEN CONTROL AND EXPERIMENTAL GROUP AND DIFFERENCES OF PARENT ATTITUDE TOWARD THEIR TARGET CHILD (APACBS SCALE)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Control Group (n=8)</th>
<th>Experimental Group (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>61.0</td>
<td>59.6</td>
</tr>
<tr>
<td>SD</td>
<td>4.5</td>
<td>9.1</td>
</tr>
</tbody>
</table>

F-value = .033; p = .85

A second analysis was conducted with an adapted APACBS scale, which included half of the items in the full scale. This adapted scale is composed of items for which the answer is less obviously determined by cultural or societal norms and thus likely to be more sensitive to the parents' personal attitudes; in that sense they may be more culture-free items. As in the full scale, the responses were "Yes" or "No" to each of the 16 items.

The means of the 16 items in the adapted scale were computed in a separate analysis of covariance and a significant difference was found at post-test for the experimental group only (f = 4.7, p = .048). The means at pre-test for the group which were identical: 30.5 (control) and 30.6 (experimental), were 29.8 (control) and 33 (experimental) at post-test. See Table 4.5 on the next page.
TABLE 4.5
ANALYSIS OF CO-VARIANCE BETWEEN CONTROL AND EXPERIMENTAL GROUPS AND THE PARENTAL ATTITUDE TOWARD THE TARGET CHILD BEHAVIOR (ADAPTED APACBS)

<table>
<thead>
<tr>
<th></th>
<th>Control Group (n=8)</th>
<th>Experimental Group (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td></td>
<td>Mean</td>
<td>30.5</td>
</tr>
<tr>
<td></td>
<td>SD</td>
<td>3.8</td>
</tr>
<tr>
<td></td>
<td></td>
<td>3.3</td>
</tr>
<tr>
<td></td>
<td>F-value</td>
<td>4.7</td>
</tr>
<tr>
<td></td>
<td>p</td>
<td>.048</td>
</tr>
<tr>
<td></td>
<td></td>
<td>30.6</td>
</tr>
<tr>
<td></td>
<td></td>
<td>33</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.1</td>
</tr>
</tbody>
</table>

Parents in the experimental group, therefore, rated their child significantly more positively following treatment.

Hypothesis 2 is, therefore, supported when the adapted APACBS scale is used. It is not supported if the full scale is used.

**Hypothesis 3**

Low-income Puerto Rican parents of three or four year olds who study the modified PECES (STEP) parent training program will report improvement in a problem area selected before starting the program.

To answer this question, different sets of questions from the questionnaires were used:

1. Questions 10-14 of the pre-test questionnaire administered to all parents in the sample. The questions
asked parents to select a problem behavior that they would most like to change; to explain what they had tried so far and what their plan was to eliminate the behavior; at post-test, Question 4 checked with parents any change that took place regarding the target problem behavior;

(2) Questions 4 and 5 of the weekly questionnaire, administered to parents in the experimental condition alone: "Since the last time we met, what have you done differently regarding the problem behavior that we have talked about?" and "What type of change have you noticed? a. much; b. some; c. little; d. no change."

Table 4.6 compiles the responses from both instruments (pre-test/post-test responses and weekly responses by the experimental group). The Table shows the number and percentages of parents' responses to each of the behaviors they indicated as problematic at pre-test. These behaviors were all selected by parents. As can be seen in Table 4.6, the behaviors parents identified based on their current experience of their children overlapped between the groups.
TABLE 4.6
SELECTED PROBLEM BEHAVIORS AND REPORTS OF CHANGE BY PARENTS

<table>
<thead>
<tr>
<th>Problem Area</th>
<th>Control (n=8)</th>
<th>Experimental (n=10)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Identified</td>
<td>Improved</td>
</tr>
<tr>
<td>Temper tantrums</td>
<td>-</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Does not listen</td>
<td>-</td>
<td>3 (37.5%)</td>
</tr>
<tr>
<td>Eats very little</td>
<td>-</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Bothers adults</td>
<td>-</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Misbehaves</td>
<td>-</td>
<td>0 (0%)</td>
</tr>
<tr>
<td>Won't go to sleep</td>
<td>-</td>
<td>1 (12.5%)</td>
</tr>
<tr>
<td>Brutal with children</td>
<td>-</td>
<td>0 (0%)</td>
</tr>
<tr>
<td><strong>Total Number</strong></td>
<td>-</td>
<td>6 (75%)</td>
</tr>
<tr>
<td><strong>% of responses</strong></td>
<td>-</td>
<td>75%</td>
</tr>
</tbody>
</table>

Not all parents gave a response: 75 percent from the control group did, against 90 percent from the experimental group. Six of the nine experimental parents written statements demonstrated the kind of change in behavior taking place.

Parents in the experimental group reported behaviors that were significantly improved and the changes were greatest after the mid-point of training, at weeks three and four (as seen in Table 4.7). As the table shows, at the end of the first session only four parents rated any...
change. After the second week, 50 percent reported substantial change, and 40 percent noted "little" or "no change." At the third and fourth session, seven of nine and seven of eight respondents respectively reported "much or "some" change in the problem area. The descriptive analysis of the data, therefore, supports research hypothesis 3 which is based on parents' self-reporting the behaviors.

### TABLE 4.7

<table>
<thead>
<tr>
<th>Number of Responses</th>
<th>Percent of Responses</th>
<th>Much or Some Change Number (%)</th>
<th>Little or no Change Number (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Week 1</td>
<td>n=4</td>
<td>40%</td>
<td>1 10</td>
</tr>
<tr>
<td></td>
<td>2 n=9</td>
<td>90%</td>
<td>4 40</td>
</tr>
<tr>
<td></td>
<td>3 n=9</td>
<td>90%</td>
<td>2 20</td>
</tr>
<tr>
<td></td>
<td>4 n=8</td>
<td>80%</td>
<td>1 10</td>
</tr>
</tbody>
</table>

**Hypothesis 4**

Low-income Puerto Rican parents who take the modified STEP program will report improved parent-child interactions in the questions especially designed to test this hypothesis.
Ratings of parents' interactions and perception of their child as compared to other children were obtained from the pre-test/post-test questionnaire. Question 4 asks respondents to rate their target child's behavior on a scale of "very good" to "very difficult" in each of four categories: "most of the time," "often," "sometimes," or "never." The data for the third and more so for the fourth category did not generate sufficient or clear data. For this reason, data for the fourth category cannot be presented. Results for the other three categories are presented in Table 4.8, based on the following: a series of T-tests were performed to find out if any statistically significant changes were found based on the mean pre-test and post-test scores for both groups. A higher score refers to a more favorable rating of the child's behavior. A significant difference was found on the "sometimes" categories in Question 4 (Table 4.8). This difference could have occurred by chance especially in view of the mothers' reluctance and difficulty to select their response in that category.

Thus, Table 4.8 does not support the hypothesis that parents perceived their interactions with their target child more positively as a result of the program. Only one difference reaches statistical significance, and that is for the control group, whereby the variable "sometimes" shows a difference of a .03 level of significance for that group.
As Table 4.8 below shows, both groups improved on their ratings from pre-test to post-test. This placebo effect has been typically noted in parent training research. Hypothesis 4 has to be rejected.

**TABLE 4.8**

DEGREE OF POSITIVE PARENT PERCEPTIONS REGARDING INTERACTIONS WITH THE TARGET CHILD

"MOST OF THE TIME," "OFTEN," AND "SOMETIMES"

<table>
<thead>
<tr>
<th>Variable</th>
<th>Control (n=8)</th>
<th>Experimental (n=9)</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pre-Test</td>
<td>Post-Test</td>
<td>Pre-Test</td>
<td>Post-Test</td>
</tr>
<tr>
<td><strong>Most of the time:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.75</td>
<td>4.0</td>
<td>3.2</td>
<td>3.5</td>
</tr>
<tr>
<td>SD</td>
<td>.71</td>
<td>.76</td>
<td>1.4</td>
<td>.73</td>
</tr>
<tr>
<td>T-value</td>
<td>-.80</td>
<td>.45</td>
<td>-.6</td>
<td>.55</td>
</tr>
<tr>
<td><strong>&quot;Often&quot;:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>3.88</td>
<td>3.88</td>
<td>3.55</td>
<td>3.78</td>
</tr>
<tr>
<td>SD</td>
<td>.6</td>
<td>.6</td>
<td>1.1</td>
<td>.8</td>
</tr>
<tr>
<td>T-value</td>
<td>-.0</td>
<td>1</td>
<td>-.5</td>
<td>.6</td>
</tr>
<tr>
<td><strong>&quot;Sometimes&quot;</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mean</td>
<td>2.25</td>
<td>3.5</td>
<td>2.4</td>
<td>2.9</td>
</tr>
<tr>
<td>SD</td>
<td>1</td>
<td>.75</td>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>T-value</td>
<td>-2.76</td>
<td>.03*</td>
<td>.4</td>
<td>.4</td>
</tr>
</tbody>
</table>

*significant at .03 level.
Hypothesis 5

Low-income Puerto Rican parents in the PECES (STEP) program will express interest in the program in the questionnaire especially designed for this investigation. Tables 4.9 and 4.10 provide data which bear on this hypothesis.

Since mothers in the control group had not studied the program, they responded from a perspective that differed from that of the experimental group: their ratings reflected an interest for a parent training program, such as STEP, that they might attend in the future, as opposed to experimental mothers who rated a program and class that they had attended. Their similarities and differences in their responses, therefore, are meaningful from their own separate perspective.

Parents were as a whole interested by a parent training program and satisfied with STEP when they studied it. There is a higher percentage of responses by experimental mothers in the 'more' favorable categories.

Table 4.9 shows that all respondents rated the program in the categories "interesting," "very interesting," or "extremely interesting" and there were no responses at all in the "negative" ("not helpful," "it is a waste of time") categories. Mothers of both groups rated the program positively; one response was missing from the control group. Parents in the experimental condition responded significantly more positively: the two highest
categories "extremely" and "very interesting" included 60 percent of the ratings from the experimental group and 37.5 percent from the control; the less favorable "interesting" category had less than half of the experimental mothers' ratings (40 percent) and half of the control mothers's (50 percent).

**TABLE 4.9**

RESPONSES OF PARENTS REGARDING THEIR LEVEL OF INTEREST WITH THE PROGRAM (ALL GROUPS, AT POST-TEST)

<table>
<thead>
<tr>
<th>Level of Interest</th>
<th>Control Group N=8 (%)</th>
<th>Experimental Group N=10 (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extremely Interesting</td>
<td>1 12.5</td>
<td>3 30</td>
</tr>
<tr>
<td>Very Interesting</td>
<td>2 25</td>
<td>3 30</td>
</tr>
<tr>
<td>Interesting</td>
<td>4 50</td>
<td>3 40</td>
</tr>
<tr>
<td>Not helpful</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>It is a waste of time</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>(Absence of response)</td>
<td>1 12.5</td>
<td>-</td>
</tr>
</tbody>
</table>

Parents in the experimental condition also rated the class itself. Table 4.10 displays data from the experimental group only, collected on a weekly basis (it includes the data from the experimental parents who did not complete the training but for whom that data exists). The compilation of the sessions' ratings indicates as it did for the program ratings, that the great majority of respondents expressed essentially very positive opinions. Bearing in mind a possible reluctance of respondents to make negative
comments, for reasons to be analyzed further, there were no ratings in the two (negative) categories "the class is not helpful," and "it is a waste of time." The highest positive ratings "Extremely helpful" and "very helpful" persist throughout the four sessions of training: the sessions' average scores were 77.3 percent, 83 percent, 99 percent and 90.8 percent in those most positive categories. They show higher ratings by a higher percentage of respondents for the last two sessions. The ratings in the lowest of the 'positive' categories, "It helped somewhat," clearly decreased after the second week from 22.2 and 16 percent, to zero and nine percent.

TABLE 4.10
PARENTS' RESPONSES EXPRESSING LEVEL OF INTEREST IN THE CLASS--IN THE WEEKLY QUESTIONNAIRE (EXPERIMENTAL GROUP)

<table>
<thead>
<tr>
<th>The class helps:</th>
<th>Week 1</th>
<th>Week 2</th>
<th>Week 3</th>
<th>Week 4</th>
<th>Mean</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>n=9 (%)</td>
<td>n=12 (%)</td>
<td>n=11 (%)</td>
<td>n=11 (%)</td>
<td>%</td>
</tr>
<tr>
<td>Extremely</td>
<td>4 (44)</td>
<td>6 (50)</td>
<td>5 (45.4)</td>
<td>5 (45.4)</td>
<td>46.2</td>
</tr>
<tr>
<td>Very much</td>
<td>3 (33.3)</td>
<td>4 (33)</td>
<td>6 (54.5)</td>
<td>5 (45.4)</td>
<td>41.6</td>
</tr>
<tr>
<td>It helps somewhat</td>
<td>2 (22.2)</td>
<td>2 (16)</td>
<td>-</td>
<td>-</td>
<td>1 (9)</td>
</tr>
<tr>
<td>It is not helpful</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>It is a waste of time</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>
Qualitative Analysis

In addition to the quantitative data, the questionnaires and forms provided qualitative information of relevance to the hypotheses, which will be examined in the first part of this section. It will be followed by a descriptive analysis of outcomes pertinent to the experimental group alone.

As was observed in Chapter 3, low SES respondents do not usually verbalize abundantly as compared with higher SES respondents, and their comments in writing are even scarcer. Typically, the parents wrote about one or two lines at a time. The following analysis is based on written comments only, although when verbal comments where forthcoming and written comments were not, the investigator encouraged the parents to write down what they had said. The following categories of responses are now examined:

Three main categories of qualitative responses were noted based on the parents' written statements.

1. Responses comprised of references to specific skills that the STEP program teaches, thus supplementing the statistical and descriptive analysis of Hypothesis 1.

2. Responses indicating a change of attitudes and behavior by the parent. This data supplements Hypotheses 2 and 3.

3. The last category of comments refers to the effects of the training on parents rethinking their
relationship to the child. The responses bear on hypothesis.

Data Bearing on the Hypotheses

Data Bearing on Hypotheses One and Two: Acquisition of Parenting Knowledge and Changed Attitudes:

The problems reported by the two groups of parents were essentially typical ones: poor appetite, difficulty going to sleep or going to bed, temper tantrums, not "listening", and mistreating other children, as well as "bothering" adults.

The following comments by parents in each group were in response to the question "Since we last met, what did you do differently regarding the problem behavior you wanted to see changed?" It is notable that parents in the experimental group acquired a STEP terminology and that they used it correctly. In addition, their comments demonstrated new parental attitudes in relating to their child: the emphasis was on what they could do as parents and the discovery that the children then could display new behaviors. There were few responses from the control mothers.

Experimental Group:

Naming feelings is a good way to start communicating more effectively.

I like using natural consequences.

The family meeting is a chance to think of family distractions and issues.
I gave the children alternatives so they could share the [new] radio. I got results!

When I practice reflective listening with her, giving attention to what it is she feels, she becomes clearly sweeter.

I use I-statements to have my son listen to me.

With I-messages, he pays more attention to me.

I try to see who owns the problem.

Understand the child, so he can understand himself.

Provide her with more stimulation of her age.

Do not make them cry, just say this is how I feel.

Control Group:

I am paying attention to her.

I ask all four children what they want to eat; they all want something different and I prepare it.

Their father does not say anything; I am tougher on them.

The comments suggest that the experimental group parents understood the skills studied, that they were practicing several of these skills, and that they were able to retrieve the correct terminology to explain what they were doing. Their comments were indicative also of the high level at which parents demonstrated that they had understood and learned the concepts and skills tested in the pre-test/post-test and sessions' achievement tests.
Data Bearing on Hypothesis 3: Change in Behavior:

Experimental Group:

I stop giving orders and try to give choices.

Now I listen really well to understand what he is trying to say.

Try not to accuse, but think first instead.

To make her less jealous of her baby sister I will give her more stimulation for her age and show her how much more capable she is than the baby; I begin to see clearly why my daughter should feel upset after I raise my voice.

Control Group:

He broke the video; I did not punish him or anything like that, because he was just being curious.

I am attentive; I scold her.

I do not hit her; she has to sit half an hour on the chair in her room.

I never punish him.

I punish her: she can't go out the next day; I hit her if she does not do that.

As the below comments indicate, the experimental mothers self-described a change in their own behavior in relation to the child's behavior, while control mothers focused on the notion of punishment or absence of it. Mothers in the experimental condition responded by means of a selection of skills in relation to the problem behavior.
The skills that experimental mothers displayed are among those that the program teaches and could be summed up in less technical terms as follows:

- stop being the parent who nags
- offer choices
- stop being the parent who accuses
- think first
- give positive stimulation, and give it appropriately to the age of the child
- tolerate if not accept the feelings and identify it (jealousy)
- build the feelings of self-confidence in the child.

The two important skills that were most used based on the statements made by parents were: the parents learned to stop and think instead of react; they recognized that the child had feelings that needed to be acknowledged.

Data Bearing on Hypothesis 4: World view reflections which impact on parent–children overall interactions:

**Experimental Group:**

My sense is that it is not good to be physically aggressive with the child; I suffer when I do that.

The family meeting should help the communication between parents and children.

I like the family meeting; it is a chance for the family to function harmoniously.

This class has helped me understand what it does: it is to communicate better with my children.
There were no comments made by the "control" group. There were four responses in this category. The last two were written by the more educated parents and reflect more sophistication but the other two are equally meaningful; they were made by one parent with less than a high-school degree and the next by a parent who holds a high-school diploma.

**Experimental Group: Sub-Group Differences**

Based on an analysis of the demographic data, it was noted that the experimental mothers belonged to several sub-groups, and that the statistical analysis performed on all subjects (n = 18) could be usefully complemented by the data provided by these very small sub-groups. As such, this analysis is informative regarding our sample rather than regarding a larger population. The following sub-groups were identified: "group" mothers (n = 3), as distinct from "individualized" condition mothers (n = 7) as the main two sub-groups. The "individualized" condition mothers also included a sub-group of mothers "least educated" (an average ninth grade education; n = 4) and "most educated" (an average two years of university; n = 3). Because of these distinctions, there were four possible categories on which the data was computed descriptively in the following table: (1) "group" and (2) "individualized" conditions; and within this last sub-group are (3) "least educated" (L.E.) and (4) "more educated"
(M.E.) sub-group. Table 4.11 will show the sub-group scores and data as follows:

**Average years of schooling for mother:** Mothers in the "group" had an average ninth grade education like the "least educated" (L.E.) mothers in the "individualized" condition. Overall, however, there were two years of difference in schooling between "group" and "individualized" condition. Parents in the "group" had the least education.

**Average years of schooling of the subjects' spouses:** The "group" spouses had an average eighth grade education, that is one year less than their wives; and overall they had at least four years less of education than the "individualized" mothers' spouses.

**Mean score differences on the Concepts Questionnaire:** The "group" mothers improved their score by an average 1.33 correct answers (there were seven questions altogether in the concepts questionnaire); the "ME" mothers did not perform as well as the "group"'s and scored an average one additional correct answer as compared to their pre-test score; the "L.E." mothers did less well than all (.66).

**Change of behavior:** In the "group" there was one mother (33.3 percent) who reported a change of behavior on Question 3; another offered no comment (33.3 percent); and one reported "no change" at all (33.3 percent). In the "L.E." group, two mothers (50 percent for this group), reported a change in behavior. One made no comment (25
percent), and the other (25 percent) reported "no change." In the "most educated" group (M.E.), all three mothers (100 percent) reported change in behaviors as a result of the training.

**Adapted APACBS mean scores:** The "group" (n = 3) mean score at pre-test was 30.6 (the higher the score, the more positive the attitude toward their child); this was also the average mean for all (n = 7) parents in the "individualized" condition, i.e. 30.5. At post-test, the "group" score is higher by four points (34.6) while it gained less than two in the other condition (32.3). The data also indicates that the "most educated" parents obtained at pre-test the same score that the "group" ended with (34.6); and at post-test it was much the same, though a bit lower (34).

The "group" did best and ended up at the level of the "M.E." mothers. The "L.E." mothers who started lowest (28), clearly improved too (31).

**Number of children:** Demographic data available indicated that mothers in the "group" condition had an average three children; in the "L.E." they had four; and two in the "M.E." category.

**Marital Status, employment of spouses and help at home with the children:** In the "group" one mother (33.3 percent) was married, against two in the "L.E." (50 percent) and "M.E." (66.6 percent) categories. Their spouse was employed at times or continuously according to one mother in the "group" (33.3 percent), two in the "L.E."
category (50 percent) and two also in the "M.E." category (66.6 percent). Help with the children provided by a relative or a friend for regular periods of time or continuously indicated that all the mothers in the "M.E." category had two people helping them; each in the "group" reported one such person; of the "L.E." mothers all had also at least one person helping, but for one (25 percent) who had two people assisting her with her children.

TABLE 4.11
EXPERIMENTAL GROUP: AVERAGE SUB-GROUP
SCORES ON ALL MEASURES

<table>
<thead>
<tr>
<th>Measures</th>
<th>&quot;GROUP&quot; n=3</th>
<th>Least Educated n=4</th>
<th>More Educated n=3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mothers' No. of Years in</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>School</td>
<td>9.3</td>
<td>11.3</td>
<td></td>
</tr>
<tr>
<td>Adapted APACBS Scores</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pre-Test</td>
<td>30.6</td>
<td>30.5</td>
<td>32.4</td>
</tr>
<tr>
<td>Post-Test</td>
<td>34.6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Concepts Questionnaire:</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Score Difference from</td>
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<td>.66</td>
<td>1</td>
</tr>
<tr>
<td>Pre-Test to Post-Test</td>
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</tbody>
</table>

(Table continued on next page)
(Table 4.11, continued)

<table>
<thead>
<tr>
<th>Measures</th>
<th>&quot;GROUP&quot; n=3</th>
<th>&quot;INDIVIDUALIZED&quot; n=7</th>
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<tr>
<td></td>
<td></td>
<td>Least Educated n=4</td>
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<tr>
<td>No. of parents reporting</td>
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<tr>
<td>Changed behavior:</td>
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<tr>
<td>No comment</td>
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<td>1</td>
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<tr>
<td>Yes</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>No</td>
<td>1</td>
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</tr>
<tr>
<td>No. of Children</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>Married</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Father sometimes employed</td>
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<td>2</td>
</tr>
<tr>
<td>Number of people helping with the</td>
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<td>1 (for 3 mothers)</td>
</tr>
<tr>
<td>children</td>
<td></td>
<td>2 (for 1 mother)</td>
</tr>
<tr>
<td>Spouses' No. of years in school</td>
<td>8.3</td>
<td>12.6</td>
</tr>
<tr>
<td></td>
<td>11.3</td>
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</table>

After these statistical and qualitative analyses, discussion of the results is now presented in Chapter five.
CHAPTER V

DISCUSSION AND CONCLUSIONS

Previous research on the PECES (STEP) program has shown clear indications of concept learning, inconsistent, but generally positive, indications of change in attitudes and perceptions, improved self-concept of parents or children, high level of satisfaction expressed and relatively little evidence of behavior changes among the parents or the children. In seeking to extend this research tradition to a low-income Hispanic population, this study asks whether the compromises and modifications in the training program to meet the needs of this group still yield results that are comparable with this previous work. Modifications included a reduction in the number of training sessions and a substantial number of individual sessions taught in the home, for respondents who were not able to attend group sessions in an institutional setting.

**Hypothesis 1**

Low-income Puerto Rican parents who join in the modified PECES (STEP) program will learn the concepts presented. T-tests verified Hypothesis 1 of the study and confirmed that the results at post-test were significant for the experimental condition alone with a T-value of \(-2.58\) and a 2-tail probability of \(.033\).
The descriptive analysis of the weekly scores on the weekly achievement tests given at the end of each training session provided an overall mean group score of 82 percent responses correct over the four sessions. The qualitative analysis of parents comments further supported Hypothesis one. This significant outcome represents a crucial finding in the study since STEP research usually indicates that when this outcome has been measured on achievement tests in nine-week STEP studies, parents have always been found to have learned the concepts. The finding is quite constant in the literature in studies that tested for this variable, (Larrivee, 1982; Conway, 1971; Bizer, 1978; Creswell-Betsch, 1979; Dodley, 1981; Grosvenor and Steele, 1984; Jamiczek, 1986). It suggests that shortening the program, as was done, did not seem to be detrimental to the parents learning the crucial STEP parenting concepts and skills of the program.

The finding that low-income Puerto Rican parents could learn and were willing to apply the STEP skills and concepts after completing a four-sessions class is a significant outcome of the study.

Hypothesis 2

Low-income Puerto Rican parents will acquire a more positive view of their children as a result of the four-week modified PECES (STEP) training, as measured by the APACBS.
As previously discussed in Chapter 3, the APACBS was used in this study to make the scale appropriate for the population, the list of items were to be rated "Yes" or "No" in order to elicit responses more easily from parents in the sample.

With regard to the full APACBS scale, an ANCOVAR of the pre-test/post-test means for both groups indicated that there was no statistical difference between the two groups at post-test ($F = .033, p = .86$). This test was selected to take into account a possible lack of equivalence between the groups at pre-test and it confirmed that no pre-experimental difference existed between the groups.

According to the authors, the APACBS items were not validated with a variety of different socio-cultural groups, and so may not be culturally appropriate for any group. Observations of the respondents suggested that they systematically took more time to reflect on certain items, while with others they systematically rushed through them giving a series of positive or negative scores that could not reflect exactly their true response to the questions.

A second ANCOVAR was then conducted on the 16 selected items of the APACBS. The adapted scale is composed of items that discriminated between the two groups of parents. Based on observations, this discriminating factor seems to reflect on parents responding according to their true attitudes more than on the basis of what they perceive to be the most desirable response. The adapted APACBS yielded a
statistically significant difference at post-test between the groups \( F = 4.7, \ p = .048 \).

The significant statistical outcome is a result that will need to be confirmed by future research, as will the use of the adapted APACBS as a more culturally-appropriate tool to use with low-income Puerto Rican parents.

After the second session of the program, the experimental group parents began to employ language and concepts consistent with democratic child-rearing attitudes. The control group's responses to these same questions presented a striking contrast, with democratic attitudes conspicuous by their absence.

In this study, using the adapted APACBS scale to perform the statistical analysis of the data, and complementing the results with a qualitative analysis of data the second hypothesis was supported. It indicated that the parents' attitudes significantly improved, and what attitudes the parents reported to be demonstrating in response to their child's target behavior after they took the training. Furthermore, these results are comparable to those reported by other nine-week STEP studies, which were presented in Chapter 2.

**Hypothesis 3**

Low-income Puerto Rican parents who take the modified PECES (STEP) program will show improvement in a problem area selected before starting the program.
One advantage of a very small sample is that the problem behavior selected by parents can be used as an example to illustrate how the concepts and skills work. Too often researchers have commented on the fact that examples in the manual are not exactly applicable. The qualitative analysis indicated that for the third and fourth weeks, seven of nine and seven of eight parents were reporting improvement in selected behaviors, while at week one and two these were not so usually reported.

For six of the two experimental mothers, the qualitative analysis indicated change in parental attitudes and behaviors toward the problem behaviors of their children. In particular, parents stopped some of their own negative attitudes, including physical punishment.

In responding, the experimental parents systematically changed their own behavior first and explained the new behavior displayed toward the child in response to the notion of 'problem behavior'. Parents in the control group referred to the problem behavior only in terms of punishment, or absence of it. The following are examples of the answers by those seven of eight and seven of nine parents at weeks three and four: "I stop giving orders and try to give choices;" "Now I listen really well to understand what he is trying to say;" "I begin to see clearly why my daughter should feel upset after I raise my voice."

Comments on the improved behavior of the child included: "She becomes easier to deal with;" "He eats better; the
other children are all eating sufficiently what I prepare now;" "the eldest did what I told her after I talked to her without being angry;" or "the other siblings seem to show more confidence in our relationship too."

In contrast, the comments of parents in the control group were to state that the child was doing better, or that there was not much of a problem: "She is much better;" "She is still so little;" "She is better; more maturity;" "There are no problems." The change of attitudes was based on striking new awareness, willingness to change, and a demonstration of the ability to do things differently. For the control group parent there was none of the flexibility to look at the problem from their own behavior's perspective; i.e. the connection did not take place between the child's jealousy for the new baby and the need to provide more positive stimulation for the four year old; instead the parent remained with the notion that the child was "brutal with other children."

While the qualitative evidence supports the changes in behaviors and interactions, the self-reported data does not demonstrate without doubt that a change in behavior has taken place or that the change in permanent. The possibility that it is so exists, however. A recent 1988 study by Hwang would tend to give more credence to the value of self-reported data, such as parents stating that they changed. The 86 observers that Hwang included in her study rated the mother and child behaviors and interactions and
confirmed what the mother had reported regarding their perception of their new behaviors.

In our study, it can be said that the respondents may have been trying to please the investigator, they may also have been registering only temporary changes in behavior or attitudes, rather than the beginning of permanent changes. In the eventuality that for the parents in the experimental group their participation in the four-week STEP program led to dramatic changes in one selected behavior, there is no telling how long this change would be maintained, or how it may be generalized. But in this, the sample is in no different situation than one who takes the nine-week training.

**Hypothesis 4**

Low-income Puerto Rican parents who take the modified PECES training will report improved parent-child interactions.

Data on this question could not be fully computed because of the faulty instrument that did not permit a complete statistical analysis. One in a series of T-tests indicated a significant change in one category, but it appeared due to chance. To respond to Hypothesis 4, therefore, the analysis was qualitative. It was also limited by the small number of responses: four out of the ten experimental mothers wrote statements on their own initiative that indicated a new understanding of parent-
child interactions; this could in turn lead to improved interactions. Based on instruments, there was no way of knowing how the mothers' statements translated in their actual interactions.

**Hypothesis 5**

Low-income Puerto Rican parents in the PECES program will express interest in the program in the questionnaire items and evaluation forms especially designed for this research.

Parents from both groups gave ratings at pre- and post-test. In addition, experimental group parents gave additional ratings in the weekly Evaluation form. The data collected from both groups at pre- and post-test (Table 4.9) and from the experimental group only on a weekly basis (Table 4.10) indicates in both cases that the great majority of respondents expressed very positive opinions about the program and about the class. The absence of negative ratings is notable. It is possible that the less positive ratings could be interpreted as actually negative ratings. Otherwise, it is noteworthy that the positive responses persist throughout the four weeks of the study for the experimental group.

Experimental group parents' ratings in the top two categories ("extremely interesting" and "very interesting") counted 60 percent of the response; parents in the control
group 37.5 percent. The negative categories got no response ("Not helpful" and "It is a waste of time").

The experimental parents' weekly high ratings increased still after week two: from 77.3 and 83 percent for week one (n = 9) and two (n = 12); to 100 and 91 percent (n = 11) for weeks three and four. The data was computed with all the responses available thus counting three respondents who could not be included in the statistical analysis because they left the area or for whom no post-test data could be collected. It suggests that the likelihood of their not completing the course may well have been due to circumstances outside the training. This would agree with the fact that when parents missed appointments or rescheduled, they also gave legitimate reasons for this. Parents' level of positive responses to the overall training proved to be high, despite the fact that there was some misunderstanding on the part of one teacher about the nature of the study. This misunderstanding arose when the teacher perceived the PECES (STEP) study as a rival for the parent education program in which she taught. Several respondents reported that this teacher had spoken negatively about the present study. Nonetheless, with all the reservations that were raised to interpret the ratings, it is clear that parents responded to the program positively and without any expressed ambivalence. These positive ratings persisted over the four weeks of the training sessions.
The ratings of the control group mothers would, of course, refer to their idea of being in a parent training program in the future while experimental mothers refer to the program and class that they already attended. The fact that experimental mothers responded the most positively, is conclusive information showing the acceptance of the population and the additional effect on experimental parents of this type of program.

A high rating is also interesting in the light of questions raised by STEP researchers (Osborne et al., 1984). There is, on one hand, the argument that: "We still do not know what elements of STEP are responsible or necessary for its success. Testimonials is not enough to gain clear answers to this question." The authors who taught STEP, within one week of intensive daily workshops to parent trainers, recommended particularly, as have educational evaluators, to carefully describe the presentation made of STEP; this was a main recommendation in their study.

And there is, on the other hand, with the same puzzlement, Janiczek (1986) reporting the main statistical finding of an extensive STEP study with data from 400 participants who took nine-week STEP programs over a period of five years. It is the largest study reported using STEP programs. The author concludes: "There was only one correlation that was strong enough though other variables correlated at .05 level, and that is: those who rate the
information they learned in STEP as useful will also perceive changes in their parenting role as a result of the program." The statement does not seem to refer to a change in parenting role, but to a change in the perception of that role. This is what our data indicated for the experimental group, and its meaning cannot be clarified further at this time in STEP research.

Implicit in the overall analysis of the outcome, is the evidence that the parents are interested to follow through and complete a parent-training program such as the one offered and they can do so when a culturally-appropriate structure is implemented. The parents also demonstrated their ability to learn the concepts taught and they reported willingness to apply them.

Significance of the Research

There are few STEP studies with low-income parents, and none are known, which use PECES with low-income Puerto Rican parents living on the mainland. Researchers have been tempted to present STEP in a reduced amount of sessions, but no information has been reported that combines a low-income Spanish-speaking population and a modified STEP program. In order to put across the most important concepts there is a need to carefully prepare the teaching material ahead of time when the presentation time is reduced. In this manner, parents can start to use the
skills by the end of each meeting. Yet they do not have homework, let alone readings, to do.

For most parents in the experimental condition (n = 7), the Program seemed to work better in the parent's home than in the group setting, though a small group format included parents who were pleased to complete the training in four consecutive weeks (incentives were added to stimulate participation). The merits of a semi-individualized training are not as obvious as that of holding a group format. In addition to including two-thirds of the participants who selected this condition on the basis of personal convenience, the "individualized" condition permitted a more personal use of examples; outcome regarding changed behaviors was superior possibly because of this. Cost-effectiveness may still apply too because of the impact on families' general mental health: a few meetings with a family in the context of their learning new skills seems much preferable to months of therapy with families in the context of their being in need. Visits to the home are most revealing and show much more a family's functioning than when it is seen in an institutional setting.

What the study demonstrated is that this population learned the material in a short period of time. When the size of the group was smaller, the degree of individualization was greater; personal examples were given to parents
in the "individualized" conditions, while parents' involvement in the "group" situation was lesser.

This is interesting when we consider the conditions under which the classes were held, both in the classroom and in the home setting. In all cases, the learning and teaching took place in the midst of other activities. The classroom was shared by two other teachers who came in and out with their group of children. The parents, themselves, had been invited to bring their own children, which was the only way they could at all come. Although there was a nice set-up for the children to play in the class-room, childcare arrangements did not materialize and the parents had to be responsible for their own children. In the group setting this meant that there was a risk for parents to often miss a good part of what was happening with the program.

"Group" and "individualized conditions. When these small groups were checked for their differences demographically and with regard to outcomes, the "group" came out as being comprised of parents least educated but who did best learning the concepts, and showing a change of attitudes. However, on measures of interest with the class, and improvement of the behaviors, parents in the "individualized" condition scored higher. The data also showed that the "most educated" parents did better in only one of the measures when compared to parents in the "group" condition: change of behavior, and they had more insight to understand
what the training did and how it impacted on their communication with their child. The evaluation questions also asked parents weekly to state their preference with regard to the set-up; the parents in the "group" regretted that their group was not larger and the parents in the "individualized" condition expressed their satisfaction at being able to study the program in their home without anyone else.

What emerges is, therefore, the possibility that two different needs exist: for larger groups and for individualized sessions for parents who express this preference.

In the home though, in which there were more often several other individuals, the parents seemed to focus better. They also had the opportunity to be with their family and show how they related to their children in the presence of a visitor. When the lesson began, the parent would ask for or demand quiet and respect and would obtain it for various amounts of time, given the children's young ages. But at home, and more so in the classroom, there were no instances when the training was not interrupted by one or several individuals. In the home there were adults, of the same age or older, who sometimes remained during the entire duration of the class, in the same space, or close by, preparing a meal or having their own visitors coming in and out. These bystanders were, on the whole, quite interested in the process; the parent studying PECES often explained the situation saying that they had their own teacher come to the house and were going to have a lesson.
In the classroom the children were not so well controlled; it seemed that the mother avoided making the harsh demands for order that they did at home.

It was, therefore, in these very imperfect conditions that the parents learned, and often reached mastery of, the concepts and skills taught. It was in the "group" set-up that the disruption seemed greatest. Equally notable was the more passive attitude of the parents in the group setting: there they were more subdued, less expressive, rarely volunteering personal information, and they seemed less involved in the process. This became quite visible when some of the parents switched from a "group" condition to an "individualized" one as they did early in the training.

The mothers seemed more relaxed in their home. However, the merit of the "group" was that it turned out to be reliable, showing up weekly, while the other parents did not. All, however, were motivated to complete the training; as was demonstrated by the fact that nine out of the ten parents had a 100% level of attendance.

Certainly, the results obtained here do not suggest any diminution in the effectiveness of the program with a special population, or when the duration of training is reduced. The results of the statistical and qualitative analyses on the contrary indicate that the parents benefited considerably from the training, and no less so than in other studies.
**Limitations**

The small sample size makes generalization inappropriate to a larger population; this problem confronts parent training researchers in most studies. The measurement of change in attitudes of parents toward their children was performed with a scale most frequently used to measure change in this area, and to be able to do so with this population the usual procedure had to be altered. The results need to be read taking this into consideration. There were no other data than those obtained from self-reporting. Other additional sources of data, spouses, children, or outside observers, etc., might have modified the conclusions drawn. The need to plan for individualized instruction for a large percentage of the parents runs against the main advantage of packaged parent training which is its cost effectiveness. Finally, there were other parent education programs taking place at the school during the time of the present study. Although these programs did not teach the same specific skills, and were regularly attended by only a small minority of the parents in this study, the possibility cannot be excluded that some of the learning observed could be attributed to the effect of the school's parent education programs in general, rather than the STEP program, in particular. However, both the control and the experimental group parents were equally exposed to it and could have benefitted equally.

Every effort was made so procedures adopted would minimize contamination of the data. It is still possible
that the responses reflected, in part, a desire to please the researcher. Individualized STEP presentations given to a large fraction of the sample means that we cannot confidently generalize on the basis of this study to the effects of an entirely group administered program. Nor is our sample large enough to make a definitive analysis of the contrasting outcome for "individualized" and "group" conditions.

Conclusions and Suggestions for Future Research

Although this research was successful in its primary goal, there are many questions which need be answered by future research, which were raised by STEP researchers studying the effects of the nine-week STEP on a middle-class population. Questions about the long-term effect of the changes are an example. Only more sensitive indicators of behavior, information from more sources about the respondent's behavior, larger samples, and long-term, follow up studies can hope to bring responses to these questions. It is understood, however, that a change in attitude, knowledge, or behavior after a four-session training that takes place over one to three months will need to be reinforced by having the opportunity to repeat this experience.

The new challenges that children bring with every step of their development could not be resolved with one training program. But for parents who took the training, it seems to have been an important opportunity to think, or
perhaps rethink, what their relationship is, or could be, with regard to their children, at least. The research has shown that STEP, in modified form, can be successful with this population: the parents can attend the four sessions of training and they can learn the material. It is not clear which is most effective for this population: group training that would preferably involve large groups rather than small ones; or individual training which a high percentage of parents decided was preferable for them. Different level of needs may be indicated in this dual option to be explored in future research. Individualized instruction is very time-consuming and expensive to implement. It may be that a cost-effectiveness study that would take mental health factors into account would, however, find the formula beneficial. The need is, therefore, for further studies of this, and similar populations, to explore the differential success of different learning settings and larger groups. Such studies will have to be sensitive to the complex and unpredictable lives that many of our respondents live, and the multitude of crises that can intervene to disrupt plans to attend a training session. But it is also clear from this research that these mothers were, for the most part, highly motivated to complete the program and reported benefitting from it. The evident enthusiasm and increased skills of the respondents in this study will, perhaps, help encourage future exploration of the utility of STEP among this population.
APPENDICES

(Translated from Spanish)
APPENDIX A

LETTER TO PARENTS & CONSENT FORM
November, 1988

Dear Parent(s):

A Parent Training program will be offered to you this Fall, at the Early Childhood Center. It will take place in the classroom of your Parent Education teacher on Fridays and each of the four (4) classes is to last 1 1/2 hours. Mrs. Gillette will teach this class as part of her Doctoral research at the University of Massachusetts. For the past four years, she has been working with Holyoke families; she is a School Psychologist and a parent.

The class is a modified STEP program (Systematic Training for Effective Parenting, by Dinkmeyer and McKay, 1976) which has been successful with parents in this country for the past 12 years. In this program you learn techniques that will help you at once understand better your child(ren)'s behavior; you learn to listen better to them, to recognize and acknowledge their feelings, which promotes mutual respect; by the fourth class, you have acquired skills to help your child(ren) become more confident and more responsible for their own behavior.

If you agree to participate, you will be asked for a brief interview meeting (about 1 hour, at the Pre-school or at your home) before the classes start and after they will be over; it will consist of general information questions about yourself and questions about parenting.

Should you have any questions about the class before you decide to join, please contact Mrs. Gillette through your Parent Education teacher or your child's pre-school teacher, or leave her a message at 534-2148. The attached page explains further your rights with regards to confidentiality of the information you choose to share with Mrs. Gillette.

In exchange for your time and cooperation in this research, the class is offered free of charge, and you also receive a Certificate stating that you attended the 4-week STEP training; a choice of some money or of children's books will also be offered to parents completing the training.
Please return the following slip to your Parent Education teacher or your child's pre-school teacher, and clearly write your name and address or phone number. As soon as you return this slip of paper to one of the two teachers, Mrs. Gillette will contact you so you will meet with her before the Parent Training program starts.

Parents who cannot be in the training now because the group is too large or because the timing is not suitable for them, may have the opportunity to join again early next year in January or February if a large enough group of parents is interested then.

Sincerely,

(For the Holyoke School Board and Early Childhood Center)

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STEP TRAINING/N.GILLETTE

PLEASE TEAR OFF AND RETURN THIS SLIP TO YOUR PARENT EDUCATION TEACHER OR YOUR CHILD'S PRE-SCHOOL TEACHER WITHIN ONE WEEK

_____ Yes, I would like to join the class now

_____ No, I am not interested in joining the class

Child's Name ____________________________________________

Address ________________________________________________

Telephone # ____________________

Parents' Signature ________________________________________
PRE-SCHOOL PARENT PROJECT
INFORMED CONSENT FORM

I understand that for her research on Parenting Skills, Mrs. Gillette asks participating parents to be interviewed at the school or at their home regarding some general personal information and about parenting skills and opinions. Mrs. Gillette or an assistant will fill out a questionnaire with my answers, or I will fill the questionnaire out myself or with my spouse. I understand that with my permission the interview will be audiotaped with my permission, as will my answers at the beginning or at the end of each class. The interview is to require about one hour of my time on the two times it is to take place, and the questions at the time of the four (4) classes are to take five (5) to (10) minutes; I may choose to respond to the questions in written.

If at any time I wish to have the tape-recorder turned off and/or to have a tape erased, I can say so, and that will be done immediately. The tapes will be used for research purposes only, and all tapes will be erased after completion of the study.

I understand that neither my name nor that of my children or spouse will be mentioned in any reports, and that all information I give will be treated as completely confidential. All questionnaires filled out by Mrs. Gillette or an assistant, or by myself or my spouse will be identified by code number and never by name.

I also understand that I may, at any time, refuse to answer any question, and that I have the right to withdraw from the study even in the middle of an interview.

I hereby give my voluntary consent to taking part in this research.

Signed ____________________________________________

Date ______________________________________________

Note to Participants: At the end of the study, Mrs. Gillette will be available to go over your responses, or discuss your participation in more detail. Please check ___ if you are interested.
Modified STEP Training

INTERVIEW SCHEDULE

Part I

1. Name of Parent:

2. Name of Child(ren) in Pre-School:

3. Age of siblings living at home:

4. Age of siblings not living at home:

5. Languages

   a. Speaks English
   b. Writes English
   c. Understands English
   d. Reads English
   e. Reads Spanish
   f. Writes Spanish

   Mother       Father
   ___          ___
   ___          ___
   ___          ___
   ___          ___
   ___          ___
   ___          ___

   Spoken fluency

   a. Fluent
   b. Some
   c. A few words
   d. Not at all

   Mother       Father
   ___          ___
   ___          ___
   ___          ___
   ___          ___

6. Grade completed by mother in school:

7. Grade completed by father in school:

8. Do you have family living close by who help you?

   ___ Yes   ___ No   If yes, how many? _____

Part II

9. How would you describe your interactions with your child?

   Very
   Difficult Difficult Average Pleasant Very Good

   Most of the time
   ___   ___   ___   ___   ___

   Often
   ___   ___   ___   ___   ___
Sometimes  ______  ______  ______  ______  ______
Never  ______  ______  ______  ______  ______

Part III

10. What are some behaviors of your child that you find difficult?

11. Which would you like to change the most? Select one that you will focus on in the class.

12. What have you tried so far?

13. How are you going to go about eliminating the behavior?

14. Each week we will talk about this behavior and how it is going: when we ask you this question, myself or an assistant, would you prefer that we tape your responses, or would you prefer to write them down directly on the form?

Part IV

Modified Adlerian Parental Assessment of Child Behavior Scale

YOUR PRE-SCHOOL CHILD:

1. Takes care of self when s/he wakes up before you in the morning  YES  NO
2. Gets dressed without help except for tying shoes  YES  NO
3. Gets ready for school without repeated reminders  YES  NO
4. Responds promptly when called  YES  NO
5. Makes contributions to family discussions  YES  NO
6. Involves you in resolving verbal arguments with other children (for example: brothers YES NO or sisters, or children in the neighborhood) YES NO
7. Involves you in resolving physical fights with other children (for example: brothers or sisters, or children in the neighborhood) YES NO
8. Does regular chores willingly  YES  NO
9. Figures out solutions to his/her own problems  YES  NO

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<p>| | |</p>
<table>
<thead>
<tr>
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<tbody>
<tr>
<td>10.</td>
<td>Changes behavior when told that it bothers you</td>
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<tr>
<td></td>
<td>YES NO</td>
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<tr>
<td>11.</td>
<td>Demands attention when you are talking on telephone</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>12.</td>
<td>Argues with you</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>13.</td>
<td>Leaves belongings scattered around the house</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>14.</td>
<td>Interrupts you at inappropriate times</td>
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<td></td>
<td>YES NO</td>
</tr>
<tr>
<td>15.</td>
<td>Stays at the table until s/he has finished eating</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>16.</td>
<td>Eats most foods offered without being coaxed</td>
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<td>YES NO</td>
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<tr>
<td>17.</td>
<td>Has table manners which are acceptable to you</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>18.</td>
<td>Tattles on other children</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>19.</td>
<td>Throws temper tantrums</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>20.</td>
<td>Shares problems s/he is facing with you</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>21.</td>
<td>Is considerate of your feelings</td>
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<tr>
<td></td>
<td>YES NO</td>
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<tr>
<td>22.</td>
<td>Requests help on tasks s/he can do independently</td>
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<tr>
<td></td>
<td>YES NO</td>
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<tr>
<td>23.</td>
<td>Cleans up after snacking without being reminded</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>24.</td>
<td>Behaves in such a way that you find yourself feeling hurt</td>
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<tr>
<td></td>
<td>YES NO</td>
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<tr>
<td>25.</td>
<td>Behaves in such a way that you find yourself feeling annoyed</td>
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<td></td>
<td>YES NO</td>
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<td>26.</td>
<td>Behaves in such a way that you find yourself discouraged, believing that the child cannot improve</td>
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<tr>
<td></td>
<td>YES NO</td>
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<tr>
<td>27.</td>
<td>Behaves in such a way that you find yourself feeling angry</td>
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<td></td>
<td>YES NO</td>
</tr>
<tr>
<td>28.</td>
<td>Stays with difficult tasks until they are completed</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>29.</td>
<td>Disturbs you when you are driving</td>
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<td></td>
<td>YES NO</td>
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<tr>
<td>30.</td>
<td>Remembers where s/he puts belongings</td>
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<tr>
<td></td>
<td>YES NO</td>
</tr>
<tr>
<td>31.</td>
<td>Has to be told more than once to go to bed</td>
</tr>
<tr>
<td></td>
<td>YES NO</td>
</tr>
<tr>
<td>32.</td>
<td>Is quiet after going to bed</td>
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<td>YES NO</td>
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</table>
2. Gets dressed without help except for tying shoes;
3. Gets ready for school without repeated reminders;
5. Makes contributions to family discussions;
6. Involves you in resolving verbal arguments with other children;
7. Involves you in resolving physical fights with other children;
9. Figures out solutions to his/her own problems;
12. Argues with you;
13. Leaves belongings scattered around the house;
15. Stays at table until s/he has finished eating;
16. Eats most foods offered without being coaxed;
18. Tattles on other children;
21. Is considerate of your feelings;
24. Behaves in such a way that you find yourself feeling hurt;
27. Behaves in such a way that you find yourself feeling angry;
29. Disturbs you when you are driving;
30. Remembers where s/he puts belongings.
MODIFIED S.T.E.P. TRAINING
Concepts Questionnaire

Please circle the correct "yes" or "no" response:

1. Communication with your child begins by effectively listening to him(her) YES NO
2. It is not necessary to compromise with children YES NO
3. Punishment shows the power of personal authority YES NO
4. Punishment is associated with threats, clearly stated or not YES NO
5. Natural and logical consequences are another form of discipline YES NO
6. The Family Meeting is:
   a) to bring together all the family members who want to join in it YES NO
   b) it is a meeting that takes place at a time agreed upon in advance YES NO
ACHIEVEMENT TESTS

ACHIEVEMENT TEST #1 - STEP
January 26, 1989

In the following statements or questions, what is the most effective parenting approach? Please circle "yes" or "no" your to respond:

1. Communication with your child begins as you listen to him/her
   YES NO

2. Parents must treat their son or daughter as well as they treat their best friend
   YES NO

3. Resist imposing your own solutions, even though it may be extremely difficult to do
   YES NO

4. What does "reflective listening" mean: understand the feelings being demonstrated by your child, and name the feelings to be like a mirror in which your child can see (him)herself better?
   YES NO

5. Encouragement and praise are the same
   YES NO

6. Praise is to acknowledge effort and improvement and not just accomplishment
   YES NO

7. A child who receives positive stimulation learns to accept him (her)self
   YES NO
PLEASE CIRCLE A "YES" OR A "NO" TO INDICATE WHAT THE CORRECT RESPONSE IS:

1. Which type of message promotes a more effective way of communicating with your child:
   a. "You-message"    YES  NO
   b. "I-message"      YES  NO

2. What type of message "accuses" the person with whom you are communicating:
   a. "You-message"    YES  NO
   b. "I-message"      YES  NO

3. Generally speaking, it is not the child's behavior itself that annoys a parent, but the consequences of the behavior:    YES  NO

4. An "I-message" is composed of essentially three parts:
   a. a description of the problem behavior )
   b. a description of your feelings ) YES  NO
   c. the consequences of the problem behavior)

5. When you are in conflict with your child, this is the appropriate time to look for solutions to the conflict that you have in common YES  NO

6. To explore alternatives is not to be mistaken with giving advice YES  NO

7. To "explore alternatives" with your child means:
   a. to identify with your child )
      the possible solutions to a problem that )
      both of you share; AND )
   b. to find out with your child what plan of )YES NO
      action he or she will follow; AND )
   c. to reach a compromise so she/he will )
      follow through with the plan: )

8. "Brainstorming" is used to "explore alternatives" and identify possible solutions to a problem that parent and child have in common: YES  NO
1. Before making use of "natural and logical consequences" parents must be willing to delay any action regarding a conflict that they have with their child until the relationship improves  

   YES  NO

2. The "natural and logical consequences" approach makes children more responsible for their behavior than "reward and punishment"  

   YES  NO

3. The "natural and logical consequences" approach is more effective than the "reward and punishment" approach  

   YES  NO

4. It is extremely important to know who owns the problem, to decide when to use the "natural and logical consequences" approach  

   YES  NO

5. When the child alone owns the problem what skill can the parent use each time to communicate provided that the child wants to talk about his/her problems:
   a. "I-messages"  
      YES  NO
   b. "Reflective listening"  
      YES  NO

6. The "natural and logical consequences" approach is a technique that replaces the "reward and punishment" approach  

   YES  NO
ACHIEVEMENT TEST #4 - STEP
February 16, 1989

PLEASE CIRCLE A "YES" OR A "NO" TO INDICATE WHAT THE CORRECT RESPONSE IS:

1. The purpose of "family meetings" is that all family members who live under one roof will take together the decisions that affect all of them
   YES NO

2. In single parent families the Family Meeting does not address issues that relate to the absent parent
   YES NO

3. Before starting to hold Family Meetings, it is necessary to talk about these with each adult and child in the family
   YES NO

4. The Family Meetings will be helpful only if the adults in charge have taken the conscious decision to work together effectively
   YES NO

5. The Family Meetings can be started before you understand clearly what it is that you are trying to achieve with the Meetings
   YES NO

6. During a Family Meeting, there are times when it is necessary to ask a family member, child or adult if they are willing to resolve a problem or if they are in the Meeting only to fight
   YES NO

7. Please explain when that question (#6) is raised:

________________________________________________________________________

________________________________________________________________________

________________________________________________________________________
Instructions: Mark as many as apply:

1. How would you rate this class overall?
   ___ a. Very helpful
   ___ b. Helpful
   ___ c. Somewhat helpful
   ___ d. Not helpful
   ___ e. A terrible waste of time

2. What did you like about the class?
   ___ a. the group
   ___ b. the hour
   ___ c. the content
   ___ d. the number of sessions
   ___ e. the plan
   ___ f. the duration
   ___ g. the location
   ___ h. other

3. What did you NOT like about the class?
   ___ a. the group
   ___ b. the hour
   ___ c. the content
   ___ d. the number of sessions
   ___ e. the plan
   ___ f. the duration
   ___ g. the location
   ___ h. other

4. What did you or what do you do differently with the problem you identified in your child?

5. Do you notice any change in your child's behavior as a result of your doing something different to eliminate the target behavior?
   ___ a. A major change
   ___ b. Some change
   ___ c. Hardly any change
   ___ d. No change

6. Comments or suggestions:
POST-TEST QUESTIONNAIRE

PLEASE CHECK ALL THE STATEMENTS APPROPRIATE TO YOU:

Part I

1. The Parent Training program (S.T.E.P.) is:
   a. ___ extremely interesting  d. ___ it does not help
   b. ___ very interesting      e. ___ it is a waste of time
   c. ___ fairly interesting

2. What is the most interesting set-up to study parent training skills:
   a. ___ in a group (in a school, or in a church; or in a similar public building)
   b. ___ individually at home
   c. ___ in group, at home
   d. ___ at home, with relatives or friends interested in this topic
   e. ___ not at home, but with relatives or friends

3. The class was:
   a. ___ extremely helpful  d. ___ not helpful
   b. ___ very helpful       e. ___ a waste of time
   c. ___ somewhat helpful

Part II

4. What did you or what do you do differently with the problem behavior we selected and talked about before?

Part III

5. How are your interactions with your child?

<table>
<thead>
<tr>
<th>Very Difficult</th>
<th>Difficult</th>
<th>Average</th>
<th>Good</th>
<th>Very Good</th>
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</table>

   a. Most of the time
   b. Often
   c. Sometimes
   d. Never

Part IV 32 Item APACBS

Part V Concepts Questionnaire
APPENDIX C

POST-TRAINING LETTER TO THE PARENTS
February 16, 1989

Dear Parents:

This letter is to thank you for your participation in the Systematic Training for Effective Parenting class (S.T.E.P.).

Your participation means that you made the time to be able to join in this group. However I want to express my hope that the time you have invested in learning to be a more effective parent is already helping you in your role as parent. I want also to thank your family and relatives who helped so you could study. Please let them know that their support was appreciated.

As you are well aware, I am still studying what this S.T.E.P. program can achieve and I will have results of the study to share with you. I believe these results will be available at the end of May and will contact you at that time if you want to be informed.

Please write your name on the sheet of paper passed around, and I will be in touch with you.

It was a pleasure meeting and working with you to share preoccupations and knowledge about parenting.

Cordially,

N. Gillette, Ed.D. Candidate
STEP Group Facilitator
APPENDIX D

PILOT STUDY
Pilot Study: A Brief Report

A four-week STEP training pilot study was conducted by this researcher, in a mental health setting. The sample was comprised of clients in the agency who were lightly medicated and were functioning reasonably well in their family. They were 30-55 years old, had at least one child.

Results: Of the nine parents who showed up or were available for pre-testing, four completed the post-test, after attending a number of sessions that varied, from two to four. Three rated satisfaction from the course with the highest score; one with a middle score (a couple) reported dramatic changes of behavior as a result of the course: "We stopped hitting him"—their four-year-old son—"and started talking to him and giving him advice." This was observed in the house whereby the parent exhibited a more varied range of behaviors because the mother exactly repeated some that she had learned from the class; she also happened to be the one parent who attended all four classes.

The APACBS data could not be used; little was available. Even the literate participants were not able to answer on a seven-point scale when this was tried before the first class, with the group, and individually later in the participants' home.

The program used was a translation done by the San Antonio, Texas school. It is not a literal translation but an adaptation to suit the need of their Mexican American
parents. The program is reportedly very successful. However, when the material was analyzed by two experts (a Puerto Rican clinical psychologists, and a Puerto Rican community organizer) they felt many terms were not usable for Puerto Ricans. The four STEP sessions were, therefore, drawn from material in the official Venezuelan translation of the program as well as from the San Antonio (Texas) schools.

When parents could not come to the "class" (this was the name we gave the modified STEP program) they always had valid excuses that for low-income Puerto Rican families are totally acceptable: someone was sick or there was an appointment with a doctor; there was a half-day of vacation on one of the lesson days, and parents had their children back home from school earlier than anticipated, so they could not come to the class; or the weather was bad.

The four-week format made it possible for those who attended to attend at all, and importantly to feel successful in accomplishing this. Using Spanish was crucial for parents to attend. Transportation was provided for one couple and may explain why they attended all four weeks; though another participant who was offered transportation because she lived equally far cancelled twice; the other parents were within walking distance. The participants recommended that this type of parent training program be made available on an ongoing basis.
BIBLIOGRAPHY


Battle, E.S. & Rotter, J.B. Children's feeling of personal control as related to social class and ethnic group. Journal of Personality. 1963, 31, 482-490.


Bell, T.H. The child's right to have a trained parent. Elementary School Guidance and Counseling, 1975, 9, 271-276.


Creswell-Betch, C. Comparison of a family microtraining program and a reading program to enhance empathic communication by black parents with young children. Unpublished doctoral dissertation, University of Massachusetts, Amherst, 1979.


de Sherbinin, P.R. Psychological study of the impact of systematic training for effective parenting groups upon children's behavior, achievement and self-ratings at home and at school. Unpublished doctoral dissertation, University of Massachusetts, Amherst, 1981.


_______. Child Guidance and Education. Chicago: Alfred Adler Institute, 1974.


Larson, R.S. Can parent classes affect family communications? The School Counselor, 1972, 6, 261-270.


Nuttall, E.V. The support system and coping patterns of the female Puerto Rican single parent. Journal of Non-White Concerns, 1979, April, 128-137.


Provus, M. Evaluation or research, research or evaluation. *Educational Technology*, 1970, 10(8), 50-54.


Wittes, G. & Radin, N. Two approaches to group work with parents in a compensatory preschool program. Social Work, 1971, 16(1).


