This study attempted to determine whether parent educators in the Florida Follow Through Model were affected by their work in the program. The following changes in parent educators were studied: (1) Significant increase in feelings of self-esteem, (2) significant changes in teaching behavior, and (3) changes in life style. Self-esteem was assessed by the "How I See Myself" inventory, which was administered to 377 parent educators at the beginning and end of the '71-'72 school year. Teaching behavior was analyzed by viewing videotaped interactions between teacher and parent educator and between parent educator and mother for the following variables: (1) Praising and accepting, (2) open questions, (3) closed questions, (4) lecturing, and (5) directing. Tapes were available for only 11 teachers and 10 parent educators. Life style changes were evaluated by two questionnaires, completed by 535 parent educators and project coordinators. There were significant gains in one of four factors (competence) of the self-concept measure. Teaching behavior changed in desired directions for all variables except closed questions. Finally, life style changes were reflected in self reports of increased effort to continue education, feelings of increased ability to speak "school type" English, and more confidence in understanding and managing children. (DP)
A STUDY OF CHANGES
IN PARENTS EMPLOYED
AS PARAPROFESSIONALS
IN A HOME INTERVENTION
FOLLOW THROUGH PROGRAM

By
Gordon E. Greenwood
William F. Breivogel
Patricia P. Olmsted

University of Florida

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A STUDY OF CHANGES IN PARENTS
EMPLOYED AS PARAPROFESSIONALS IN A
HOME INTERVENTION FOLLOW THROUGH PROGRAM

Gordon E. Greenwood, William F. Breivogel
and Patricia P. Olmsted*

Since the 1968-69 school year the Institute for the Development of Human Resources at the University of Florida, under the direction of Dr. Ira J. Gordon, has operated an experimental home intervention Follow Through Program that included twelve school systems in ten states during 1971-72. The Florida Follow Through Model is one of several federally-funded experimental programs that attempts to change the kind of educational experience that children from low-income backgrounds receive during their first four years (K-3) of schooling. (Gordon, 1972).

In the Florida Model, the emphasis is on changing the kind of educational experience that the child receives at home as well as at school. Two adults, usually mothers from low-income backgrounds, are trained to work in the classroom with the teacher as a team. These adults, called "parent educators", also visit the homes of the children in the classroom weekly in order to teach an enrichment type learning activity called a "task" to the child's mother, who later teaches it to the child.

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Parent educators are usually from low socio-economic backgrounds so that they visit low income homes. While the program is primarily aimed at parents and children, very noticeable changes have been observed in the parent educators who work in the program and who are likely to be parents themselves. However, previous to this study no systematic attempt was made to collect such data in the Florida Program. Therefore, the general purpose of this study was to determine whether certain changes had taken place in parent educators as a result of their employment as paraprofessionals in the Florida Model Follow Through Program in their community.

**Purpose of the Study**

More specifically, this study attempted to determine whether the following changes have taken place in parent educators employed in the Florida Follow Through Program: (1) significant increases in feelings of self-esteem; (2) significant changes in teaching behavior toward significantly more praising and accepting, and asking more open-ended questions, and toward significantly less lecturing and directing and less closed questions; and (3) changes in life style in terms of the amount of education completed, housing conditions, use of "school type English", style of dress, and attitudes toward understanding and managing children, including their own.

**Method of the Study**

The above changes in parent educators were assessed as follows:

(1) Feelings of self-esteem of 377 parent educators (out of a possible 574 parent educators or 66%) in all twelve communities were measured by means of the "How I See Myself" (Gordon, 1968) which was administered at the beginning and at the end of the 1971-72 school year.
The "How I See Myself" (HISM) is a 40-item self-report measure that yields four factors:

(a) Interpersonal Adequacy - feelings of self satisfaction in relationship to trying new things, working with others, staying with things until finished, etc.

(b) Social-Male - feelings concerning relationships with other people, use of own time, use of energy, sense of well being, etc.

(c) Personal Appearance - feelings relating to self-image, perception of own hair, skin, face, clothes, etc.

(d) Competence - feelings of academic or intellectual ability, language adequacy and public appearance.

HISM data were analyzed by means of t-tests for correlated means. Control groups were not available.

(2) Parent educator teaching behavior was analyzed by means of a modification of the Reciprocal Category System (Olmsted and Jester, 1972; Ober et al., 1968) which is a modification of Flanders Interaction Analysis. Only those Reciprocal Category System (RCS) categories most closely related to teaching behaviors emphasized by the Florida Model were used in this study. These categories are:

(a) Praising and accepting - praises or accepts the action, behavior, comments, ideas and/or contributions of the other.

(b) Open questions - asks a question or requests information with the intent that the other should answer verbally. This type of question usually has more than one acceptable answer.

(c) Closed questions - asks a question or requests information with the intent that the other should answer verbally. This type of question usually has only one correct answer.
(d) **Lecturing** - Presents facts, information, and/or opinion concerning the content, subject, or procedures being considered; expresses one's own ideas; lectures.

(e) **Directing** - Gives directions, instructions, order and/or assignments to which another is expected to comply.

Praising and accepting and asking open questions are emphasized in the Florida Model as desirable teaching behaviors. Video tapes were made in December, 1971, and again in May, 1972, of twelve teachers and twelve parent educators randomly selected from two Florida Model communities. Due to attrition and equipment failure data were available on only eleven teachers and nine parent educators. In the tapes each teacher demonstrated to her parent educators how to teach a home learning activity (called a "task") to one of her mothers during the next weekly home visit. The tapes also contained the actual teaching of the task to the mother by the parent educator. Thus, each video tape showed the teacher demonstrating the teaching of the task to the parent educator as well as the actual teaching of the task to the mother by the parent educator. The teaching behavior of both the teachers and the parent educators were analyzed by means of the RCS and the data were analyzed for pre-post (December-May) changes by means of t-tests for correlated means.

(3) Parent educator life style changes were assessed by means of two questionnaires developed at the University of Florida. They were completed by: (a) 535 parent educators (out of 574 representing a 93% return) in the twelve communities and (b) all twelve project coordinators. These data were descriptive (not pre-post) of changes and were reported in terms of frequencies and percentages.
Results

Table I presents "How I See Myself" pre-post data on 377 parent educators in twelve communities. Significant gains are indicated on only the competence factor. No significant change is noted on the other three factors.

Table II summarizes changes in 5 categories of teaching behavior as analyzed by the RCS from video tapes on a pre-post (December-May) basis involving eleven teachers and nine parent educators in two communities. The results indicate that in every category but one (closed questions) there was significant change in the direction of teaching behaviors compatible with the philosophy of the Florida Model. Lecturing and directing decreased while praising and accepting increased. Both teachers and parent educators began to ask more open questions but the number of closed questions that the parent educators asked did not change while it increased for the teachers.

The findings obtained by means of the two (one by 535 parent educators and one by the 12 project coordinators) changes in parent educator life style questionnaires may be summarized as follows:

1. Fifty-eight percent of the parent educators responding were Black, 34% White, 3% Mexican-American, 2% Indian, and 3% other. Less than 1% are males and the average age of the parent educators was 33. Seventy percent of the parent educators are married, 10% are divorced, 9% are separated, 8% are unmarried, and 4% are widowed.

Most of the respondents come from educational backgrounds in which their own fathers (49%) and mothers (41%) completed only the eighth grade or less. Twenty percent of the fathers and 27% of the mothers completed
TABLE I

1971-72 Data Summary for Twelve Communities
How I See Myself for Parent Educators

The How I See Myself (HISM) - Parent Educators (N = 377)

The HISM measures four factors related to self-concept:
1) Interpersonal Adequacy
2) Social Male - School
3) Physical Appearance
4) Competence

Means, Standard Deviations, and t-Tests of Differences (Posttest-Pretest)

<table>
<thead>
<tr>
<th>Factor</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\bar{X}$</td>
<td>57.94</td>
<td>40.24</td>
<td>18.41</td>
<td>19.45</td>
</tr>
<tr>
<td>$s$</td>
<td>8.35</td>
<td>5.76</td>
<td>4.09</td>
<td>3.89</td>
</tr>
<tr>
<td>Post</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$\bar{X}$</td>
<td>58.27</td>
<td>39.85</td>
<td>18.66</td>
<td>20.13</td>
</tr>
<tr>
<td>$s$</td>
<td>8.39</td>
<td>6.25</td>
<td>4.11</td>
<td>3.80</td>
</tr>
<tr>
<td>t</td>
<td>0.71</td>
<td>-1.34</td>
<td>1.35</td>
<td>3.84*</td>
</tr>
</tbody>
</table>

* P < .05
TABLE II

1971-72 Data Summary for Five RCS Categories of Teacher and Parent Educator Teaching Behavior Across Two Communities

<table>
<thead>
<tr>
<th>RCS Category</th>
<th>Pre $\bar{X}$</th>
<th>Post $\bar{X}$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Praises &amp; Accepts*</td>
<td>9.8</td>
<td>18.8</td>
<td>3.77</td>
<td>&lt; .01</td>
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<tr>
<td>% Closed Questions</td>
<td>5.3</td>
<td>10.5</td>
<td>3.83</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Open Questions</td>
<td>6.1</td>
<td>10.6</td>
<td>3.18</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Lectures</td>
<td>48.7</td>
<td>23.7</td>
<td>5.11</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Directs</td>
<td>23.9</td>
<td>16.4</td>
<td>1.95</td>
<td>&lt; .05</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>RCS Category</th>
<th>Pre $\bar{X}$</th>
<th>Post $\bar{X}$</th>
<th>t</th>
<th>p</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Praises &amp; Accepts</td>
<td>11.0</td>
<td>16.8</td>
<td>3.14</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Closed Questions</td>
<td>8.5</td>
<td>9.3</td>
<td>0.53</td>
<td>N.S.</td>
</tr>
<tr>
<td>% Open Questions</td>
<td>4.3</td>
<td>9.7</td>
<td>3.79</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Lectures</td>
<td>48.7</td>
<td>28.7</td>
<td>7.70</td>
<td>&lt; .01</td>
</tr>
<tr>
<td>% Directs</td>
<td>22.4</td>
<td>15.0</td>
<td>2.27</td>
<td>&lt; .05</td>
</tr>
</tbody>
</table>

* % = amount of time spent praising and accepting as a percentage of the total amount of teacher talk
some high school, while 20% of the fathers and mothers graduated from high school (see Table III).

How do parent educators obtain their jobs? Twenty-five percent said they were active Policy Advisory Committee members and 42% said they were active classroom volunteers before becoming parent educators.

The parent educator drop-out rate has been as follows: 1968-69 = 34%; 1969-70 = 18%; 1971-72 = 20%. Their salaries averaged $315 per month across 11 of 12 communities.

2. Before becoming parent educators, the majority of the respondents (51%) had completed high school and only 15% had completed some college (up to two years of college). Twenty-two percent had some high school but did not graduate and 6% completed eighth grade or less. Only 4% had completed more than two years of college, but not four years, and less than 1% had completed four years of college.

3. After becoming parent educators, 43% of the respondents had completed some college (up to two years), 5% completed two years of college, another 5% completed two years, but not four years of college and still less than 1% had completed four years of college. Twenty-seven percent completed high school, 17% completed some high school but did not graduate and 3% completed eighth grade or less.

Table III summarizes the data concerning changes in the parent educators' level of educational attainment and their educational backgrounds in terms of their parents' level of educational attainment.

4. The majority of respondents (77%) have continued to live in the same house since becoming parent educators but 59% have made major changes
<table>
<thead>
<tr>
<th></th>
<th>Father's Educational Level</th>
<th>Mother's Educational Level</th>
<th>PE's Before Entering FT</th>
<th>PE's After Participation in FT</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Completing Eighth Grade or Less</td>
<td>49%</td>
<td>41%</td>
<td>6%</td>
<td>3%</td>
</tr>
<tr>
<td>% Completing Some High School But Not Graduation</td>
<td>20%</td>
<td>27%</td>
<td>22%</td>
<td>17%</td>
</tr>
<tr>
<td>% Completing High School</td>
<td>20%</td>
<td>20%</td>
<td>51%</td>
<td>27%</td>
</tr>
<tr>
<td>% Completing Some College But Not Two Years</td>
<td>5%</td>
<td>5%</td>
<td>14%</td>
<td>13%</td>
</tr>
<tr>
<td>% Completing Two Years of College</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>% Completing Two Years But Not Four Years of College</td>
<td>1%</td>
<td>2%</td>
<td>4%</td>
<td>5%</td>
</tr>
<tr>
<td>% Completing Four Years of College</td>
<td>3%</td>
<td>2%</td>
<td>&gt; 1%</td>
<td>&gt; 1%</td>
</tr>
</tbody>
</table>
in the house such as painting, repairs, new furniture, appliances, etc. Of the 23% who moved to a different house, 71% said they had moved to a better house and another 26% moved to a house that was about the same as their old house. Only 3% said they moved to a poorer house.

5. Several different kinds of educational opportunities have been made available to PE's by the program. Sixty-three percent of the parent educators have taken college courses. In 1968-69 only six PE's took 20 semester hours of credit. In 1969-70, 66 PE's took 544 hours credit. By 1970-71, 190 PE's took 2,239 hours credit and by 1971-72, 203 PE's took 1,889 hours credit.

Fifteen percent of the PE's have taken basic education courses, 12% have taken refresher high school courses, and 7% have taken refresher basic college courses. Sixteen percent have taken the GED (high school equivalency) exam. Six percent took advantage of other educational opportunities.

6. Follow Through has affected the PE's knowledge in other ways. Eighty-seven percent of the PE's feel their knowledge of community services has increased significantly in certain areas: the availability of medical, dental, and social services - 87%; legal assistance to low income parents - 77%; workmen's compensation - 48%.

Fifty-one percent feel that they speak "school type" English "much better" as a result of their participation in the program. Another 31% feel they speak "a little better" and 19% "no better".

7. Sixty-four percent of the respondents feel that they have changed "a great deal" in their attitudes toward understanding and managing children. Twenty-five percent feel they have "changed a little" and 11% feel that they have not changed.
The parent educators also feel that they have changed their attitudes toward understanding and managing their own children with regard to the five areas reported in Table IV.

Further evidence of change was provided when PE's were asked if they had related to their own children at home in certain ways. Ninety-three percent said they read books to their children; 96% talk more with their children; 96% work with their children; and 91% play with their children.

**Discussion**

As the parent educator drop-out data indicates, some of the parent educators were new to the program in 1971-72 and some had been in it since it began in 1968-69. Thus, much of the data is not longitudinal in nature. While the finding that the parent educators have changed in terms of the competency factor on the HISM is very encouraging, the question might be raised as to why they did not change on the other three factors. It should be recalled that the competence factor is the one that appears to be most closely related to the academic setting and refers to feelings regarding such things as academic or intellectual ability, language adequacy, and public appearance. The other three factors would appear to be more closely tied to events in the private lives of the parent educators. Since parent educators usually come from different backgrounds and neighborhoods than did the educators with whom they work, their interactions with professional educators would primarily be in a work setting and not in their homes or other racial or subcultural circles in which they move when not working. Thus parent educator feelings of esteem in a public work setting would seem to have changed while those more closely related to their private lives apparently changed little.
### TABLE IV

Changes in Parent Educators' Attitudes Toward Understanding and Managing Their Own Children in Five Areas

<table>
<thead>
<tr>
<th>Reasoning</th>
<th>No Changes</th>
<th>Changed a Little</th>
<th>Changed A Great Deal</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>19%</td>
<td>34%</td>
<td>47%</td>
</tr>
</tbody>
</table>

| Spanking       | 34%        | 34%              | 31%                  |

| Talking        | 21%        | 29%              | 50%                  |

| Explaining Why | 19%        | 27%              | 54%                  |

| Asking What Child's Problems Are | 18% | 25% | 57% |


This interpretation would seem to be borne out by parent educator lifestyle questionnaire data in which parent educators self report increases in such things as amount of education completed, amount of college courses being taken, feelings of being able to speak "school type English better" and even being able to understand and manage children, including their own children, better; but not feeling that they dressed any differently than they did before being employed as parent educators. Changes of an educational nature were due, in part, to arrangements that many programs made through Career Opportunities Programs and the Education Professions Development Act for parent educators to take courses without charge. The fact that the parent educators took such courses when offered, however, would seem to be at least partly a reflection of some desires for upward social mobility. It is entirely possible that the parent educators' feelings of being able to understand and manage children are at least partly a result of such courses as those in the area of human growth and development. Working with and observing the teacher managing children in the classroom is, of course, another likely influence on the parent educator's knowledge of children.

The teaching behavior analyzed from the video tapes by means of the RCS would represent still another source of learning for the parent educator. In this case the teacher demonstrates during planning sessions how the task should be taught by the parent educator to the mother. The extent to which the parent educator actually imitates the teaching behavior demonstrated to her is also captured on the video tapes. When the results were analyzed it was found that the parent educators tended to imitate the
teaching behavior modeled for them with one exception: asking closed questions. Curiously, the number of closed questions asked by the parent educator did not change while it increased for the teachers. However, at the time the pre-data was gathered the parent educators were already asking a much larger percentage of closed questions than were the teachers. Thus, the main change in the parent educators was in the direction of the "new" teaching behaviors that the teachers modeled.

A recent reanalysis of the Coleman Report (Mosteller and Moynihan, 1972) seems to lend considerable support to the Florida Model position that home variables have at least as great if not greater influence on the pupil achievement over a long period of time than do school variables. Changes in parents would, therefore, seem crucial to changes in pupil achievement. One way that the Florida Follow Through Model attempts to change parents is by employing them as paid paraprofessionals. The data reported in this study would seem to indicate that certain educational beliefs, values, and behaviors of parent educators did change while they were participants in the program. When the final analyses of Follow Through data are made at some future point when the Follow Through experiment has ended, it would not surprise us to find that the population most strongly influenced by the programs involved to be that of parents employed as paid paraprofessionals.
REFERENCES


