
This paper addresses the conditions of families in Ankara, Turkey, who live in gecekondus (hastily built homes of the poor). The socioeconomic and educational disadvantages of these families result in continuous academic underachievement for their children. Ecological and educational interventions for breaking the poverty cycle are proposed. Preliminary findings of a field experiment with 60 mothers of low socioeconomic status that began in November of 1988 in Ankara are described. The 6-year field experiment is part of the Early Childhood Education in Ankara Gecekondus project. The project attempts to follow sequential stages involving: (1) preparation for parenthood by means of information about child care, nutrition, and health care; (2) facilitation of reciprocal interaction in child-parent relationships from the child's birth to its third year; (3) exposure of children of 4-6 years to a cognitively oriented preschool program and continuing parental intervention; and (4) assurance of parental support of children's educational activities during the elementary school years. Although the study has not yet been completed, preliminary findings indicate that ecologically oriented early childhood educational programs that start before birth and involve the mother will eventually change the child's immediate environment. A bibliography provides nine references. (GLR)
EARLY CHILDHOOD EDUCATION IN ANKARA GECEKONDUS: A first report from a longitudinal field study in Ankara

Nurper S. Ülküer

ABSTRACT:
"Gecekondus" are hastily and hurriedly built homes of the poor. As a result of socio-economic and educational disadvantages of the gecekondu families, their children are continuously underachievers at schools. Therefore, ecological as well as educational intervention is needed. This paper attempts to summarize and discuss the first findings of a longitudinal Research Project: "Early Childhood Education in Ankara Gecekondus" based on "ecologically" oriented early childhood education model. Such educational model takes the gecekondu child's day-to-day environment into account and follows sequential stages starting even before the baby is born.

INTRODUCTION:
Meeting socio-economic and educational needs of "gecekondu dwellers" is still an important issue in Turkish Society today. Poverty in such settlements is still being cycled from one generation to the next. One of the first the reasons of this poverty cycle is the educational level of the gecekondu dwellers which has remained low for the last three decades (Ülküer, 1983); as the gecekondu people's educational level remains unchanged, their chances for being absorbed by the growing economy which usually offers white collar jobs and requires specific skills, are becoming fewer. Loosing the hope to find regular job, the gecekondu people who are then usually not the newcomers to the city any more (on the contrary they are the second even third generation of the gecekondus), are falling into desperation forming the 'slums of despair' (Ülküer, 1986a). In order to break the poverty cycle; the ecological intervention is needed in Gecekondus. Such ecological intervention means, providing gecekondu settlements with basic services of the city i.e public transport, road, water, electricity and gas supply, school, health services and other facilities that make life easier, healthier and safer for the dwellers.

* This paper was presented at the XIXth World Assembly and Congress of OMEP "The Voice of the Child", July, 11-14 1989 London.
** Nurper S. Ülküer, (PhD) Assoc. Professor and Head of the Department of Child Development and Education, Faculty of Vocational Education, Gazi University Ankara-Turkey.
Besides, education which aims to enhance child's overall development through changing his environment and making his own parents active participant, is needed.

The review of the literature points to the similar attempts in all over the world. After evaluating the pioneering studies of Head Start in America, provision of early childhood education which attempts "not only to change the child but also his environment", has become a world wide phenomenon, (e.g. Bronfenbrenner, 1974; Lombard 1981; Kağıtçibaşı 1988; Ülküer, 1983, 1986a). Specifically, in these and so many other studies, child-family centered educational models have been advocated for the children and their families in similar conditions.

Thus, this paper attempts to describe the nature and the preliminary findings of a field experiment started in November 1968 in Ankara, with 60 low SES mothers. The field experiment is part of "Early Childhood Education Project in Ankara Gecekondu" which employs an Ecological Approach as suggested and described elsewhere (Ülküer, 1986b). The project attempts to follow sequential stages involving; 1) Preparation for parenthood by means of information about child care, nutrition, and health care; 2) facilitation of reciprocal interaction in child-parent relationships from birth to three years; 3) exposure of children of 4-6 years to a more cognitively oriented preschool program and continuing parental intervention; and 5) assurance of parental support of children's educational activities during the elementary school years.

METHOD

Design:
Early Childhood Education Project is a six year field experiment. However, every year is also treated as an independent field experiment within itself. The dependant variables are; i) context of development; ii) Child's HOME environment. Mother's training program is the independent variable.
Selection of the Sample:
For this study, mothers were selected from the Social Insurance (Sosyal Sigorta Ulucanlar Doğumevi-Ankara) Natal Hospital. This hospital serves the workers who are registered to the Social Insurance Scheme which is controlled by the state. Therefore, although they belong to the low income group, still the husbands of the mothers (or themselves) have fairly secured jobs and income.

Selection was made according to three criterion 1) Mothers of healthy and normal infants; 2) Eagerness of the mother to participate; mothers were explained the nature of the study and asked if they wish to participate. 3) Ordinal number of the child: the mother who has given birth to her first or second child were selected. However, some mothers who anxiously wished to take part but they had given birth to the third and fourth child were included in the study. Sixty mothers were selected because there were thirty senior students to carry out the mother training program. Every student had one training mother and one control mother. Control and training mothers were selected from the same address pool. The mothers were selected in November 1988 and the training program started immediately after they returned from 'natal hospital'. First visit was paid to the mother at home within the first week.

The demographic characteristics of the sample:

Age of the sample:
The mean age of the training mothers is 22.815; control mothers' is 23.136. The mean age of the training fathers is 27.5; control fathers' is 26.

Family Type:
Majority of the mothers have nuclear family (Training: 26; Cont.; 26). Only four of each groups have extended family.

The educational composition of the groups:
Majority of the sample is graduate of five year primary school (Table 1.)
### Table 1. Educational level

<table>
<thead>
<tr>
<th></th>
<th>Mother Training</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>No literacy</td>
<td>1</td>
<td>-</td>
</tr>
<tr>
<td>Primary School</td>
<td>22</td>
<td>18</td>
</tr>
<tr>
<td>Middle School</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>High School</td>
<td>3</td>
<td>5</td>
</tr>
<tr>
<td>Higher Ed.</td>
<td>-</td>
<td>2</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>30</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>

### Employment:

All fathers are working, but majority of mothers are at home (Mother Training: working 2, not working 28; Control: working 4, not working 26).

### Job Specification:

The majority of the sample are skilled workers or unskilled workers (Table 2).

### Table 2. Job Specification

<table>
<thead>
<tr>
<th></th>
<th>Mother Training</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mother</td>
<td>Father</td>
</tr>
<tr>
<td>Unskilled Worker</td>
<td>-</td>
<td>10</td>
</tr>
<tr>
<td>Skilled Worker</td>
<td>2</td>
<td>11</td>
</tr>
<tr>
<td>Office worker</td>
<td>4</td>
<td>-</td>
</tr>
<tr>
<td>Small Business</td>
<td>-</td>
<td>4</td>
</tr>
<tr>
<td>Farmer</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>2</strong></td>
<td><strong>30</strong></td>
</tr>
</tbody>
</table>
Characteristics of the Infants:
Only healthy and normal infants have been selected.

Ordinarily:
22 infants in mother training group; 19 in the control group are first born.
Second born: 7 in training and 5 in control group. Third born: 2 in training
and 2 infants in control; only one infant in control group is fourth born.

The Sex of the Infants:
There are 9 girls and 21 boys in training group; 19 girls 11
boys in control group.

PROCEDURE

Assessment

As the study is still ongoing, further assessments will be made later. However, currently two measures were used:

Developmental measures:

Denver Developmental Screening Test
Denver Developmental Screening Test which is adapted and
standardized to the Turkish children (Yalaz and ark., 1985) was used to
assess the developmental level of the infants in both groups. Children
were assessed first: when they were one month old on seven criteria and
second: when they were six months old on thirteen criteria.

Family Variables

HOME Inventory
The infants' HOME Environments were assessed by Caldwell and
Bradley's Home Inventory 0-3 (Home Observation for Measurement of the
Environment) (Caldwell and Bradley, 1984). Some of the items of the
inventory such as "parent permits child to engage in 'messy' plays" and
"Child eats at least one meal per day with mother and father", were deleted
as they were not applicable to the one month or six months old infants.
However, after nine months the full inventory will be used.
As the HOME Inventory includes questions to describe the family composition, another questionnaire for such purpose was not developed.

**MOTHER TRAINING PROGRAM**

The basic aim of this study is to maintain and encourage the overall development of the child through well-established mother (or mother substitute)-child interaction. Therefore, mothers' training program primarily consists of activities which are designed "to engage the mother and the child in the same activity that it is challenging to both of them". In the mean time, as mothers' educational level is low and majority live in small families or with ignorant parents (in-laws), they needed information on child health, care and nutrition. So that, training program also designed to provide the mothers with such information and guidance where, when and what seemed to be necessary.

Mothers training activities were selected and designed according to the child's expected developmental and behavioral characteristics of the age level. The nature of the design was to draw mothers' attention to even very trivial behavioral characteristics of the infant. Hence, first, mothers were informed of the particular behavior for which that particular activity designed, then questions were designed to check if the mother had noticed the expected 'response'. For example: "what did he do when you flash the light in to his eyes when asleep? Has there been any change in the breathing? Has there been a slight move? Have eye lids moved? etc". The primary attempt here is "to make mothers sensitive towards infants' responses and messages".

**The Sources of the Behavioral Objectives:**

**Newborns:**

Objectives and Activities designed for the newborn infants were selected among the items of the Brazelton Neonatal Scale (Brazelton, 1973).

Eight items were selected:
- Response decrement to light.
- Response decrement to rattle.
- Orientation response - inanimate visual.
- Orientation response - inanimate auditory.
- Orientation - animate visual.
- Orientation animate auditory.
- Orientation animate visual auditory.
- Self quieting activity.

For each items, "games" have been designed for the mother to play with her newborn infant. The games were also attractively illustrated on a work sheet and left with the mother to be collected at the 'next' visit. Each activity has also set of relevant questions to the mother about the responses of the baby then the mother has noted down the responses observed on her infant.

**The visiting mother trainers** were selected among the senior students of the "Child Development and Education Teacher Training Program" of the Faculty of Vocational Education, Gazi University. Then they were trained and informed of the nature of the 'study' as part of their 'Parent Education Course'. The 'visiting mother trainers' visited mothers once a week and explained the nature and the aims of the games and demonstrated it for the mother. Then, the mother played the game with her infant in presence of the trainer. After the activity, the trainer and the mother talked about the responses of the infant. The 'work sheet' then was left with the mother that she would play the game with her baby at least twice in the week.

**2-6 months olds**

By the time, designed activities were applied, the infants became 6 weeks old. So that new activities were designed according to the developmental characteristics of the age, as well as to his individual characteristics.

Between ages of two and six months, weekly visits (except two weeks interval for winter vacation) were paid to the mothers with new games, in the same style. Developmental skills for this period were selected according to the widely accepted developmental characteristics of the period.

Following characteristics were selected to form the developmental objectives for the activities of this period:
- Orientation to auditory object.
- Orientation to visual and auditory object.
- Changing his attention to one object to other then to the
previous one.
- Attempting to reach and touch the object- hold and leave action.
- Following and looking at the objects' place when disappeared.
- Discriminating her vision and her mother vision in the mirror.
- Enjoying tearing papers.
- Grasping two objects with both hands one in each.
- Holding two objects (e.g. cubes) and hitting them to each other.
- Recognizing the shapes and the functions of the some known objects. For example; when a glass or a small box is placed up side down in front of him, he picks and turns it up and looks inside or if it is a glass takes it to his mouth.

For some of these skills, more than one game were designed for the repetitions of the skills (objectives).

The training program will (hopefully) be carried out until the infants grow up and settled in their primary education. Inevitable, the educational processes will be changed according to the changing developmental characteristics and as a result changing educational needs of the babies and their mothers.

**Mother training on child health, care and nutrition**

Although, the prime aim of this study is to *enhance interaction between mother and child*, yet as the mothers are in need of information about *child health, care and nutrition*, they were informed and guided by the visiting mother trainers on these needs. The trainers who are trained in ‘child development and education’ helped mothers in their problems of child care and nutrition (with the help of an expert on nutrition), and referred mothers to mother and child health centres for the child’s health problems. In such cases, the University’s hospital has often been used.

**RESULTS**

The study is very recent and incomplete, therefore extensive assessment is yet to be completed. However, preliminary findings have
been analyzed on three main grounds: 1) Comparison of the developmental achievement of the INANTS on “Denver Developmental Screening Test” between the mother training and not training groups; 2) Comparison of the HOME ENVIRONMENT of the babies between mother training and not training groups; 3) Interpreting of the mothers’ responses and feelings towards the study, home visits and sensitivities to their ‘homeworks’.

1) Developmental Achievement:

Infants were assessed by seven items of DDST when they were one month old. The mean score on these are for mother training group is $X = 6.129$; not training $X = 5.8$. One way ANOVA is used ($F = 1.671; df = 1; .10 < p \leq .25$). Then, they were assessed again when they are six months old on 13 items. ANOVA is used to analyse the results; ($F = 2.124; df = 1; .10 < p \leq .25$). According to the ANOVA between training and not training groups, no significant difference is observed on this assessment. The main reason for this may be that DDST is rather a broad test and related to the maturational processes. Also, it is used to identify abnormalities on children rather than to identify developmental differences among normal children.

2) HOME Environment:

“Caldwell and Bradley’s HOME INVENTORY 0-3” was used for assessment of the home environment. The differences in the qualitative characteristics of the homes between training and not training mothers were assessed on six criteria of the INVENTORY; a) Emotional and verbal RESPONSIVITY, b) ACCEPTANCE of the child’s Behavior, c) ORGANIZATION of Environment; d) Provision of PLAY MATERIALS; e) Parental INVOLVEMENT with Child; e) Opportunities with VARIETY.

The HOME Inventory was first used when infants were one month old. One way ANOVA showed significant differences between two groups. The training mothers seemed to offer better home environment to their newborn babies ($F = 6.382; df = 1; .01 < p \leq .025$). However, the ANOVA of the results of HOME Inventory, used second time when the babies are six months old, showed even more significant differences suggesting that the training mothers have advanced in being responsive to their infants’ environmental needs ($F = 11.881; df = 1; .0001 < p \leq .005$).
3) Interpreting the feelings, responses and "dutifulness" of the training mothers:

In the short terms, mothers' responses and acceptance of the studies such as this, can be considered a meaningful evaluation of the study. Thus, within the first six months of the study, observed positive responses of the mothers (and even other members of the family) can be summarised as follows;

a) Enthusiasm and cooperativeness of the mothers
- Mothers were so open and happy about the weekly visits. They did not show any boredom or other uneasy feelings toward the visitors, and encouraged them to visit more often.

- They were careful and interested in their 'weekly work'. commented openly on their usefulness and inefficiency.

- When they were asked if they wished to remain in the study with different visiting trainer (as the current ones were to be graduated this year) all wanted to remain.

- Some of the mothers asked the visiting trainer to bring books on child care and education. Then they read and discussed the book with the trainers.

b) Contentment of the Mothers:
Mothers were satisfied with the work. They commented that 'before this study they had never thought of playing and talking with a baby as young as one month old'. They had thought that the baby, until it was six or more months old, only need to be fed, changed and put to the bed.

c) Father involvement:
The involvement of the fathers was the surprise part of the study. In some cases, fathers helped to fill in the
activity sheet as the mother was not skillful enough. Most important, some of the mothers reported the genuine interest of the fathers in activities that they played with their babies according to the activity of the week.

a) Involvement of the other members of the family:
Especially mother in laws were of the interest group for some of visiting trainers. In some cases mother in law was living with them, in other cases had come for birth of the baby and helping her daughter in law with her traditional child care techniques. In such cases, the strategy was employed to make the grand-mother as part of the process first and once drawing her to the side of the trainer weekly homeworks were more successfully completed.

b) Leaving dangerous traditional child care habits:
Among such habits "swaddling baby with a special cloth from neck to toe so tightly that often caused "displaced hips" in children. Most of the mothers were using this techniques at the beginning of the study, left the habit soon after the visitors explained them. This was checked by visiting the mother on different days and times without giving advance notice.

c) Vaccination and other health controls were made in time
with the advice as well as the guidance of the Mother Training Visitors.

Conclusion:
This brief and uncompleted field study, very strongly indicates that such ecologically oriented early childhood educational programs starting from the BEGINNING and insuring the involvement of the mother will eventually change the child's immediate environment. Such change is expected and can easily be foreseen that it can be one of the strongest effect to break the poverty cycle. This does not happen that because the children will be in a more stimulating environment and interacting with their parents well but also by parents that they will be regaining their control thus, self-confidence in childrearing as well as in life.
REFERENCES


(1987b) *Early Childhood Education in Turkish Gecekondu*. Paper submitted to the 18th World Congress Meeting of OMEP July, Jerusalem13-17, 1986 (ERIC Number is: ED 296 791).