

CHILDREN'S HOME ENVIRONMENTS IN THREE SOCIO-ECONOMIC STATUS GROUPS IN ANKARA ¹

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INTRODUCTION

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Home and its surroundings constitute one of the most important settings for the developing child. Ironically however, it is also one of the least explored settings in relation to the child. In a review of children's home environments, Parke (1978, 33-81) noted that for further progress, more developmentally oriented descriptive studies of the physical, social and intellectual spheres of the home environment need to be undertaken with an interdisciplinary approach. As part of a project in congruence with these suggestions, the present paper aims to explore the general physical characteristics of primary school children's homes and their surroundings, family-living and space usage patterns as well as some evaluative responses to surroundings. In order to cover a broader spectrum of social and physical environments in studying the relationships to the developmental variables, the project included samples from three socio-economic-status (SES) groups in Ankara, namely, the upper, middle and lower.

A review of related literature reveals that childhood outdoors has received relatively more research interest including neighborhood studies (ranging from the pioneering work of Barker and Wright, 1955, to the more recent contributions of Hart, 1979, and Moore's "Childhood use of the urban landscape" project), residential-district and play-area studies (Moore and Young, 1978).

One study that aimed to explore ecological aspects of family home environments, collected data from male sailors and only occasionally referred to children (Altman, Nelson and Lett, 1972). A series of studies were conducted using the Caldwell HOME Inventory (Parke, 1978) which assesses the quality of stimulation available to the child in the home. On the other hand, Rheingold and Cook's (1975) study was more directed at the physical aspects and specified in what ways the contents of boys' and girls' rooms differed at 1-6 years. They noted, "... boys were provided with objects that encourage activities directed away from home - toward sports, cars, animals, and the military - and the girls, objects that encourage activities directed toward the home - keeping house and caring for children" (1975, 463).

Among the related studies conducted in Turkey, Kandiyoti's (1977) survey of low income houses in İzmit, a town near İstanbul, indicated that these households closely conformed to descriptions of the adult-centered family. Space for children was a low priority and when needed it was their space that got sacrificed first. Only 30 % had a separate room to sleep in, 37 % shared their parents' bedrooms, 82% did their homework in a crowded living room and all played out in the streets. Another study (İmamoğlu, V., 1978, 1979) included the upper and lower SES

dwelling and dealt with user needs, space quality in the house and affective dimensions of living rooms but was not directly related to children. Some studies on social housing examined various aspects of this type of housing. For example, Özsoy (1978) in 40 social housing flats in İzmit found that few households were concerned with children's study areas and none of the mothers felt a need to allocate separate space for their children. Pamir (1983) however, studying various psychological and design parameters of social housing in Ankara with 175 units, found some concerns of families on suitability of environments to children. His results revealed that children constituted the highest accident-prone group in social housing.

E.O.İmamoğlu (1979) working with upper and lower SES children and university students, found that in general traditional house types were liked but contemporary ones were preferred to live in. She also found that all subjects liked their houses, the young ones more so than the older ones. It should be noted that E.O.İmamoğlu's report is also based on the perceptual and evaluative responses of the same sample as the present one (İmamoğlu, E.O., 1982).

Before explaining the method and the results of those aspects of the project, the present paper is concerned with - ie. a comparative description of children's home settings in three SES groups - a brief description of the general setting of the study may be worthwhile.

THE SETTING

The end result of the high population growth rate (2.2 % annually) and continuous migration from the rural areas is a fast urbanization in Turkey. In 1950 about one fourth of the population was living in cities, whereas today it is almost one half. Ankara is one of the fastest growing cities in the country. When it became the capital in 1923, it was only a provincial town with about 30,000 inhabitants; today its population is around 2.5 million. As a result of this rapid and continuous change of size and character, today two types of residential zones can be depicted; one of which consists of dense urban living, in apartments of various quality within the planned and serviced parts of the city, whereas the other consists of the squatter type, self-built houses called "*gecekondu*" (the original meaning being "built overnight") situated usually on the periphery and having neither planning nor any of the municipal services to start with. Hence, *gecekondu* is a simple shelter built by rural migrants without any regard to municipal laws and regulations, on a piece of land not legally owned by the dweller. In time, however, *gecekondus* are somewhat legalized, provided with infrastructure, such as water, electricity, sewage system, roads, and are enlarged in size with additions and improvements. In general, the upper and middle SES groups live in the former and the lower SES group in the latter zones.

A social survey carried out by the Ankara Metropolitan Area Planning Bureau in 1970, indicated that the low income group constituted 52 %, the middle income group 39 %, and the upper 9 % of the total population (Okuy, *et al.*, 1975). Another study (Türel, 1972) showed that the high income groups were settled at about 4.2 km from the center where the density was 122 persons/ha. The middle income groups inhabited the areas which were 2.4 - 3.9 km from the center where the density was 264-586 persons/ha. The low income groups on the other hand, lived in *gecekondu* areas at the periphery of the city, 4.2 - 6.3 km from the center and the density was 144-314 persons/ha.

METHOD

SAMPLE

The areas selected for the study were: Altındağ, one of the earlier *gecekondu* areas formed in 1950's; Cebeci, representing the middle SES group, one of the older residential areas of Ankara, very near to the center and high in density; and finally Çankaya, the most prestigious part of the city near the Presidential Palace and various embassies. Three large public elementary schools were selected from these three areas (Figure 1). Letters addressed to parents asking them to participate in the project were passed on to children in the randomly selected first, third and fifth grade classes of each of the three schools. Of the 536 families (76 %) who were willing to participate in the project, 216 were selected randomly according to the fathers' occupation and educations as well as the birth date and sex of the critical child in the family². Although the project in general included

2. See E.O.İmamoğlu (1982) for mean ages of children in each group.

these final 216 families, some refused to participate in the house-survey part, which was conducted on 207 family-house units (69, 71 and 67 from upper, middle and lower SES groups, respectively).

THE HOUSE SURVEY QUESTIONNAIRE AND PROCEDURE

Assessment of the physical environments of children was carried out by seven trained architects in winter 1980, by means of the House Survey Questionnaire which consisted of three parts, each composed of checklists, open-ended questions and scales. The first part, addressed to the mothers, aimed at examining the general characteristics and conditions of the houses and mothers' evaluations. The second part consisting of questions addressed to the critical child were aimed at getting his/her responses towards the physical environment. The third part consisted of items involving physical measurements, observations and evaluations that had to be filled in by the architects. In addition the architects were required to take detailed measurements to enable them to draw 1/100 and 1/50 house and room plans.

RESULTS

Results will be grouped under the main subtitles of general characteristics of dwellings and surroundings, evaluative responses to the dwellings, and usage of dwellings and surroundings.

1. GENERAL CHARACTERISTICS OF DWELLINGS AND SURROUNDINGS

House types and surrounding environments: Survey of dwellings indicated that all the upper (except one) and middle (4 exceptions) SES families lived in apartment flats and all the lower SES families in one or two storey *gecekodu* type of houses. The mean number of floor levels for the upper middle and lower SES groups were 5.72, 4.41 and 1.18, respectively; their modes being 5,4 and one storeys for the respective groups. The majority of the upper (78%), and the lower (72%) SES families owned their dwellings, while 65% of the middle SES families were tenants ($\chi^2 < 23.47$, $df = 2$, $p < .001$).

The survey-conducting architects' evaluations of the buildings and their immediate environments on 5-point scales, indicated that upper SES apartment buildings were more inviting (3.61), better planned (3.60), and had larger windows (4.01) than the middle SES buildings. (The respective values for this group were 2.63, 2.51 and 2.93). The respective means for the lower SES families, on the other hand, were even lower (2.20, 1.91 and 2.06).

The ratings of the immediate surroundings by the architects indicated that there were no differences between the three SES environments as far as greenery was concerned (values around 2.5); however, the middle SES surroundings were evaluated as being noisier than the other two.



Figure 1. "Gecekodu" houses in the vicinity of Atilla Primary School at Altındağ

Figure 2. Family (sitting) room in a "gecekodu"



Amenities and service spaces in the dwellings: All the upper and middle SES dwellings had electricity and water supply, while two cases in the lower SES group did not have electricity and almost half (46 %) did not have running water. Majority of the upper (84 %) and middle (68 %) SES dwellings had piped gas but none of the lower SES *gecekondus* did so.

All the upper SES flats (with one exception) and 24 % of the middle SES ones were centrally heated while none of the lower SES houses had this facility. Thirty percent of the upper group had hot water supply for about 3 days a week, only 2 of the middle and none of the lower SES houses had this opportunity.

The total number of service spaces like kitchens, bathrooms and squatting type WC. cabins were analysed by a one way ANOVA. The results indicated a significant difference between the three SES groups $F(2,200) = 4.947, p < .001$, respective means being 3.02, 2.69, 1.39 for upper, middle and lower SES dwellings, all differences were significant according to Tukey test (for upper versus middle, $p < .05$ and for middle versus lower, $p < .01, df = 200$). The upper SES flats were well equipped with service spaces and all had a proper kitchen, a bathroom and a separate WC cabin. (Only 5 houses did not have the latter). Some, however, had more than two bathrooms, extra showers or WCs. Two middle SES flats and 11 (16 %) lower SES houses did not have a proper kitchen, 8 (11 %) of the middle and 48 (72 %) of the lower SES dwellings did not have a bathroom (however five of the middle SES houses without a bathroom had a squatting type WC); 80 % of the lower SES houses lacked a WC inside; dwellers had to go out and sometimes share it with a neighbor. Eight of the lower SES houses didn't have any of the service spaces: kitchen, bathroom or WC.

Dwelling and room size: As is seen in Table 1, average size of dwellings increased from the lower to the upper SES groups. One way ANOVA applied to the data indicated that SES differences were significant at .001 level, $F(2,199) = 43.29$. While most of the upper SES dwellings had private open or semi-open, spaces, like balconies, terraces, patios or gardens, one-third of the middle and two thirds of the lower SES group did not have any. The mean size of such private open or semi-open spaces was similar (around 12 m²) in all SES groups. The number of rooms significantly increased from the lower to the upper SES groups, $F(2,199) = 34.03, p < .001$. The number of people living in these houses, however revealed a different picture (See Table 1). Though living in houses with fewer rooms, the lower SES families were larger than the others.

Table 1. Averages and ranges of closed and open areas, number of rooms, family sizes and densities in three SES dwellings

SES	closed area		private-open / semi-open spaces		number of rooms	family size	number of children	area/person m ²	people/room
	mean m ²	range m ²	dwellings without nr.	dwellings with mean m ² range m ²					
UPPER	226.16	74 - 650	5	12.52 1.30 - 140.00	4.23	4.98	2.17	28.09	1.05
MIDDLE	81.58	25 - 127	24	11.66 2.75 - 34.00	3.34	4.81	2.37	17.63	1.57
LOWER	52.57	24 - 105	44	12.22 3.00 - 30.00	2.81	6.44	4.36	8.46	2.66

The increase of the average area per person from the lower to the upper SES was significant $F(2, 199) = 207.92, p < .001$. The ratios of people per room were also different for the three groups $F(2,199) = 54.04, p < .001$; Tukey tests applied to the group differences indicated that all differences were significant.

2. EVALUATIVE RESPONSES TO THE DWELLINGS

Householders' reasons for selecting the particular dwellings: In selecting the houses they lived in, the upper SES mothers were mainly concerned with the particular locations (being located in the areas where upper SES lived), the quietness of the environment and functionality of their dwellings. The middle and lower SES families, on the other hand, were concerned with the rent prices, proximity to work, to school, to friends and relatives. In addition to these common concerns of the two groups, the middle SES mothers considered being in a respectable location as an important factor in selecting their houses.

Mothers' general satisfaction with their dwellings: Two hundred and seven mothers evaluated their houses on a 5-point, "not satisfied at all - very satisfied" scale. A one-way ANOVA indicated that the three SES mothers evaluated their houses differently, $F(2,204) = 8.99, p < .001$. The means for the upper, middle and lower SES groups were 4.22, 3.63 and 3.35, respectively. In other words, the upper SES mothers generally were relatively more satisfied with their dwellings (mode

being at the "very satisfied" level) compared to the other groups (modes being at the "satisfied" level).

Type of heating and satisfaction: All the upper SES dwellings with one exception were centrally heated. The satisfaction of mothers on a 5-point satisfaction scale gave a mean value of 2.59 for this group. 74 % of the middle and all of the lower SES houses were heated by stove. The average levels of satisfaction for these groups were 3.17 and 3.09, respectively.

Complaints from dwellings: Mother's complaints from their houses were recorded by use of an open-ended question and a check-list. Responses to the open-ended question revealed that the upper SES mothers were dissatisfied with heating, inadequate size of the house and the inadequate number of rooms. The middle SES group complained again on size of their houses, number of rooms, inadequate size of kitchens and various functional shortcomings of their dwellings. The lower SES mothers were also dissatisfied with the size of their houses, in addition to the lack of indoor bathrooms, lack of kitchens, running water, leaking roofs, humidity, etc. The complaints checklist indicated that mothers in all three groups had difficulties, hence complaints on drying clothes, cooking, bathrooms, washing, inadequacy of closets, balconies etc. The upper and middle SES mothers had complaints on similar aspects like drying clothes, inadequate number of closets, cooking. The complaints of the lower SES group were originating from not having service spaces like bathrooms, kitchens, or not enough rooms and open spaces.

Mothers' ideal houses: On a 6-point "very close (1) - very far (6)" scale, mothers evaluated the distance of their present houses to their ideal ones. The mean values for the upper, middle, and lower SES groups were 2.43, 3.86, and 4.29, respectively. The upper SES mothers felt that their present dwellings were close to their ideal type, those of the middle a little far and those of the lower even further, $F(2,201) = 29.75, p < .001$. The modes for the three groups were 2 - "quite close" to the ideal for the upper, 3 - "a little close" for the middle and 6 - "very far" from the ideal for the lower SES group.

Few of the mothers (ranging from 9 % for the upper to 3 % for the lower) indicated that the houses they lived in were exactly like their ideals. On the other hand 80 % of the upper, 64 % of the middle and lower SES mothers indicated their ideal type as a house with a garden while 15 % of the upper, 31 % of the middle and 28 % of the lower SES mothers preferred apartment flats. A limited number of upper SES group wanted luxurious villas; some lower SES mothers *gecekondu* type houses.

When describing their ideal houses, the upper SES group mothers used greater number of concepts than the other two groups. The upper group was concerned mainly with gardens, the size and spaciousness of the houses of detached and low-rise (single or two storeys) character. The middle SES mothers were interested in size, spaciousness, the gardens, central heating, and large living rooms. The lower SES group was concerned with having a separate kitchen, a bathroom, large and spacious houses, gardens and some of them having a flat in apartment buildings.



Figure 3. Middle SES apartments in the vicinity of Kurtuluş Primary School at Cebeci

Figure 4. Living room of a middle SES flat



The number of rooms in the ideal house: Mothers were also asked to give the number and the identified usage of rooms in their ideal dwellings. The average number of rooms stated, including the living rooms, were 4.96 for the upper, 4.24 for the middle and 3.93 for the lower SES groups. The modes were 4 for both the lower and middle and 5 for the upper SES mothers.

The number of rooms allocated for children were figured out; 12 of the upper and middle and 16 of the lower SES mothers did not mention a separate room for their children (the average number of children in the upper SES was 2.17, in the middle 2.57 and in the lower 4.36.) The mean number of rooms to be allocated to children by the upper, middle and lower SES groups were 1.73, 1.32 and 1.24, respectively. The modes for the upper SES was 2 rooms, for the middle and lower SES, one room. Thus, the rooms to be allocated to children comprised 29 % of rooms in the upper, 26 % in the middle and 24 % in the lower SES.

3. USAGE OF DWELLINGS AND SURROUNDING AREAS

Family living spaces: In order to provide a clear picture of family living in Turkey, room names and their functions need to be identified. The guest room is a traditional space, generally kept by the middle and lower SES, restricted only to the entertainment of guests. It may include sofas, show cases, valued belongings. It is a clean spot in the house and kept by a high proportion of low SES families. The living room, "salon" in Turkish, or "sala" as used by some authors on the other hand, is the largest room generally seen in all of the upper and most of the middle SES houses, furnished in western style. It is used for entertaining and dining with guests and for living. Living and guest rooms are the better furnished and formal parts of the house: the difference lies on the restricted use of the latter for visitors only. The third space is the "sitting" or family room which serves the family and intimate friends for various activities; it has an informal, unkempt character (Figure 2).

In the lower SES families the function of rooms is not clearly defined. A room, whatever it is called, can be used for other additional purposes such as living, sleeping, cooking and even for bathing. Hence, names used for the rooms in the low SES houses should be looked upon with this characteristic in mind.

In general, houses in the three SES groups had more than one of these social spaces. In the upper SES, 64 % of the families had a sitting room in addition to a larger living room. In the middle SES 35 % of the families had sitting and 25 % had guest rooms in addition to their living rooms. Only two of the lower SES houses had a sitting room and 30 houses (45 %) had a guest room, in addition to their living rooms. It must be noted that in the lower SES families sitting room - living room differences are unimportant; the names used here were the original names given by the householders. Thus, houses with a single social space constituted 36 % of the upper, 39 % of the middle and 52 % of the lower SES groupings.



Figure 5. Upper SES apartments in the vicinity of Çankaya Primary School at Çankaya

Figure 6. Living room of an upper SES flat



Majority of the families in all three SES groups used sitting rooms as their private living spaces. Fifty-two percent of the upper, 51 % of the middle and 72 % of the lower SES families watched TV and had family interaction in this room. Forty-eight percent of the upper, 49 % of the middle and 28 % of the lower SES families used the living room.

Sizes of living rooms (*sala*) in the upper and the middle; and family rooms in the lower SES groups differed significantly, $F = (2,199) = 78.38, p < .001$. The mean family room size for the lower SES was 13.75 m^2 (the range being $4.2 - 23.9 \text{ m}^2$), for the middle SES 21.41 m^2 (ranging between 9.9 to 40.5 m^2), and for the upper SES 35.39 m^2 (ranging between 20.4 and 63.0 m^2).

Family eating patterns: During the week-days family members in all three SES groups could have only their dinners all together. Lunches and breakfasts were eaten in the absence of someone in the family. During the weekends, however, all three meals were eaten together.

The spaces where families had their meals together were different for the three SES groups. In general, for both week-days and weekends the upper group used their kitchens for this purpose, while the middle and the lower SES families used their sitting rooms.

The type of furniture used for dining, were tables and chairs for all the upper, 89 % of the middle and 16 % of the lower SES families. The remaining proportions of householders used a traditional circular floor-table and sat on floors to eat. This rather practical and temporary setting is still common in the villages and seems to continue in *gecekondus* and some of the middle SES houses.

The answers to the question of whether the family members had a fixed seat at the dining table or not indicated that for all three meals more than 90 % of the upper and the middle SES family members did. This proportion was around 39 % for the lower SES families.

The recordings of shape of dining tables and (fixed) seating position of family members showed that around 38 % of fathers in the upper and middle SES groups sat at the end (head) of the table. In the lower SES group 8 out of 10 did so. The head position was taken rarely by mothers; however, sometimes one end of the table was taken by fathers, the other end by mothers (this was so in 18 % of the upper and in 7 % of the lower SES). When the number of mothers and fathers sitting at the head position of the table were added up, their proportions constituted 60 % of the upper and 49 % of the middle SES families.

Various domestic instruments, household devices and items of furniture: A list of 37 items with some space for writing extra ones was prepared. They ranged from simple furniture elements to sophisticated electronic household devices (including refrigerator, washing machine, telephone, TV, camera, video, etc.) A one-way ANOVA performed on the total number of household furniture and devices indicated a significant SES difference, $F(2, 204) = 149.81, p < .001$. The upper SES households had an average of 25.2, the middle 19.3, and the lower 13.7 elements.

Also, the number of instruments children used were analysed by an ANOVA for 3 (SES) x 3 (Age) x 2 (Sex) factorial design. The results indicated that both the SES, $F(2, 180) = 52.05, p < .001$, and age, $F(2, 180) = 5.45, p < .01$, main effects were significant, whereas neither sex, nor any of the interactions were significant. The average number of devices an upper SES child used was 16.3, that of a middle was 12.88 and that of a lower was 9.58. The proportion of these figures to the ones available in their houses were 55 % for the upper, 67 % for the middle and 70 % for the lower SES families. The first graders used an average of 12.0, the third graders 12.7, and the fifth graders 14.1 items.

Spaces where children spent most of their day-time: In addition to the four activity areas for playing, watching TV, studying and sleeping, the children were asked to point out the space where he/she spent most of his/her day-time when at home. As seen in Table 2, 39 % of children in the upper, 49 % of those in the middle and 82 % of those in the lower SES families spent their daytime in the sitting room. Thirty seven percent of the upper, 14 % of the middle and only 3 % of lower SES children spent their time in study-bedrooms. The remaining proportions in the upper (24 %), middle (37 %) and lower (15 %) SES children used either living rooms or guest rooms. The average size of children's day-spaces were 19.2 m^2 for the upper, 17.0 m^2 for the middle and 13.8 m^2 for the lower SES houses, $F(2,171) = 5.59, p < .01$.

Physical conditions of the rooms where children spent most of their day-time

were assessed in terms of temperature, illumination and sound levels. Dry and wet bulb temperatures at the level of the child's usual sitting position indicated no difference in any of the three SES groups. The mean level of dry-bulb temperatures for the upper, middle and lower SES groups were 19.69°C, 19.68°C and 19.76°C, respectively. The respective values for the relative humidities were 52.90 %, 52.35 % and 53.06 % for the upper, middle and lower SES groups.

However, illumination level at the child's working plane increased from the lower towards the upper SES groups. The average value for the lower SES group was 198.6 lux, for the middle 316.9 lux and for the upper 361.6 lux, $F(2,112) = 4.86, p < .025$.

One of the two measurements made on the sonic environment of the child, was the measurement of the sound level infiltrating into the room from the exterior. The mean values of such measurements were 35.7 dB for the lower, 36.4 dB for the middle and 35.9 dB for the upper SES groups, and they were not significantly different. The sound levels in children's daytime spaces that have been recorded when the radio or TV was on at the usual volume indicated the mean sound levels of 35.0 dB for the upper, 40.3 dB for the middle and 42.2 dB for the lower SES groups. The results of a one-way ANOVA indicated that the sound levels in children's day-spaces were significantly different for three SES groups $F(2,73) = 6.31, p < .005$. Separate Tukey analyses indicated that only the sound level of the upper SES differed from those of the others ($df = 91, p < .01$).

Indoor playing: The majority (75 %) of the upper SES children played in their bedrooms, whereas those in the lower (63 %) played in the sitting room. The middle SES group on the other hand, used either the sitting (42 %), living (33 %) or bedroom (25 %), (Table 2).

Table 2. Interior spaces where children spent most of their day-time and carried out their activities

Activity	SES	n	His/her room, or bedroom		Living-room (Sala)		Family/sitting room		Guest room	
			Nr.	%	Nr.	%	Nr.	%	Nr.	%
Day-time Space	Upper	66	24	36.4	16	24.2	26	39.4	-	-
	Middle	71	10	14.1	24	33.8	35	49.3	2	2.8
	Lower	67	2	3.0	7	10.4	55	82.1	3	4.5
Indoor Playing	Upper	67	50	74.6	5	7.5	12	17.9	-	-
	Middle	67	17	25.4	22	32.8	28	41.8	-	-
	Lower	65	7	10.8	11	16.9	41	63.1	6	9.2
TV. Watching	Upper	69	1	1.4	33	47.9	35	50.7	-	-
	Middle	68	5	7.4	31	45.6	30	44.1	2	2.9
	Lower	65	3	4.6	9	13.8	44	67.8	9	13.8
Studying	Upper	69	41	59.5	11	15.9	17	24.6	-	-
	Middle	68	16	23.5	21	30.9	30	44.1	1	1.5
	Lower	66	9	13.6	8	12.1	43	65.2	6	9.1
Sleeping	Upper	67	63	94.0	1	1.5	3	4.5	-	-
	Middle	71	25	35.2	23	32.4	23	32.4	-	-
	Lower	67	19	28.4	4	6.0	41	61.2	3	4.4

T.V. watching: Children generally watched TV with the other family members. The space utilized was either the sitting (51 %) or living room (48 %) in the upper, and middle (44 % and 46 %, respectively) SES groups, and the sitting room (68 %) in the lower one.

Studying: The majority of the upper SES children usually studied in their bedrooms (60 %), the lower group in the sitting room (65 %). The middle SES children, on the other hand, used the sitting (44 %), living (31 %), and bedrooms (24 %). While the majority of the upper and some of the middle SES groups had proper furniture for studying, children in the lower group had to find temporary solutions for this purpose, sometimes working on sitting room floors near the stove and using their school bags as desks.

Sleeping: The type of rooms where children slept were different for the three SES groups. The majority (94 %) of the upper SES children slept in bedrooms; the proportion of such children was about 1/3 (35 %) for the middle and less (28 %)

for the lower SES groups. Sitting rooms were used by 61 % of the lower and 32 % of the middle SES groups. The remaining proportion of the middle SES children slept in living rooms (32 %) and the remaining 10 % of the lower SES in the guest room.

The size of rooms where children slept were different for the three SES groups, $F(2,201) = 9.65$, $p < .001$. The mean sizes of such spaces for the upper, middle and lower SES groups were 11.36 m², 15.92 m², and 13.78 m², respectively. The average size of the sleeping space of the upper SES children was the smallest and that of the middle was the largest. (The ranges of sleeping spaces were between 5 to 27 m² for the upper; 5 to 41 m² for the middle and 5 to 24 m² for the lower SES groups.)

Children in general, shared their sleeping spaces with someone. The results of a one-way ANOVA indicated that in different SES groups different number of people were sleeping in such spaces, $F(2,201) = 87.46$, $p < .001$. The mean values for the upper, middle and lower SES groups were 1.76, 2.01, and 4.07, respectively (respective modes being 2, 2, and 5). However, 34 % of the upper and 35 % of the middle SES children slept alone; in the lower SES group, only one child did so. A high proportion of the upper (51 %) and the middle (41 %) SES children shared their sleeping spaces with a brother or a sister; whereas, in the lower SES, 19 % of the children shared the same space with a brother/sister, 38 % with more than one brother/sister. In fact another 38 % of the lower SES children slept in the same space with parents, while 11 % of the middle and none of the upper SES children did so. A few children in all SES groups shared the same space with kinfolk like grand-parents and aunts/uncles.

Whereas a few middle SES children shared the same bed with brothers/sisters, 67 % of the lower SES children shared their bed with another person or sometimes with two persons who in a few rare cases may be the parents. With few exceptions, in general children shared their beds with sibs of the same sex. The majority (78 %) of the upper SES children used beds while those of the other groups used sofas (74 % of the middle and 61 % of the lower). The ratio of children who slept in a proper bed was 24 % for the middle and 17 % for the lower SES groups. A few upper (4) and middle (2) children slept in bunkbeds and fifteen (about 22 %) of the lower SES children used a floormattress.

The spaces where children were not allowed to enter and play: Children in the 28 upper (41 %), 40 middle (58 %), and 39 lower (62 %) SES families were free to enter and play in all the rooms. Forty-one percent of the upper, 13 % of the middle, and 5 % of the lower SES children were not allowed to play in the living rooms. One child in the upper, 7 in the middle, and 12 in the lower SES families were not allowed to play in the guest rooms.

Another restricted area in the dwelling was the mother's bedroom; 13 upper (19 %), 11 middle (16 %) and 10 lower (16 %) SES children were not allowed to play there. In a few cases in all SES groups, children were not allowed to be in the kitchen.

The main reasons why the children were not allowed in these spaces were to keep them neat and tidy (24 %), to keep them clean (13 %); because of the fragile objects (9 %), or safety. Data on privacy regulations which were studied in relation to bedroom or bathroom doors will not be reported due to space limitations.

The spaces children liked most: Twenty-three percent of the upper and 10 % of the middle SES children liked their own rooms most; while 51 % of the upper and 47 % of the middle SES children liked the living rooms most. The children of the lower SES, on the other hand, liked their sitting rooms (41 %), and their guest rooms (41 %). These spaces were less popular with the other groups. A total of 19 (9 %) children liked their parents' bedrooms most.

Living rooms in the upper and middle SES groups and guest rooms in the lower and some of the middle SES families have a similar formal character. They are furnished with the better furniture, are kept neat and tidy and guests are entertained in either of these spaces. The sitting rooms in all three groups are family oriented spaces and have an informal character. The same is true for the children's own rooms. Therefore, in analyses, these spaces were grouped as (a) the more formal ones, ie. living rooms and guest rooms, and (b) the more informal ones, ie. sitting rooms and children's bedrooms. Separate χ^2 analyses indicated that boys and girls did not differ, but in general children tended to like the more formal living and guest rooms more than the sitting and study-bedrooms ($\chi^2 = 5.65$, $df = 2$, $p < .1$).

Exterior play areas: The answers to the open-ended question about where each

child usually played were grouped in the following categories: (1) front yard of garden, an area somewhat related to the entrance of the building; (2) backyard, a space generally allocated for building services - coal delivery, garbage collection etc.; (3) areas between the apartment buildings or houses; (4) balconies, terraces; (5) streets; (6) parks and school gardens; (7) empty lots, open fields etc. The frequency counts in this classification indicated that regardless of the SES, the highest proportion of children played in the streets (47.1 %). The next most frequently used areas were the frontyards (45.6 %), then backyards (16 %); followed by empty lots, fields, parks, school gardens and balconies.

The number of children playing in front and backyards (62 %) exceeded those playing in the streets. However, a significant sex difference was observed; girls who played in the streets were less than those who played in the front or backyards of the buildings when compared to the boys ($\chi^2 = 9.95$, $df = 1$, $p < .005$).

Another grouping was made with regards to the proximity of the exterior play areas; balconies, front and backyards and spaces between two adjacent apartments were considered as (proximate environments); streets, empty lots, squares, parks, school yards as the less proximate ones. A Chi square analysis indicated that girls played in the immediate and boys in more distant environments ($\chi^2 = 19.84$, $df = 1$, $p < .001$).

A question was posed on children about the suitability of the exterior play areas to their purposes; 30 % of the upper, 18 % of the middle and 24 % of the lower SES children said that these spaces were not suitable for playing. The rest of the children, however thought that they were somewhat suitable.

When asked about the type of exterior spaces they wanted for play, a high proportion of children in all three groups wanted private gardens (a total of 49 %), 20 % asked for parks and formal play fields, 13 % wanted to play in the street in front of their houses, 8 % wanted large green open fields. Girls showed a stronger preference for playing in the private gardens rather than parks and fields in comparison to boys who did not reveal any differential preference ($\chi^2 = 10.56$, $df = 1$, $p < .005$). However, further analyses revealed that middle SES boys and girls did not differ in their play-place preferences and that the above-mentioned difference was due to upper and lower SES children's tendencies ($\chi^2 = 13.53$, $df = 1$, $p < .001$, for the latter two groups).

Toys children have: By means of a check list and a space to be filled in, the number and type of toys children had were examined. A 3 (SES) x 3 (Age) x 2 (Sex) analysis of variance indicated that all three main effects were significant. The average number of toys were 8.91, 5.39 and 2.26, respectively, for the upper, middle and lower SES children, $F(2,180) = 91.63$, $p < .001$. Similarly, the number of toys decreased as a function of age, $F(2,180) = 9.07$, $p < .001$, means being 6.86, 5.85 and 4.35, respectively, from youngest to oldest age groups. In general boys tended to have more toys than girls. $F(1,180) = 5.48$, $p < .025$, with respective means of 5.99 and 5.05. The types of toys girls had were dolls, soft animals, kitchen-ware and toys related to doll houses. The boys, on the other hand, had guns, cars, trains, sleds, bicycles. Balls of various kinds were common for all three SES children. Almost every child in the upper, 4/5 of the middle and more than 1/2 of the lower SES children owned a ball. "Lego"-type constructional toys were common for the upper SES. More than 70 % of children in this group, 34 % of the middle and none of the lower SES sample had this type of toys.

Although all children from the upper SES played with toys 26 % of the fifth grade children from the middle and lower SES groups indicated that they did not play with toys, particularly the girls.

The number of children who produced certain things by themselves, like constructing toys, knitting, etc., seemed to decrease from upper to lower SES ($\chi^2 = 5.43$, $df = 2$, $p < .1$). Since the number of middle SES children who engaged in such activities were equal to those who did not, separate comparison of upper and lower SES children indicated that significantly more of the former group engaged in such activities ($\chi^2 = 5.38$, $df = 1$, $p < .025$). As far as sex differences in relation to such production activities were concerned, significantly more middle and upper SES girls were involved in such activities compared to the boys ($z = 3.32$, $p < .05$); on the other hand, in the lower SES, sex difference was not significant.

Plants and pets in dwellings: More of the upper and middle SES families had plants in their dwellings as compared to the lower ones ($\chi^2 = 8.2$, $df = 2$, $p < .025$). Fifty-seven (84 %) upper, 55 (77 %) middle and 42 (63 %) lower SES householders kept plants in their dwellings. On the other hand, pets were common in more of

the lower SES families. Thirty-four (51 %) lower, 11 of the upper and 5 of the middle SES householders kept animals ($\chi^2 = 39.41$, $df = 2$, $p < .001$). The number of children who took care of pets did not differ in any groups; however, more girls looked after plants compared to boys ($\chi^2 = 10$, $df = 1$, $p < .005$). Families who had both plants and pets were more common among the lower SES group; there being 8 such dwellings in the upper, 5 in the middle and 24 in the lower SES groups.

DISCUSSION

The results of the survey indicated significant differences on various aspects of children's living conditions and environments between the three SES groups in Ankara. Though living within the same city, the children of the upper SES families had more favourable conditions, they had well-equipped, properly serviced, large dwellings in better surroundings; the lower SES group lived in deprived conditions and the middle group was somewhat in between these extremes, being less privileged than the upper group. One-half of the lower SES children lived in houses without running water which had to be fetched and stored in tight spaces; only one-third of these lower SES houses had bathrooms, the dwellers of others had to bath in the interior WC cabin, a corner in the hall, kitchen or sitting room; mothers had to wash the clothes in a similar area especially inconvenient and uncomfortable in cold winter days. Only one-fifth had their interior WC cabins, the rest had to use exterior ones sometimes sharing them with a neighbor. The houses in this group, though small in size, accommodated greater number of persons, hence created crowded conditions. Rooms were few in number and non specialized; a multi-functional family room was the focal point; the stove was set there, the meals were cooked on the stove, eaten on floor table, TV was watched, women mended and ironed, washed the laundry, children did their homework and slept at night.

The type of heating may also be responsible for this concentrated living, since all the *gecekondus* and three-fourths of the middle SES flats were heated by stove (İmamoğlu, 1958). In general a coal or a kerosene stove was set in a central position in the dwelling which may be the hall or sitting room, and kept burning all day long, in some houses one of the other rooms also had a stove and was heated when necessary - eg. the guest room when visitors came. Otherwise in winter, which is severe for about 3-4 months in Ankara, the room with the stove is convenient for various activities, especially for children. Although the temperature measurements taken in the three SES houses did not differ, one-third of the upper SES mothers complained from cold, and their satisfaction level with heating was the lowest among the three groups. The dissatisfaction and complaints of the upper SES mothers may be due to irregularities in heating as a result of fuel shortage, or to the recorded temperature levels (18 to 20°C) which may be lower than the accustomed or expected levels.

Children of the upper SES, compared to the other groups lived in quieter, better-lit and functionally differentiated rooms. They had specialized furniture items, decorative elements in their rooms. The number of furniture and household devices in their houses, hence the ones they used were more than those of children in the other two SES groups. Also producing items like toys, knitting, etc. were seen more in this group compared to the lower SES.

Almost every upper SES child slept in bedrooms alone or with a sib, whereas the majority of the lower group slept in the family room; each one-third of the middle SES group, on the other hand, slept in bedrooms, sitting and living rooms. As for sharing the sleeping space, the upper and middle SES children were similar; on the average, each slept in a room with another person, whereas in the lower SES, children slept in rooms with three other persons, sometimes with parents; and two-thirds shared even their beds with somebody. While the upper SES children slept in regular beds, those in the other groups, in general slept on sofas and sometimes on floor mattresses that were spread at night and rolled up in the morning.

An interesting finding emerged in relation to the expected sizes of dwellings. Regardless of SES, mothers complained about the smallness of their houses and number of rooms in the existing house, and wanted one further room in the average for their ideal homes. This is in congruence with the earlier findings of İmamoğlu (1978) in which the majority of the lower and half of the upper SES families desired an additional room. When describing their ideal houses, mothers also referred to size and spaciousness as an important asset. Pamir (1983) has found

similar results in his social housing survey. For the crowded lower SES families, living in cramped houses, it seems natural to ask for larger dwellings, but it is difficult to explain why the upper SES householders want larger houses; since already there are problems of heating, cleaning and maintaining the existing flats. One explanation may be that the present study examined only those who have children at the primary school level, and this particular sample (of young parents) may be in need of larger houses. For example, when asked about the function of the rooms in ideal houses, the upper SES group allocated more rooms to their children compared to the middle and lower ones. Thus, one probable explanation may be the differentiated use of rooms for the upper SES families: they further asked for study-rooms, hobby-rooms, rooms for utilities, rooms for children's play, room for maids, etc. This, of course, brings together larger floor areas and more space units. Another explanation may be that it may be a cultural phenomena to insist on more space in accordance with the traditional large prosperous house-types of the past.

In general, however, mothers of all three SES groups seemed to be satisfied with their houses, the upper SES ones being more so than the others. The distance of the actual to the ideal house was least for the upper and most for the lower SES mothers.

Children in general thought that their exterior play areas were suitable for the purpose. The greater proportions, in all SES groups, played on streets, front or backyards. Ankara has a densely built-up character and does not provide much green areas, parks, etc. Even the most quiet street has vehicular traffic and can be hazardous for children. Due to the inadequacy of play fields, parks and similar facilities, a high proportion utilized the streets for various plays and games, including football which is very popular. While the upper and middle SES streets are busy with traffic and parked cars, *gecekondu* areas have other problems like irregular and generally sloped terrain and muddy surfaces. The findings on boys playing in distant places are in congruence with those of other findings from other cultures (Hart, 1979).

The type of toys owned by children of different sex was similar to Rheingold and Cook's (1975) findings. The number of toys children had, increased from the lower towards the upper SES. Boys had more toys as compared to girls. With increasing age, the number of toys decreased; in the middle and lower SES one fourth of the fifth graders did not play with toys which can be explained as an early transition to a new role.

In spite of the highly concentrated living in the lower SES a traditional space like the guest room still existed, but was transformed into a new kind: a spare room used not only for entertaining guests but also for watching TV or letting children do their homework in.

In conclusion one can say that, the upper SES children in Ankara have the comfort and opportunities of the contemporary life. Although outdoor playing conditions are restricted, indoor living in well differentiated spaces is very smooth and they seem quite happy with the situation. The majority of the middle SES children live in stove-heated, rather concentrated spaces where the physical conditions are comparatively lower - darker, noisier, smaller, etc. Children of the lower SES group, on the other hand, have to learn to struggle with the lack of simple services in the house, have to share spaces, even beds with siblings and parents; play with fewer toys and start to be adult-like at the primary-school level. What is common for all children, however, is their positive affective responses towards everything related to their houses perhaps in the persona of the family (İmamoğlu, E. O., 1979, 1982). The inter-relationships between these differing physical conditions and the social ones and consequently some developmental indices, will have to be considered in future reports of the project.

ÜÇ DEĞİŞİK SOSYO-EKONOMİK-DÜZEYDEN GELEN ÇOCUKLARIN KONUT ÇEVRELERİ

ÖZET

Ankara'da devlet ilkokullarının birinci, üçüncü ve beşinci sınıflarında okuyan, alt, orta ve üst sosyo-ekonomik-düzey (SED) içinden 207 çocuğun konut ve yakın çevresi yedi mimar tarafından incelenmiştir. İncelemede bu amaç için geliştirilen

bir anket kullanılmıştır. Anketin birinci bölümünde anneye, ikinci bölümünde çocuğa sorular yöneltilmiş, üçüncü bölümde mimarlar yaptıkları gözlem, ölçüm ve değerlendirmeleri kaydetmişler, 1/100 ölçekli ev ve 1/50 ölçekli oda planlarını çizmiş, fotoğraflarını çekmişlerdir.

Sonuçlar genel olarak üst SED konutlarının büyüklük, yoğunluk, oda sayısı ve servis mekanları; mobilya ve donatım; aydınlatma; ses düzeyi ile çocukların gündüz zamanlarını geçirdiği, ders çalıştığı ve gece yattığı mekânlar bakımından diğer SED konutlarından daha elverişli olduğunu göstermiştir. Annelerin evlerinden hoşnut olmaları, evlerinin ideallerindeki eve yakınlığı, ideal evde istedikleri ve çocuklara vermeyi düşündükleri oda sayısı alt SED'den üst SED'e doğru artmaktadır. Diğer gruplara kıyasla alt SED ailelerindeki yaşam anne-baba-merkezli ve yoğundur; evlerde mekânlar özelleşme göstermemektedir. Çalışmada ayrıca çocukların dış oyun alanları, oyuncakları, evcil hayvanlar ve sis bitkileri ile ilişkileri ve mekân tercihleri açısından anlamlı farklar bulunmuştur.

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