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Child-Rearing Practices in the Sudan: Implications for Parent Education

A Dissertation submitted in partial satisfaction of the requirements for the degree of Doctor of Philosophy in Education by

Basim Yousif Bedri

Committee in charge:
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June 1979
The dissertation of Cavin Youssif Badr is approved:

[Signatures]

Committee Chairman

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in the completion of this study. Naturally this study could not have been completed without the cooperation of the families interviewed. They gallantly welcomed me into their homes, offered me hospitality and spent considerable amounts of time answering questions. In Elshabarga Ustaz Mustafa Mohammed Ahmed and his family deserve special thanks for accommodating me in their home during my several visits to the village. I hope this study will offer some practical benefits for the people of the Sudan, in some small way repaying the families for their time and help.

I am also grateful to Professor Wilson and Professor Zimmer for reading the final draft of this work and making valuable criticisms and suggestions.

My indebtedness to Professor Thomas goes beyond his supervision of this study. He has been a constant source of ideas and encouragement throughout my graduate years in this institution. His interest in and knowledge of the educational problem of the developing countries, inspired and steered this study to its final conclusion.

And to my wife, Anna, who has been with me during the ups and downs of my graduate life, a very special thanks.
VITA

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ABSTRACT
Child-Rearing Practices in the Sudan: Implications for Parent Education
By
Gosim Youssif Badri

Purpose of the Study
The purpose of this study has been to describe some aspects of child-rearing practices in the Sudan and to suggest some changes in those practices through parent education.

Organization of Thesis
The thesis is divided into three parts. Part one first introduces the reader to the Sudan: its history, geography, ethnic composition, and economic conditions. Second, a discussion of some of the problems and procedures in child study is offered and a rationale for using the interview technique for collecting our data is delineated. And third, a detailed picture of the families studied is given.

Part two relates the findings of the study. Here different aspects of child-rearing practices are described. These aspects are maternal warmth, feeding and weaning, toilet training, discipline, sex and sex roles, and maternal reactions to the child’s curiosity. In all these areas of child rearing a review of the psychological literature on the importance of these aspects for child development.
is offered, and a comparison between Sudanese practices and those of other cultures is given.

Part three deals with the prescriptive aspect of this thesis. It interprets child-rearing practices in the Sudan in light of the existing scientific evidence from child psychology and suggests ways of educating parents to change those practices which need change, sustain those which are deemed good, and introduce new ones which are not existing at present.

Technique of Collecting the Data

The present study is based on data gathered through using the interview technique. The interview schedule consists of forty-nine questions. The schedule was adopted from the one used by Professor Edwin T. Prothro to study child-rearing practices in the Lebanon. Prothro's interview was, in turn, evolved from the interview schedule prepared by the staff of the Laboratory of Human Development of the Graduate School of Education of Harvard University under the directorship of Professor Robert Sears.

The Subjects of the Study

The sample for this study consisted of one hundred and fifty mothers of five-year-old children. The mothers were interviewed in their homes, and each interview lasted for about one hour and a half. The mothers represented three different groups: two urban groups and one rural group. Each group consisted of fifty mothers.

Group I: This group represented well educated mothers who live
group ranged between 12 and 18 years of schooling. The husbands of these mothers had at least the same level of education as their wives. This group represented the urban middle-class family.

Group II: This group, which represented the urban lower-class family, consisted of poorly educated mothers. The maximum level of education in this group was four years of schooling. The education of the husbands in this group ranged between 0 and 12 years.

Group III: This group represented rural areas. The level of education of the mothers in this group ranged between 0 and 8 years and that of the fathers between 0 and 16 years of schooling.
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CHAPTER I

Introduction

How a society treats its children depends upon its views of what children are like as well as what is perceived as valuable and necessary for the smooth functioning of the society itself.

From earliest times scholars have studied children as a key to social change. Plato, Comenius, Rousseau, to name a few, have looked at children to discover the basic nature of mankind, and at child rearing practices as a crucial element in the building of a better society. Moreover, as a result of their investigations they have suggested certain ways of educating the young child.

Today in western countries studies of child-rearing practices abound and efforts to educate parents have long been in existence. And in socialist countries child rearing is almost a state enterprise.

In the developing countries, however, studies of child rearing are very scarce and programs of parent education are almost non-existent. Although education is rapidly spreading in those countries, few systematic studies have been made to assess the needs of the children and those of the countries. African countries, for example, are still maintaining the educational systems they inherited from the colonial powers.
The Sudan today devotes 25 percent of its annual budget to education. It is the present writer's opinion that the urgency of assessing the needs of Sudanese children so that the social and economic pay-off of schooling might justify such a high expenditure hardly needs to be emphasized.

In this study we intend to explore child-rearing practices in the Sudan. Our ultimate aim is, first, to assess these practices in light of the existing scientific evidence from child psychology and development and, second, to suggest ways of educating parents to change those practices which need change, sustain those which are deemed good, or introduce new ones which are lacking now.

In order to reach our ultimate aim, the study is divided into three parts. Part one first introduces the reader to the Sudan: its history, geography, and people. Second, it discusses some of the problems and procedures in child study. And third, it furnishes the reader with a detailed picture of the families studied.

Part two relates the findings of the study. Here we will address ourselves to different aspects of child-rearing, such as: infant indulgence and maternal warmth; feeding, weaning, and toilet training; discipline; sex and sex roles; and maternal reactions to the child's curiosity. In describing these practices we will also be drawing cross-cultural comparisons between the Sudanese child-rearing practices and those in other cultures, both cultures of the
West (such as the United States) and of the Middle East (such as Lebanon). In doing so we will first describe the similarities and differences between Sudanese society and other cultures. And, second, we will try to explain the underlying causes for these similarities and differences.

Part three deals with the issue of parent education. Parent education in the Sudan is nonexistent today. And if we are going to suggest the institution of parent education, our suggestions should be based on serious studies and accurate assessments of needs. Otherwise we will be guilty of squandering public funds and, worse still, we may harm the children we propose to serve.

It is our aim, therefore, in the third part of this thesis to suggest the need for objectives of and approaches to parent education which will meet the needs of Sudanese parents and children both in the rural areas and urban centres. We hope that these suggestions will improve the existing child-rearing practices in the Sudan.

In order to build this hope on some solid data I have used the interviewing technique to collect this data. Ideally it would have been best to collect the data by direct observation, but such a task would need dozens of observers and years to accomplish. Thus the interviewing approach is the only feasible way for our purpose of obtaining sufficient data on a wide array of topics on child rearing within a reasonable time.
Our sample for this study consisted of one hundred and fifty mothers of five-year-old children. The mothers were interviewed in their homes, and each interview lasted for about one hour and a half. The mothers represented three different groups. Each group consisted of fifty mothers.

Group I: This group represents highly educated mothers who live in Khartoum, the capital of Sudan. The level of education in this group ranges between 12 and 18 years of schooling. The husbands of these mothers have at least the same level of education as their wives. This group represents the middle-class family.

Group II: This group consists of uneducated mothers who live in Khartoum. The maximum level of education in this group is four years of schooling. The education of the husbands in this group ranges between 0 and 12 years. This group represents the lower class.

Group III: This group represents rural areas. The level of education of the mothers in this group ranges between 0 and 8 years and that of the fathers between 0 and 16 years of schooling. In this group the majority of the families are of low income. Only five families may be considered of high income. The mothers in these families work as teachers in the local elementary school.

In dividing the families into middle class and lower class we are assuming that it is possible to make meaningful statements about social class in the Sudan. Evidence for this existence of a class
CHAPTER II
The Land and the People

The Sudan is a vast country and its peoples are of varied ethnic background. Any study of child rearing practices in the Sudan has be necessity to be limited to certain ethnic groups or geographic regions. This chapter intends to serve two purposes: first, to give the reader a brief idea about the Sudan and its peoples; and second, to give reasons for our choice of the regions we have chosen to conduct our interviews in.

The Republic of the Sudan is the largest state in Africa and covers an area of almost one million square miles. It stretches between latitude 25° North and 4° North and between longitude 22° West and 33° West. The Sudan shares boundaries with Egypt and Libya in the North; Chad and the Central African Republic in the West; Zaire, Uganda, and Kenya in the South; and Ethiopia in the East; and it has some 400 miles of coastline on the Red Sea.

Climatically the Sudan lies wholly within the tropics; and apart from the narrow plain on the Red Sea, it is entirely landlocked and has a predominantly continental climate. With the exception of the Sudd region in the South, where there are extensive swamps, and a few areas on the Red Sea and in the west and northeast, where some hills are to be found with local climatic effects, this
Large territory consists almost entirely of one vast plain. It may conveniently be divided into three fairly distinct zones. The northern zone from latitude 25° to about 18° North consists of desert land and forms part of the Sahara. With temperatures as high as 102°F on an average, and northerly winds blowing from the Sahara throughout the year, this is one of the hottest and driest parts of the world. The central belt from about latitude 18° to about 32° North, contains the richest agricultural and grazing lands in the country, including the Gezira (meaning Peninsula) between the White and the Blue Nile, where cotton, the most important cash crop, is grown. Here, the climate is somewhat milder than it is in the northern zone. This zone is the nerve centre of the country — the most active, the richest, and most thickly populated part of the Sudan. The Southern zone of the Sudan extends over some 350 miles between latitudes 12° and 4° North. This region is characterized by heavy rainfall of well over 50 inches annually, consequently, the vegetation of the country changes from thorny desert shrub in the north to richer grasslands in the centre and thickly forested jungle in the extreme south.

Traversing these three zones and, in a sense, uniting them with one another is the River Nile and its tributaries. The most important of these is the Blue Nile which rises from Lake Tana in the Ethiopian Plateau and when in full flood, moves rapitcly into the Sudan.
bringing with it the bulk of the water and the silt which give
life to the valley as far as the Mediterranean Sea. At Khartoum it
is joined by the more steady White Nile which flows from the Great
Lakes of East and Central Africa. On its way it is fed by numerous
tributaries, the most important of which are Bahr al-Orab from the
west and the River Sobat from the east. From the point where it
meets the latter, the White Nile slowly makes its way to Khartoum.
Beyond Khartoum, where it is joined by the Blue Nile to form the
River Nile proper, there is only one tributary, the River Atbara
which rises in northern Ethiopia and meets the Nile about 200 miles
north of Khartoum. From that point to the Mediterranean, a distance
of about 1700 miles, there are no tributaries; and with less and
less rainfall, both human and animal life become increasingly
dependent on the Nile.

Diversity is not confined to the physical features of the
country alone but is also reflected in its population. Ethnically,
the Sudanese represent a cross-section of all Africans. Some are
Arabs, some Hamites, some Negroid-Africans, and some a mix-
ture of two or of all three. Some sources claim that there are 697
tribes in the Sudan comprising 56 tribal groups.4

Traditionally the people of the Sudan have been divided into
Northerners and Southerners or Arabs and Africans. This, I think,
is an oversimplification, for a careful look does not yield this
clear a dichotomy. The 13 million people who live in Northern Sudan are by no means a homogeneous group; nor, for that matter, are the four million who inhabit the Southern provinces.

The people living along the banks of the Nile between Kefa in the far north and latitude 15° North, where the northern limit of the Southern Sudan begins, are of mixed blood. They are a blend of three races: Nubian, Arab, and African. The Nubians who live in the Kefa-Dongola region resemble their neighbors in Upper Egypt. Here the Nile, fringed by palms and water-wheels, twists through the great desert with cultivation on both banks. The people plant the foreshore as the river falls and drive their herds to graze inland behind their villages. While adopting Islam as a religion, the Nubians have retained their own language.

South of Dongola and up the Nile to Khartoum live the tribes which claim to be of Arab origin. Subsumed under the name of the Ja'ali group, these tribes are Muslim and speak Arabic as their mother tongue. It is these tribes that give the Sudan its Arab character. Moreover, the Ja'ali group together with Nubians form the ruling class in the Sudan, for the majority of the educated Sudanese come from these tribes.

To the east between the land of the Nubians and the Red Sea there lives a third race, completely different from the previous two. These are the Beja. A Hamitic group, the Beja occupy the
northeastern quarter of the Sudan and lead a nomadic life, herding their sheep and camels. Like the Nubians, they adopted Islam without relinquishing their Hamitic languages.

To the West of the Beja land between the Atbara River and the Blue Nile, a large nomadic tribe, Elshuirjiya, roam the land with their herds of camels. These are both Arab and Muslim.

The western part of the country is also a mixture of different ethnic groups. Here we find the camel-owning Rabbabish and other Arab nomads who do more business with Libya and Egypt than with the other parts of the Sudan.

South of these tribes we find a more settled people, originally nomads, now living in an area with better rainfall, where millet, sesame, and groundnuts are grown. Their herds include fewer camels and more cattle. These are the Fur, the Masalit, and Berti of Darfur. Again, these tribes became Muslims and retained their own languages.

However, there are also Arab tribes among the cattle-owning tribes. These are the Rizeigat, Messeria, and Hamazma. They live in camps dotted across the whole breadth of the land to the west of the Nile -- in Southern Darfur, Southern Kordofan, and White Nile. During the dry season they move south where they come into contact -- not always of a friendly variety -- with the Dinka, Nuer, and Shilluk of Upper Nile and Bahr-el-Ghazal provinces.
The last major ethnic group in Northern Sudan is the Nuba. They live southeast of Kordofan where a series of rocky masses rises from the plain. Secluded in their mountains, the Nuba, by and large, maintain their traditional beliefs; few of them have been converted to either Christianity or Islam.

The Southern Sudan is also characterized by diversity. Usually the Southern tribes are divided into two main groups. However, this should not conceal the heterogeneity within each group. The two groups are the Nilotic and the Sudanic tribes. The former are mainly cattle-owning tribes while the latter live by cultivation.

The Nilotic tribes consist of three tribes: the Dinka, the Shiluk, and the Nuer. They live in Upper Nile and Sahr-el-Shasal provinces where they herd their cattle and engage in hunting and fishing. They are the most important tribes in the Southern Sudan, not only because they constitute the majority of the population but also because they all live within the boundaries of the Sudan and hence are distinct from other African tribes.

The Sudanic group is made up of a multitude of small tribes. In the Upper Nile province, home of the Nilotics, we find small pockets of Sudanic tribes like the Beir. In the extreme southeast live other groups related to the tribes of Ethiopia and Kenya. Equatoria province is the home of the Sudanic tribes. On both sides of the river we find the Barl, who speak a language similar to that
of the Kassai of Zaire. In the southwest of the province live the
Azande whose main home is Zaire.6

Unlike the northern part of the country, the South remained
closed to external influences till the 1880's. In spite of mission-
ary endeavours by Catholic and Protestant missionaries, few south-
erners were converted to Christianity. Fewer still became Muslims
through the influence of northern traders. The majority retained
their traditional beliefs.

Culturally, however, the country is far more homogeneous than
it is racially. For although slightly more than one-third of the
total population claim Arab descent, over half speak Arabic as their
mother tongue. Most of the rest, including the Southern Sudanese,
use Arabic or a pidgin form of it as a lingua franca.7

Reasons for this are not hard to find. In the first place,
the majority of the Sudanese are Muslims. Historically speaking, the
spread of Islam went hand in hand with that of the language of the
Qur'an, Arabic. Secondly, the fact that Arabic is the national
language used in business, education, journalism, broadcasting, and
in government offices at once explains its adoption throughout the
country. Finally, the intermixing of the population in the North
has greatly contributed to the spread of Arabic. In so far as the
Southern provinces in particular are concerned, it is hoped by
Sudanese officials that the Addis Ababa agreement of 1972, which
ended the civil war in the Sudan, will facilitate the spread of Arabic language to those sectors as well, for the agreement stipulated that Arabic should be taught in all schools.

For the time being, however, more than 40 percent of the Sudanese speak languages other than Arabic at home and use Arabic only as a lingua franca. This is true mostly in the Southern provinces but also, though to a much lesser extent, in the Red Sea Hills, the Dongola and Halfa districts of the Northern Sudan and certain parts of the Western Sudan.

Nevertheless, the spread of education, the improvement in communication, and economic development should lead to the removal of the language barrier among the Sudanese.

Economically the Sudan presents a less diversified picture. The economy of the Sudan is predominantly agricultural and pastoral with land and water as the main sources of production and income. The majority of the people, (80 percent) are either peasants or animal breeders; 60 percent of the national income is derived from agriculture, livestock, and forestry. Agricultural and animal products dominate the export trade while manufactured goods form a substantial part of imports.

Though underdeveloped, the Sudan, in some respects, exhibits different features from other similarly placed countries. Land is abundant and there is no population pressure on the available supply
of cultivable land. Out of the country's 60 million hectares which are potentially cultivable land, only 37 million hectares are at present being used. On the other hand, the population of the Sudan is estimated at 10.2 million people.9

The structure of economic activities in the Sudan may best be viewed as comprising two economies. There is on the one hand the subsistence economy in which production for the market plays a small part and where most of the population is engaged in the rain-fed cultivation of food crops using primitive methods. On the other hand there is the money economy devoted to the production of cash crops, notably cotton, with modern methods of irrigation and tillage.10 Cultivators in this sector get direct supervision from government inspectors. This is especially true of those engaged in the Gezira scheme which provides the government with nearly 40 percent of its revenue. Other foreign exchange earners in addition to cotton are sesame seeds, ground nuts, camels and cattle, oil cake, hides and leather goods, and gum arabic.11

Both economic development and labour resources are unevenly distributed in the country. Annual per capita income is very low even in comparison with other developing countries -- about $150.12 This conceals wide divergences among the different regions. Annual per capita income in the Gezira province, where the Gezira scheme is located, is estimated at $200 while in the southern provinces, the
will now turn to the social stratification of the population. Unlike in the industrialized nations, the societal cleavage is not between the haves and the have-nots or the upper class and the lower class but rather between the urban and rural population. Although the urban population comprises about 13 percent of the total population, almost all of the government services are concentrated in the urban centres. Schools, hospitals, electricity, running water, etc. are scarce in the rural areas. This inequity in the distribution of services has lead to an influx of rural people into the cities. This is especially true of Khartoum where almost half of the urban population live. Most of those people who come from rural areas lack both education and skills, so they become unemployed or, at best, they take up menial jobs with very low income, thus swelling the number of the urban proletariat. The urban proletariat was almost negligibly small until the mid-1960's when a combination of factors produced a significant increase in their numbers. Lack of policy to develop the rural areas, the attractions of urban life and the continued supply of school graduates who could not all be gainfully employed, all combined to heighten unemployment and disguised unemployment in the capital cities.

The upper class in the Sudan has been and continues to be
very small. This is mainly because the land belongs to the government; so there has never been a landed aristocracy in the Sudan as the ones that could be found in Egypt, Ethiopia, and India until recently. Also, the government controls most of the important economic enterprises. Consequently, the private sector beyond the small shopkeeper level has consisted primarily of a rather small number of local merchants plus some important businessmen.

The third urban group, and by far the most important, is the salaried middle class. It is mainly composed of civil servants and various professionals. The sole requirement for membership in this group is education. As such the middle class has been very active in recent history and has furnished leadership in the independence struggle and for subsequent political development. Moreover, the middle class members by virtue of their education are very much westernized. It is also in this class that we see the shift from the extended family to the nuclear family. It should be noted, however, that this does not mean a complete break of kinship ties but rather a lessening of these ties and an attempt for more independence and privacy as reflected in living in separate houses, for example.

To sum up, the widest disparity in Sudanese society is that between the rural and urban areas. The former are neglected and deprived of all signs of modern life, while the latter enjoy the
amenities of modernization — T.V., cars, medical care, education, entertainment centres, etc.

The above brief account of the geography, ethnography, economy, and social stratification of the Sudan is intended to help us in understanding the data that we have gathered and to point to the importance of these factors in determining human behavior. There is evidence to suggest that different forms of economics and of social organization relate to different ways in which young children are perceived and trained. 14

With the diversity of socio-economic and ethnic forms found in the Sudan, we cannot point to one world in which Sudanese infants are born and in which they are nurtured. Nor can we prescribe ways of training children which would be applicable to all parts of the country. The concerns of the nomadic tribes in the Western Sudan, for example, would be different from those of the farmers in the Okeira area. And the problems encountered by children in the jungles of the Southern Sudan may be very different from those faced by children in the desert-like Northern province.

Moreover, the problem of diversity in the Sudan is further complicated by the presence of several languages in the country. It is not only that children whose mother tongue is not Arabic will be at a considerable disadvantage in schools, but also in order to understand the culture of those children one needs to know their
ing practices of the different cultural groups in the Sudan, such a
task will prove to be formidable and time consuming. The present
writer, therefore, has to limit his study to certain parts of the
Sudan.

In this thesis, we are concerned with the central Sudan. I
have chosen the central Sudan for several reasons. First, it is
the most homogeneous part of the country. Although the inhabitants
come originally from distinct tribal groupings, there is a common
tradition and culture stemming largely from a shared language,
Arabic, and religion, Islam. Interaction between the members of
different groups is thus facilitated. Second, it constitutes the
largest single culture in the country, being composed of about 35
percent of the population. And third, it is the most prosperous and
influential part of the country and thus is where we can most reason-
ably expect any future development in early childhood education to
develop and spread.
CHAPTER III

Some Demographic Characteristics of

The Families Studied

In this chapter we will first briefly describe the communities from which the samples are drawn; and second, we will examine some of the demographic characteristics of the samples in some detail. The sample description will cover: (1) the socio-economic status of the families, (2) education of parents, (3) mother’s employment history, (4) household size and composition, (5) age of parents, and (6) sex ratio.

The communities were selected after considering the various geographical, ethnic, cultural, and related factors discussed in the preceding chapter. First it was decided to draw some of the subjects from the comparatively modern capital city of Khartoum. Second, to make the Khartoum sample representative of the population of the city as a whole, it was deemed desirable to divide the sample into middle-class and lower-class. And third, to make the study representative of the central Sudan, we needed to draw another group from a rural area.

In the Sudan the urban population comprises about 13 per cent of the whole⁴, and more than half of this is made up by the inhabitants of the “Three Towns” of Khartoum, Omdurman, and Khartoum North. These three cities stand on the three sites afforded by the
confluence of the Blue and White Niles and are known as the triangular capital. Khartoum is the official capital and the seat of the central government, companies' head offices, and embassies. Omdurman, affectionately referred to by its inhabitants as the national capital (because it was the capital of the Mahdist state), is essentially a residential area. Unlike Khartoum, it has very few high buildings and is less westernized. Khartoum North is a light-manufacturing as well as a residential area. Our urban sample was drawn from families living in those three cities.

The rural sample was drawn from a village 125 miles south east of Khartoum called Elshabarga. It is almost one square mile in area with a population of nearly 7,000 inhabitants. Like other villages in central Sudan, settlements in Elshabarga are of a concentrated type, houses being clustered together according to a rather irregular pattern. Usually houses in the villages are built of unfired mud-brick. However, in Elshabarga a considerable number of houses are made of fired red brick. This is mainly because one of the occupations of the people there is brick-making. The village does not have electricity. The main occupation of the people is agriculture. Also some of the village's youths are employed in the different government departments in Medani, the capital of the Gezira province about 20 miles to the west of Elshabarga.

Let us now examine some of the demographic characteristics of the families studied.
we need to specify some of the features which enable us to classify a family as lower- or middle-class. In a country like the Sudan, where the illiteracy rate is extremely high, education becomes a viable index of social stratification. Other indices used are occupation and housing conditions. The following description of certain families may help to clarify the distinction we made between lower- and middle-class. Here are some typical lower-class families:

(A) Father works as a driver in a government department. Neither parent has any schooling. Five children. Mud house consisting of two rooms. Monthly income of $140.

(B) Father is a shopkeeper. He spent four years in school; his wife is illiterate. Six children. Mud house consisting of one room and a veranda.

(C) Father works as a foreman in a construction company. He has four years of education and his wife has three. Six children. Mud house consisting of two rooms. Monthly income $95.

Next let us describe some of the middle-class families:

(A) Father is a police officer and mother works as a school teacher. Father has fifteen years of education and his wife has eight years. Two children. House made of red brick and consists of four rooms. Monthly income $100.
(b) Father is a high ranking executive in ministry of communication and mother is a school teacher. Both are university graduates. Two children. Red brick house with four rooms. Monthly income $500.

(c) Father is a professor of agriculture and mother is a housewife with twelve years of education. Three children. Red brick house consisting of three rooms. Monthly income $570.

From the above descriptions a fairly general pattern emerges. On the one hand, lower-class families have little education, low income, and poor housing conditions. Middle-class parents, on the other hand, are well educated, have high income, and their homes are larger and often have items, such as televisions and refrigerators, which are absent in lower-class homes.

Our rural sample does not lend itself to social stratification. Elshabarga, like most other Sudanese villages, is a class-halt community where almost everybody is somehow related to the others. Although the income of the families interviewed varies between $950 and $168 per month, the living conditions of the families in the village is almost identical. For one thing the houses are usually similar, consisting of a compound containing a number of small rooms surrounded by a wall from four to six feet high. The walls are protected on the outside with a mixture of dung and clay. The roofs are flat and are made of thatching supported by logs of wood. The floors are merely of pressed earth. Second, because of lack of electricity supply in the village even people who can afford to buy
electrical appliances cannot do so. Third, all of the children go to the same school and are taught by the same teachers.

Education of Parents

As education was one of the criteria used for determining social class, there is a class difference in educational achievement. Also our sample reflects the national dichotomies between the level of education of men and women and of urban and rural areas. Table 3.1 provides a detailed description of the education of parents in our sample.

Table 3.1 Level of education of parents

<table>
<thead>
<tr>
<th>Community</th>
<th>Years in school for father</th>
<th>Years in school for mothers</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban middle class</td>
<td>0 1-4 5-8 9-12 13-16 17-</td>
<td>0 1-4 5-8 9-12 13-16</td>
</tr>
<tr>
<td>Urban lower class</td>
<td>0 0 0 14 33 3 0 3 10 24 13</td>
<td></td>
</tr>
<tr>
<td>Rural</td>
<td>2 14 24 0 0 0 0 10 12 0 0</td>
<td>0 45 13 4 0</td>
</tr>
</tbody>
</table>

It is interesting to note that all of the mothers interviewed in Elshahbarga have had some schooling. This finding, however, is not typical of other rural areas in the Sudan. Thanks to the efforts of a local notable, Sheikh Youssif Jameel, who established a girl's
school in the 1920's, almost all of Elshabarga's women have been able to obtain some formal education.

On the whole, our data support the expected lead in educational achievement of middle class over lower class, of city people over rural inhabitants, and of men over women.

Mother's Employment History

Toward the end of each interview in the present study, the mothers were asked whether they had worked before they were married and/or if they are working now. Only ten percent of the mothers said that they had worked before or are still working. Of these the majority were middle-class mothers who have worked as teachers, secretaries, or bank clerks. The lower-class mothers worked in their homes as dress-makers. The lower-class mothers gave the reason for not working as being that they were too much occupied with household duties. Also one may add that if they lacked education and if they did not have the necessary skill for dress-making, for example, there was little that they could do by way of employment. Middle-class mothers, on the other hand, said that the reason they did not work was because they had married immediately after leaving school or their parents or husbands did not want them to work.

For our sample of rural women, employment was limited to the village school. Four of the mothers interviewed work as teachers in the school. One other mother reported that she sold small articles which she made in her home.
Household Size and Composition

The family, either in its nuclear or extended form, and the lineage are very important in Sudanese society. While urbanization has led, by and large, to the weakening of tribal allegiance, it has not affected familial ties. Although there is a trend, especially among middle class families, toward independence and small households comprised only of the nuclear family, still a considerable number of families in urban centers live in an extended form in one house. Within the middle class, for example, 34 percent of the families interviewed lived in an extended form. Within the lower class the percentage of such families jumped to 76 percent.

In the rural areas the extended household is the prevalent mode of living. Eighty percent of the families interviewed live in an extended household. Not only that, but also the composition of the household itself is more complex than that in the city. In the city the extended household usually consists of the nuclear family and a spouse's parent(s). In tishabargha families still live by the old system of Mauh. Mauh literally means courtyard. In this system each offspring upon getting married moves into a separate room within the Mauh of his or her parents. Thus the household consists not only of the spouse's parents but also of their married and unmarried siblings.

It is interesting to note that the extended family in the
central Sudan is neither patrilineal nor matrilineal in nature. Whether a man lives with his own parents or those of his wife depends mainly on the availability of space. This contrasts with the traditional Arab family pattern in which the extended family is patrilineal.

The number of children in each family is presented in Table 3.2. Although there were no consistent class differences in family size, the middle-class sample had more small families of two or three children than did the other two groups. Also, in the village families tended to be larger than in the city. In Elshabarga more than 50 percent of the families had six or more children, whereas only 19 percent of the urban families had more than five children.

Table 3.2 Number of children in each family

<table>
<thead>
<tr>
<th>Group</th>
<th>No. of Children</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>2</td>
</tr>
<tr>
<td>Middle Class</td>
<td>16</td>
</tr>
<tr>
<td>Lower Class</td>
<td>3</td>
</tr>
<tr>
<td>Elshabarga</td>
<td>0</td>
</tr>
</tbody>
</table>

Age of Parents:

Data on age in the Sudan is usually unreliable, especially in
Certificates have only recently been introduced. Second, Sudanese women are no exception to the prevalent practice among women of reducing their age. And third, not all wives know the exact age of their husbands. For all these reasons the data on age, especially of the lower class and Elshabarga, should be regarded at best as an approximation. A summary of the data is presented in table 3.3.

<table>
<thead>
<tr>
<th>Age Ranges</th>
<th>20-29</th>
<th>30-39</th>
<th>40-49</th>
<th>50-59</th>
<th>60-69</th>
</tr>
</thead>
<tbody>
<tr>
<td>Middle Class Father</td>
<td>0</td>
<td>27</td>
<td>19</td>
<td>3</td>
<td>1</td>
</tr>
<tr>
<td>Middle Class Mother</td>
<td>21</td>
<td>26</td>
<td>4</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Lower Class Father</td>
<td>10</td>
<td>27</td>
<td>12</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lower Class Mother</td>
<td>27</td>
<td>21</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Elshabarga Father</td>
<td>2</td>
<td>26</td>
<td>22</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Elshabarga Mother</td>
<td>26</td>
<td>22</td>
<td>2</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Father</td>
<td>12</td>
<td>80</td>
<td>53</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Total Mother</td>
<td>74</td>
<td>68</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Fifty per cent of the mothers reported that they were in their twenties, and forty-five per cent placed themselves in the thirties.
None was over 45 years. The majority of the fathers were in their thirties and forties. The husbands were seven years older than their wives, on the average. This is a bigger difference than that found by Sears in the United States.9

Sex Ratio

The interview with each mother was centered around her five-year-old child. Early in the interview the name and sex of the child was determined so that the subsequent questions would refer to him or her specifically. Of the 150 children, 79 were boys and 71 were girls. The excess of males over females is typical in population surveys in the Sudan -- males 52.5 per cent and females 47.5 per cent.6

Summary

The above description of our sample reveals that families in the Sudan tend to be large; that the level of education of the father is a viable index for classifying urban population into middle and lower class; that urban people are more educated than rural people; that the majority of the mothers in such groups do not work; and that the extended household is the major mode of living in rural areas and among the urban lower-class families.
CHAPTER IV
The Research Technique

In the previous chapter we have described in some detail the families we have studied. In this chapter we will discuss the procedure of the study and the sampling procedure. First, we will explain why we have chosen the interview technique as a mode of investigation. Second, we will describe the areas covered by the interview. And third, we will discuss the issue of the validity of the data gathered.

One of the main purposes of this thesis is to suggest ways of educating parents to become better child rearers and hence to maximize the likelihood of optimal development for each Sudanese child. In order to be most effective in offering such suggestions, we need to know the present situation of child rearing practices in the Sudan. Such knowledge can be reaped either by: (1) direct observation of mother-child interaction in different situations and at different age levels or (2) by generating this information indirectly from answers mothers give to questions pertaining to child rearing.

Advocates of the direct-observation approach maintain that it yields valid data. This may be true but it has to meet several conditions to ensure the validity of the information gathered. First, it is important to ensure that the presence of the observer will not
change the usual pattern of mother-child interaction. In the Sudan, this is very difficult to accomplish because people are much affected by what others might say about them. It is a shame-oriented culture rather than a guilt-oriented one. Second, such observations need to be made either by trained investigators or by parents who have been specially trained in objective observation. In a country like the Sudan where illiteracy abounds, it will be very difficult to find such objective observers. And third, such a task by its very nature would require years if it were to be done well. For all these reasons we opted to gather our information by way of interviewing mothers.

Although the interview approach helps us in obtaining sufficient data on a wide array of topics on child rearing within a reasonably short time, it leaves us with the problem of the validity of the data thus gathered.

In our case, the problem of the validity of the information obtained may be posed as: How do we know the mother is telling the truth? The short answer to this question is that we do not know. But we estimate that we can reasonably expect mothers, or for that matter anybody, to tell the truth in an interview situation in which the subject feels free to say anything he or she wishes. In the present research several techniques were used to help ensure that respondents did not feel compelled to give answers other than their
true opinions.

First, there is no question of the mothers' methods of child-rearing being judged by a supposed "expert." During the interview, the present writer deliberately underplayed any status which he might seem to have as an "expert." Questions were phrased in a way to suggest that the mother is the one considered to be the expert on her own child.

Second, the questions were phrased in a way which was intended to prevent stereotyped answers. For example, there is no way that the mother can detect from the question a desirable answer. If mothers were asked directly if they slapped their children or not, we could well expect them to deny it even if it were true. To avoid such distortion the question assumes the existence of the behavior and it is phrased as "When you smack your child what instrument do you use?" (Instead of asking "Do you smack your child?").

Third, the technique we adopted in the interview is an open-ended one. While the nature and form of the scheduled questions are carefully determined, the mother is not forced into a limited set of responses. She can answer at length; she can state any qualifications and reservations she may wish to make. Just as we make no evaluations as to the rights and wrongs of her child-rearing methods, so we do not try to judge the information she offers as trivial or important. Indeed the mothers are encouraged to elaborate, for the
function of our questions is both to trigger off the mother's own
discussion of the topics in which we are interested and also to
allow her to introduce any topic which she may consider of interest.
It is only at a later stage, and on the basis of these total answers,
that we attempt to classify for the purpose of statistical analysis
the sorts of things which mothers typically do or say.

Fourth, the interview itself is rather long -- it normally took
over an hour and frequently considerably longer -- and I have thus assum-
ed that it simply is not practicable for a person consistently to
dissemble for that length of time.

And last, the fact that the interviewer was a member of the
culture gave the interview an informal atmosphere which I think
helped the mothers to feel relaxed and free to relate their
experiences. In fact, many mothers were enthusiastic at the
opportunity to describe some problems and talked at such length
that there was no doubt about their beliefs and attitudes. In many
occasions, I have encountered what a prominent psychologist in the
field of testing said: "Most people enjoy talking about themselves --
Dr. Gallup's door-to-door interviewer finds getting away one of his
hardest problems."

To sum up, given a situation in which she has no means of really
knowing the interviewer's opinion, given that we are committed not to
judge her, given that we take seriously whatever she says -- given all
these, there seems to be a high degree of likelihood that the mother
The Interview

The interview schedule consisted of 49 questions. The schedule
was adapted from the one Professor Edwin T. Prothro used
to study child rearing practices in Lebanon. Prothro evolved his
interview mainly from the interviewing schedule prepared by the
staff of the Laboratory of Human Development of the Graduate School
of Education of Harvard University. This schedule, with the results
obtained from its use, was described in detail in *Patterns of
Child Rearing* by Robert Sears et al. According to Prothro the
Harvard Schedule "covered a wide range of maternal behavior and
explored most of the facets of child rearing considered important
by contemporary psychologists." Moreover, modeling our research
after that of Prothro enabled us not only to compare our findings
with those of Prothro but also with those obtained in the United
States by Sears and his colleagues.
The Conduct of the Interview

The interview opened with general questions about the manner of children in the family and the composition of the household. Then it centered on the five-year-old child in the family. The mother was then asked about the feeding habits of her child; her methods of discipline; her techniques of and attitude toward weaning and toilet training; her idea of a good child; her aspirations for her child's future; her interactions with her child; her husband's participation in child rearing; and her attitude toward her child's expression of curiosity.

Although the interview questions in the following list are in English, the list actually used for the study were in Arabic.

The Interview Schedule

1. To begin with, I would like to get a general picture of your family.
   a. How many children do you have? Does that include girls and boys?
   b. How old are the boys? The girls?
c. Which of the children go to school? What school? What grades?

d. Does any relative live with you in the house? If yes, who is the relative?

2. Let us go back to the time when X was an infant. Who took care of him/her most of the time?
   a. Did your husband help in taking care of him/her?
   b. Did anyone else help in taking care of him/her?

3. Some mothers believe it is necessary to pick up a child when he cries, while other mothers let the child cry lest he get used to being picked up. What is your opinion about this?
   a. What did you do when X was an infant?
   b. What was your attitude at night?

4. Did you have time to spend with X other than the time spent taking care of him, such as nursing him and bathing him?
   a. (If yes) Tell me, what did you do during that time?

5. Do you believe that children are more pleasing in infancy or when they are older?

6. Now tell me something about your way of feeding him when he was an infant.
   a. Did you suckle him? For how long? (If not) How did you decide to use the feeding bottle?
   b. Tell me about the method of weaning him (from the feeding bottle or from the breast?)
   c. When did you begin to wean him?
   d. What led you to begin weaning him?
   e. How did the weaning affect him?
f. Did he take any liquid from the cup before weaning?
g. How long did it take him to stop suckling completely?

7. Could you tell me now something about his feeding schedule?
   a. How many times a day was he fed?

8. Suppose he does something which you do not like, what do you do?

9. Did you use diapers for him? For how long?

10. When did you start training him in bowel control?
    a. Was he easily taught?
    b. What method did you use? Did he become upset?
    c. How long did it take to train him completely?
    d. What did you do when he sometimes forgot after having been trained?

11. Now could you tell me what you did if he wet the bed at night?
    a. How did you feel about it?
    b. What did you do when you found the bed wet?

12. You know how children sometimes like to go around without their clothes on. How do you feel about this?
    a. (If negative) what did you do to teach X that this is not approved off?
    b. When did you start teaching him this?

13. What did you do when you found X playing with his genitals?
a. Is it advisable to prevent children from doing this?
14. Does he have any idea about how children are born?
   a. (If yes) Where did he get this information?
15. Some parents require a child to obey immediately (when told to stop making noise, for example). Others do not attach much importance to how quickly a child obeys. What is your opinion on this?
   a. What is your husband's opinion?
16. Suppose you asked him to do a certain job, and he did it immediately. What would you do? Would you say anything to him?
17. If I neglected your request, would you forget it or would you insist until he did it?
18. Does he seem to want such attention from you? How about following you around and staying close to you?
   a. Did he pass through a period in which he did this?
   b. How do you feel when he follows you around and stays close to you?
19. What level of education do you want him to reach in school?
20. Do you think there is any difference between rearing girls and rearing boys?
   a. Is there a difference in behavior when they are at the age of X?
   b. (for boys) Does he like games and that sort of thing?
   c. (for girls) Does she like boyish games?
21. Could you tell me something about X's relations with his brothers and sisters?
   a. How do you feel when children quarrel?
   b. What type of disagreement necessitates your intervention?
   c. What do you do when they quarrel? Give me an example.
   d. And when the children's relations are good, do you show in any way your satisfaction with their behavior? (If yes) What would you do?

22. In general, could you tell me something about X's relations with the neighbors' children?

23. What do you do when X disagrees with the neighbors' children during play?

24. Some people feel it important that the child not learn to fight with other children, while others feel that it is important for them to learn how to do this. What is your opinion?
   a. Do you encourage X to fight back in self-defense?

25. A child sometimes gets angry and tries to hit his parents, to scream at or to insult them. To what extent should his parents ignore this?

26. What do you do when he is intentionally disobedient?

27. Do you have a special arrangement to reward X when he behaves well?

28. Some parents praise their children so as to encourage them to behave well. Others consider that good behavior is simply to be expected.
   a. What is your opinion on this point?
29. When you smack X what instrument do you use?
   a. What does your husband use?
30. Do you think that beating is useful?
31. Do you prevent X from having something he likes for the purpose of teaching him?
32. Do you often threaten him, and then do nothing for some reason or another?
   a. What might make you fail to follow through?
33. When X was an infant did he suck his thumb often?
   Sometimes?
   a. When did he start?
   b. When did he stop?
34. What do people do to keep their children well?
35. Now I would like to ask you about X and his father. Can you tell me something about how they get along together?
   a. For example, when your husband comes home from work and X is at home, what happens?
36. What is your husband's attitude toward X?
   a. Does he often show his affection (kisses and embraces him, for example), or is he reserved?
37. Who disciplines X when he needs it and both you and your husband are present?
38. Do you think that X resembles his father rather than you? In what respect?
   a. Does he imitate you in talking, gestures, or way of walking?
   b. Does he imitate his father in those things?
39. People differ on the meaning of 'good boy' (or 'good girl'). In your opinion, what is a good boy (or girl) who is five years of age?

40. What do you expect him to become in the future?

41. As you know, children like to ask many questions. What do you do when X asks you a question?

42. Some mothers believe that there are some people children should not ask questions of while other mothers allow children to ask anybody. What do you think about this?

43. Do you get fed up with X's questioning? What do you do to X?

44. Do you think it is good or bad for children to ask questions? Why?

45. Do you think it is good or bad for children to play with things? Why?

46. We have just about come to the end of our discussion. One thing I would like to know: How do you feel about being a mother?
   a. How wish you would tell me about your feeling when you discovered that you were pregnant (with X)?
   b. How did your husband feel about it?

47. From the viewpoint of expenses, are of the children, etc., do you think X's coming was suitable?

48. If you think back on the matter, do you think if X had been delayed a little it would have been better for you? Tell me about this.

49. What does your husband do for a living? Is there another income? Does the mother work?
The Sampling Procedure

As we have mentioned in Chapter Three we have studied three different groups: urban middle-class families, urban lower-class families, and rural families. In a country like the Sudan where public records are neither easily available nor adequately compiled, securing subjects for studies such as the present one depends primarily upon personal contacts. It is through using this procedure by and large, that we secured our sample. Our urban sample was procured by utilizing three different avenues: (1) kindergartens, (2) child health centres, and (3) selection of certain neighborhoods. I contacted several private kindergartens which usually cater to middle-class children. Some of the parents agreed to be interviewed while others did not even reply to my request.

The lower-class families were recruited from two sources: the child health centres and neighborhoods. The clients of the child health centres are mostly lower-class mothers who bring their infants to the centres for inoculation and other public health services. All those who had five-year-old children agreed to be interviewed. The second method of locating some of the lower-class families was by visiting lower-class neighborhoods. In Omdurman there are certain sections of the city which are exclusively inhabited by lower-class families. The neighborhood from which I drew some of the sample is called Elsalona. I sought the help of an acquaintance
The rural sample was recruited through the help of the local elementary school staff, especially Mr. Mustafa Mohamed Ahmed. After I explained the purpose of the study and the kind of people I needed to interview to the staff of the school, Mr. Ahmed kindly volunteered to contact the heads of the appropriate families to let me interview their wives.

**Statistical Analysis**

The statistical technique used to analyze the data in this study is the Chi Square Test of Independence. All of the data have been tested for significant differences. However, only those statistically significant differences are reported here. Some data is analyzed using a 3x2 contingency table and some by collapsing the data into a 2x2 table.
INTRODUCTION TO PART II

In most developed countries the health, education, and welfare of children have traditionally been seen as major concerns of both the public and the private sectors of society. In less developed countries like the Sudan, the governments concentrate on economic development as a means of improving the lot of the people. However, the present writer agrees with those who believe that the development of human resources should at least go hand in hand with economic development. With the meager resources of the government careful planning becomes imperative to achieve this goal.

If we are to plan more rationally for the allocation of resources and services to children, both directly and through their families and communities, it is essential that trustworthy information concerning child-relevant matters be readily available at many levels and in many forms. Since children as well as their problems are multifaceted, the present writer is convinced that such information should be concerned not only with their physical health and capacity with regard to social, cognitive, and emotional functioning but also with the goodness of their environmental circumstances — physical, economic, and social.

Although such information is essential for planning services for young children, it was beyond the scope of the present study to acquire all this information. However, our aim in this study has
been to procure an important component of the information needed, namely, parental influences on the development of the young child as transmitted through child-rearing practices.

In the following chapters we shall describe different aspects of child-rearing -- e.g., weaning, toilet training and discipline. In all these areas we shall first review the psychological literature regarding the importance of these practices to child development, describe the Sudanese ways of carrying out these tasks, and compare the Sudanese approaches with those of other cultures. Throughout the presentation we shall be descriptive rather than prescriptive. Part III of this thesis is devoted to the prescriptive aspect, that is, to the implications that the findings in Part II hold for parent education.
CHAPTER V
Infant Indulgence and Paternal Warmth

Many students of culture feel that a good time to start studying a mother's child-rearing practices in a society is when the mother realizes that she is pregnant. Homogame maintains that "The role of the future child may be reflected throughout the mother's pregnancy."[1] And Margaret Mead says, "It is probable that in different societies, by the attribution of more or less autonomy of movement to the baby, by enjoining upon the mother active or placid behavior, the process of learning may begin within the womb... .[2]

So, in this chapter we will first discuss the attitude of the mothers toward pregnancy and, second, we will describe their feelings about their child as a member of the family in regard to maternal warmth and infant indulgence.

Feelings about Pregnancy

All the questions in the interview schedule were centered around the five-year-old child. Questions regarding pregnancy, therefore, referred to the mother's pregnancy more than five years earlier in relation to that child.

The questions were designed to find out how the mother felt when she first discovered that she was pregnant, how her husband
felt about it, and whether she thought that her pregnancy came at the right time.

The first two questions were as follows: "What was your feeling when you discovered that you were pregnant with X?" (X is the five year old child.) "How did your husband feel when he knew that you were pregnant with X?"

Table 5.1 Feelings of mothers toward pregnancy (5)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pleased</th>
<th>Somewhat Pleased</th>
<th>Not Pleased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Mothers</td>
<td>92</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>96</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>72</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>86.6</td>
<td>3.3</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 5.2 Feelings of fathers toward their wives' pregnancy (5)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pleased</th>
<th>Somewhat pleased</th>
<th>Indifferent</th>
<th>Not pleased</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Fathers</td>
<td>80</td>
<td>0</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>94</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>94</td>
<td>0</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>89.3</td>
<td>0</td>
<td>6.6</td>
<td>4</td>
</tr>
</tbody>
</table>
Table 5.1 summarizes the answers of the mothers regarding their feelings toward their pregnancy. Of the total number of mothers interviewed, 86 percent reported that they were either pleased, delighted, or very happy when they discovered that they were pregnant. None of the rural mothers said that she was unhappy about her pregnancy, while 2 percent of the urban lower class reported such feelings and still a larger percentage (20%) of the urban middle class reported feelings of being unhappy about their pregnancy. The difference between middle-class mothers on the one hand and the lower-class and rural mothers on the other is statistically significant at the 0.05 level of significance. Of the mothers who were dissatisfied, one lower-class mother said that she was "too old for such a thing." She was over forty years old at the time. Two middle-class mothers mentioned that they were unhappy because they were sick at the time of pregnancy. One complained that as her five-year-old child came after twelve years it was "a disaster" to her, and the rest of the mothers said that their pregnancy came too soon.

Concerning the feelings of the fathers about their wives' pregnancies, nearly 90 percent of the mothers reported that their husbands were delighted. Urban fathers in both the middle and lower class were equally pleased. However, in the rural sample 20 percent of the mothers said that their husbands "do not speak about these matters." This might reflect a lingering tradition
that men should not speak about things which are exclusively pertinent to women.

So, in general, mothers and fathers were happy about the event of pregnancy regardless of social class and place of residence. This attitude of happiness was also held regardless of whether it was a first pregnancy or a later one. This is evident by the fact that over 80% of the mothers interviewed had children older than the five-year-old child.

The second question in the series aimed at tapping the feelings of the mother toward her pregnancy from the viewpoint of the family's financial situation and the ages of the other children. Table 5.3 summarizes the answers of the mothers.

Table 5.3 Does the mother think her pregnancy was suitable? (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>88</td>
<td>12</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>68</td>
<td>22</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>80</td>
<td>20</td>
</tr>
</tbody>
</table>

These results show that 80 percent of the mothers interviewed felt that their pregnancy came at a suitable time. However, a considerable number of middle class mothers (32 percent) felt that
their pregnancy was not suitable from the viewpoint of the family's financial situation. This difference between middle-class mothers on the one hand and lower-class and rural mothers on the other might be attributed to a basic difference in outlook between the two groups. The middle-class mothers appeared in general to feel that things would always improve, their husbands would be promoted, and their income would increase. In fact, seven of the mothers expressed this attitude in their replies: 'It would have been better to wait until we establish ourselves.' On the other hand, the attitudes of rural and lower class mothers were characterized by a fatalistic outlook. Most of these mothers said that their pregnancy was the 'will of God.'

These findings should not be surprising in a society in which having children is given a profound significance for the life goals of parents. There is much evidence from events of daily life to suggest that having children is the raison d'être of marriage. Failure to conceive is a traumatic experience to the wife and a matter of grave concern not only to her husband and herself but also to relatives. Because it is a common belief, especially among the uneducated people, that the woman is usually the one to blame for failure to conceive, this issue is considered one of the main reasons for divorce and polygyny. Also, the many rituals and beliefs which accompany pregnancy are a testimony to the importance of this event. For example, during the entire pregnancy the woman is not
supposed to cross the river lest the baby be born prematurely.

Sudanese society in this respect is not different from other Middle Eastern cultures. Prothro, for example, in his study of child rearing in the Lebanon, reported that Lebanese mothers were happy to learn that they were pregnant and that their husbands also shared their happiness.²

In Western societies this is not necessarily the case. Saers and his colleagues reported that although a majority of mothers said that they had been happy at discovering themselves pregnant, a considerable minority (31 percent) had mentioned that they had some reservations and mixed feelings, or that they were displeased.³

In sum, Sudanese wives and husbands eagerly anticipate having children. They feel happy when the wife gets pregnant, and children are regarded by most parents as a gift of God.

Maternal Warmth

So far we have been discussing the attitude of the mothers toward their pregnancies and potential children. Now we will consider their feelings about the child as a member of the family—specifically, the warmth of the mother toward the child.

The crucial importance of the experiences of a child in his early years has been underscored by philosophers and psychologists alike. Although many people seem to believe that this idea owes its existence to Freud, we find it reflected throughout the whole
founder of Behaviorism wrote:

But once a child’s character has been spoiled by bad handling...who can say that the damage is ever repaired?... Some day the importance of the first two years of infancy will be fully realized. 10

John Bowlby, the British psychiatrist, is an unequivocal advocate of the importance of maternal warmth. He wrote:

Among the most significant developments in psychiatry during the past quarter of a century has been the steady growth of evidence that the quality of the parental care which a child receives in his earliest years is of vital importance for his future...the evidence is now such that it leaves no room for doubt regarding the general proposition—that the prolonged deprivation of the young child of maternal care may have grave and far-reaching effects in his character and so on the whole of his future life. 11

Benjamin Bloom, after running statistical analyses on pertinent data, concluded that:

...for these [personality] characteristics the early development is, at least quantitatively, in accord with the psychoanalytic literature... By an average age of about 2, it seems evident that at least one third of the variance at adolescence in intellectual, emotional, dependency, and aggression is predictable. 12

Burton White, in a preliminary report of a study investigating mother-infant interaction, wrote:

I will begin with the bold statement that the mother’s direct and indirect actions with regard to her one-to-three-year-old child are, in my opinion, the most powerful formative factors in the development of the pre-school child...Finally, I would expect that much of
History of Western thinking. For example, in a brief review of be-
thiefs in this area we might start with Plato who preached that "And
the beginning, as you know, is always the most important part, espe-
cially in dealing with anything young and tender. That is the time
when the character is being molded and easily takes any impress one
may wish to stamp on it." And Quintilian, the Roman educator,
farthered the belief that "We are by nature most tenacious of what
we have imbued in our infant years." According to W. H.
Woodward, the fifteenth-century humanists were keenly alive to the
importance of the first years of infancy in the development of the
child. John Locke also lent his support to this belief. He wrote:

If...the differences to be found in the manner and
abilities of men is owing more to their education
than anything else, we have reason to conclude
that great care is to had of the forming of
children's minds and giving them that seasoning
early which shall influence their lives always
after.

This same belief was carried over to psychology. Freud early
in the twentieth-century declared that:

On the other hand we must assume, or we may con-
vince ourselves through psychological observations
on others that the very impressions which we have
forgotten have nevertheless left the deepest traces
in our psychic life, and acted as determinants for
our whole future development.

This conviction has also been shared by other psychologists who
have not subscribed to the psychoanalytic school. John Watson, the
the basic quality of the entire life of an individual is determined by the mother’s actions during these two years. 13

And Anthony Starr, a British psychologist, wrote in a popular magazine:

...If we want our children to grow up happy, there is little doubt that the experience of the first few months and years of life is crucial. An infant who receives what he (rationally deserves during this period is likely to acquire an unshakeable sense of his own lovability and worth which will see him through most of the reverses of life without too much difficulty. 14

Evidence for the importance of maternal warmth in the child's subsequent development can also be found in infrahuman studies (Harlow)15 in institutionalized children (Spitz)16 and in anthropological studies (von Gumbert).17

So, what is the situation in the Sudan? In our investigation of maternal warmth in the Sudan, the mothers in our sample were asked four questions. The first of these questions enquired about who took care of the child most of the time when he was an infant. Over 95 percent of the mothers interviewed reported that they themselves took care of their infants most of the time. Only 10 percent of the middle class mothers said that a nursemaid took primary care of their infants. Many of the mothers, irrespective of social class or place of residence, responded to the question with 'Of course, I did.'

Mothers were also asked whether their husbands or other
relatives helped in caring for their infants. Tables 5.4 and 5.5 summarize the results.

Table 5.4 Did husband help in taking care of (s)he? (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Much of the time</th>
<th>sometimes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>20</td>
<td>26</td>
<td>52</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>40</td>
<td>26</td>
<td>26</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>50</td>
<td>22</td>
<td>28</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>39.3</td>
<td>25.3</td>
<td>35.3</td>
</tr>
</tbody>
</table>

Table 5.5 Did the mother receive help from another member of her family? (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>80</td>
<td>20</td>
</tr>
<tr>
<td>Urban Middle class</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>82</td>
<td>18</td>
</tr>
</tbody>
</table>
As Table 5.4 shows there is no significant difference between the two urban classes as far as the husband's contribution in helping the mother with their infants. Almost 50 percent of the urban mothers interviewed said that their husbands helped them most of the time and another 25 percent felt that the husbands helped them sometimes. The picture in the rural area is exactly the opposite -- over 50 percent of the mothers said that their husbands did not help them, 20 percent said their husbands helped and another 28 percent reported that their husbands helped them a little. This contrasting picture is most likely due to the difference in the way families live in urban and rural areas. In rural areas every house is distinctly divided into women's quarters and men's quarters. Moreover, because most of the families in the rural areas live in an extended household,* this distinction is always maintained. Since care of children is generally regarded as the job of the mother, children spend most of their time in the women's quarters. In the urban areas, on the other hand, this distinction is less marked. Even when families live together in an extended household, each family as a unit usually occupies a part of the household. So, the children are equally exposed to mothers and fathers.

The results in Table 5.5 show that there was no difference between the three groups of mothers as far as getting help from

*For a detailed description of the extended household, see chapter three.
other members of their family. Other people mentioned as a source of help in taking care of the child were one of the child's grandmothers, the child's aunts, and the child's older sister. In Sudanese society the grandmother is always at hand when needed to help her daughter in taking care of her young children. It is common practice in the Sudan that a woman bears her child in her mother's house even if she lives a considerable distance from it. Some families even maintain a special room for childbirth and the confinement which follows. The duration of this confinement is forty days during which the grandmother teaches her daughter (especially in the case of the first-born child) the skills needed in child care - skills such as the right way of holding the baby while feeding it, what to do in case the baby chokes, or the 'meaning' of the different cries of the baby.

So, although the mothers themselves take care of their children most of the time, help is also readily available to them from their own mothers, especially in the early months after childbirth. They are also aided by other relatives, and in case of the urban families in particular, by husbands.

The second set of questions asked first about the opinion of the mother on the issue of crying during infancy and second about what the mother actually did when her infant cried. The question was stated as follows to the mothers: "Some mothers believe the child should be picked up when he cries, while other mothers let
the child cry lest it get used to being picked up. (a) What is your opinion about this? (b) What did you actually do when (x) used to cry? (c) And at night when he used to cry what did you do? The results are presented in Table 5.6, 5.7 and 5.8.

Table 5.6 Opinion of mothers about the infants’ crying (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pick up</th>
<th>Leave to cry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>38</td>
<td>62</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>38</td>
<td>62</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>38.6</td>
<td>61.3</td>
</tr>
</tbody>
</table>

Table 5.7 Actual behavior of mothers when infant cries during the day (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pick up</th>
<th>Leave to cry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>56.6</td>
<td>43.3</td>
</tr>
</tbody>
</table>
Table 5.8 Actual behavior of mothers when infant cries at night (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Pick up</th>
<th>Leave to cry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>98</td>
<td>2</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>99</td>
<td>1</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>98.3</td>
<td>1.6</td>
</tr>
</tbody>
</table>

The opinions of the mothers in our three groups about what should be done about a crying child is almost identical. As Table 5.6 shows, 60 percent believed that a child should be left to cry lest he get used to being picked up. Four mothers even volunteered the belief that crying is good for the child because it expands his lungs. One mother, on the other hand, said she picked up her child when he cried because she feared that his liver may burst.

As far as actual behavior of the mothers during the day is concerned, we find differences between the rural and urban groups (Table 5.7). While 67 percent of the urban mothers reported that they actually picked up their infants, only 36 percent of the rural mothers did so. This is a significant difference at the 0.01 level. However, it would not be construed that rural infants were neglected. Rather, the mothers reported that they asked one of the infant's
siblings to see what was wrong with him. At night, however, there are no differences in the behavior of the mothers. Ninety-eight percent of the mothers reported that they actually picked up their infants and comforted them, either by giving them the breast or a sip of water, or by rocking them or changing their diapers.

The third question in this category asked whether the mother had time to spend with her infant other than the time she spent attending to his physical needs. The answers to this question are presented in Table 5.9.

<table>
<thead>
<tr>
<th>Location</th>
<th>yes</th>
<th>sometimes</th>
<th>no</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>92</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>86</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>96</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>91.3</td>
<td>6</td>
<td>2.6</td>
</tr>
</tbody>
</table>

These results show that over 90 percent of the mothers reported that they did find time to spend with their children other than the times attending to their physical needs. Although no mother in the urban middle class sample or in the rural sample reported that they had no time at all to spend with their children, four urban lower class mothers reported that they did not have time. On the whole,
urban and rural mothers. Most of the mothers said they generally spent the time singing to the child, cuddling him, or talking to him.

These answers, I think, should not be regarded as an attempt on the part of the mothers to paint an unduly good picture of themselves, for in answering another question in the interview regarding the age at which they find the child more pleasing, nearly 75 percent of the mothers said that they enjoyed their children most during infancy, that is, up to two years old. (See Table 5.10).

Table 5.10 Do you believe children are more pleasing in infancy or when they are older?

<table>
<thead>
<tr>
<th>Location</th>
<th>Infancy (0-2)</th>
<th>2-4</th>
<th>4-5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>78</td>
<td>16</td>
<td>6</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>74</td>
<td>14</td>
<td>12</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>73</td>
<td>15</td>
<td>12</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>75</td>
<td>15</td>
<td>10</td>
</tr>
</tbody>
</table>

The last question in this series addressed itself to the issue of clinging behavior of young children. Each mother was asked if
her child followed her around and stayed close to her and how she felt about it? Table 5.11 summarizes the results.

Table 5.11 Did (x) follow the mother around and what was her feeling toward it? (3)

<table>
<thead>
<tr>
<th>Location</th>
<th>Followed</th>
<th>Feelings</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Village</td>
<td>64</td>
<td>56</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>59.3</td>
<td>40.6</td>
</tr>
</tbody>
</table>

Sixty-seven percent of the urban mothers reported that their children stuck close to them and followed them around, while only 44 percent of the rural mothers attributed this behavior to their children. This difference between urban and rural children, which is statistically significant at the 0.05 level, may be due to the fact that children in rural areas are exposed from an early age to a larger number of care-givers and so a child forms multiple attachments to a number of people rather than to his mother only. Also there is a difference between urban and rural mothers regarding the feelings of the mothers toward this behavior. Nearly one third of the urban mothers said that they did not feel annoyed when their children followed them around while only 12 percent of the rural
CHAPTER VI
Feeding and Weaning

In the previous chapter we have seen that the Sudanese infants, on the whole, are eagerly anticipated by both parents and warmly surrounded by the mother as well as other members of the extended family. In this chapter we will deal with a specific aspect of child rearing; namely, feeding and weaning.

Our discussion of this aspect begins with a review of the psychology of feeding and weaning. Subsequently, we describe feeding and weaning practices in the Sudan, as well as compare the Sudanese practices with those in other cultures.

The Psychology of Feeding and Weaning

Reports about the nature of infantile sucking began to appear in the 19th century with the earliest descriptive studies of infant physiology. Some investigators linked sucking movements to autoerotic stimulation. Dewar referred to sucking as an instinctual act. G. S. Hall believed that the first centre of psychic life is the mouth, and Compaire expressed the view that in a newborn the degree of satiety is measured not by the amount of milk absorbed but by the sensation of fatigue that sucking produces.1

However, psychological interest in oral experience during infancy was generated primarily by Freud's theory of psychoanalysis.
Freud and other psychoanalytic writers have stressed the importance of experience in the oral period for all later social and emotional development. The basic assumption of this theory is that the dominant motive during the first year of life is the oral drive, the instinctual impulse to gain pleasure through sucking. This gratification and the resultant emotional well-being are thought to be functions of the degree of satisfaction the infant obtains through sucking and through the other components of the feeding situation. Any significant interference with these activities is thought to lead to intense frustration and dire consequences. The infant's feeding experience is presumed to have not only short-term effects of relative satisfaction or frustration, but long-term consequences as well. Excessive gratification of oral impulses or too-intense frustration can lead to oral fixation, in Freud's view. Oral fixation may be expressed in a variety of behavioral symptoms, running from such habits as thumb-sucking or nail-biting to overeating or excessive drinking of alcohol as characteristic ways of relieving tension.

On the other hand, according to psychoanalytic theory, an infant whose sucking and other oral experiences were adequate and gratifying would develop personality traits of optimism, self-confidence, sociability, and so on.

Support for the psychoanalytic position that differential oral experience has at least short-term effects came from a series of
studies by Levy. After interviewing mothers, Levy concluded that non-nutritive sucking occurs where nutritive sucking somehow fails to satiate this oral drive. In an experiment with puppies Levy found that puppies that were artificially fed with fast-flowing nipples did more non-nutritive sucking than those fed on nipples with small holes, which provided more opportunity for sucking along with the ingestion of milk. Both showed more non-nutritive sucking than did a third group of puppies that had been nursed normally by their mother. The fast-fed puppies, furthermore, were more active than the slow-fed and had greater difficulty in gaining weight. Benjamin has obtained similar results with rhesus monkeys.

Levy interpreted his human and animal findings as indicating that reduction of sucking not only leaves an important need unsatisfied, but also produces a generally unhealthy state characterized by restlessness and interference with the optimal metabolic functioning required for maximum physiological development.

However, later studies, carried out within a social-learning-theory orientation, have questioned the purely instinctual nature of the sucking drive. According to the psychoanalytic view, greater amounts of oral gratification should produce satiation, whereas less gratification, as with reduced opportunity for sucking, should produce frustration and an increased likelihood of substitutive behavior like thumb-sucking. Sears and his colleagues, however, suggested that the oral drive is in part a learned or secondary
frustrating. From their studies, Sears and his colleagues concluded that upset and thumb-sucking incidents occurred more often among infants who were weaned later. Support for Sears’s position came from the study by Treisman and Treisman who found thumb-sucking to be associated with a history of longer rather than shorter feeding sessions.

These opposing views of psychoanalytic theory and social-learning-theory have been synthesized by later studies, especially cross-cultural evidence. Data from studies by Yarrow, by Sears, Maccoby, and Levin, and by Hetherington and Chils’s cross-cultural comparisons suggest that the amount of upset actually bears a curvilinear relationship to age of weaning. More upset is shown by infants who are weaned at about a year than by those weaned earlier or later. So both the social-learning theory and the psychoanalytic view seem partially correct: that the strength of the oral drive increases with gratification up to a certain point but then wanes with further gratification beyond the end of the first year. The latter observation is consonant with the psychoanalytic notion of an oral period, at the end of which the needs and drives specific to that period tend to be replaced in importance by motives appropriate to the next period of development.
Research findings on the long-term effects of feeding practices and later personality development have also been reported. Small and Mussen, in a study relating the variables (bottle-versus breast-feeding, scheduled versus self-demand feeding, and abrupt versus gradual weaning) to later adjustment, found no support for the psychoanalytic concept of oral character. Also, Sears and his associates found no significant relationship between weaning variables and later personality traits such as dependence and aggression.

Most of the reviews of the literature on the effects of early oral training on later behavior have pointed out the lack of consistent evidence linking the two.

In sum, the findings on oral socialization suggest that there is considerable evidence that sucking is the product of an innate drive. In addition, there is reason to believe that variations in treatment of the infant's oral behavior have important immediate effects on his oral behavior. With respect to more lasting or more general effects of oral training either before or at the time of weaning, no such definite conclusions can be reached on the basis of the available data.

Feeding and Weaning Practices in the Sudan

In our interviews with the mothers we have dealt with different aspects of infant's feeding and sucking experiences — whether the child was breast- or bottle-fed, whether feeding was arbitrarily
scheduled by the mother or on a demand basis, at what age weaning from the breast or the bottle was begun, how long the weaning process took, how it was carried out, and the evidence of the child's reaction to it.

Breast Versus Bottle

As Table 6.1 shows, over 65 percent of Sudanese mothers used the breast as the only mode of feeding their infants, another 28 percent reported that they used both the bottle and the breast to feed their infants, while only 8 percent said that the bottle was their only method of infant feeding.

Table 6.1 Mode of Infant Feeding (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Mother</th>
<th>Bottle</th>
<th>Bottle &amp; Mother</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>72</td>
<td>0</td>
<td>28</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>84</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>42</td>
<td>10</td>
<td>48</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>65</td>
<td>5.3</td>
<td>28.6</td>
</tr>
</tbody>
</table>

The results also show a difference between middle-class mothers and the other two groups. The middle class group tended to use the bottle more than the others. (This difference is statistically significant at the 0.05 level.) Although none of the rural mothers said that they used the bottle as the only means of infant feeding,
to supplement their infant’s diet or as a transition to weaning from the breast. This use of the bottle by rural mothers is a fairly recent development. Culwick, for example, in a survey conducted in a small rural area in the early 1950’s, does not report any incident of bottle feeding.18 Also, Barelay in a study of a suburban village of Khartoum in the mid-1960’s mentions that infants were exclusively breast-fed.19 The use of bottles in infant feeding poses some health hazards, especially in rural areas. With the lack of adequate kitchen facilities which ensure the proper boiling and sterilization of the bottle and the plastic teats on the one hand, and with the great number of flies on the other hand, the bottle becomes a source of diarrhoea and other infectious diseases as well as a source of nutrition. This health hazard would appear to be a real one, for in answering a question on common diseases in the village which inflict the child, all the mothers mentioned diarrhoea as the number one culprit.

The finding that the majority of Sudanese mothers breast-fed their infants is similar to the findings reported in studies of cast cultures around the world.20 Proctor reports that breast feeding is the normal practice in Lebanon.21 Hahnemann observes that Pakistani mothers use the breast not only as a source of nourishment to the infant but also as a palliative whenever the child cries.22 And Alenouw states that “most Ganda babies are breast-fed for the
part of the first year of life or longer. However, breast-feeding is not a universal practice. In the Boston area study of Sears and his associates, for example, only about 40 percent of the children were breast fed, the large majority for less than three months. In England, also, the majority of the mothers used the bottle in lieu of the breast to feed their infants.

Schedule Versus Demand Feeding

The second issue of infant-feeding discussed with the mothers was whether they fed their infants according to a schedule set by the mother or on the demand of the infant. Table 6.2 summarizes the results.

Table 6.2 Degree of scheduling (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>None</th>
<th>Partial</th>
<th>Regular</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>72</td>
<td>16</td>
<td>12</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>56</td>
<td>0</td>
<td>44</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>52</td>
<td>4</td>
<td>44</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>60</td>
<td>6.6</td>
<td>33.3</td>
</tr>
</tbody>
</table>

While 60 percent of the mothers interviewed reported that they used to feed their infants on the latter’s demands, there is a statistically significant difference at the 0.05 level between the rural and urban groups. The majority of rural mothers (72 percent) did not
cling to any schedule in feeding their infants. They either fed their infants when they cried or when the mother judged that the infant was hungry. In fact, the breast was really used as a pacifier for infants. Urban mothers, on the other hand, were almost equally divided between the two modes of feeding.

The fact that more urban mothers used feeding schedules is probably due to their more frequent contact than rural mothers with pediatricians, nutrition officers, and mass media.

**Age at Weaning**

The third issue discussed with the mothers was the age at which they weaned their infants and the reasons for weaning them. Table 6.3 shows the results.

<table>
<thead>
<tr>
<th>Location</th>
<th>6</th>
<th>7-12</th>
<th>13-18</th>
<th>19-24</th>
<th>25-30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>4</td>
<td>36</td>
<td>40</td>
<td>16</td>
<td>4</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>0</td>
<td>36</td>
<td>44</td>
<td>14</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>28</td>
<td>50</td>
<td>16</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>10.6</td>
<td>40.6</td>
<td>33.3</td>
<td>17</td>
<td>3.3</td>
</tr>
</tbody>
</table>

The above results show a wide range of breast-feeding duration --
from birth to 2½ years. Although there are variations within each group, the between-group differences are more striking. Whereas nearly 80 percent of urban middle-class infants were weaned from the breast before the end of the first year only 40 percent of the infants in the other two groups were so weaned. (This is significant at the 0.05 level.) Also, none of the urban middle-class infants were suckled beyond the age of two while 5 percent of the infants in the other two groups were. The modal age of weaning for the urban middle-class infants was nine months while that for the other two groups was fifteen months. Although rural and urban lower-class infants were breast-fed considerably longer than urban lower-class infants, there apparently has been a growing trend among the former two groups to reduce the duration of breast-feeding. Culwick, for example, reports that in the Gaziwa boys were weaned after eighteen to twenty-four months and girls often twenty-four to thirty months.

Reasons for Weaning

The reasons for weaning the infants were varied. Table 6.4 gives a detailed picture.
Table 6.4 Reasons for weaning infants (%)

<table>
<thead>
<tr>
<th>Reasons</th>
<th>Village</th>
<th>Urban Lower Class</th>
<th>Urban Middle Class</th>
<th>Whole Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infant became old enough</td>
<td>32</td>
<td>32</td>
<td>18</td>
<td>27.3</td>
</tr>
<tr>
<td>Mother became pregnant</td>
<td>36</td>
<td>6</td>
<td>2</td>
<td>14.6</td>
</tr>
<tr>
<td>Sick infant</td>
<td>6</td>
<td>12</td>
<td>6</td>
<td>8</td>
</tr>
<tr>
<td>Sick mother</td>
<td>4</td>
<td>0</td>
<td>12</td>
<td>5.3</td>
</tr>
<tr>
<td>Infant refuses to suckle</td>
<td>0</td>
<td>12</td>
<td>14</td>
<td>9.3</td>
</tr>
<tr>
<td>Mother has no milk</td>
<td>6</td>
<td>16</td>
<td>12</td>
<td>11.3</td>
</tr>
<tr>
<td>Mother's milk no longer good</td>
<td>12</td>
<td>16</td>
<td>20</td>
<td>16</td>
</tr>
<tr>
<td>Suckling painful to mother</td>
<td>4</td>
<td>6</td>
<td>10</td>
<td>6.6</td>
</tr>
<tr>
<td>Mother works</td>
<td>0</td>
<td>0</td>
<td>6</td>
<td>2</td>
</tr>
</tbody>
</table>

In the rural area the main single reason for weaning was pregnancy (36 percent). The mothers believed that their milk was not healthy for the child when they were pregnant. But studies of nutrition have shown that such a belief is not correct, as the composition of the milk will not be affected by pregnancy. However, the quantity
of breast milk could be reduced as the mother would be under heavier stress than usual with feeding herself and the fetus while needing to produce milk for the breast-fed infant. In addition to her doing the daily household work that she should accomplish. The second main reason for weaning (32 percent) reported by rural mothers was that their child became old enough (usually beyond 18 months) and could eat other things. The third main factor (12 percent) was that the mothers felt that it was not good for their children to rely on mother's milk as the only source of nourishment.

Although feelings of the mothers in the urban sample that their infants had become old enough and could eat other things was the number-one reason for weaning (25 percent), pregnancy was the least often cause offered for weaning (only 4 percent). A disturbing finding to those who are interested in infant feeding is the belief harboured by 20 percent of the urban middle class that their milk was of no nutritional value to the infant after nine months. This belief constituted the major single reason for weaning mentioned by the middle class. A second difference between the urban and rural mothers was that while 13 percent of the urban mothers reported that they had weaned their children because the latter refused the breast, none of the rural mothers reported such a thing. A third urban-rural difference was that whereas 14 percent of the urban mothers gave their reason for weaning as a lack of milk, only 4 percent of the rural mothers mentioned this as a cause.
When compared to data from other cultures, our findings on the age of weaning of Sudanese children puts the Sudanese child in the middle between Western mothers who tend to wean their infants before the end of the first year and other cultures in which infants are suckled for about two years.

Duration of Weaning

The fourth aspect of weaning discussed with the mothers was the duration of the weaning process.

Table 6.5 Duration of weaning in weeks (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>6</th>
<th>8</th>
<th>12</th>
<th>over 12</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>40</td>
<td>12</td>
<td>12</td>
<td>4</td>
<td>0</td>
<td>8</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>40</td>
<td>0</td>
<td>0</td>
<td>28</td>
<td>10</td>
<td>16</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>40</td>
<td>10</td>
<td>4</td>
<td>10</td>
<td>2</td>
<td>24</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>42.6</td>
<td>7.3</td>
<td>5.3</td>
<td>14</td>
<td>4</td>
<td>16</td>
<td>9.2</td>
<td>1.3</td>
</tr>
</tbody>
</table>

As Table 6.5 shows, nearly 43 percent of the mothers weaned their infants within a week. The rest of the mothers fell within a range of from two weeks to five months. Although there was a wide range within each group, there was a trend among rural mothers to wean their children in a short period. For example, 76 percent of the rural infants were completely weaned within one month, while
only 66 percent of the urban infants were. However, this difference is not statistically significant.

In their attempt to study the duration of weaning in different societies, some students of child-rearing practices have divided mothers into decisive weaners and indecisive weaners.\textsuperscript{30} Prothro,\textsuperscript{31} for example, labels mothers who complete the weaning process within three days as decisive and those who complete it after that as indecisive. According to this categorization, Sudanese mothers on the whole may be regarded as indecisive in their weaning.

**Effects of Weaning**

Related to the question of the duration of the weaning process is the issue of the after-effects of weaning on the infant. Mothers were asked whether their infants cried as a result of being deprived of the breast or the bottle.

Before we discuss the results shown in Table 6.6 regarding this issue, however, we should mention that the infant before weaning has already had an experience with solid foods. Culwick mentioned in her study, which was carried out over twenty-five years ago, that there was no system for introducing solid foods to the infant's diet and that infants were weaned directly into the diet of the family.\textsuperscript{32}

In our study, however, almost all of the mothers, irrespective of class and place of residence, reported that they had introduced solid foods (usually biscuits, vegetables, and rice) to supplement the infant's milk supply during the second half of the first year.
<table>
<thead>
<tr>
<th>Village</th>
<th>60</th>
<th>70</th>
<th>12</th>
<th>28</th>
</tr>
</thead>
<tbody>
<tr>
<td>Urban Lower Class</td>
<td>84</td>
<td>0</td>
<td>16</td>
<td></td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>64</td>
<td>22</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Whole Sample</td>
<td>69.3</td>
<td>10.6</td>
<td>19.3</td>
<td></td>
</tr>
</tbody>
</table>

Although nearly 70 percent of the mothers interviewed reported that their five-year-olds did not experience any difficulty in weaning, there was a difference between the urban lower class on the one hand and the rural and the urban middle class on the other. Considerably more lower-class mothers reported that their children had not experienced any problem as a result of weaning. This difference is statistically significant at the 0.05 level of significance. One possible reason for this difference may be due to the fact that lower-class mothers, unlike the mothers in the other two groups, relied solely on breast feeding and very few of them used the bottle in conjunction with the breast. (See Table 6.1) This difference is statistically significant beyond the 0.05 level of significance. In other words, the lower class mothers were more decisive in weaning their infants and they seldom resorted to the bottle as a
transition toward weaning.

Sudanese children, on the whole, compared to children in other cultures apparently experienced less difficulty at weaning. Pretho, for example, reports that Lebanese mothers tend to wean their infants abruptly in one or two days and that "Lebanese infants often respond unfavourably to this abrupt treatment."23

Thumb-sucking, as we have seen in the previous section of this chapter, has often been associated with weaning problems and with age at weaning. As it may be remembered, psychoanalytic theory postulates that frustration of sucking will more likely lead to thumb-sucking while adherents of the social-learning-theory believe that sucking habits grow stronger with practice, so that a child weaned later would show more thumb sucking. According to our data there is no evidence to support either hypothesis. Of the 150 children in our sample only 41 were reported to be thumb-suckers.

Table 6.7 Thumb-sucking in relation to weaning

<table>
<thead>
<tr>
<th></th>
<th>No</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Infants sucking their thumbs after weaning</td>
<td>9</td>
<td>6</td>
</tr>
<tr>
<td>Infants sucking their thumbs while breast-fed</td>
<td>27</td>
<td>18</td>
</tr>
<tr>
<td>Infants sucking their thumbs while bottle-fed</td>
<td>5</td>
<td>3</td>
</tr>
</tbody>
</table>

The difference between the three groups is not statistically significant. Of these 41 children only 9 started sucking their thumbs after weaning. The rest of the children started sucking their thumbs in the early months of their life while they were breast- or
bottle-fed (See Table 6.7). According to our data, therefore, there is no reason to link thumb-sucking to weaning.

Summary

In sum, the majority of Sudanese mothers breast-fed their children rather than artificially fed them with the bottle. This is especially true among urban lower-class mothers and rural mothers. In general, the rural mothers did not follow any schedule in feeding their children while the urban mothers did. Third, the rural and urban lower-class mothers tended to wean their infants at a considerably later age than the middle-class mothers. Fourth, the main reasons for deciding to wean the infants in rural areas was when the mother discovered that she was pregnant or she felt that the child had become old enough. Urban mothers also gave the age of the child as the main cause for weaning him. Fifth, Sudanese mothers, on the whole, were tolerant toward their infants' resistance to weaning. And last, the majority of mothers indicated that their children did not experience any difficulty as a result of weaning.

The above data, by and large, suggest that the mother-infant interaction in the feeding situation was a pleasant and relaxed one: infants were fed on demand, they were left to suckle for a long period, and they were gradually weaned.
CHAPTER VII
Toilet Training

One of the major behavioral changes to occur during late infancy is in the child's elimination habits. The toddler, who has been accustomed to defecating and urination where and when he pleases, must learn to conform to the toileting customs of his culture. Because toilet training involves imposing certain restrictions on the child, it has been regarded by many investigators as a frustrating experience for the young child.

In this chapter we will first review some of the literature regarding toilet training and, second, we will describe such practices in the Sudan as revealed to us in our study, and compare them with those of other cultures.

The Psychology of Toilet Training

As in the case of feeding and weaning, much of the work on elimination behavior has been stimulated by psychodynamic theory. This is reflected in Freud's conception of the anal stage in psychosexual development and his famous theory of "anal character".1

Although elimination behavior involves both bowel and bladder training, most of the studies on toilet training have concentrated on the former. Considerable work has been done on how toilet training procedures affect children's immediate reactions and their
later development of excretory problems such as constipation; effects of age and method of training on the time required to complete training; and effects of severity of training in order to test the validity of the psychoanalytic concept of the anal character. In the following pages we will review some of these studies.

In a study on the immediate effects of severe toilet training practices, Huschka reported that nearly two-thirds of a group of children who received coercive bowel or bladder training showed an undesirable response. Also she reported a high incidence of enuresis in her sample. However, as Caldwell pointed out in her review of the literature on toilet training, Huschka's findings are open to question because she did not specify what is meant by an "undesirable response", nor did she report the percentage of non-coercively trained children who manifested similar responses. Contrary to the conclusions of Huschka are the findings of Despert who found no significant differences in the toilet training of children with and without enuresis.

Seers and his colleagues investigated the effects of age and method of toilet training on the time required to complete training and on the degree of emotional upset during training. They showed that over half of the severely trained children, compared to one sixth of the mildly trained, were upset during the training process. Also it was found that training which was started later was completed in a shorter time.
Brazelton reported that delaying toilet training until the child is about two years old, when he is neurophysiologically mature, reduces the incidence of enuresis, soiling, or chronic constipation in later childhood to less than two percent as opposed to the ten to twenty percent usually reported from pediatric practice.

Bostock and Shackleton, after interviewing 73 kindergarten children and their mothers, reported that coercive training results in a higher incidence of enuresis. Prugh, after gathering data on the history of the toilet training of a group of children with colonic dysfunction (e.g., constipation), concluded that early toilet training results in a greater incidence of colonic disorder. Bernstein, however, could find no relationship between coercive training and constipation in his study of 47 children attending a child clinic in New York City.

In what Caldwell calls "an ingenious experimental approach," Anthony studied the relationship between toilet training methods and enuresis (i.e., defecation in the clothes). The subjects were 76 children ranging in age from four to fifteen years. Anthony found that enuretic children can be divided into three categories: (a) continuous -- soiling was only one aspect of a general lack of concern with being clean; (b) discontinuous -- soiling was but an isolated aspect which contrasted sharply with overt attitudes favouring regularity and cleanliness in other
aspects of living; and (c) retentive-persistent constipation with only occasional enopresis. Anthony found that children in the continuous group had received more neglectful training, whereas children in both the discontinuous and retentive groups had received more coercive training. Also children in the continuous group, unlike those in the other two groups, showed no aversive reactions to unpleasant odours. 9

Burton used such evidence to argue for the interaction of constitution and social pressures. He pointed out that newborn babies vary in sensitivity and responsiveness to stimulation of different kinds, probably because of constitutional characteristics. They may, as a result, respond very differently to their mother's behavior, even where this is essentially constant from one baby to another. Burton gives us an example of a finding that children found to be very sensitive to being wet were easily trained to go through the night without urinating.10

Several studies have investigated how type and timing of training are related to a number of general personality characteristics. Sewel, for example, investigated the relations of several socialization variables to measures of adjustment, and for the most part found them not significant. The greatest number of statistically significant findings related to toilet training indicated with one exception that children experienced better adjustment with later initiation of training.11
Sears and his colleagues, for example, did not find a stable relationship between the two, although there was some suggestion, in boys only, of a positive relation of severe toilet training to aggression. Wittenborn, in two separate studies of five-year-old and eight-year-old children, provides much more consistent evidence of a positive relation between severe toilet training and aggression. However, Sowell's study, which included several measures of aggression, did not show a consistently significant relation between severity of toilet training and aggression. Holway found a small but positive correlation between coercive training and doll-play aggression in preschool children, whereas Durrett, in a similar study, did not. In short, the relations found between severity of toilet training and aggression have not been consistent.

Social scientists also have tried to investigate the validity of the psychoanalytic concept of the anal character. Some investigators attempted to find out whether the traits said to constitute the anal character were sufficiently intercorrelated to warrant the existence of such a concept. Others set out to investigate the contention that these traits are the outcome of particular toilet-training practices.
The concept of the anal character has been appealed to repeatedly by those interpreting correlations among relevant personality characteristics. Sears, in his study of psychoanalytic concepts, described some of the earliest sets of findings. One such finding was that of Hamilton. Using as an index of anal tendencies the recall by adults of childhood anal excitement or constipation, Hamilton found that several traits might be a part of the psychoanalytic picture of the anal character, such as stinginess or extravagance, were positively associated with this index, both in men and in women. And Hcattinson, in a comparison between men who abide and men who do not abide by a law, pointed out that the abiders were noticeably conscientious, and in line with the concept of anal character, also showed more responses which might be interpreted as substitutes for coprophilic activity. Sears also reported data of his own which indicated positive correlations between stinginess, orderliness, and obstinacy, three traits which are included in the concept of anal character.

Other investigators also have lent their support to the concept. Fairber, for instance, reported a correlation of 0.37 between a five-item scale on anal-retentive attitude and political-oppressive attitudes. And Hetherington and Brackhill, using Kindergarten children as their subjects, found more confirmation of the anal character pattern in girls than in boys.

Some investigators have used the concept of anal character to
ous and disturbing material. And Bishop showed that under certain conditions, students high in the anal character of hoarding did not conform to Festinger's theory of cognitive dissonance, in that they held their judgments on internal rather than external standards.

It seems reasonable to conclude, on the basis of the research reviewed above, that there is evidence to support the existence of the clustering of the traits that constitute the anal character as postulated by psychoanalytic theory.

However, when we turn to examine whether these various traits are a direct result of toilet training, as the psychoanalytic theory wants us to believe, we find that most studies do not support the theory.

Bernstein, for example, found some correlates of toilet training, but not the ones suggested by the psychoanalytic typology. He found that coercive toilet training was not correlated with later tendency to collect objects, with tendency toward constipation, nor with response to a snatching test. Instead, coercive toilet training was correlated with separation anxiety, immaturity, and negativism. Geffner suggests that anal character traits are transmitted from mother to child independently of toilet training practices.
Rather, toilet training may be just one of a whole series of situations in the socialization process in the course of which parental attitudes, feelings, and values influence personality development.

Toilet Training in the Sudan

To investigate how Sudanese mothers toilet-train their children, each mother was asked questions. The first of these questions was: Did you use diapers for (x)? For how long?

All the mothers reported that they used diapers, usually rural and urban lower-class mothers used old pieces of cloth as diapers while middle-class mothers purchased a special kind of cloth and made it into diapers. Although, as Table 7.1 shows, middle class mothers use diapers for a relatively longer period, the difference is not statistically significant.

Table 7.1 Duration of using diapers (in months)

<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Area</td>
<td>5.3</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>4.8</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>6.4</td>
</tr>
</tbody>
</table>

After this preliminary question each mother was then asked about the age at which she started her child in toilet training. As Table 7.2 shows, there are some class differences though not statistically significant. Both urban groups tend to
<p>| | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Rural Area</td>
<td>12.5</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>7.7</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>9.5</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>9.9</td>
</tr>
</tbody>
</table>

This tendency among the urban mothers to start toilet training earlier than rural mothers might be due to the difference in the housing conditions of the two groups. In rural areas almost all the floors of houses are made of beaten earth. In the urban areas, on the other hand, most of the houses have tile or cement floors. So the problem of soiling the floor in the rural areas is not a serious one. This explanation is further supported when we asked the mothers about the procedure used in training their children in bowel control. Rural mothers said that when the child starts to defecate they pick him up and put him between their legs so he will defecate on the ground. While the child is held in this position a special grunt is repeated by the mother during the process of bowel movement. This type of activity is repeated until the child learns to signal his need by using the same special grunt which he now associates with defecation.
The urban mothers also use the same procedure in training their children to control their bowels. However, instead of holding the child between their legs and letting him defecate on the ground, they use a special pot for that purpose. The difference in the use of the poty between the urban and the rural mothers is statistically significant beyond the 0.05 level.

Compared to mothers in other cultures, the Sudanese mothers begin toilet training early. They begin earlier on the average than do Americans, who, according to Whiting and Child, have been rated as beginning earlier than do most people. The average at beginning, according to our survey, was nearly ten months. Americans begin at about eleven months, and most of the cultures in the study of Whiting and Child begin during the second or third year. The Lebanese mothers in Prothro's study, however, begin almost two months earlier than the Sudanese mothers.

It is important to note, however, that these general statements should not obscure the fact that there are wide variations within the Sudanese mothers' groups regarding the time they started bowel training. Although the range extended between one month and thirty months, 33 percent of the mothers started bowel training during the first six months of life, 37 percent during the second half of the first year, 13 percent between the age of eighteen months, and the rest 17 percent beyond the age of eighteen months.

The third aspect investigated was the mother's reaction to her
was her feeling toward the incident. Tables 7.4 and 7.5 show the results.

Table 7.4 Mother’s reaction to bed wetting (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Spank</th>
<th>Scold</th>
<th>No Punishment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>4</td>
<td>24</td>
<td>68</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>16</td>
<td>22</td>
<td>56</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>16</td>
<td>20</td>
<td>58</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>12</td>
<td>22</td>
<td>60</td>
</tr>
</tbody>
</table>

Table 7.5 Mother’s feelings toward bed wetting (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Angry</th>
<th>Not Angry</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>36</td>
<td>60</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>82</td>
<td>12</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>70</td>
<td>28</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>63</td>
<td>33</td>
</tr>
</tbody>
</table>

*Note: The percentages in Tables 7.4 and 7.5 do not add to 100 because some mothers reported that their children did not urinate in bed at night.

Again the rural mothers were by far more tolerant of their
children's bed wetting. It is also interesting to note the dis-
crepancy between the mothers' feelings and their reaction or be-
havior. While over 75 percent of the mothers felt angry when their
children urinated at night, less than 40 percent would either
physically punish or scold the child. Many mothers, moreover, ex-
pressed the view that it is 'their job to take care of the child.'
Others believed that bed wetting is expected to occur in young
children, and some blamed themselves when the child urinated in
bed at night because they felt that they should have made him ur-
nate before he went to bed.

The fifth aspect of toilet training explored was the effect of
the training on the child -- that is, whether the child experienced
any difficulty in or showed resistance to the training.

In the urban area more mothers reported that their children
had showed some signs of difficulty such as excessive crying during
toilet training. The urban-rural difference is statistically sig-
nificant beyond the 0.05 level. This finding is in consonance with
our earlier finding that more city mothers than rural mothers used
corporal punishment in training their children bowel control.
Table 7.6 Effect of toilet training on child (3)

<table>
<thead>
<tr>
<th>Location</th>
<th>No effect</th>
<th>Some effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>92</td>
<td>8</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>78</td>
<td>22</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>79</td>
<td>21</td>
</tr>
</tbody>
</table>

However, this should not obscure the fact that the majority of the mothers in all three groups reported that their children did not experience any difficulty in achieving bowel control. This finding may be attributed to the fact that the mothers described their method of training as one of training themselves to anticipate their child’s bowel movement and attend to him rather than imposing a schedule on him. The mothers who reported that their children experienced difficulty usually described the difficulty as the child’s resisting to sit on the potty.

Compared to Lebanese children studied by Prothro, Sudanese children experienced less difficulty during toilet training. Prothro reported that 30 percent of the Lebanese children experienced difficulty while our data show only 21 percent of the Sudanese children were reported to have had difficulty associated with toilet training.26
nis or her toilet training. Table 7.7 gives the average age of completion of toilet training.

| Rural Children | 23 |
| Urban Lower Class | 20 |
| Urban Middle Class | 19 |
| Whole Sample | 20.6 |

Although Sudanese mothers, as we saw earlier, started toilet-training their children earlier than in most other cultures, they did not complete the toilet training of their children any earlier than American mothers, for example. The average age at completion of training was 20.6 months for the Sudanese as opposed to 18 months for the Americans. The Sudanese average is similar to that of the Lebanese, which is twenty-one months.

As with the age of beginning toilet training, here again we find wide fluctuations in the age of completing toilet training. This is especially true in the urban middle-class sample who reported a range between 6 and 52 months. The range of the urban lower class was 5 to 30, while that of the rural sample was between
12 and 36 months.

Taking these findings together with findings reported in Table 7.2 above, we find support for the findings reported by other investigators that the later toilet training begins, the shorter the duration of the training will be.

In sum, Sudanese mothers started toilet training relatively earlier than most mothers in other cultures, but on an average completed the training process later than most. Although the majority of Sudanese children apparently did not experience difficulty associated with toilet training, reports of the incidence of such difficulties were greater among urban mothers than among rural mothers. Also, urban mothers were more punitive toward their children's relapses into accidents of soiling than were rural mothers. Although our findings support the thesis that the later the training starts the shorter its duration will be, we did not find any consistent link between the age of beginning training and experiencing difficulty in the process.
CHAPTER VIII
Discipline and Aggression

In the preceding two chapters we have discussed Sudanese infant socialization in matters concerning the baby's biological needs, namely, feeding, weaning, and toilet training. In this chapter we will turn our attention to another facet of the socialization process which starts later than these and goes on for many years: the training of the child to control his or her temper tantrums, aggressive actions, and the like.

As in the previous chapters we will first review the literature on parental discipline and, second, we will describe the practice of Sudanese mothers as revealed in our sample and compare it with practices in other cultures.

The Psychology of Discipline

We have paired discipline and aggression in this chapter because of two reasons: first, parental discipline of young children, in most cases, is justified by the child's aggressive impulses toward the parents, siblings, or others; and, second, parental punishment in itself may be thought of as a type of aggression. In short, aggression and discipline are closely interrelated.

Aggression has been studied by psychologists of different persuasions. Research on parental influences upon children's
aggression seems to be influenced, asBronfenbrenner has noted,\textsuperscript{1} by three major viewpoints: (1) psychoanalytic theory, with its assertion that aggression is a basic innate human drive; (2) the frustration-aggression hypothesis of the Yale group, which believed aggression to be the universal and natural response to frustration;\textsuperscript{2} and (3) the more recent social-learning theory which sees aggression as a purely learned response.\textsuperscript{3}

As is typically the case in an area where a number of theoretical approaches are contending for ascendancy, the proponents of each approach try to muster evidence to support their position. In the following pages we shall review some of this evidence. We shall first consider the innate position.

The apparent universality of aggression in man as well as in other animal species and its obvious survival value argue strongly for an innate determinant. This position has been taken by ethologists such as Lorenz\textsuperscript{4} and Tinbergen.\textsuperscript{5} Also a number of animal studies reviewed by Berkowitz indicate that direct electrical stimulation of appropriate regions of the brain results in overt aggressive responses.\textsuperscript{6} And Ivory, who mated dominant male rats with dominant females, has supported the innate position by demonstrating the genetic basis of aggression.\textsuperscript{7}

In a discussion of human rather than animal research, Patterson and his colleagues argue that genetic effects on aggression partly result from genetic effects on general activity level. They note
that several studies consistently found a positive relation between
the general activity level of a child and his aggressive output. This
assumption that some of the variance in aggression must result
from genetic variables is then supported indirectly by a number of
studies indicating that infants vary in activity level at birth and
that such variations persist over the years.

Evidence for the second theoretical position, the frustration-
aggression hypothesis, abounds. In fact, much of the research deal-
ing with socialization of aggression has stemmed from viewing
aggression as acquired rather than innate. Following is a review
of some of this research.

A study by Bodenough shows that the most common sources of
anger in preschool children are home situations that interfere with
some fairly obvious goal-striving of the child. Herring observed
mother-child interactions and found a positive relationship between
the frequency of restricting and controlling behavior by the mother
and fretful behavior of the child. Hartup and Hires found
an increase in aggressive behavior following a brief period of
social isolation, which the authors interpreted as a frustrating
condition. On the other hand, several studies which directly
manipulated frustration failed to find a relation between frustra-
tion and aggression.

Sears and his associates resolved this conflicting data by
proposing that an important factor in determining whether a child
reacts aggressively to a frustrating situation depends upon how others respond to the way the child acts and how the child perceives their responses. This view receives support from a study by Oels and McCandless in which they found that the amount of aggressiveness following a frustrating event was greater in children dominated by “need for power” than in children dominated by “need for love.” Block and Martin, after classifying children as “overcontrollers” and “undercontrollers,” compared them in a frustrating situation and found that the latter gave predominantly aggressive responses, whereas the former played constructively with the less attractive toys that were available. And Inson and Hussen, having measured nursery-school children’s ego control, reported similar results.

Nevertheless, there are many psychologists who have not been convinced by the frustration-aggression hypothesis. Foremost among them are the social-learning theorists. These researchers have questioned the universality of the relationship between frustration and aggression, pointing out the many circumstances under which frustration leads to other responses than aggression (e.g., dependency, withdrawal, regression, etc.) and emphasizing the instances of aggression not clearly instigated by frustration. In short, they have felt that frustration alone cannot explain aggression.

Thus Bandura and Walters, who are prominent exponents of social-learning theory, introduced the concept of modeling to explain the link between physical punishment and aggression. Modeling
is used by these theorists to mean that a child will imitate the behaviors he has seen displayed by other people who serve as models for the child. As applied to aggression, the authors' modeling principle states that "observation of aggressive social models, either in real life or in fantasy productions, increases the probability that the observers will behave in an aggressive manner if the model is rewarded or does not receive punishment for aggressive behavior." Bandura and Walters have employed this formulation to interpret much of the child-rearing literature concerned with aggression, saying, for example, that children of punitive parents are aggressive because they model their behavior after that of their parents. Bandura and Walters have also done many experiments to demonstrate the validity of modeling as the major influence on children's aggressive behavior. A portion of this experimental evidence will be cited below.

In an early study, Bandura and Huston had preschool children watch an adult model who made functionless incidental responses, including aggression, while performing a discriminating task. Then later performing the same discriminating task in the presence of the model, 90 percent of these children made aggressive responses, whereas none of the control children did. Another study showed that the imitative aggression does not depend upon continued presence of the model. In sum, each of the three theoretical positions discussed above
has found some support for its claims. The controversy over aggression, to be sure, is far from resolved and, indeed, is encouraged by the fact that certain findings appear amenable to a variety of theoretical interpretations. For example, the finding that children who are physically punished tend to show more aggression is consonant with: (1) the psychodynamic view that the type of parent-child relationship embodied in physical punishment leads to aggression; (2) the frustration-aggression formulation, inasmuch as such punishment to frustration results in greater aggression; and (3) the modeling principle, since the physically punishing parent provides a graphic example of aggression to be emulated by the child.

Irrespective of the theoretical explanation of the causes of aggression, some psychologists have noted that aggression does appear to be fairly consistently related to certain broad dimensions of child rearing. Becker, in his thorough review of the literature on the consequences of different kinds of parental discipline, has identified three such dimensions.23

One dimension is love-oriented versus power-assertive techniques of child rearing. The former is positively manifested in praise and reasoning with the child and negatively shown by withdrawing love or showing disappointment with the child. The power-assertive technique includes physical punishment as well as yelling, shouting, and verbal threats.

Power-assertive techniques have been found to promote aggression
In young children, resistance to authority, power assertion to other children, and externalized reactions to transgression (fear of punishment, projected hostility). On the other hand, low-oriented techniques "tend to promote acceptance of self-responsibility, guilt, and related internalized reactions to transgression." The second general dimension of child rearing identified by Becker is that of restrictive versus permissive approaches to discipline. This dimension refers to the degree to which parents place demands and restrictions on the child in different activities, and insist on compliance to those demands and restrictions. This dimension proves to be a complex one since the manner in which parents apply their restrictiveness or permissiveness affects the outcome. Parents can be either warm or hostile towards their children when applying their technique of restrictiveness or permissiveness. The following Table summarizes the findings of the interactions of restrictiveness versus permissiveness with warmth versus hostility.

<table>
<thead>
<tr>
<th>Restrictiveness</th>
<th>Permissiveness</th>
</tr>
</thead>
<tbody>
<tr>
<td>Warmth</td>
<td>Dependent, maximal compliance, submissive, minimal aggression</td>
</tr>
<tr>
<td>Hostility</td>
<td>Vexing and shyness with peers, maximal self-aggression, withdrawn</td>
</tr>
</tbody>
</table>
And the third dimension of child rearing to be related to aggression, according to Becker, is that of the concept of parental consistency in discipline. The concept of consistency has been used to reflect three conditions: the general stability of the parent-child interactions; the consistency over time of a single parent; or the congruence of the demands placed on the child by one parent with those of the other. In all three measures inconsistent discipline has been found "to contribute to maladjustment, conflict, and aggression in the child."76

In sum, both theoretical formulations and research findings point to some parental disciplinary practices contributing to aggressive behavior in children. Now we will turn our attention to the Sudanese parents' disciplinary techniques.

Children's Discipline in the Sudan

In order to investigate the process by which Sudanese children are disciplined, we asked the mothers in our sample several questions covering the following areas: (1) the mother's attitude toward and action regarding her child's aggressive impulses against herself, siblings, and other children; (2) the parents' demands on and expectations for their child; and (2) the techniques used by mothers to control their children's behavior.

Socialization of Aggression

In a society such as the Sudanese in which children, especially
In rural areas, live in a communal way and in which children play together in the yard or in the streets, usually under no supervision, friction and quarrels between children are bound to occur. Therefore, the socialization of aggressive behavior becomes an important component of the Sudanese child-discipline process.

To obtain information about this component, the researcher asked each mother about her attitude as well as action toward her child’s aggression against herself, siblings, and other children in the neighborhood. First we will discuss aggression against the mother.

As Table 8.1 shows the majority of the mothers do not tolerate their children’s aggression against themselves.

<table>
<thead>
<tr>
<th>Location</th>
<th>Mother Tolerates Child’s aggression</th>
<th>Mother does not tolerate child’s aggression</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>20</td>
<td>80</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>18</td>
<td>82</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>10</td>
<td>90</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>16</td>
<td>84</td>
</tr>
</tbody>
</table>
This is especially evident among middle-class mothers, where the difference between them and the rural mothers is statistically significant at the 0.05 level.

Although the middle-class mothers are the least tolerant of the child's aggression against his or her mother, their reaction to such aggression is less severe than the reaction of the mothers in the other two groups, as shown in Table 8.2.

<table>
<thead>
<tr>
<th>Location</th>
<th>Hit child back</th>
<th>Talk to child</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>72</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>62</td>
<td>6</td>
<td>14</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>46</td>
<td>26</td>
<td>18</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>60</td>
<td>13</td>
<td>10</td>
</tr>
</tbody>
</table>

When the mothers talk to the child, their explanation takes the form of either frightening the child with God's punishment in the hereafter or embarrassing the child by telling that other children will laugh at him. Only 10 percent said that their child would never do such a thing. The Sudanese mothers in this respect are similar to the Lebanese mothers, but are unlike the American mothers who are reported to be more tolerant of their children's
aggression toward themselves. The second aspect of aggression discussed with each mother was her child's relationships with his or her brothers and sisters. Almost all the mothers described the relationship a good one and said that their children get along together fine. Only four of the urban middle-class mothers and one of the rural mothers reported their child was either jealous or selfish. This finding is in marked contrast with Prochor's finding in Lebanon where "one-fourth of the mothers described the relation as openly hostile..." and Amer's study in Egypt where sibling rivalry is openly encouraged by the shaming of one child by comparing him with another.

To be sure, quarrelling and fighting take place between Sudanese siblings. In our interview we asked the mothers both about their feelings when their children fought among themselves and what they did in such cases. Here again the majority of the mothers reported that they got angry when their children fought with each other. Only four urban middle-class and two lower class mothers said that such fights were normal and should not be considered a problem.

Although over 90 percent of the mothers felt angry about sibling conflict and disapproved of it, they did not promptly intervene to stop it. As Table 8.3 shows, almost 00 percent of the mothers said they intervened at a later stage when the argument between the children turned into fighting.
<table>
<thead>
<tr>
<th>Location</th>
<th>Beginning of quarrel</th>
<th>When children start to hit each other</th>
<th>do not interfere</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>8</td>
<td>92</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>28</td>
<td>72</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>26</td>
<td>70</td>
<td>4</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>20.6</td>
<td>78</td>
<td>1.3</td>
</tr>
</tbody>
</table>

This is especially true in the case of rural mothers. When the mothers were asked about what they did to their children when they fought, further differences between rural and urban mothers showed up. As Table 8.4 indicates, the urban lower class mothers physically punished their children when they fought more often than the mothers in the other two groups. This difference, which is significant at the 0.01 level, may be due to the pervasive use of physical punishment by lower-class mothers as a mode of controlling the behavior of their children.
### Table 8.4 Mother's reaction to children's fighting (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Spank</th>
<th>Reason with child</th>
<th>Nothing</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>24</td>
<td>76</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>88</td>
<td>12</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>32</td>
<td>64</td>
<td>4</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>48</td>
<td>50.6</td>
<td>1.3</td>
</tr>
</tbody>
</table>

The last aspect of aggression discussed with the mothers was their children's relations with other children in the neighborhood. Here again almost all the mothers said that their children enjoyed a good relationship with other children. Only two mothers in the village characterized the relationship as bad, and five urban middle-class and six urban lower-class mothers said that their children had not been exposed to such relationships.

When asked about what they do in case their children get into a fight with other children, the most common response the mothers gave was to have the child come home. As Table 8.5 shows, there were also other measures the mothers would take.
Table 8.5 Mothers’ reaction to their children fighting with other children in the neighborhood (3)

<table>
<thead>
<tr>
<th>Location</th>
<th>Keep child in home</th>
<th>Know reason of fight</th>
<th>Arbitrate</th>
<th>Hit own child</th>
<th>Don’t interfere</th>
<th>NA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>60</td>
<td>0</td>
<td>16</td>
<td>12</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>70</td>
<td>12</td>
<td>12</td>
<td>0</td>
<td>6</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>82</td>
<td>2</td>
<td>4</td>
<td>4</td>
<td>8</td>
<td>20</td>
</tr>
</tbody>
</table>

Children fighting appeared to be a sensitive issue, especially in rural areas where children spend much of their time playing together. Many rural mothers expressed the dilemma they were caught in: If I get involved, I shall fall out with my neighbors; but if I don’t stop my children fighting, I shall also fall out with my neighbors. Some mothers solved this dilemma by assuming the role of arbitrator between the child and the other children, some punished their child, and others tried to point out to the children the importance of playing together as brothers.

While still on this subject of fighting in the neighborhood, the mothers were asked about their beliefs regarding this. Specifically, the mothers were asked whether they thought the child should learn to fight or not. Table 8.6 summarizes the results.
### Table 8.6 Opinions of mothers on fighting among children (%)  

<table>
<thead>
<tr>
<th>Location</th>
<th>Should never fight</th>
<th>Sometimes</th>
<th>Self defence only</th>
<th>Inevitable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>84</td>
<td>0</td>
<td>12</td>
<td>4</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>60</td>
<td>30</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>62</td>
<td>28</td>
<td>6</td>
<td>4</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>69</td>
<td>20</td>
<td>7</td>
<td>5</td>
</tr>
</tbody>
</table>

The above results show a statistically significant difference between rural mothers and urban mothers at the 0.01 level. Rural mothers did not like their children to fight other children. As we noted above, this difference may be due to the environment in which rural families live. In such circumstances children are usually exposed to each other most of the time and disagreements and fights between them are bound to occur. Mothers are aware that children's quarrels may cause friction between adults. Hence, to preclude such a possibility from arising, rural mothers do not like to see their children fight other children. This concern is less evident in urban areas where families living in the same neighborhood are less dependent on each other and may even, particularly among middle-class neighborhoods, not even have any relationships at all.
When taken together, the findings on the socialization of aggression tend to suggest that Sudanese mothers discourage aggression in their children and severely punish it. Writing and Child have rated American mothers as somewhat more severe than most cultures in the socialization of aggression. Yet Americans are considerably less severe than are Sudanese mothers. The mothers in our study were much less permissive of aggression toward parents, siblings, and peers than were American mothers, and used much more severe techniques in their control of aggression.

Parents' Demands and Expectations

In the previous section we saw that the mothers expected their children to refrain from aggressive behavior. In order to find out the demands of mothers in other aspects of behavior and their expectations of their five-year-olds, two sets of questions were asked. The first concerned parents' permissiveness from the standpoint of promptness: "Some parents require a child to obey immediately, as for example, when told to do something or to stop making noise. Others did not attach importance to how quickly a child obeys. What is your opinion about this? How does your husband feel about it?" As Table 8.7 shows, over three-quarters of both parents reported that they demanded their children immediately obey their commands.
Table 8.7 Parents' demands on children's obedience (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Mothers:</th>
<th>Fathers:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Immediately obey</td>
<td>Immediately obey</td>
</tr>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Village</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>82</td>
<td>18</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>68</td>
<td>32</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>78</td>
<td>22</td>
</tr>
</tbody>
</table>

However, middle class parents were less markedly so. The difference between middle-class parents and the other two groups is statistically significant beyond the 0.05 level. Middle-class mothers who did not require immediate obedience expressed the view that it is important to give the child "a degree of freedom in order to build his own personality," whereas comparable mothers in the other two groups felt that children are sometimes bound to be "stiff-headed" and so they would let them be slower in obeying.

In this respect, the Sudanese mothers were more strict than Lebanese mothers surveyed, of whom 68 percent demanded immediate obedience.33

The second question asked the mother called for opinions about the ideal child of five years of age. Although no list of terms
use, a consistent pattern emerged. Table 8.8 summarizes the results.

<table>
<thead>
<tr>
<th>Location</th>
<th>Obedient</th>
<th>Responsible</th>
<th>Intelligent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>66</td>
<td>10</td>
<td>24</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>88</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>76</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>77</td>
<td>9</td>
<td>14</td>
</tr>
</tbody>
</table>

These findings are not surprising since most Middle-Eastern cultures emphasize obedience and politeness in children. Prothro reports that Lebanese mothers of different sects and classes "replied most often that the good child was the obedient child." And Ammar, in his study of an Egyptian village, mentions that subservience and obedience are the ideal characteristics of children. It is interesting, however, to note the significantly high number of rural mothers who emphasized intelligent behavior as the ideal behavior for children. This may reflect a growing concern of rural mothers with the education of their children.
In sum, the Sudanese child is required by both parents to be obedient, docile, and polite.

Techniques of Control

The Sudanese child, as we saw in the previous sections of this chapter, is expected to be compliant and polite. We now turn to the question of how the mothers go about achieving this goal.

The mothers were asked several questions regarding their mode of controlling their children’s behavior. The questions aimed at tapping the techniques of punishment and reward used by the mothers.

One direct question addressing itself to the mothers’ reaction to the child’s misbehavior was “What do you do when x is intentionally disobedient?” Table 8.9 shows the results.

Table 8.9 Mother’s reaction to disobedience (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Spank</th>
<th>Talk</th>
<th>Withdraw</th>
<th>Threat</th>
<th>Tell Father</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>60</td>
<td>16</td>
<td>12</td>
<td>8</td>
<td>4</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>70</td>
<td>12</td>
<td>6</td>
<td>6</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>50</td>
<td>30</td>
<td>10</td>
<td>8</td>
<td>2</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>60</td>
<td>19</td>
<td>9</td>
<td>7</td>
<td>4</td>
</tr>
</tbody>
</table>

It is apparent from the above table that physical punishment was the most frequent mode of punishment used by the mothers.
Talking with the child and reasoning with him were in a distant second. The mother's technique for coping with disobedience, by and large, stressed punishment rather than training.

In a later question we asked the mothers the following question: "With what instrument do you spank your child?" The question was intentionally phrased in this manner in order to make spanking look like a normal thing so that mothers would not deny it. Only four rural mothers said that they have never physically punished their children. These results reveal that spanking was widely used by Sudanese mothers irrespective of social class or place of residence. The fathers, on the other hand, used physical punishment much less frequently as can be seen in Table 8.10.

Table 8.10 Use of physical punishment by parents (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Mothers</th>
<th></th>
<th>Fathers</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Village</td>
<td>92</td>
<td>8</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>96</td>
<td>4</td>
<td>69</td>
<td>40</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>88</td>
<td>12</td>
<td>66</td>
<td>34</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>92</td>
<td>8</td>
<td>56</td>
<td>43</td>
</tr>
</tbody>
</table>

This evident difference between fathers and mothers in their use of physical punishment is probably due to the fact that children,
of rural fathers punishing their young children.

The rather prevailing use of physical punishment in controlling children is not unique to Sudanese children. In Lebanon and Egypt, for example, physical punishment is the chief technique used by mothers in their responses to disobedience.

Although corporal punishment was so widely used by the mothers, the majority of them did not believe that it was an effective way of controlling the child. As Table 8.11 shows, only 31 percent of the mothers placed an unequivocal trust in the effectiveness of corporal punishment.

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
<th>Sometimes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>32</td>
<td>64</td>
<td>9</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>32</td>
<td>64</td>
<td>13</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>30</td>
<td>52</td>
<td>15</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>31</td>
<td>55</td>
<td>15</td>
</tr>
</tbody>
</table>

When mothers were asked why then they used it, a typical answer that we got was: "I do not think it does any good. It only makes me less
angry. If I could control myself I would not spank him (or her)." So physical punishment seemed to be the result of the mother's anger and desperation rather than a technique deliberately chosen because she felt it would do the most good.

Mothers were also asked about their consistency between statement and behavior with respect to the child. Specifically the following question was asked: "Do you often threaten him (or her) and later do nothing? What makes you forgive him (or her)?" As Table 8.12 shows, over 50 percent of the mothers reported using threats which they failed to carry out.

<table>
<thead>
<tr>
<th>Location</th>
<th>Carry out threats</th>
<th>Do not carry out threats</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>60</td>
<td>40</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>54</td>
<td>46</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>55</td>
<td>45</td>
</tr>
</tbody>
</table>

The most frequent reasons for doing so were either the child apologized, or the mother forgot, or she felt pity for the child.

In this respect Sudanese mothers are not different from Lebanese mothers of whom nearly two thirds reported making empty threats. However, there is a marked difference between Sudanese
mothers and American mothers as only 27 percent of the latter said they made empty threats. 39

The last type of punishment discussed with mothers was depriving the child of privileges or withholding favors from him. Unlike corporal punishment, this type was not widely used by mothers. Table 8.13 summarizes the results.

Table 8.13 Use of deprivation as a means of punishment (7)

<table>
<thead>
<tr>
<th>Location</th>
<th>Deprive child</th>
<th>Do not deprive child</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>44</td>
<td>56</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>40</td>
<td>60</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>45</td>
<td>55</td>
</tr>
</tbody>
</table>

When mothers used this type of punishment they usually deprived children of playing outside with other children or threatened them with refusing to take them with her when the mother went out to visit relatives. Many mothers complained that this procedure "needs a great deal of patience" while others felt that "it is not good to deprive the child in any way." Again, Sudanese mothers differed markedly from American mothers. Only 15 percent of the Boston mothers said they rarely or never used deprivation. 40

So far we have been considering punishment as a means of
To study this method of control, we asked the mothers two questions, one eliciting their opinion of the necessity of using praise as a technique of encouraging children to behave well and the other asking about the mother's behavior when the child acted properly in general.

In order to know the opinion of mothers, we phrased the question in a manner which did not call for a stereotyped answer: "Some parents praise their children so as to encourage them to behave well, and others consider that good behavior is simply to be expected. What is your opinion about this?"

As Table 8.14 shows, the majority of the mothers expressed the opinion that children should be praised in order to encourage them to do good things.

Table 8.14 Opinion of mothers on whether to praise a child (5)

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>84</td>
<td>16</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>88</td>
<td>12</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>90.6</td>
<td>9.3</td>
</tr>
</tbody>
</table>
Only eight rural mothers and six lower class mothers thought it was not necessary to praise or reward children. Those mothers, it seems, felt there is no need to praise good behavior as the child should behave in a good manner anyway. Some mothers even expressed the view that should not be habitually praised because it was fitting that they not get used to it.

However, as Table 8.15 indicates, when the mothers were asked if they usually praised or rewarded their child when he did something good, only two rural mothers said they did not.

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>96</td>
<td>4</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>100</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>90.6</td>
<td>1.3</td>
</tr>
</tbody>
</table>

So although nearly 10 percent of the mothers said that it was not necessary to praise children, almost all of the mothers actually reported praising their children when they behaved well.

When compared with mothers in Lebanon, for example, Sudanese mothers used praise much more than Lebanese mothers. Almost one
children for good behavior. Sudanese mothers seemed more like American mothers in their widespread use of praise.

To sum up our findings on discipline and aggression, it is fair to say that Sudanese mothers reported that they punished aggressive behavior on the part of their children whether this aggression was directed toward their siblings, or other children; that both mothers and fathers, particularly low-class and rural parents, demanded prompt obedience from their children; that in spite of the fact that physical punishment is ubiquitous in Sudanese homes, irrespective of class and place of residence, mothers also readily reported using praise as a technique of controlling children; and, in general, Sudanese mothers' disciplinary techniques stressed control rather than training.
CHAPTER IX
Sex and Sex Roles

Almost every aspect of human bodily behavior is brought under the regulation of social control. For example, human beings cough, yawn, sniff, pass wind, etc., but even such automatic and apparently trivial responses tend to be controlled in both the manner and the incidence of their expression by strict rules of what is considered proper to time and place. Each culture, of course, differs from others in the approbation or disapproval with which they endow individual functions.

Pressures toward cultural conformity are particularly evident where the behavior concerned involves sex. In the Sudan, as in other Middle-Eastern countries, sex is a taboo subject. In a recent conference on sex education, sponsored by the Sudanese Family Planning Society, the conferences were only able to refer to the subject in disguised form. 1

Sex is not only too sensitive a subject to discuss, but also the two sexes are largely segregated. In such a society it is not surprising to find different expectations for each sex and for their roles to be closely linked to the sex of the person.

In this chapter we will first look at the psychology of sex differences and second describe the training of the Sudanese child in modesty. Third, we shall inspect differential parental treatment
The Psychology of the Origins and Development of Sex Differences

The discussion of sex differences in the literature has been characterized by two opposing views: those of writers who believe sex differences to be innate or biologically determined and those of authors who believe the differences to be mainly due to societal influences. Each group has amassed evidence to support its argument. Below we will present some of this evidence.

Garraè and Scheinfeld point out that from the moment of conception males and females exhibit radically different patterns of development. At birth, males are heavier and longer than females. From infancy on, boys have a consistently higher basal metabolism and greater vital capacity and develop proportionately larger hearts and lungs. In sharp contrast to his physical advantages, however, is the male’s developmental retardation: growth velocity lags nearly two years behind the female’s, bone ossification is completed much later, and puberty is attained about two and a half years after the girl. The onset of walking and talking, as well as aspects of dentition, occurs earlier in girls than in boys. In terms of maturity the newborn girl is estimated to be equivalent to a 4-to-6-week-old-boy.

In the sphere of motor activity and sensory capacities, sex-linked differences have also been suggested. Kovner reported that male infants exhibit more spontaneous motor activity and this
consists predominantly of gross movements, whereas the activity of
female infants consists typically of finer movements, largely
of the facial areas, for example, mouthing, smiling, sucking. 9
Kagan and Lewis found that female infants attended more to auditory
sequences, while male infants showed greater interest in visual
patterns. 10 On the basis of results obtained from three-month-old
infants, Moss and Robson concluded that, whereas social experience
and learning appeared to have a strong influence upon the visual be-
behavior of females, that of the males was more a function of endoge-
nous attributes like state. 11 And Watson found that visual fixation
on a target could be operantly conditioned in fourteen-week-old in-
fants, the effective reinforcers being visual for males and auditory
for females. Moreover, the boys failed to learn under conditions of
auditory reinforcement. 12 This reliance of males and females on
visual and auditory channels, respectively, is believed to persist
through adulthood. 13

Even in the realm of mother-infant interaction, some investiga-
tors have pointed to evidence of innate sex differences. Moss, for
example, took issue with the widely held belief that differences
in the way mothers interact with female or male infants are
due to the mothers' expectations of a daughter or a son. In a
study of mother-infant interaction, Moss found that consider-
able differences in the behavior of male and female infants exist
at the age of three weeks. The differential reactions of the mother, Moss suggests, are very probably contingent upon these behaviors and not contrariwise, as commonly supposed.  

Studies of older children, which have looked at social interaction and intellectual functioning, have also suggested innate sex-linked differences. For example, a number of studies have shown boys to be more aggressive than girls. Many of these results have been interpreted in terms of sex-role expectations and conventions. Mutt, however, argues that the universality of male aggression both across cultures and species makes the interpretation of male aggression in terms of purely cultural or environmental sex-role expectation difficult to countenance. Mutt presents experimental evidence for regarding aggressive behavior as primarily a function of the early sexual differentiation of the brain and secondarily as an effect of circulating hormone levels.

Finally, supporters of the innate determinants of sex differences point out that differences between boys and girls in intellectual functioning are biologically determined. Shouksmith, for instance, carried out an extensive factorial study of intelligence, reasoning, problem solving, and creativity, and on the basis of his results concluded that:

...males and females do not think alike. Factorially the female group is more complex than the males...for females a much greater range of behaviour patterns appear to be mutually exclusive.
categories... for example, we see that "creative associating" is opposed to "deductive reasoning" in men, whereas it is not so clearly opposed in women... true creativity depends on an ability to switch from the one to the other of these as and when necessary. On this argument, one would expect to find fewer women among the ranks of truly inventive geniuses or scientific discoverers. 17

In sum, advocates of the innate determinants of sex differences point to the above reported sex differences as well as others as proof of their viewpoint. They point out that since these differences are not unique to a particular society, nor even to the human species, it would be extremely difficult to accept a preponderantly environmental theory of sex differences.

Supporters of the cultural determinants of sex differences, on the other hand, maintain that parental training and societal expectations are the main causes of sex differences. Eleanor Maccoby, who has done an extensive study on the psychology of sex differences, points out that there are many unfounded beliefs about sex differences. These include the belief that boys are more analytic than girls, that girls lack achievement motivation, and that girls are better at rote learning while boys excel at tasks that require higher level cognitive processing. None of these beliefs, according to Maccoby, are supported by evidence in the literature. 18

Even when differences between the sexes are substantiated by evidence, psychosocially oriented workers point out that parental
influences accentuate these differences. Goldsberg, for example, argues that where a biological basis for sex differences exists, it behooves societies to socialize children in such a way as to emphasize and exaggerate the differences. In the same vein, McCoby explains the differences between the sexes in aggression and nurturance. She writes:

...since males are more aggressive, girls should be carefully trained in nonaggression throughout childhood... if women's greater propensity for nurturance has a biological basis, it would follow that men should not be trained in nurturance, leaving all nurturant activity to the sex biologically better suited for it.

McCoby sums up the position of the environmentalists by advocating that people are capable of moderating the effects of biology. Society could "devote its energies," she writes, "more toward moderating male aggression, or toward preparing women to submit to male aggression, or toward encouraging rather than discouraging male nurturance activities."

Psychologists, however, have not only disagreed on the origins of sex differences but also have advanced different theories of how children acquire their gender roles.

Attempts to account for the acquisition of sex-typed behaviors have generally employed the Freudian concept of identification. In his formulation of the Oedipus/Electra complex, Freud maintained that during the phallic stage, the child chose the parent of the
opposite sex as a sexual love object, and the anxiety that ensued led to the identification with the parent of the same sex.

Within Freudian theory, two processes of identification are distinguished -- aggressive and analic identification. The first and more important, according to Freud, is identification with the aggressor, which is the process of introjecting characteristics of a threatening figure. It is through this type of identification that boys resolve the Oedipus complex and girls the Electra complex.

In the case of analic identification, parental characteristics are introjected because the child fears loss of parental love. It harkens back to fear of desertion by the mother when her perseverance literally meant life or death to the infant. 22

Some of the social-learning theorists have used Freud's basic concepts of identification and have modified them according to behaviorist principles. Whitman, for example, has proposed the status-envy hypothesis of identification. According to this theory, the motivation to identify is not fear and anxiety reduction, but vicarious gratification. Parental characteristics are valued resources that the child envies and wants for himself or herself. To attain the parents' high status, the child identifies with the parents and enacts their role. 23 And Sears hypothesizes that nurturance is the most important influence on the development of identification behavior. He believes that the young infant learns
sent, or she may withhold her attention from the child. As a result, the child learns to adopt the mother's role to please himself in her absence. Role playing in fantasy allows the child some vicarious satisfaction. Identification thus becomes an acquired drive, that is, all identification behaviours, such as imitation, serve as positive reinforcements for the child. The child, motivated to attain these reinforcements, continues to increase his or her identification behaviours.24

More entrenched social-learning theorists, however, study imitation in lieu of identification and claim that identification is not a meaningful construct. Bandura and Walters, for example, argue that "it is in the interest of clarity, precision and parsimony to employ a single term, imitation, to refer to the occurrence of matching responses.25 They believe that imitative responses are acquired mainly through observation. Models may elicit new patterns of behaviour or disinhibit previously repressed patterns of behaviour (such as aggression). It is not necessary for the observed behaviours to be reproduced immediately, because stimulus cues are symbolically retained by subjects over a period of time in either verbal or imaginal form. In other words, if a child does not perform a modeled behavior this does not mean that he or she has not acquired the behaviour."26
The final psychological position to be considered here is the cognitive-developmental approach to identification. Kohlberg, a leading representative of this approach, defines identification as a constellation of behaviors occurring during Piaget's preoperational period, consisting of imitation of the model, emotional dependency on the parent, perceived similarity to the same-sexed parent, and the ability to derive self-esteem from the parent's approval. According to Kohlberg, identification arises because the child is basically motivated to be competent and to attain mastery over a structured reality. In addition, the child needs to maintain a consistent, stable, positive self-image. The child actualizes these needs through cognitive processes that, at this preoperational stage, are concrete and physical. The child notices physical differences between the sexes, and the child sex-types himself or herself accordingly. Once the child has self-categorized his or her sex role, certain sex-typed acts of others become reinforcing — they satisfy the child's need to maintain a consistent, stable, positive image. Thus, the child will tend most often to imitate the same-sexed parent.27

In sum, as we have moved from psychoanalytic to social-learning theories of the emergence of sex-role behavior, we have seen decreasing emphasis on hypothetical processes such as sexual rivalry with the same-sexed parent and anxiety over catastrophic parental retaliation, and increasing emphasis on behavioral antecedents of
Learning appropriate sex roles based on cultural patterns. Cognitive-developmental psychologists have added to the social-learning theories the belief that the child activity constructs and shapes the process of acquiring his or her sex role and that cognitive structures mediate that construction process.

From the above review of the literature on the psychology of sex differences, it is reasonable to conclude that sex differences, by and large, are caused by societal influences during early childhood. We will now turn to see how boys and girls in the Sudan are socialized.

**Sex Training and Sex-role in the Sudan**

In this section we shall discuss four topics. First, we shall describe the training of the Sudanese child in modesty; second, discuss parental differential training of boys and girls; third, describe the role of the father in the training of young children; and fourth, discuss the concept of identification in the Sudanese setting.

**Sex Training**

As we have mentioned earlier, the subject of sex is a very sensitive one in Sudanese society. Hence it is not surprising to find that the sexual impulses of the young child are severely curbed. In order to study the mother’s attitude toward modesty, we posed three questions to the mothers during the interview. First, the
mothers were asked about their attitude towards children nudity: whether they approved of it or not, their reaction to it, and when they started to insist that their children not take off their clothes. As Table 9.1 shows, almost all of the mothers expressed the opinion that they did not like to let the children go about naked. A considerable number of middle-class mothers (26 percent) said that they had never been faced with this problem. Those mothers usually answered the question in this manner: "I have no child who goes about naked" or "Thank God I have not encountered this problem." These answers clearly indicate disapproval of nudity.

When the mothers were asked when they started to forbid their child from going about in the nude, a wide variation between the three groups was found. Table 9.2 summarizes the results.

<table>
<thead>
<tr>
<th>Location</th>
<th>Don't Like</th>
<th>O.K.</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>100</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>98</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>72</td>
<td>2</td>
<td>26</td>
</tr>
</tbody>
</table>

Table 9.1 Mother's attitude toward nudity in children (5)
Table 9.2 Age (in months) at which nudity is forbidden (%)  

<table>
<thead>
<tr>
<th>Location</th>
<th>0-6</th>
<th>7-12</th>
<th>13-18</th>
<th>19-24</th>
<th>25-30</th>
<th>over 30</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>20</td>
<td>24</td>
<td>4</td>
<td>36</td>
<td>8</td>
<td>8</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>48</td>
<td>24</td>
<td>6</td>
<td>6</td>
<td>6</td>
<td>10</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>80</td>
<td>4</td>
<td>6</td>
<td>4</td>
<td>2</td>
<td>4</td>
</tr>
</tbody>
</table>

The majority of the middle class mothers enforced modesty at a very early age. The average age for this enforcement was around five months among the middle-class children, nine months for lower class children, and seventeen months for rural children.

Modesty in the Sudan is not only enforced by the mothers but also by other children. A naked child is usually teased by his siblings or peers by clapping their hands while singing "Oh the naked one we like him not and a knife will cut his/her hand!"

Sudanese mothers are apparently not different from other Middle Eastern mothers in their attitude toward nudity. Prothro found that nearly 80 percent of the Lebanese mothers dislik[ed] the practice.28 American mothers, on the other hand, were found to be more permissive of nudity in children.29

The second question concerning sex training that we posed to the mothers enquired about whether the child had any idea of how children were born and, if so, from where did he get that idea. As
the results in Table 9.3 show only 36 percent of the mothers said that the child does have some idea about pregnancy and birth. In all these cases, the mothers said the child acquired his idea from the mother herself. To be sure, these mothers were not attempting to instruct the child but were merely answering the child's inquisitive questions about the issue. Usually these mothers said their children asked them when they noticed that they were pregnant. The answers the mothers reported to have given to their children were not scientifically accurate. Some mothers said they told their children that they have “eaten the baby and when they become big they will take it out of their stomach.” A sentiment echoed by the majority of the mothers who denied that their children have any idea about this matter, was “I have no children who discuss these

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>48</td>
<td>52</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>22</td>
<td>78</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>38</td>
<td>62</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>26</td>
<td>64</td>
</tr>
</tbody>
</table>
The last question pertaining to sex training asked the mothers about their attitude and reaction toward their child's masturbation. All the rural and urban lower-class mothers believed that children should be forbidden from playing with their genitals irrespective of the sex of the child. The attitude of the middle-class mothers was not very different either. Only five mothers (10 percent) expressed the view that masturbation is either a natural thing for the child to engage in or that it is just play and does not have any sexual connotations. However, this difference between the classes is not statistically significant.

Also there is no significant difference between the three classes as far as the actions of the mothers were concerned. As Table 9.4 shows, almost all of the mothers said they stopped their children from playing with their genitals. An interesting finding

Table 9.4 Mother's reaction to child's masturbation

<table>
<thead>
<tr>
<th>Location</th>
<th>child forbidden</th>
<th>child does not masturbate</th>
<th>child not forbidden</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>76</td>
<td>24</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>78</td>
<td>22</td>
<td>0</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>66</td>
<td>26</td>
<td>8</td>
</tr>
</tbody>
</table>
Sudanese mothers in this respect resemble Lebanese and other Middle Eastern mothers. Prothro, for example, reports that 50 percent of the mothers he interviewed "expressed strong disapproval" of child masturbation. 31 American mothers, though judged to be strict about sex matters by comparison with the mothers of the many non-literate societies studied by anthropologists, are quite permissive by comparison with Sudanese mothers. Sears and his colleagues report that nearly 50 percent of the mothers in their study were permissive toward children's masturbation. 32

In sum, the sex training of the Sudanese child, regardless of the sex of the child or social class, starts very early in life. Mothers enforce modesty, and genital manipulation is promptly prohibited.

Differential Training of the Sexes

During the interview mothers were asked about their opinions regarding the rearing of boys and girls. Specifically, the questions concerned whether the mothers thought there were differences between bringing up a boy or a girl, in what ways are the two sexes different, and whether they thought there were differences between five-year-old boys and girls.

As Table 9.5 shows, two-thirds of the mothers believed that there were differences between bringing up a girl and rearing a boy.
Table 9.5. Mother's Opinion of Differences between Bringing up Boys and Girls (

<table>
<thead>
<tr>
<th>Location</th>
<th>Yes</th>
<th>No</th>
<th>Don't know</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>72</td>
<td>28</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>66</td>
<td>28</td>
<td>6</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>62</td>
<td>20</td>
<td>18</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>66</td>
<td>25</td>
<td>8</td>
</tr>
</tbody>
</table>

* Mothers have either only girls or only boys.

Although there was no significant difference between the groups in this respect, the reasons behind this similarity were different. Urban mothers described girls as calm, sensitive, easy going, responsible, and obedient while boys were seen as aggressive, disobedient, difficult to manage, in need of more harsh treatment, and very sexist. Rural mothers, while also depicting girls as obedient and responsible, felt that bringing up girls were were difficult and time consuming — they need to comb the girl's hair, closely supervise her, and teach her household duties. Boys, on the other hand, according to rural mothers, are not so demanding, for most of the time they play outside the house. So while urban mothers differentiate between the two sexes on basis of "natural" tendencies in each sex, rural mothers' distinctions were based on what
they expected of each sex -- girls are expected to be in the house performing chores which require obedience and responsibility while boys are free from such obligations and spend much of their time further from home with less adult supervision.

However, when mothers were asked whether they saw differences between five-year-old boys and girls, most of the mothers said no. Table 9.6 summarizes the results.

Table 9.6 Differences between boys and girls at age five (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Are there differences?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>Yes  42</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>No  58</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>Yes  38</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>No  62</td>
</tr>
</tbody>
</table>

The reason for this may be due to the age of the children in question. Actually, a number of mothers volunteered the information that differences between the sexes appear after the age of seven.

The last question about sex-role training posed to the mothers was whether their five-year-old child engaged in play characteristic of his or her opposite sex. As Table 9.7 shows, there is a significant difference at the 0.01 level between the behavior of rural
and urban boys.

Table 9.7 The child and opposite-sex games (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>50</td>
<td>52</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>0</td>
<td>54</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>0</td>
<td>58</td>
</tr>
</tbody>
</table>

While none of the boys in the city were described by their mothers as engaging in play characteristic of girls, half the boys in the village were attributed with such behavior. This difference may be due to the communal way of life characteristic of the village and to the types of games played by children in the village. A popular game in the village is played with mud. Both boys and girls engage in this game together building mud houses. Perhaps the mothers when answering this question were thinking in terms of whether boys and girls played together rather than whether the child preferred to play a game characteristic of the opposite sex. In any case, mothers did not express their disapproval of such joint activities. Games of urban children, on the other hand, were highly differentiated along sex lines. Boys played soccer or marbles while girls enacted their mothers’ role or played with home-made dolls.
Nevertheless, half of the urban girls were described by the
mothers as engaging in boys' games while none of the boys was said
to have engaged in girls' games. This may be explained in terms of
either (1) that girls value more highly boys' activities, (2) that
boys despise girls' activities, or (3) that parents discourage boys
from playing girls' games while they do not prohibit girls from en-
gaging in games characteristic of boys.

Mothers were also asked about their own as well as their
husband's aspirations for their children in the future. In all
cases the mothers had high hopes for their children irrespective of
the child's sex. Forty-nine of the rural mothers wanted their child-
ren to become medical doctors, the fiftieth mother wanted her
daughter to become a teacher. Rural fathers, however, were not so
unanimously enthusiastic about their daughter's education. Twelve
fathers (60 percent of those who had daughters) were reported by
their wives to want their daughters just to get married. The rest
of the fathers had aspirations for their children similar to those
of their wives. Urban mothers of both classes also wanted their
children to continue their education to the highest level possible.
Unlike rural mothers, however, urban mothers mentioned several differ-
ent occupations besides that of a medical doctor, such as a univer-
sity professor, lawyer, and engineer. Another difference is that
22 percent of the lower-class mothers, while still maintaining that
they wanted their children to attain the highest level of education, mentioned that it is up to the child to choose what he or she wanted to be. There were no differences between the urban mothers and urban fathers in this respect.

It is evident, then, that while mothers treat boys and girls differently, they have the same aspirations for them. The traditional role of the woman as a housewife is no longer perceived by the mothers as the ideal feminine role.

From the data above, it seems reasonable to conclude that Sudanese mothers perceive girls and boys differently, have different expectations for each, and likely act according to these perceptions and expectations. However, all mothers and fathers, though to a lesser degree rural fathers, do not differentiate between boys and girls as far as education is concerned. Girls are no longer expected to curtail their education in order to get married.

The Role of The Father

In the Sudan, as in many other countries, the mother is usually the parent with whom the preschool children spend much of their time. Because of this, many observers of Middle Eastern societies have attributed a very small role, if any, to fathers in the rearing of young children. One observer has depicted Sudanese fathers as “servere and aloof” because they find young children “noisy and bothersome.”
In our present study we asked the mothers about the relationship between their husbands and their five-year-old child. Then the mothers were asked a more specific question as to whether the father shows his affection toward the child or not (e.g., whether he carried the child or kissed him or her). And finally they were asked what happened when the father came home at the end of the working day.

Almost all of the mothers described the relationship between the father and his child as a relationship of love and affection, irrespective of the sex of the child. Only one lower-class mother said that her son feared his father. Moreover, the majority of the mothers said that their husbands carried their children, played with them and kissed them. Only two middle-class mothers, one lower-class mother and one rural mother said that their husbands, though they loved their children, did not show affection toward them. Two other rural mothers said that their husbands used to show affection when the children were a bit younger. Furthermore, the majority of the mothers reported that the child usually got excited when the father came back home. The children would run toward the door to receive him while shouting "Daddy came, Daddy came!" Three lower-class mother and five middle-class mothers, however, said the children became calm and stopped their noise when the father came home.

Mothers were also asked whether the father took part in
ally much more than did the fathers. This was mainly due to the fact that the mother was the one with whom the child came into contact most of the time. For present purposes, however, the mothers were asked specifically who punished the child when both parents were present. As Table 9.8 shows, lower-class and rural fathers assume a greater role in the disciplining of the child than middle class fathers.

<table>
<thead>
<tr>
<th>Location</th>
<th>Father</th>
<th>Mother</th>
<th>Either one of us</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>56</td>
<td>44</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>54</td>
<td>26</td>
<td>20</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>22</td>
<td>58</td>
<td>20</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>44</td>
<td>42</td>
<td>13</td>
</tr>
</tbody>
</table>

Since the disciplining of older children was usually done by the father, this finding, which is statistically significant at the 0.001 level, may suggest that among rural and lower class families, five-year-old children already begin to receive older children's treatment.
The sex of the child seemed to play no part in influencing whether the father punished the child or not. Among the mothers who said that disciplining was carried out by the fathers, the respondents were about equally divided between those whose five-year-old was a boy and whose five-year-old was a girl. This observation is true of all the three groups studied.

In some, the image of the father as aloof and disinterested in his young children is not born out by our data. On the contrary, fathers, at least in the eyes of their wives, seemed to be affectionate toward and involved in the rearing of their young children irrespective of the sex of the child.

Identification
As we mentioned in the earlier part of this chapter, many psychologists have argued that by age five the child has already begun to identify with the parents of the same sex. To investigate the issue of identification, we asked the mothers whether the child seemed to imitate the mother or father in manner of walking, talking, speech, and the like. As Table 9.9 shows, the majority of the children were seen as identifying with the parent of the same sex. In answering this question, mothers related stories of how their daughters would use Moli or dress like their mothers, or of how their sons imitated their fathers in their mannerisms.
<table>
<thead>
<tr>
<th></th>
<th>Boys</th>
<th>Girls</th>
</tr>
</thead>
<tbody>
<tr>
<td>Imitates Father</td>
<td>59</td>
<td>10</td>
</tr>
<tr>
<td>Imitates Mother</td>
<td>8</td>
<td>49</td>
</tr>
<tr>
<td>Imitates neither parent</td>
<td>12</td>
<td>12</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>79</td>
<td>71</td>
</tr>
</tbody>
</table>

In the few cases in which boys were said to imitate their mothers, they usually mimicked the mother's manner of speech. Girls, when they imitated their fathers, are said to have imitated the latter's behavior, as, for example, the child's holding a newspaper and making believe that she was reading.

There were slight differences between the groups. While none of the middle class mothers reported that a son imitated his mother, five rural and three lower-class mothers reported that their sons imitated them. Again, only one middle-class daughter was judged as imitating her father while three rural and six lower-class daughters were so judged. And the children who were said to have identified with neither parent were equally divided among the urban mothers for both sexes. These children, the mothers said, "have their own personality."
CHAPTER I
Maternal Reactions to Children's Curiosity

In the previous chapters we have been dealing with child-rearing practices which meet the child's physical needs, such as methods of feeding, waxing, and toilet training. We have also discussed child-rearing practices which attempt to mold the child into his or her culture, such practices as discipline and sex-role training. In this chapter we shall discuss a child-rearing practice which affects the child's cognitive development.

We shall first review the literature on the origins of curiosity and manipulatory behavior in humans and the effect of maternal behavior on the development of curiosity in young children. Second, we will describe the attitudes of Sudanese mothers toward the curiosity and manipulatory behavior of their children.

The Origins and Development of Curiosity

Many psychologists consider curiosity to be one of man's most basic motives, and some even believe it to be an innate source of motivation. McDougall, for example, considers curiosity as an instinct and "...its impulse is to approach and examine more closely the object that excites it." Plaget reports the presence of intensive curiosity and investigatory activity very early in the infant's life, and maintains that the search for knowledge is a
necessary extension of organic function. And Fantz maintains that curiosity occurs as early as one month of age. Also, curiosity has been found to be persistent in monkeys as well as other animals. The world of a child or adult without the opportunity to exercise his or her natural curiosity is to be considered a much restricted world. The individual in such a setting is not participating in an "ever increasing extension of the environment."

Although curiosity has been considered an important drive of men since the early days of scientific psychology, very little research has been done concerning the development of curiosity in humans. Various researchers have found that curiosity is manifested at an early age, but very few studies have considered which factors influence its strength over time. If one finds evidence that curiosity is manifested in infants at an early age that social environments could not yet have had much influence and also finds evidence of marked individual differences in curiosity among young children, one must ask what has occurred between birth and five years which would explain the differential strengths of curiosity.

Most of the studies which have tried to deal with this question have tended to focus on personality characteristics of parents. Pangrac, for example, divided children into three groups on the basis of their perception of their parents, but found no significant differences between curiosity scores of the three groups of children. However, a post-hoc analysis in which children
were first divided on the basis of their curiosity scores revealed that low curiosity boys and girls saw their parents as high on the love and autonomy dimensions and low on the dimensions of hostility and control, while high curiosity boys and girls rated their parents as moderately and consistently high on all four of these factors.  

In another study, Maw and Maw divided 577 fifth-grade children into high and low curiosity groups on the basis of peer and teacher ratings and then administered the Parent Attitude Research Instrument to the parents of the children in these two groups. They found fathers of low-curiosity boys on these subscales: Fostering Dependency, Socialization, Harsh Punishment, Ascendancy of Husband, and Suppression of Sexuality. Fathers of high-curiosity boys scored higher on the subscales of parent attitudes. Mothers of high-curiosity boys scored high on the subscales of Fostering Dependency, Excluding Outside Influence, and Intrusiveness. However, Maw and Maw found that these differences did not hold for parents of high- and low-curiosity girls.  

The findings of Pagrac and those of Maw and Maw for boys lend some indirect support to the idea that the relationship between children and their parents may affect the amount of curiosity a child manifests. More direct support to this notion is furnished by the study of Rubenstein and that of Schiff. Both investigators directly observed mother-child interaction.
Rubenstein's subjects were 44 home-reared babies in their fifth month. The mother-infant interaction pattern was observed, and mothers were classified as showing high, medium, or low attentiveness to their children. A month later all infants were tested for curiosity (curiosity was measured by the extent of the child's looking at, tactile manipulation of, and vocalizing to a novel stimulus). Significant differences were found between scores of infants of high and low attentive mothers on all tests. Rubenstein's results suggest that stimulation from the mother is a variable affecting the amount of curiosity a child displays. Children of mothers who reinforce curiosity behavior may be expected to be more curious than children whose mothers punish them for curiosity. 

Schiff, in an attempt to study factors relating to curiosity among Ganda children in Uganda, interviewed 94 caretakers (mothers, aunts, grandmothers) of preschool children. In the course of the interview, information was obtained about family structure and the child's development; the amount of experience, stimulation and positive reinforcement the child received from its family; the caretaker's attitude toward passivity; and the caretaker's level of acculturation. During the interview, an unobtrusive measure of the child's curiosity was obtained; and following the interview, formal tests of children's curiosity were administered, using (a) a basket full of simple toys (b) Banta's Curiosity Box and (c) a Choice Test containing (a) and (b).
Schiff reported that the females' scores on the unobtrusive measure and males' scores on the Basket Test correlated with caretakers' scores on the stimulation scale, which measured the positive stimulation the caretaker reportedly administers to the child. However, the tests involving the Curiosity Box did not correlate with the stimulation scale. Schiff cited possible aversive aspects such as fear of the Curiosity Box as an explanation for this lack of correlation.\textsuperscript{11}

Besides the experimental evidence linking encouragement of curiosity during early childhood with the development and manifestation of curiosity later in life, there are some theoreticians who also share this conviction. Fiske and Maddi, for instance, hypothesize that "For each stage in an organism's sleep-wakefulness cycle, there is a characteristic or normal level of activation," and that "positive effect is associated with shifts of activation toward normal level."\textsuperscript{12} Thus, the organism will seek to maintain stimulation at the level closest to his or her normal activation level. While it is not clear what factors determine the normal activation level of the individual organism, Fiske and Maddi suggest that this may be a result of early experience. Children who have been exposed to high amounts of variation in early childhood would subsequently require a high level of activation to maintain activation at level to which they have been previously accustomed. Leuba succinctly drives this point home:
Evidence for the importance of maternal influence in the development of the child's curiosity and exploratory activities may be indirectly obtained from another group of studies which investigated maternal and cultural influences on the cognitive styles of children. Hess and Shipman, for example, after studying the interaction between 160 mothers and their four-year-old children concluded that the growth of cognitive processes is fostered in family control systems which offer and permit a wide range of alternatives of action and thought and that such growth is constricted by systems of control which offer predetermined solutions and few alternatives for consideration and choice.\textsuperscript{14}

Studies carried out in other cultures also reveal the importance of culture in the development of cognitive styles. For example, Dawson, who studied adults in two groups in Sierra Leone who differed in the way they reared their children, found that relatively field-dependent men had mothers who exercised strict dominant
control in rearing them whereas field-independent men had mothers who were permissive. 15

In sum, theoretical formulation, indirect information on mother-child interaction, direct observation of mother-child interaction, and investigations of cultural influences on cognitive style, all point to the importance of early experience in the development and maintenance of the child's curiosity. Let us now turn to see how the Sudanese mothers reported that they reacted to their children's curiosity.

**Sudanese Mothers' Reactions to Child Curiosity**

In order to find out how the mothers reacted to their children's unceasing questioning, the mothers were asked four questions. The first question tapped their attitudes toward the issue of the child's curiosity itself, that is, whether they believed it is good or bad for children to always ask questions and why. As Table 10.1 shows, a vast majority of the mothers believed that it is good for children to ask questions. Those mothers believed that when children ask questions they will increase their general information, know what is right from wrong, and understand more about their physical and social world. In short, these mothers believed that children's questioning is their means of attaining knowledge. The rest of the mothers, on the other hand, had some reservations regarding
Table 10.1 Desirability of children's asking questions (%)

<table>
<thead>
<tr>
<th>Location</th>
<th>Always good</th>
<th>Sometimes good</th>
<th>Not Good</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>80</td>
<td>20</td>
<td>0</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>80</td>
<td>10</td>
<td>2</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>90</td>
<td>10</td>
<td>0</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>83.3</td>
<td>15.3</td>
<td>1.3</td>
</tr>
</tbody>
</table>

children's asking questions. One middle-class mother said that she objected to children always asking questions because this might lead to certain topics about which parents either do not have the adequate knowledge to provide children with the correct information or topics which parents do not want to discuss with children, and in both cases this might force parents to lie to their children. Four other middle-class mothers said that there should be certain times when children may ask questions. That is, children should not ask questions when the mother is busy doing something else. The objections of the lower-class and rural mothers centered on the issue of the appropriateness of the questions. These mothers believed that children may ask any question as long as the issue involves "things that concern them." One mother reported that asking questions is not good because "it annoys the mother."
Although more middle-class mothers believed that children should always be allowed to ask questions, the difference between the groups was not statistically significant.

Second, the mothers were asked about their actions, that is, what did they usually do when their children asked questions. Here almost all the mothers said they usually answered their child's questions. However, most of the mothers also qualified their answers. Whereas ten middle-class mothers said they answered their children's questions "frankly, clearly, and at anytime," all the rest of the mothers attached certain restrictions to their answers. However, there were some differences regarding the nature of these restrictions between middle-class mothers on the one hand and lower-class and rural mothers on the other. Whereas middle-class mothers tended to tell the child to wait till later, mothers in the other two groups were more blunt and told the child "don't ask about this; it is not your business." One possible reason for this difference in style of mothering may be that middle-class mothers are more educated, and they may have been exposed to books or articles on child-rearing. Also it seems reasonable to suggest that rural and lower-class mothers emphasize the differences between children's world and adults' worlds more than do middle-class parents.

The third question in this category concerned the mothers' attitudes towards children asking other people questions.
That is, the interviewer asked whether the mother believed that children should refrain from asking certain people questions? Or could children ask anybody? As Table 10.2 shows, two-thirds of the mothers did not approve of children asking just anybody a question. Most mothers felt that children should not question guests, strangers, and elderly people. The most frequent reasons behind the mothers’ objections were that children may embarrass the visitor, their parents, or people who do not have children of their own and who thus may not tolerate children’s questioning. Some mothers feared that other people might give the child wrong information. Nevertheless, there was a considerable number of mothers (34 percent) who believed that children should be permitted to ask anybody because “it is normal that young children are curious.”

The last question tapping the mother’s reaction to their children’s curiosity was addressed to the issue of exploration,
that is, whether the mother allowed the child to explore different objects, see how they work, and the like. In this respect we found a wide difference between middle-class mothers and lower-class and rural mothers. Table 10.3 summarizes the results. Whereas more than half the middle-class mothers allowed their children to explore different objects and thought such activities were good for the child because "it teaches them new things and broadens their minds," only one-third of the mothers in the other two groups so believed. This difference is statistically significant at the 0.05 level. The difference may be due to the fact that since middle-class homes are economically more affluent than the rural and lower-class homes, middle-class children usually have toys to play with. In fact, several middle-class mothers said that they

<table>
<thead>
<tr>
<th>Location</th>
<th>allow child to explore</th>
<th>do not allow</th>
</tr>
</thead>
<tbody>
<tr>
<td>Village</td>
<td>36</td>
<td>64</td>
</tr>
<tr>
<td>Urban Lower Class</td>
<td>34</td>
<td>66</td>
</tr>
<tr>
<td>Urban Middle Class</td>
<td>52</td>
<td>48</td>
</tr>
<tr>
<td>Whole Sample</td>
<td>40</td>
<td>60</td>
</tr>
</tbody>
</table>
allowed their children to "dismantle their toys." In contrast, what lower-class and rural children might dismantle would not be toys but would more often be items belonging to adults. Nevertheless, it should be noted that nearly two-thirds of the mothers interviewed did not allow their children to explore. These mothers felt that such activities were either dangerous to the child or might lead to the destruction of property. Six middle-class mothers added to these two reasons that if the child is allowed to explore, it lead him to "become disorganized and chaotic."

In sum, although the majority of the mothers believed that it is better for children to be allowed to ask questions as a means of increasing the children's understanding, most mothers did not actively encourage this in their children. Mothers usually actively discouraged their children from asking questions of other people, especially of strangers. And children's exploratory and manipulatory activities were, by and large, forbidden by mothers out of fear for the child's safety or out of regard for the safety of the objects.

These findings are not surprising since, as we have mentioned earlier in our discussion of discipline, mothers regarded obedience as the most valued trait in children. In accordance with this value, children are taught to be quiet when visitors are present, not to join in adult conversations, not to ask questions of elderly people, and to refrain from other similar intrusions into the adult
Introduction to Part III

In Part I of this thesis we described the setting of this study, the sample used in the study, and the procedure of the study. In Part II a description of child-rearing practices in central Sudan was delineated. In this final part we shall draw some implications that the child-rearing practices described in Part II hold for parent education in the Sudan.

In this introduction we shall first discuss the needs of young children and the extent to which they are satisfied by the current child-rearing practices in the Sudan. And second we shall delineate the criteria by which parent education in the Sudan should be pursued.

The Needs of Young Children

Students of child psychology today recognize that children have certain needs which should be satisfied in order that the child maximally develop his potentialities. These needs are usually talked about in terms of physical needs, emotional needs, social needs, and cognitive needs. From this viewpoint child development is seen as the simultaneous development of these four needs or components of the child.

We will first discuss each component of the child separately and second we will see to what extent these needs are likely satisfied by the current child-rearing practices in the parts of the Sudan covered in this study.
Physical Development

By physical development we mean not only motor development but also the wider concept of general health of the child. The effects of inadequate nutrition on learning have been clearly documented.\(^1\)

Apart from the consideration that health is a good in itself, investigations indicate that the mental development of the infant and very young child may be particularly affected by dietary deficiencies.\(^2\) In the developing countries, of which the Sudan is an example, ignorance of the unique nutritional needs of the young child combined with inadequate medical care and infection helps account for the death of 50 percent of the children before the age of five years.\(^3\)

Social and Emotional Development

Research on the areas of social and emotional development has pointed to two important concepts which develop during the early years of life and seem to remain more or less unchanged henceforth. These are the concepts of self-esteem and of emotional adjustment or mental health.

The development of a positive self-concept or a feeling of self-worth is very important to the child’s success in school. Most child psychologists link high self-esteem with success in the school. "If a child feels good about himself... if he gets along well with his peers, and if he has reasonable expectations of success reinforced by his daily encounters at school, then we can expect his
cognitive potential to be realized.”

Moreover, many of the findings of Stanley Coopersmith in his study of the antecedents of self-esteem suggest important contributions which can be made by parents. Coopersmith found that self-esteem is significantly associated with early childhood experience, parental characteristics, and parental attitudes toward and treatment of their children. Adults who were high in self-esteem were less likely to have been loners in their childhood and more likely to have been close to their siblings and non-familial peers. Coopersmith concluded that "...persons with high self-esteem have more frequent, positive, and congenial experiences during their childhood years.”

The second concept of mental health is also relevant to early childhood experience. Bowlby, for example, has underscored the importance of the proximity of the mother to her infant in the early years of life. He states:

Prolonged breaks in the mother-child relationship during the first three years of life leave a characterologic impression on the child's personality. Clinically such children appear emotionally withdrawn and isolated. They fail to develop friendships with other children or with adults and consequently have no friendships worth the name. 6

And a follow-up study of 120 nursery school children contradicts the widely held notion that children outgrow childhood behavior problems. The study found that children who had adjustment problems in the nursery school tended to have the same kind of adjustment
problems in later school life.\textsuperscript{7} Besides the above two concepts of self-esteem and mental health, early social development is believed to have direct effect on cognitive development. A group of researchers in the United States found that early social differences tended to correlate with later intellectual ones; children who were socially dependent in nursery school tended to show a less abstract cognitive style and lower nonverbal intellectual functioning when older.\textsuperscript{8} And a group of Piagetian psychologists in Geneva hypothesized that the coordination of actions between individuals promotes the acquisition of cognitive coordinations.\textsuperscript{9} Piaget often underlines the importance of the social factors in the child's cognitive development. "Human intelligence," he wrote, "develops in the individual in terms of social interactions too often disregarded."\textsuperscript{10} Indeed, according to Piaget, "...cooperation is the first of a series of forms of behavior which are important for the constitution and development of logic."\textsuperscript{12} Therefore, social and emotional development during the early years of life are of great importance to the child's building of a positive self-concept, of achieving emotional stability, and of enriching his cognitive potential.

**Cognitive Development**

Since the early 1960's the importance of the early years in the cognitive development of the child has been increasingly recognized.
Essentially the new emphasis of early-childhood educators on intellectual development came as a result of the changing view of intelligence from being fixed and hereditarily determined to one that intelligence emerges as it is nurtured. The works of psychologists like Piaget, Bloom, and Hunt have greatly contributed to the changing attitude toward intelligence. Today very few people question the importance of the early years of life to cognitive development.

Although we have discussed each of the components of child development separately, it would be erroneous to think of them as separate entities. Though it is convenient to think of child development as composed of different aspects, children are not compartmentalized. In fact, most psychologists and early-childhood educators point to the importance of integrating the different components of the child when dealing with his education. Earls Schafer, for example, points to the substantial intercorrelations between the child's social behavior and the child's early intellectual development.

He concludes his infant education research project by stating:

Perhaps the controversy between proponents of promoting the social and emotional development of children and of promoting the cognitive development of children is unnecessary for an optimal education program can and should promote both competence and adjustment.

Now that we have seen the importance of the early years of life in the development of the whole child, how well do Sudanese parents perform? We will answer this question here briefly and
leave the details to the following chapter on parent education.

To be sure, there are both positive and negative sides to the reported Sudanese child-rearing practices. On the positive side there are:

First, Sudanese parents welcome the news of expecting the coming of a new child, and childbirth itself is a great social occasion for the whole family as can be seen from the elaborate celebrations which accompany childbirth.

Second, the infant is seldom left alone. He is always attended to by the mother or other members of the immediate or extended family. This ensures the child's security and provides him with an opportunity to form attachments not only to his mother but also to other people.

Third, although there is a growing tendency, especially among middle-class mothers, to bottle-feed the babies, Sudanese infants, by and large, are breast-fed. This minimizes health hazards and satisfies the infant's sucking need.

And fourth, Sudanese young children have ample opportunities to interact with other children of different ages. Mothers usually take their young children with them during their social visits, and children are ubiquitous in all social ceremonies.

Notwithstanding these positive aspects, Sudanese parents need to be educated, I believe, in all the components of child development. This need arises partly from the poverty of the majority of the
population, partly from ignorance, and partly from erroneous attitudes and beliefs held about children.

First, in a country with a per capita annual income of less than two hundred dollars, the need for physical care of young children hardly needs emphasis. Both medical and nutritional services and information need to be made available to parents.

Second, although a Sudanese young child usually has a number of other siblings and neighbours to play with and is exposed early in life to social interaction with children of his age, he generally lacks interaction with adults. Parents in the Sudan, as we have seen earlier, separate the children after infancy from the adult world. They hardly share in their children’s play. A much repeated phrase to children is "go and play outside." Parents, therefore, need to be made aware of the importance of adult participation in and direction of children activities and play.

Third, Sudanese parents reliance on physical punishment to instill in their children their values is not conducive to promote a good self-concept in the child. Also such punishment precizes the opportunity of reasoning with the child, stimulating his thinking, and developing his moral character on the basis of understanding rather than fear.

And last, the Sudanese child almost completely lacks any intentional cognitive stimulation by his parents. In fact, mothers usually discourage the child’s natural curiosity and exploratory
activities. Parents, therefore, need to be made aware of the import-
tance of stimulating the cognitive development of their children.

In sum, although there are positive features in child-rearing
practices in the Sudan, such as the closeness of the infant to his
mother especially in the first two years of life and the presence
of other children and adults in the home to interact with the child,
Sudanese parents need to be made aware not only of the importance of
the experiences of the child in those early years for his subsequent
development, but also of the impact of their treatment of the child
on this development.

Criteria for Establishing Parent Education

Any implications we draw from the data in our study necessarily
involve passing some value judgments. Though there is nothing wrong
with passing value judgments, the criteria on which these judgments
are based should be made clear. The following four criteria reflect
values I hold and ones upon which I believe recommendations for par-
ent education should be based.

Criterion 1: The present writer believes that the use of psycho-
logical and other relevant information on human development should be
the basis not only for suggesting changes on existing child-raising
practices but also for strengthening existing practices which are
found to be good. In other words, we first need to know what is good
child-rearing practice before we attempt any intervention in the
existing patterns of parent-child interaction. For example, there is
method, I feel, and thus it should be changed. Also, there is evidence that a child needs to interact with siblings and other peers in order to develop not only social competencies but also a good self-image. As Sudanese children are usually exposed to such interaction, this aspect of child rearing should be maintained.

Criterion 2. Parental beliefs, attitudes, and value systems should be taken into consideration in any attempt at intervention which aims at changing the existing child-rearing practices. Today one may identify at least three strategies for affecting social change. Each strategy implies different assumptions about man and is based on different philosophical and/or psychological beliefs. One may adopt an empirical-rational approach, or he can try to re-educate the public by taking into consideration the existing norms, or he can attempt to force his own ideas and beliefs on people.

The empirical-rational strategy, which has its roots in the Enlightenment and classical liberalism, assumes that man will follow his rational self-interest once this is revealed to him. A change is proposed by some person who knows of a situation that is desirable, effective, and in line with the self-interest of the community which will be affected by the change. Because the community is assumed to be rational and moved by self-interest, it is assumed that people in
It will adopt the proposed change if it can be shown by the proposer that they will gain by the change.

The normative-reeducative strategy is based on the thinking of several people. First, there is Dewey's reflex-arc concept which postulates that intelligence arises in the process of shaping organism-environmental relations toward more adequate fitting and joining of organismic demands and environmental resources. Second is Lewin's advocacy that man must participate in his own reeducation if he is to be reeducated at all. And third is Freud's concept of the unconscious which points to man's partial irrationality and to therapeutic techniques which emphasize the need for developing a collaborative relationship between the therapist (change agent) and patient (client). This strategy, therefore, builds upon assumptions about human motivation different from those underlying the previous strategy. The rationality and intelligence of man are not denied. Patterns of actions and practices are supported by sociocultural norms and by commitments, whether conscious or unconscious, to these norms on the part of individuals. Change in a pattern of practice or action, according to this view, will occur only as the persons involved are brought to change their normative orientations to old patterns and develop commitments to new ones. And changes in normative orientations involve changes in attitudes, values, and skills, not just dissemination of knowledge and information.
plans, directions, and leadership of those with greater power. Often the power to be applied is legitimate power or authority. Thus, the strategy may involve getting the authority of law or administrative policy behind the change to be effected. This type of strategy is used by governments both in the communist world (as, for example, child care rules in the Soviet Union) and in the democratic world (as, for example, school desegregation laws in the United States).

Adoption of any of the above strategies depends on the preferences of the advocate of change as well as on the issues to be changed. The present writer believes that the normative reeducative strategy is the most appropriate strategy for our purpose.

It must be remembered that in dealing with an issue such as the rearing of young children there are myriads of attitudes and beliefs involved. Parents, especially in a country like the Sudan where illiteracy abounds, are not likely to shift their attitudes and beliefs readily. One needs to work with parents and gradually change what needs to be changed in the light of evidence from child development or strengthen existing practices. This working with parents is a characteristic of the normative reeducative strategy.

A second reason for adopting the normative reeducative strategy is the belief in the abilities not only of the agents of change but
also in the targets of change. In this strategy parents' advice and experience will be sought. It is a two-way flow of information. In such an atmosphere parents will not only be more receptive of new ideas but also will feel more confident in their own abilities.

And third, this strategy, with its emphasis on establishing a dialogue between the "experts" and parents, should heighten the interest of parents in the welfare of their children.

**Criterion 3.** Any intervention program should be commensurate with the financial resources of the country. In a basically poor country like the Sudan, economic considerations for implementing any program are imperative. Therefore, our suggestions in the following chapters will always be guided by the economic realities of the country. It will be folly, for example, to suggest a massive introduction of parent-education programs. Such a suggestion, even if psychologically sound, is economically not feasible.

**Criterion 4.** The intervention program should take into consideration the practical implications which face the introduction of parent-education programs. Today in the Sudan parent education is virtually non-existent, and there are no trained personnel to carry out the job. Therefore, any suggestions for parent education should bear in mind this lack of trained personnel.

In sum, the criteria to guide the choice of parent-education programs are to be founded on include: (1) consideration of the
psychological and other pertinent scientific evidence regarding the healthy development of young children, (2) the dissemination of this evidence through interaction with parents taking into consideration their existing attitudes and value systems, (3) the economic realities of the Sudan, and (4) a recognition of the lack of well-trained personnel to carry out parent education.
It is true that mothering is recognized as essential for the healthy development of a child, but this should not mean that just any kind of mothering will do. A host of clinical and experimental evidence indicates that the quality of the relationship between parents and child is of prime importance to the subsequent development of the child. Consequently, if we are concerned with the child's growing up satisfactorily, we appear morally bound to see that parents become aware of their influences so as to enable them to do a better job. More important, parents can be helped to be better not only in their traditional role as care givers but also as educators of their young children. That is, parenthood has more to it than "caretaking" in the sense of the mere passive role of meeting the physical needs of the young child and furnishing him with love and security. There is also the active role of educator, a role in which parents reach out for their young children and stimulate them in varied ways, play with them, talk to them, give them the chance to explore their world, and try to understand the causes of their behavior. It is this latter role that most parents in the Sudan neglect, a neglect that makes the institution of parent-education programs imperative.

There are at least four reasons -- founded on the data gathered in the present study -- which have led the present writer to adopt the foregoing position. First, although Sudanese parents enjoy
CHAPTER XI
Parent Education

The concept of parent education, and for that matter any other type of education, assumes the need for intervention to change the existing practices. From our preceding description of child-rearing practices in the Sudan, the present writer believes that there is indeed need for parent education in the Sudan. It is the purpose of this chapter first, to present a rationale for the need of parent education in the Sudan, second, to describe the objectives to be sought in parent education, and third, to discuss different approaches for reaching parents.

Rationale for the Need of Parent Education

The need for parent education in the Sudan rests first on moral grounds, second on practical considerations, and third on research evidence.

Parent Needs Reflected in this Study

In the Sudan where the family, both in its nuclear and extended forms, is the main educator of the young child until he goes to school at the age of six or seven, it does not seem morally justifiable to call for parents to abdicate their traditional role. But it is equally morally wrong to leave the upbringing of young children, who ultimately become active members of the society, to just anybody.
having babies and the infant is seldom, if ever, left alone, mothers do not stimulate their infants in ways which may help the infants in their psychomotor development. The mothers see their role mainly as caretakers -- merely attending to the infant’s physical needs. The concept of stimulating the infant for psychomotor development is virtually nonexistent. Fortunately, Sudanese mothers do not lack the time to spend with their infants. They only lack the knowledge of the importance of stimulating their infants in a meaningful way. The importance of this stimulation has been understood by many observers of child development. Piaget, for example, maintains that intellectual adaptation is the progressive differentiation and integration of inborn reflex mechanisms under the impact of experience and that the growth of intelligence may be viewed as the progressive transformation of motor patterns into thought patterns. It is the duty of the different professionals not only to point out the importance of this stimulation to parents but also to help them to master the necessary techniques for doing it.

Second, as the reader may recall from our discussion in the chapter on discipline, Sudanese parents as a whole use corporal punishment as their main mode of controlling their children’s behavior. However, the disadvantages of this technique of controlling children’s behavior have been pointed out by most researchers in the psychology of punishment. Arzin and Holz, for example, argue that
the primary disadvantage of physical punishment is that it disrupts social behavior. That is, the child tends on the one hand to avoid situations in which punishment is delivered and on the other hand to become aggressive, thus causing other people to avoid him. Seligman and his colleagues further maintain that continued use of punishment in an inescapable context, such as the home, may lead to passivity and withdrawal or adaptation to the punishment stimuli themselves.

In either case, whether escape is possible or not, the quality of the parent-child relationship may deteriorate if physical punishment is used with high frequency and punishment administered by such an agent will, therefore, be less effective in inhibiting the child. And Walters and Parks point out that the use of physical punishment by parents reduces the opportunity of teaching the child new appropriate behaviors.

In short, physical punishment may lead children to avoid the punishing parent, hence reducing the chance for parent-child interaction and likely producing meek and submissive personalities or aggressive ones. Punishment may succeed in suppressing certain behaviors in children but certainly does not teach children alternative desirable behaviors.

If Sudanese parents are taught these conclusions and are taught alternative and more effective ways of controlling their children's
behavior, I think many would alter their child-raising practices, for most mothers, as we have seen, said they do not believe that physical punishment is effective and that they use it either out of exasperation or out of lack of knowledge of a better way to discipline the child. The need for parent education in this aspect is, therefore, apparent, and it is incumbent upon educators to help parents become better disciplinarians.

Third, we have seen that Sudanese mothers believe that a good child is an obedient child. So in their attempt to instill this obedience on their children, mothers unwittingly seem to stifle their children's enterprise and initiative by limiting children's movements and discouraging their curiosity. So parents need to be told about the effects of their injunction on their children's cognitive growth. Here again, I would estimate that Sudanese parents would be a receptive audience since, as we have seen previously, all parents expressed their desire for their children to attain high levels of education.

And last, mothers need to be made aware of the importance of nutrition, hygiene, and preventive techniques not only for their children's physical well being but also for their intellectual development. The importance of these factors for physical health is obvious, but it is the influence of diet on intellectual development that is subtle and that most parents are not aware of. Studies
conducted in Uganda, Venezuela, Mexico, and other countries have reported that undernourished children tested with the Gesell technique show a marked retardation in their language, adaptive, personal-social, and psychomotor behavior.\(^7\) The malnourished child, furthermore, is found to have lost the curiosity and desire for exploration that is natural in a young child.\(^7\) Besides these psychological effects, malnutrition also causes diminished body size or altered body proportions and results in structural lesions of the nervous system.\(^8\) Moreover, some investigators have suggested that when malnutrition strikes during the first half year of life, its impact on the intellectual capacity of the child may be irreversible.\(^9\)

Malnutrition is a malady arising from not only poverty but also from ignorance and social custom. It is not necessarily the paucity of food stuffs that causes malnutrition but the lack of knowledge of which foods are necessary to produce a healthy young child. The problem of poverty in the Sudan is further compounded, especially in rural areas, by social customs. Within the Sudanese family the men are fed first, and they get the best of the food available. Except in the heyday of youthful married life, women are the first to suffer where food is in short supply, and they are the last to be served when "good things" are passed out. Since young children usually eat with their mothers, their nutritional needs also go
Both men and women in the Sudan need to learn that certain members of the family need special consideration nutritionally because their condition gives rise to special needs. During pregnancy and lactation, for example, women have to build the body of their child, and its health and strength will depend on whether they are being fed well enough to do this properly without ruining their own health. Babies and children are special classes, too, because they are growing, and to do this properly they need enough of the right kinds of food.

Although, as we have seen, the majority of Sudanese babies are breast fed, there is a considerable number of urban middle-class mothers and an increasing number of rural mothers who use the bottle in lieu of, or in conjunction with, the breast. The advantages of breast feeding over artificial feeding for promoting infant survival have long been recognized in the developed countries. A number of studies in Europe and the United States since the end of the last century show that the chances of surviving to age 1 year are substantially higher for breast-fed than for artificially-fed infants. Also the studies conducted of the effect of feeding practices on infant mortality in developing countries today have led to a similar conclusion. In a study conducted in a rural area in India, for example, 95 percent of the infants artificially fed from
birth died before reaching age 1, compared to 12 percent of the breast-fed infants.\footnote{12}

The advantages of breast-feeding are that breast milk is nutritionally ideal, it provides some immunity from disease (at least for the first six months), and it is clean.\footnote{13} On the other hand, avoidance of the risks associated with bottle-feeding depends on the nutritional quality of substitute foods, the sanitary conditions surrounding artificial feeding, and the overall hygiene conditions of the infant's environment. These factors are certainly far from optimal in the Sudan, especially in rural areas.

Furthermore, breast feeding has been found to have a suppressing effect on fertility. There are a large number of studies which confirm that lactation prolongs the period of postpartum amenorrhea.\footnote{14} In a country like the Sudan where the annual rate of population growth is rather high (2.5\%) and the use of contraceptives is more likely to be unacceptable to the majority of the people, breast-feeding serves as a natural birth control device, thus reducing the number of children in the family, making the care for children easier and more enjoyable for the mother, and saving the mother from depleting her health as a result of frequent births.

Besides learning about nutrition, parents also need to be made aware of the importance of immunization and general hygiene for the health of their children. This concept of preventive protection of
people do to keep their children well?” Whereas 75 percent of the urban mothers in both the middle- and lower-class mentioned inoculation, cleanliness, and good food as the major ways of keeping children healthy, only 20 percent of the rural mothers gave these reasons. The other 80 percent of the rural mothers said that when the child gets ill they take him or her to the hospital, thus displaying a lack of understanding of the concept of prevention. This difference between urban and rural mothers, which is significant at the 0.01 level, is perhaps due to the immunization campaigns which the health authorities conduct in the cities and to which urban mothers are exposed as well as to the existence of several child health centres in the capital. Immunization campaigns in rural areas, on the other hand, are sporadic at best, and child health centres certainly do not exist in rural areas. Taking as an indication the answers of urban lower class mothers, who are similar to rural mothers in educational level, there is reason to believe that if immunization and other child health services are made available to rural mothers, these mothers will incorporate the concept of preventive care into their child-rearing practices. I do not think the importance of such services in rural areas and the need for education of mothers in matters of sanitation and hygiene can be overstated.
In sum, our findings on child-rearing practices in the Sudan suggest that Sudanese parents need to be informed about and trained in, ways of stimulating the young infant in a meaningful way; they need to be told about the undesirable consequences of physical punishment and to be shown alternative ways for controlling and modifying their children’s behavior; they need to be educated in fostering their children’s natural curiosity rather than stifling it; and they need to be helped in satisfying their children’s physical and nutritional needs.

Practical Considerations

The economic situation of the Sudan calls for parent education, as contrasted to the establishment of a large number of early-childhood centers, as a practical measure toward creating a better environment for young children. The other alternative to parent education will be the establishment of institutions to care for children. Irrespective of the moral issues, which I believe are important, such a proposal would be impractical in the Sudan. First, it is very expensive to establish the needed institutions in large numbers. Second, there are no trained personnel in the Sudan as yet to manage such institutions. And third, there seems to be little need for such institutions since, on the one hand, working mothers are still relatively few and, on the other, the extended family is still a thriving institution in the Sudan. Thus, there are plenty
of family members available to care for the young child.

Evidence from Research Supporting Parent Education

There are three types of evidence from research on child development which underscore the importance of parent education. First, there is the mounting body of research evidence which emphasizes the importance of the first few years of life to the subsequent development of the child. Bloom, in a review of data from a number of longitudinal studies, has underscored the critical importance of the early years for the later intellectual development of the individual. He states:

The effects of the environment, especially of the extreme environment (that is abundant or deprived), appear to be greatest in these early (and more rapid) periods of intelligence development and least in the later (and less rapid) periods of development. The evidence so far available suggests that marked changes in the environment in the early years can produce greater changes in intelligence than will equally marked changes in the environment at later periods of development. 15

Caldwell emphasizes the importance of the early years not only for the development of intelligence but also for other skills. She writes:

The rate of proliferation of new behavioral skills during the first three years of life and the increasing accumulation of data pointing to the relative permanence of deficit acquired when the environment is inadequate during this period make it mandatory that careful attention be given to the preparation of the developmental environment during the first three years of life. 16
Brenfenbrenner, after reviewing data from programs of early childhood education both at home and in group settings outside the home, concluded that "the magnitude of gain was inversely related to the age at which the child entered the program, the greatest gains being made by children enrolled as one and two year olds."  

And White is unequivocal in his belief that the first three years of life matter a great deal. He contends:

After 17 years of research on how human beings acquire their abilities, I have become convinced that it is in the first three years of life that we should now turn most of our attention. My own studies, as well as the work of many others, have clearly indicated that the experiences of those first years are far more important than we had previously thought. In their simple everyday activities, infants and toddlers form the foundations of all later development.  

Second, research findings have emphasized the importance of the parents in the early learning of the children. Painter, who developed a program of stimulation for infants ages eight to twenty-four months in the areas of language, conceptual, and sensory-motor development, concluded that the home environment provides a suitable medium for early intervention.  

Brenfenbrenner's review of early intervention notes the importance of focusing on the parents as the primary teacher of the child: "Gains from parent intervention during the preschool years were reduced to the extent that primary responsibility for the child's development was assured by the staff member rather than left with the parent."  

Gordon, who has
developed a parent-education program which includes training parents in child development and interpersonal relationships, reports that trained parents progressed more rapidly than those children whose parents did not receive the training.24 Lamble and Weizart stress that the process of a teacher, a mother, and an infant getting ready to learn together is a critical one.22 Moreover, the mother's involvement in the education of her young child is not only very important, but also there is evidence to suggest that such involvement may be more successful in producing lasting effects on children than preschool intervention programs without parent participation. In one study by Scheffer,23 it was found that when low-income children were intensively tutored by trained tutors instead of by mothers, there were immediate but no long-term effects on the children's IQ scores. The tutor-child interaction in this program was quite similar to the mother-child interaction encouraged in parent-participation programs like the one in Florida. That is, the children's intellectual development was stimulated through verbal interaction based around toys and games. The fact that the tutoring did not produce any lasting effect on the children, while the mother-child interaction of the Florida program did, has been interpreted by Bronfenbrenner as showing that parent participation is a crucial factor in the maintenance of long-term effects.24 Scheffer himself was later convinced of the need to
focus upon parent-centered rather than child-centered education."

Also, the Educational Testing Services’ assessment of "Sesame
Street," an educational program on American TV for preschoolers,
revealed that the children who watched the show the most and learned
the most were those whose mothers watched with them and discussed
the program with them.26 And the classic report of Coleman and his
associates on the equality of educational opportunity in the United
States has pointed out that the family has a major effect upon the
educational outcomes of its children and that the impact of the
family is not usually overcome by later schooling.27 Caldwell
succinctly sums up the case for the home as the optimal learning
environment for the young child. She maintains:

As judged from our scientific and lay literature
and from practices in health and welfare agencies,
one might infer that the optimal learning environ-
ment for the young child is that which exists when
(a) a young child is cared for in his own home (b)
in the context of a warm and nurturant emotional
relationship (c) with his mother... under condi-
tions of (d) varied sensory and cognitive input. 28

Third, there is evidence to indicate that parents, when trained,
may be as successful in teaching and modifying their children’s be-
behavior as are professionals. Patterson and his colleagues, for
example, employed parents as reinforcing agents in laboratory studies
of the effect of parental approval upon a child’s performance on a
single two-choice discrimination task. Their investigations provided
strong confirmation of the effectiveness of parents as reinforcing
A number of studies also have systematically demonstrated that deviant and normal behaviors are under the control of reinforcements delivered by parents. For example, Reisman and Ora in a recent review of the literature on training parents as therapeutic agents for their children have concluded that "The evidence, attitudes, and opinions presented in the present review indicate that parents can often be trained to function as effective change agents for their children." And Karrer has reported impressive results in an infant tutorial program in which parents can be trained to promote the educational development of their young children. Moreover, the evidence of the success of mother-child interaction programs reviewed above attests to the ability of mothers to be effective teachers of their own children.

In sum, research findings which have revealed the importance of the early years of life to the subsequent development of the child, suggest the importance of parent education. In the case of the Sudan, the need for parent education is further accentuated by the presence of several harmful child-rearing practices. And the evidence regarding the effectiveness of parents as teachers of their young children makes the development of a program for educating parents most desirable.

However, the decision to educate parents has to include consideration of at least two problems: first, the objectives to be sought
in parent education, and, second, the strategies or approaches to be adopted to reach parents. The remainder of this chapter deals with these two issues.

Objectives of Parent Education

The general goal of parent education is to enable parents to facilitate the growth and development of their children by making parents more conscious of their role performance, by improving their independent judgment, and by increasing the rationality of their role performance.

Specifically, the goal of parent education in the Sudan, I believe, should be first to make parents more effective teachers of their young children, that is, to give parents new competencies which help them in stimulating and enhancing the development of their children. Second, it is to help mothers and fathers become better parents by informing them about child development principles, nutrition, hygiene, family planning and home economics and by showing how all these things fit together to produce a nourishing environment for the child. To achieve these two objectives, parents should, I am convinced, learn the following principles that are based on a considerable amount of clinical and research evidence compiled on groups of children in a variety of societies.

(1) Human potential is developed largely through an environment of supportive relationship and interactions.
that meet the needs of the children. Children have needs - physical as well as psychological. The degree to which children achieve their potential is largely related to the degree to which parents provide environments which meet those needs.

(2) Environments most supportive of children's development are based on an understanding of the principles of child growth and development. The same behavior exhibited by different children (or by the same child in different situations) may be indicative of very different needs. Responses to children in a given situation that are based on knowledge and an understanding of child growth and development are more likely to be facilitative than are responses based only on the knowledge of the situation.

(3) Children's behaviors are caused. The causes are multiple, complex, and interrelated. Intervention by parents is more likely to be effective when based on insight into causes.

(4) Parents may view some child behavior as nonproductive, unwise, or socially unacceptable. These
at that time toward accomplishing the tasks of becoming functioning persons in society. Children want to become worthwhile and significant members of their society. They expend their energies toward that goal in the most effective way they know how at any point in time. The ways in which they exhaust their energies are sometimes non-productive, sometimes effective, sometimes irritating to others, sometimes fascinating, sometimes even wrong as viewed by adult standards. However, they are the children's best efforts at that time. Children need help, support, and, above all, tolerance in learning more effective and more acceptable ways of accomplishing the tasks of becoming functioning persons in society.

Every child is unique. This does not mean that there are no similarities or generalities among children, but to recognize and appreciate uniqueness means not to expect all children to respond in the same way. It means that there are no formulas for child-rearing that work equally for all children, even in the same family.
In short, the goal of parent education is the creation in parents of a conscious awareness of the teaching role they play in the life of their children, and the desire to increase their skills in guiding their children's growth. I believe that effective parenthood, far from being a matter of blind instinct, demands the willingness to learn, to attack problems and situations with knowledge and discrimination, and to give careful advance consideration to potential difficulties.

**Approaches to Parent Education**

The education of parents in the Sudan is faced with two main difficulties: first, lack of appropriately trained personnel to carry out the job, and second, the illiteracy of the majority of parents. The first difficulty can be circumvented by training paraprofessionals, volunteers, and elementary-school teachers. The second problem which is the subject of the present discussion may be averted by using radio, TV, public lectures, and home visits as means of reaching parents.

In the 1960's and 1970's many programs of parent education utilizing the home-visit approach have been developed in the United States. One such program is that developed by Phyllis Levenstein in New York. In this program, which is designed for parents of two-year-olds, home visitors bring toys and teach the parents how to use the toys to help their child learn. A more relevant program to the
Sudan is the Parent Education Project developed by Ira Gordon in Florida. Gordon’s program uses low-income women to teach mothers how to stimulate their infants intellectually (0-2 years old). Women selected as the parent educators come from the same general background as the mothers with whom they work. The trainers are selected on the basis of their experience with babies, ability to communicate verbally, ability to comprehend a short written description of the project and interest in the basic aim of the work. After five weeks of intensive training, field work gradually starts under supervision. The normative work of Gesell, Cattell, and Rayley is used to provide some of the stimulation tasks and to clarify the order of presentation. The material is so organized that each item or exercise is introduced to the infant just before the behavior should occur according to the norms. The emphasis is upon modeling for the mother who is eventually to extend the behavioral pattern to the child. Part of the training program includes teaching the mothers to make simple toys and mobiles from objects readily at hand or very inexpensive to obtain, to stimulate the young child.

The Florida program is relevant to the Sudanese situation because of two reasons: first, it relies for its implementation upon women who have very little educational background, women drawn from the same community as the parents. Such educators will likely be trusted more by parents that would outsiders from different cultural
mothers and perhaps have paid than several social visits in the past. So the training sessions would likely be relaxed and congenial.

Second, this program is not expensive; the only expense would be remuneration that the home visitors would receive and the cost of any simple supplies that might be required.

A second means of reaching parents is through the use of mass media, such as the radio, TV, newspapers, and books. As the rate of illiteracy is very high in the Sudan (over 80 percent), newspapers, books and magazines have a very small audience. Also, very few people can afford to have TV sets. This leaves the radio and public lectures as the most potent forms of mass media suitable for parent education in the Sudan.

The radio, in particular, is a useful medium since it reaches wide audiences and is regarded by the people as an authentic source of information. Daily talks by qualified people on different topics pertaining to child development — nutrition, hygiene, and the like — and how to deal with them — could help parents in their child-rearing duties. More important perhaps, the mass media could serve as propaganda agencies. They could draw public attention to the children in their midst and heighten the parents' awareness of their role as teachers of their young children. Since every parent apparently wants his child to succeed in school, programs about enhancing
children's school progress should attract parents' attention. Moreover, parents could send to the radio stations their questions and concerns about child raising.

A third approach to parent education is to directly train mothers in groups. Since mothers in the Sudan spend much of their time in social visits, it should be easy to organize group training sessions either in one of the mothers' homes or in a public building in the community. In these sessions mothers may be trained to develop toys and games to use with their own children. Also, mothers may be given elementary lectures on child development, to point out to them the ability of the young child to learn and the importance of the early years to the child's growth. Such group training has the advantage of reaching more parents than the home visit method and gives an opportunity for discussion and the pooling of experiences.

Finally, a fourth approach to parent education is to require mothers to participate in early-childhood education centres. This participation may take two forms. Mothers may work directly with the children as teachers' aids or they may merely observe what is happening in the classroom. In both cases mothers will be undergoing a parent-training program which teaches them techniques of classroom management as well as principles of child development.

When parents are regular participants in their child's classroom activities, an orientation program should be planned to provide
then with help in acquiring the skills they will need in working with the children. These parents need to know about the nature of the program, including the daily schedule of activities. Parents can learn how to use equipment and materials as well as how to bear their own specific responsibilities. As far as possible, at the end of the school day, parents should be given the opportunity to discuss problems, ask questions, and evaluate what happened during the day.

Such parental involvement in early childhood education centres can achieve many objectives. First, it helps parents develop a better understanding of the behavior of preschool children, particularly their own preschool child in an environment different from that of the home. Second, it gives parents an opportunity to put into practice whatever they have learned in theory. Third, it gives parents confidence in themselves and shows them that they are indeed able to teach their young children. Last, this participation may encourage parents to become directly involved in the education of their children at all subsequent levels of the educational ladder and hence bridge the gap between the home and the school.
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