

**Childcare and Early Education Services in
Low-Income Communities in Mexico City:
Patterns of Use, Availability and Choice**

**Robert Myers
Xóchitl de San Jorge**

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The analysis and conclusions that are presented here are the exclusive responsibility of the authors and do not pretend to represent the opinion of any of the organizations or individuals mentioned above.

I. INTRODUCTION

Within a framework focusing on early childhood care and development, as related to women's work, the main purpose of this paper is to examine the use and availability of childcare and early education services by families living in low income areas of the Federal District in Mexico in order to inform programming and policy formulation. Data will be presented about childcare options open to families and about the choice to use or not to use centers outside the home as well as about choices among centers. Use, availability and choice will be related to characteristics of families and children.

The data analyzed come from two related studies carried out during the period from June 1997 and January 1998, one a household survey of families with young children in a sample of 60 randomly chosen low-income communities (colonies) in Mexico City and the other an intensive study of a subset of 10 communities to determine the extent and characteristics of childcare and early education options provided in those communities and their immediate surroundings.

From these data it is possible to provide at least partial answers to the following questions:

1. Who provides care and education for children aged zero to six at different times of day?
2. How is attendance at some sort of extra-domestic childcare or early education institution related to age and gender of children and to the age, education, marital and work status of mothers?
3. What are the characteristics of the different childcare and early education services used, as reported by parents and as determined from the case studies of communities and childcare and early education centers?
4. What reasons do families give for not enrolling their children in centers or for enrolling their children in the particular centers chosen? How important are such factors as: cultural values, nearness, cost, the quality of services, and confidence in caregivers associated with childcare.
5. What is the level of satisfaction with the centers in which children are placed?
6. Do available options satisfy demand within the communities where the families live?
7. What are the costs associated with providing and using childcare and early education services, and who bears them?

The paper is organized in four sections. The first sets out a general framework and describes the setting for the study. A second section describes the method and sample and presents results from the household survey, organized as answers to the questions posed above. Section three presents data from the community case studies responding in greater detail to question 3 above and providing additional insight into the nature of the services offered. This section also allows us to respond, partially, to question 7. A final section is devoted to conclusions and implications for early childhood policy and programming.

II. SECTION 1: THE FRAMEWORK AND SETTING

This study was motivated by a hypothesis -- based on our experience and on a revision of the literature -- that the supply of extra-domestic services of childcare and education for children during their preschool years lags demand for such services and that the demand, in turn, lags behind the need. It will be difficult to prove or disprove this hypothesis, because the answer depends very much on how demand is defined. But it will be possible to approximate an answer.

Why is a possible lag of concern? We think these lags have a negative effect on the development of children and on the earning and learning capacities of family members, particularly women, both of which, in turn, limit economic productivity and growth. These effects also limit the ability of low-income families to overcome the conditions of poverty in which they live, perpetuating the vicious cycle of poverty and exacerbating social inequalities.

Why do we think these lags exist? Some would say that they are a product of lags in the dissemination of knowledge about early childhood care and development (ECCD). If parents, policy makers and programmers were aware of the potential benefits that can come from increased investments in ECCD, demand would increase and governments and others would be willing to provide additional services. Although there may be some truth to this position, we think it is not the main reason for the lags.

Our main hypothesis is that lags in supply and demand are mainly a product of cultural beliefs and values, grounded in history and habit, that makes it difficult for people to respond easily to new knowledge and, even more important, to social changes that challenge previous ways of thinking about and organizing childcare and early education.

What are these social changes? We know, for instance, that industrialization, urbanization, increases in poverty levels, shifts in ideas about the roles of women, increased consumerism -- to name some of the changes -- have created tensions inside families, one of which is the tension between time assigned to childcare and family matters and time assigned to work. The fact that children are developing and will live in a world that continues to change rapidly, that is ever more global and urbane and technological, suggests the need for skills and knowledge that most families are not in a position to provide to their children without help.

Despite these apparent trends and what would seem to be a need for shifts in childrearing patterns and practices, cultural resistance apparently appears on two levels. First, at the level of governments whose members resist involvement in what is seen as a family matter and who do not see the value of investing in this area. Second, at the community and family level where the status of women is still often linked to her childrearing role, where changes in family roles threaten male dominance and where there is a fear, often legitimate, that using some sort of extra-domestic arrangement for childcare will erode further essential social values.

Why do we think that lags between the supply and demand for good extra-domestic childcare and early education have negative effects on children, family members and the society at large? The arguments demonstrating the potential benefits from investment in childcare and early education have been set out in other documents and will not be treated here in detail (see, for instance, Myers 1995, Young 1995). In brief, an increasing number of research studies show that the first years of life are critical in the development of intelligence, personality and social conduct. During the early years the brain develops almost in its entirety and forms connections under the influence of the stimulation provided by the different environments in which the child is raised. The early years are when a person learns to walk and talk, when coordination, curiosity, self-control, cooperation, communication, confidence, and other skills and values that are vital to the behavior of future citizens and workers develop.

We know that it is possible to influence the developmental process, for better or for worse, depending on the support that is provided to children by the immediate and broader environments in which the child is cared for, socialized and educated. (Bronfenbrenner 1979; Sroufe 1988; Thomas 1992). And, we know that a variety of programs of support, including options for childcare and education outside the home, can significantly improve the level of development of young children. (Myers 1993; Bekman 1998; Schweinhart, et. al, 1993)

Families, Women's Work and Childcare

Failure to provide alternative childcare options limits not only the development of young children, but also the opportunities of parents, particularly women and sometimes older siblings, to earn and learn -- to look for, find and maintain productive employment and to develop personally according to their capacities (Búvenic 1996; Leslie and Paolisso 1989; Deutsch, 1998). That failure is related to engrained ideas about families and some myths about how families have functioned historically as well as about how they have changed.¹

Throughout history, the main context for socialization and development of young children has been the family. One prominent view of the family has been as a social unit capable of functioning in relative harmony for the benefit of all its members. This view is consistent with a line of contemporary analysis based on an economic model of the family (Becker 1988) seen as a welfare maximizing unit. This model has been applied to analysis of decisions within the family including decisions about how a mother should use her time: working outside the home or taking care of children within the home. According to this home economics model, the decision to work outside the home and enter the cash economy while seeking help for childcare would represent a "rational" economic decision, redounding to the benefit of children as well as parents.

This model of the family has been seriously criticized because it supposes a unity of interests and a level of altruism that is often lacking. In an alternative model, decisions

¹ For an outstanding cross-cultural, scholarly discussion of families in relation to the theme of human development, see Kagitcibasi, 1996. See also: Myers and Indriso, 1987; Leslie and Paolisso, 1989;

about how to allocate time are seen as the result of a process of negotiation among family members, a process characterized by intra-familial differences in interests and power and by a tendency for members to try and benefit their own welfare rather than family welfare. (Peters 1994) From this perspective, the response to the question, "Who is going to care for the children?" may be made on the basis of cultural patterns of male dominance, overriding interests of wife and children and not necessarily serving the best interest of either. Indeed, studies in diverse settings have shown that family decisions regarding time and the use of resources often favor men. They also show that the negotiating power of women is greater when they earn money and/or control family resources, resulting in a better distribution to children. Thus, small children may benefit if their mothers work outside the home, not only because of the increased resources that accrue to the family but also because of a change in the distribution of resources.

The traditional view of the family and the contemporary home economics models have also been criticized because they do not adequately take into account the effect of the conditions of poverty in which many families live. Families in poverty, it is argued, do not have the luxury of considering the diverse alternatives that a rich family can consider; the need to survive requires a different mentality. Options for poor families are circumscribed, and work outside the home for mothers becomes imperative. According to CEPAL (1995), the most important way that families living in poverty manage to work their way out of poverty is by an increase in the number of family members who are in the paid work force, including the mother. A similar line of argumentation appears in relation to single mothers because many of them do not have the option of remaining at home with their children during the day; they have to work.

Clearly, the work and childcare decision will be affected by the availability of alternative childcare options, a topic to which we now turn.

Childcare Options and Criteria for Choice

Care in the family or with neighbors. In the past, the way to reconcile the tension between childcare and work outside the home for mothers of small children has been to turn for help to other members of the family, particularly grandmothers and older siblings, or to neighbors. Today, these alternatives are not so viable: grandmothers may have remained in rural areas or be living outside the home or be working themselves; older siblings are now more likely to be in school. In cities an environment of lack of trust in neighbors makes it much less likely that a family will turn to neighbors for care, as might have been done in a small town. With these social changes, it is logical that families would look to extra-domestic options other than neighbors and that other systems of childcare would have grown – to what we have generically labeled Childcare and Early Education Centers (CEEC). Our study will try to find out how extensive often such alternative options are used, and what the offerings look like.

Childcare and early education centers. We define CEECs as those extra-domestic spaces in which children younger than six years of age are cared for and/or educated. The concept includes a set of options that run from privately-run, paid care occurring in a neighbor's home and involving 4 or more children, to large formal childcare

and/or preschool arrangements administered by the government. These may be called childcare centers, preschools, home day-care, etc.

A CEEC may focus exclusively on the protection (shelter, food, and health care) of small children, or exclusively on education (as in the case of most preschools), or the two may be brought together in the larger idea of fostering integral development of young children. With the increase in the number of CEECs at least two groups of concerns have surfaced. The first group refers to doubts about the effect of CEECs on the growth and development of children. Is it positive, compared with the attention that would be given at home? The second group of doubts has to do with possible biases in the access to services in general and to quality of services in particular. Do low-income families have access to such services? Under what conditions? How does the quality of available services differ for different income groups in the population? A more extensive literature exists responding to the first set of doubts than to the second.

CEECs and child development. Although it is true that in some cases a child will be better off if cared for in the home, it is also true CEECs can provide important benefits to participating children. In the case of Mexico, few studies exist showing the relationship between childcare in extra-domestic vs. home settings and the level of child development or subsequent achievement. We draw for the most part on studies from other countries (Myers 1992).² These studies show that programs of different kinds can have positive effects – short and long term – on health, nutritional status, psychosocial development and performance in school. Among these programs one encounters a wide variety of models, from formal to informal and from those focussing more on nutrition to those that are fundamentally educational. Moreover, we know from the evaluations that the effect on child development is greater if programs:

- Are of good quality;
- Include participation of parents and community members; and
- Take an integral approach, including health, nutrition and intellectual, social and emotional development.

We also know that the effects, in many cases, are greater for children who come from families living in poverty and/or suffering from social disadvantage.

It is also possible that the effect of NOT having an alternative form of care can be a negative on children. In extreme cases, the result can be abandonment or shutting small children in the house during the time that the mother works. Although data proving this point are scarce and not always believable, several studies and many informal discussions with people living in marginal colonies suggest that this practice is all too common.

² Nevertheless, the studies of Chávez and Martínez (1981) and of Cravioto (1982) do show the effect of nutrition on the development of children during their first years. For readers who would like additional information about longitudinal studies we suggest that they consult Myers (1992).

CEECs and Women's Work and Study. As indicated earlier, we have much less evidence looking at this relationship than we do for effects of CEECs on child development. Nevertheless, several pertinent studies exist for Latin America. An evaluation of the Community-Based Home Day-care Program in Colombia showed that 20% of the mothers participating in the program changed their work after enrolling their child in a day-care center (Ortiz 1992). A more recent study carried out in Rio de Janeiro confirmed that mothers who had their children in a CEEC earned more money and had a better level of living than mothers that kept their children at home (Deutsch 1998). Studies dealing with the work of young girls and adolescents, in Mexico and in Colombia, suggest that another immediate benefit derived from access to CEEC may be to prolong the time that girls are in school (Knaul 1998).

If family childcare options or CEECs do not exist and a woman needs or wants to work, the most common strategy is to look for employment that permits paid work at home or a job that allows the woman to take her children with her to the workplace. This option runs contrary to the notion that there is a direct trade-off between work and childcare (Myers and Indriso 1987). There will almost always be some trade-off, but the degree of trade-off depends on the nature of the job. For example, at home women take in washing and/or they knit. These are jobs that may be compatible with childcare because they can be done while a child sleeps or is in a walker. Or, they work as street vendors or in agricultural fields, jobs that allow them to take their children with them, sometimes in hazardous conditions and with negative effects for the child (Hernandez 1994). Unfortunately, these jobs are usually poorly paid, irregular and in the informal sector. Thus, the lack of childcare options not only influences whether a woman works or not, but also has negative effects on the type of work she may choose. The available employment is unlikely to help move a low-income family out of poverty, but it may help a family survive.

When a family is confronted by the need to look for a CEEC, what are the main considerations in making a choice? According to the literature, demand for and utilization of extra-domestic care is sensitive to at least five characteristics of the services that are offered. These are ³:

- personal knowledge of and trust in those who run the center, assuring personal care and improving the possibility that they can be held accountable;
- proximity to the home.
- the flexibility and duration of hours, as related to work schedules and availability of others;
- cost; and
- quality.

Family members other than the mother often meet the first four of these criteria, but not necessarily the 5th. Therefore there is an obvious preference for childcare in the family. It is not surprising that if a family option exists, it will be chosen. Many families, because

³ For an elaboration of these points see Myers (1995, Chapter 9).

of their own economic limitations, are obliged to sacrifice quality for accessibility and price, in which case there may be dissatisfaction with the services provided.

We also know that demand and the utilization of services offered in CEECs is affected by: 1) information about existing options and knowledge of the potential benefits that such an arrangement can bring to a child; 2) cultural patterns related to the role a woman is expected to play in the family; and 3) options for care within the home by someone other than the mother, including the option of contracting someone to care for the child in the home.

Finally, we expect demand for and use of CEECs to be related to the characteristics of parents – their level of education, and whether or not they are working, for instance. In this study we will explore how these factors figure in the choice of families to choose a CCEE.

III. THE MEXICAN SETTING: CONDITIONS AFFECTING THE AVAILABILITY, USE AND CHOICE OF CHILDCARE AND EARLY EDUCATION SERVICES

The setting for this study is the Federal District of Mexico which makes up about one-half of the urban metropolitan area of Mexico City, one of the largest cities in the world, if not the largest. In Mexico and in the Federal District, as in other parts of the Majority World⁴, a set of general demographic, economic, and social changes are affecting patterns of childcare and early education.

Demographic changes

Two trends should be noted. The first is a product of the constant migration to cities and of readjustments of urban populations within the growing urban areas. In the Mexican case, 70% of the population now lives in urban centers of varying size. According to the interim census of 1995, the population of the Mexico City metropolitan area continued to grow, approaching 20 million. However, the population of the Federal District, located within the larger metropolitan area, dropped almost one million people over the five years, from about 9.5 million to approximately 8.5 million people. This suggests a movement from the center of the city to the periphery and means that if new services are added within the Federal District, they should result in an increase in the percentage of those who are served -- as contrasted with the need simply to keep pace with population growth due to new migration.

A second trend reinforces the first; a falling birth rate has resulted in a very small decline in the absolute number of children between the ages of zero and six years in the population at large. Again, this means that increasing services brings a real increase in the percentage of the population served.

⁴ We prefer this term to others such as "Third World," "The South", or "Developing Countries."

The number of children younger than six years of age in the Federal District, according to the 1995 population count, was 940,310, with 619,263 younger than 4 years and 321,037 aged 4 or 5. These figures represent the limits of potential demand for under-six childcare and early education services in the District.

Economic changes

Mexico has adopted a policy of economic adjustment with neoliberal underpinnings over the last two decades. Among the results of this process are:

- A reduction in the rate of inflation, with slow and fluctuating economic growth, characterized by repeated moments of crisis.
- The concentration of economic benefits within a select group, with an unfavorable affect on the distribution of income: the 10% richest now control approximately 60% of the wealth (Mejia and Monroy, 1997 , p. 24).
- The number of people officially recognized as living in poverty and extreme poverty has reached an estimated 40 million (La Jornada, August 1, 1998). According to figures from the National Statistics Institute, 48% of the economically active population in the Federal District in June 1997 received less than two minimum salaries; 18 percent of the workforce received less than a minimum salary but worked more than 48 hours per week (La Jornada, September 23, 1997, p. 51).
- Under-employment and work in the informal sector have increased. According to the Rate of Partial Employment and Unemployment calculated by the National Statistical Institute in 1996, 23% of those in the labor force were under- or un-employed (Instituto Mexicano de Estudios Políticos (IMEP), April 24, 1998).
- The purchasing power of a minimum salary has decreased markedly.
- Employment in the “maquiladora” (piecework) industries has risen. Recent data show a sustained increase at the national level, reaching 11% (or approximately one million workers) during 1997 (The News, July 30, 1998). Many such industries are found in the Federal District. Most employ a high percentage of female labor and do not pay benefits to their workers.
- Social investments by the government fell markedly at the beginning of the present presidential period, and, although there has been some recovery in recent years, the real expenditure for social programs has not recovered fully under adjustment. Moreover, the current budget is burdened by debt payments.

What are the implications of these changes for attention to young children? They make it difficult to establish or extend programs of childcare and early education with public funds. The changes put increased pressure on women to work outside the home. They leave many working women outside the social security system and hence without access to care and education services offered by the State. They make it difficult for many

families to consider enrolling their child in a private center during the early years, for purely financial reasons, even when the quotas are low.

Social and cultural changes

Demographic and economic changes have been accompanied by important changes in the structure and functioning of families. In Mexico, as in many other countries, it is possible to observe a slow but persistent shift away from extended to nuclear family arrangements, with an increase also in the percent of families headed by women, often single women. (Leñero, 1994)

At the same time, participation by women in the labor force has increased, partially due to economic pressures, improved educational levels, reduced fertility, and changes in their perception of the roles they should play in society. From data collected in the National Education, Training and Employment Survey of 1995 it is possible to calculate labor force participation rates of women for different age groups and in different settings, including cities with a population of over 100,000 inhabitants.⁵ These rates are set out in Table 1.

TABLE 1. Labor Force Participation Rates for Women, by Age and Degree of Urbanization	
Population	Participation Rate
Women, age 11 and above (total)	34.5%
Women, age 11 and above in cities with over 100,000	38.1%
Women, ages 30 to 34 (total)	44.1%
Women, ages 15 to 49, in cities with more than 100,000	45.5%
Women, ages 20 to 49, in cities with more than 100,000	49.0%
Women, ages 30 to 34, in cities with more than 100,000	50.6%

The figure of 34.5% for the total labor force participation of women is approximately 5 points more than that registered during the decade of the 1980s, and is almost double the rate of 1970. Note that the participation rate for women of reproductive age in large cities approaches 50% in some age categories and surpasses that figure for women aged 30 to 34.⁶ The 1995 population count placed the number of women between the ages of 20 and 49 years in the Federal District at 2,127,094. Thus, more than a million women in this age range are working or looking for work.

⁵ In this survey, a minimum of one hour per week is used to define work. Included in the count are people who worked during the week prior to the survey (80%), including those who work independently; those who have worked but did not work during the week; those who will begin to work within a period of four weeks; those who helped out in a business during the week but without pay; and those looking for work.

⁶ Another recent study, in three Mexican cities (but not the Federal District), arrived at a participation rate for women 12 or older of 41%, with a rate of 62% for women 25 to 29 (Pedrero 1998).

According to various surveys carried out in the 1980s, approximately 55% of all women aged between 20 and 49 who are in the labor force are married. Another 30% are single and 14% are divorced or separated (Tolbert, 1991, p. 15). If we apply these percentages to the number of working women in the Federal District, we can estimate that approximately 600,000 women between the ages of 20 and 49 years need to balance work life and married life. This group represents approximately 30% of all women aged 20 to 49, which is more or less the span within which they would be expected to have children younger than six years old.⁷

If women aged between 20 and 49 who work have, on the average, one child younger than six years of age, then 600,000 of the 940,000 children under six in the Federal District should need not only educational programs but also some kind of childcare while their mother works. From this analysis of women's work we conclude that:

- The percentage of women who are in the paid labor force is increasing.
- At least half of the women who work have family responsibilities that usually include the care and education of young children.
- Approximately 600,000 working women and an equal number of children under six constitute the population may need assistance with childcare and early education. For children under 4, the figure would be closer to 400,000.

Moreover, we conclude that the changes we have described, taken together, have produced pressure on the traditional forms of care provided for children under 6 – previously handled by the mother or another family member – thereby generating a new demand for extra-domestic forms of day-care and early education.

The foregoing review of the literature and of the data describing changes in Mexico suggest several conclusions:

- Programs of attention to the care and development of children during their early years should respond to needs of both children and of parents, particularly mothers.
- Changing conditions have exacerbated a potential conflict with respect to the use of time where time devoted to childcare and early education trades off against time devoted to working outside the home in paid employment, helping to create a growing need and demand for alternative forms of care and education.
- There is reason to believe that centers providing care and early education can improve the development of young children while moderating the potential conflict mothers (and other family members) face between providing satisfactory care at home throughout the day and working for at least part of a day.

⁷ It is unlikely that many women in the 45-49 age range will have children under 5; at the same time, it is likely that there will be many working mothers with young children who are in the age range of 15 to 20. Our figures are, therefore, a very rough approximation.

Against this background, we will ask what has been the response of the Mexican government and of civil society to the changes, both in terms of the legal base that has been provided for childcare and early education and in terms of the actual services offered. In this section, we will draw on official documents and statistics to describe the setting. We will also look at the results of an earlier study of childcare done 10 years ago to help. All of this will help interpret results from the two studies to be reported subsequently.

IV. THE SETTING: LEGAL BASES AND EXISTING PROGRAMS OF CHILDCARE AND EARLY EDUCATION

The Legal Base

One way in which the government can facilitate a response to changing childcare and education needs is by providing a solid legal base for programs. The actual legal base for establishing these services can be found in laws pertaining to at least three distinct areas: education, work and welfare.

From the review, it is possible to see that:

- A coordinated policy does not exist to promote integral child development. Legal obligations as well as the bodies charged with attending to the care and education of young children are dispersed.
- There exists a base for attention to children in Child Care and Early Education Centers, organized and supervised by the State through IMSS and ISSSTE which, in theory, cover all children under four whose mothers work in the formal sector, leaving attention to the rest of the children under four to programs administered by DIF and by SEP.
- There is a legal opening for private participation in early education and care through the General Education Law.
- The State has an obligation to create preschool centers for children ages four and five in response to the organized demand of families, even though attendance at preschool is not obligatory for entrance into primary school.
- As a signatory to the Convention on the Rights of the Child, Mexico has an added legal obligation to work toward promoting the full development of children, including the creation of institutions and services that help parents, especially working parents, in their childcare responsibilities.
- We turn now to examining the state of the provision of childcare and early education services in Mexico and in the Federal District, looking first at programs directed to children under the age of 4 ("Initial" education) and then to programs for children ages 4 and 5 (Preschool education).

Governmental Programs of Initial Education (Children Under Four)

Programs for children under four years of age are often classified as “childcare” programs. In Mexico center-based services are classified as “guardrails” or as Centers for Integrated Development (CENDIs).

Coverage in 1989. In order to have a basis for comparison, we present results from a study carried out by the Population Council in Mexico in 1989 (Tolbert 1990), according to which the public sector provided services for 60,000 children in the entire Mexico City Metropolitan Area, representing 12% of the potential demand calculated in terms of children under four years of working mothers. (If the calculation had been made in terms of the total number of women with children under four – instead of working mothers – the percentage would have been much lower. The total included children enrolled in CEEC administered by the following institutions:

TABLE 2. Coverage in 1989	
INSTITUTION	NUMBER OF CHILDREN
The Federal District (DDF)	16,372
The Mexican Social Security Institute (IMSS)	12,970
State Secretariats	8,308
The Institute for Social Security of State Workers (ISSSTE)	6,630
The Educational Secretariat (SEP)	5,959
Quasi-governmental institutions (“para-estatales” such As the national oil company, PEMEX)	5,075
The National Institute for Integral Family Development (DIF)	3,740
The Institutional Revolutionary Party (PRI) ⁸	641
TOTAL	59,695

The Population Council study concluded that “after examining the evidence, it seems that Mexico City is not prepared to offer childcare services to the children who most need them – the children of families with scarce resources and without the right to social security” (Tolbert, p. vi).

These data offer a general idea of program coverage in public programs nine years ago. In order to interpret correctly the data and to compare them with the information that will be presented subsequently it is important to emphasize two characteristics of the data presented in the 1989 study. First, the enrollment figures include an unknown number of children in the reporting institutions who are not under four years of age. The percentage could be as high as 20%. In our presentation we try to separate the places available for children under four years of age from those ages four and five. Second, the figures

⁸ It is interesting to note that the political party, PRI, is include among “government” institutions, a definition that would not be permitted today, eliminating 641 places from the list.

presented include children registered in all of the Metropolitan Area. The population of the Federal District is about one-half that of the total Metropolitan Area.

Taking these adjustments into account, we estimate that in 1989, the number of children under four enrolled in CEEC administered by the government would be between 27,000 and 30,000.

Coverage in 1997. In 1997, the institutions that were responsible for attention to children under the age of four remain essentially the same as in 1989. The main actors continued to be IMSS, ISSSTE, SEP, the City Government, State Secretariats, Quasi-governmental institutions (in spite of a reduction in the size of this sector) and DIF. Nevertheless, it is possible to discern several general tendencies in relation to early education and childcare programs.

- Although there has been an increase in places available in government-administered CEEC each year, the rate of this growth has decreased. The Presidential report to the nation presented in September 1997 indicated that the number of places in the childcare centers of IMSS and ISSSTE rose 6% per year in the previous six years but rose by only 2% per year during the first three years of the current presidency. By way of contrast, the coverage in the parental education program option that is also directed toward children under four years of age fell 20% during the Salinas period and grew almost 100% during the first three years under Zedillo. The statistics mark an important change in the "initial education" policy in which the present government has placed its emphasis on parental education. The Mexican parental education may result in better development of young children (we lack a good evaluation), but this form of attention does not help to provide a solution to the childcare problem faced by many families.
- In recent years the main public agencies offering childcare have sought an alternative to the costly model of Integrated Child Development Centers that had been the norm previously. IMSS, ISSSTE, SEP and DIF have all instituted and expanded community-based programs,⁹ consistent with the idea of "co-participation" or, as critics point out, as a sign of a movement to privatize childcare, albeit with a major contribution from public funding.

According to statistics obtained from several sources,¹⁰ the number of children under four served by childcare and early education programs of the government in the Federal District was approximately 52,000 (See Table 3). If we compare this number with the number of children under four in the Federal District according to the 1995 population count (619,273) we see that the public sector is attending to 8.4% of the total population.

⁹ IMSS has created "Community Neighborhood Centers"; ISSSTE an "Integrated Educational Program"; SEP, "Semi-formal Centers of Initial Education; and DIF, "Community Centers for Child Assistance".

¹⁰ SEP, Estadísticas Anuales, 1996-7; Memorias del Encuentro de Educación Inicial para el Distrito Federal, Febrero de 1997; SEP, Educación Inicial. Encuentro de Educación Inicial en el Distrito Federal, Resumen de Información, "Febrero de 1997; Poder Ejecutivo Federal, Tercer Informe del Gobierno, 1 de Septiembre de 1997, Anexos, p. 64.

TABLE 3. Attention to Children Under Four Years of Age Public Sector Programs in the Federal District, 1996-97*			
Institution	Program	No. of children	Total
Instituto Mexicano de Seguro Social (IMSS)	Madres IMSS	1586 x .8**	11,167
	Ordinarios	9257	
	Participativos	96	
	Vecinal-comunitarios	545	
Instituto de Seguridad y Servicios Sociales del Estado (ISSSTE)			6,772
Sistema Nacional para el Desarrollo Integral de la Familia (DIF)	CAIC	8764 x .8	11,171
	CADI	5200 x .8	
Government of the Federal District	CENDI	1194 x .8	10,768
	Estancias Infantiles	12266 x .8	
Secretaría de Educación Pública (SEP)	Semi-formal and employees of SEP	3273 x .8	11,689
	Sector estatal	2797 x .8	
	Sector para-estatal	2990 x .8	
	Universities	2487 x .8	
	Special Education	3064 x .8	
TOTAL			51,747

Notes: *Not included in these statistics are some children who were in a federally-administered Home Day-care Program operated by an institution called "National Volunteers" with some support also from UNICEF. In Mexico City this program, operating in 170 homes, was transferred to the DIF and, later, a decision was taken to abandon the program, ignoring the previous investments made. The result of this shift has not been evaluated; however, we know that many of these home day-care arrangements disappeared whereas others were taken over by the city and others began to operate as private centers without any support or supervision.

**The ".8" figure represents an approximate adjustment for the estimated number of children in the particular programs who were aged four or five. In the case of IMSS, the Madres IMSS program regularly accepts children up to age six, but according to information provided by IMSS, the other programs are concentrated virtually 100% on children under the age of four. In the cases of SEP, DIF and the DDF it was not possible to obtain exact data for children under four so we simply applied an adjustment figure, assuming that 20% of all children enrolled were age four or five. This corresponds roughly with our field observations.

And, if one accepts the estimate of approximately 400,000 children under four in the Federal District who are children of working mothers, the percentage of the coverage would be 13%. Even if the estimate of children is reduced drastically to 300,000, the coverage would remain at 17% of the children of working mothers. This means that over 80% of the families in which the mother works have to find another means of covering childcare needs – by choosing work compatible with childcare, by meeting the need from within the family, or by looking to programs that are not administered by the government.

If we compare the estimates for 1997 with those for 1989 we see a significant advance in coverage over the period of eight years. However, it is clear that the overall coverage remains well below the potential demand defined in terms of the number of

children of working mothers and does not begin to cover the potential demand defined in terms of the total population of children under four in the Federal District.

V. GOVERNMENT PRESCHOOL PROGRAMS (AGES FOUR AND FIVE)

For the 1997-98 school year, the index of attention to children of five years of age who wish to attend preschool was tabulated as 81.4%. (Zedillo, Fourth Report, 1998) For children aged four, the percentage is considerably lower, estimated at 58% for the 1998-99 school year (La Jornada, February 25, 1999). The percentages for children in the Federal District are presumably higher than the national averages. At a national level, and taking into consideration all types of preschool programs, the official statistics show that the coverage for preschool programs has increased at a rate of about 2% per year during the decade from 1988 to 1998. The overall increase in coverage was 21% during this period. In brief, there has been a continuing, but slow, effort to increase coverage to reach a level of 100% for children aged five, with much less attention to younger children.

In urban areas of Mexico, the preschool model is essentially uniform whereas in rural areas the model varies according to population concentration and isolation and according to whether or not the population is predominantly indigenous. The standard urban model consists of attention for about three hours each weekday, either during the morning from 9 to 12 or during the afternoon from 2:30 to 5:30. According to official statistics, the average number of children per preschool teacher is 28, raising a serious question about the quality of the coverage provided.

Preschools are the responsibility of the educational sector which, however, works with other organizations such as IMSS and DIF which include children ages four and five in some of their programs.

A program called *Jardines Mixtos* has developed within education which extends the preschool schedule into the afternoon hours, providing food for children at mid-day and offering various recreational activities during the extended time. The coverage for children in *jardines mixtos* is relatively small, approximating 5,000 children.

Private and Community CEECs

An unknown number of private and community centers exist in the Federal District. The number is unknown because a high percentage, recently estimated at 92% by the SEP (La Jornada, October 18, 1998, p. 60) is not registered. The 1989 study by the Population Council concluded that there is a need to quantify and try to better understand the contributions of these CEECs to have a complete picture of childcare and education. But the picture has remained fuzzy.

Registered centers. According to data provided by the SEP for 1996-97, only 3,383 children attend private preschool centers registered with the SEP. Of these, 1,431 (42%) are classified as preschoolers.¹¹

In addition to these statistics, a report from "The Alliance to Favor Children in the Federal District"¹² (1997) indicated that the Private Assistance Board (*Junta de Asistencia Privada*) registered another 3,466 children, but it is not clear if these are the same children registered with the SEP or whether these are independent centers. In the same report, the Montessori Institute of Mexico reported 360 children in affiliated centers.

Adding up these various figures we arrive at a total of 7,209 children, but there is no way of knowing how much duplication there is among the various reports and we do not know the split between preschool and "initial education" for some of the reports. Nevertheless, it is clear from the above that the registered private sector is responsible for a relatively small number of children in the larger picture.

Non-registered centers. To the officially recognized offerings we need to add private and community CEECs that are not registered with the SEP because they either follow a different philosophy or do not cover the pre-requisites or do not want to pay taxes. Because they are not registered, we do not know how extensive these offerings are nor what they look like. This study will help to verify or contradict the finding reported earlier from the SEP, that 92% of the private early education centers are not registered.

Whereas privately run centers try to cover their costs from fees, the community-based CEECs, depend to a large extent on volunteer initiatives of groups of local residents. They are often run by locally trained mothers (*madres educadoras*), with varying levels of training and usually without official certification, but with a social commitment to their work. These women sometimes work for a honorarium but in most cases they donate time, taking a minimum salary or less and working without any health or other benefits. Most CEECs are located in marginal communities and cater to low-income families. Funding for such centers may come in part from parents who pay a modest fee, but in the majority, churches, civic organizations, political parties, and/or international organizations cover costs.

Our experience and that of others suggests that within this broad category of community and private CEECs are centers of excellent quality and centers that could qualify as potentially harmful to children. It is sometimes assumed that the mere fact that a center does not register itself with the SEP indicates that it is not up to standard, is harmful, and should therefore be eliminated. And, unfortunately, few studies have been done to evaluate their quality. However, it is possible to find studies showing that at least some of these centers are of excellent quality, despite the fact that they are not registered and that

¹¹ This total included 1,084 children in centers run by the Institutionalized Revolutionary Party (PRI), now classified as private.

¹² This mechanism for coordinating efforts favoring children was an initiative of the ruling party and was dismantled after an opposition candidate was elected and before he took office.

their staff is not officially certified.¹³ And our visits to many such centers have shown that many are of excellent quality. A contrasting posture is, then, that many, and perhaps even most, of these CEECs are fulfilling a valuable social function, treat the children well, and represent a resources that can be drawn upon and helped to improve.

A major purpose of this study is to offer a more systematic indication of how frequently community and private CEECs appear in low-income communities of the Federal District and to present information about their characteristics.

With the above framework and setting as a backdrop, we now turn to presenting results from the two related studies: the household survey and the intensive study of CEECs in 10 colonies.

VI. SECTION 2: THE HOUSEHOLD SURVEY

Methodology

To arrive at the sample of 60 communities¹⁴ for the household survey, we first identified the set of communities within the Federal District¹⁵ that comprise the 20 percent with the lowest average incomes, within each of the 16 Delegations. From this group of 301 communities, 60 were chosen randomly within delegations, with the number of communities chosen from each delegation proportional to the population of the delegation.

A standard survey technique was used to determine which households to interview within each community, with the number of households chosen in each community proportionate to the population of that community in the total sample of 60, and with a target of 1,000 households. Families were included in the sample only if they had one or more children under the age of seven years (including only those aged 6 who were not

¹³ See for instance: Isabel González, "Evaluación de la capacitación teórico-práctica y trabajo de educadoras: Centro de la Amistad del Cerro de Judío," en R. Myers y S. Martinic (eds.) *Evaluación: Aprendizaje al Servicio de los Proyectos Sociales*. México, D.F.: Colectivo Mexicano de Apoyo a la Niñez y Centro Juvenil Promoción Integral, 1997.

¹⁴ Mexico City is divided into 16 "delegaciones" and each delegación is sub-divided into "colonias". The definition of boundaries of colonias are somewhat fluid but the colonia provides a basis for assigning a variety of services including postal and police services. Colonias differ a great deal in size and organization but most colonias have some sort of organization, formal or informal, that deals with affairs of the colonia. For these reasons the colonia is roughly equivalent to a "community". Another synonym might be "neighborhood." The Arturo Rosenblueth Foundation has painstakingly reclassified census data to correspond to communities and we used this reclassification as the basis for defining the low-income communities from which to choose the sample.

¹⁵ The original design included a sample of households in the larger metropolitan area of Mexico City. However, financial limitations and the difficulty of defining a sampling frame in the more fluid and often more recent communities outside the boundaries of Federal District led us to limit the study to the Federal District. This means that the study does not include some of the poorest settlements in the larger metropolitan area of Mexico City and means that the situation described is probably somewhat better and more optimistic than it would have been had we been able to include outlying communities.

enrolled in primary school). Information was gathered from the person primarily responsible for child-care in the family.

A questionnaire administered in the household survey sought general information about: the family, the people who care for the child at different times of day, extra-domestic childcare/educational institutions and the general characteristics of the services used, reasons for using or not using services and for choosing the particular services used when that was the case, and satisfaction with services chosen as well as the options available in the community.

Description of the Population Surveyed

Information was gathered in a total of 1,041 households in which we encountered 1,361 children under the age of seven (and not in primary school). Because the field work occurred over a seven month period and included times when school was in session (as of August 25, 1997) and before, it is important to identify which families were interviewed before and after because the patterns of childcare and the use of services changed accordingly. Of the 1,361 children, 666 were in families interviewed before the start of the school year and 695 in families interviewed on or after the opening of school. Most of the information to be presented later in this document dealing with patterns of care and the use of services will focus on the 695 families interviewed during the school year. However, the availability of data before and after schools allows us to see also how patterns differ when school is in session and when it is not.

Table 4 summarizes information about households, families and children obtained in the household survey:

TABLE 4. CHARACTERISTICS OF HOUSEHOLDS		
Characteristics	Percentage	
More than one family forms part of the household	9%	
The family owns its home (de jure or de facto)	53%	
Homes with:	Running water	97%
	Drainage	94%
Type of family:	Married couple	57%
	Unmarried couple living together	31%
	Single, divorced, separated or widowed woman	11%
	Grandmother present	4%
	Families with older sister, aged 12 or more	9%
Families with one or more members eligible for social security ¹⁶	44%	
Education	Mothers	Fathers

¹⁶ This does not necessarily imply eligibility for childcare which is linked to women's employment.

TABLE 4. CHARACTERISTICS OF HOUSEHOLDS		
• Complete primary or less	40%	38%
• Secondary	43%	42%
• Upper secondary	12%	14%
• Higher	5%	6%
Paid Work by mother:	Outside the home	20%
	At home	2%
Children	Girls	47%
Age	>3	40%
	3 but > 4	18%
	4 but > 6	35%
	6+ (but not yet in school)	7%
Physical or mental problems (as reported by parents)		3%
Without parents		1.5%

Results

Results from the Survey are organized to respond to the questions set out in the introduction to this paper.

1. Who provides care and education for young children aged zero to six at different times of day?

In order to see what options were being used to care for children during different times of the day, families were asked, for each hour of the day, "who is responsible for caring for and/or educating the child?"

Responses to this question were obtained for approximately 70% of the children in the sample. When we compared respondents and non-respondents on this question, we found that the response rate was much higher for questionnaires administered before school opened (90%) than for those administered after (51%). We also found that the response rate was higher for children from families that later said that they did not send their children to a center than among families that said they did, particularly for those interviewed after school began (54% vs. 43%). Non-response did not show any consistent pattern with respect to the age of the children or the education of the mother.

This analysis suggests that there will be a downward bias in the data against finding children being cared for in extra-domestic settings and that this downward bias will be greater for the period after school began than before.

The information reported in Table 5 covers the hours from 6AM to 10PM, grouped as follows: 6AM to 9AM, 9AM to 12PM, 12PM to 6 PM, 6PM to 10PM. The unit of analysis is child-hours. For instance, to obtain the total number of child hours during which someone was responsible for care and education between 6AM and 10PM, we multiply the total number of hours (16) by the number of children for whom information was available.

To simplify the table, only the most important actors are presented: mothers, grandparents and early childhood centers. Fathers alone account for only 0.6% of the total time (or 1.1% if one includes responses indicating fathers and mothers together). Older daughters also covered only 0.6% of the caregiving time. Neighbors, servants and relatives were responsible for less than 1% of the time.

Table 5 is divided in four parts. In the first section we present information for all those for whom information was available. The second part of the table presents the responses only of those who were interviewed during the period school was in session, but for all ages. The third and fourth sections also present the patterns during the school period, but for children younger than 3 and for children 4 to 6, respectively.

TABLE 5. Responsibility for Care and Education of Children, 0-6 in Low-Income Communities of Mexico City, 1997 (percent of child-hours)					
All respondents, all ages (1)					
Hours	Agent Responsible for Care				Total
	Mother	Grandparent	Childcare center	Others (2)	
6AM to 9PM	90.5%	3.6%	3.4%	2.5%	100%
9AM to 2PM	76.7%	5.6%	15.7%	2.0%	100%
12PM to 8PM	86.8%	6.3%	4.1%	2.8%	100%
18PM to 2PM	93.2%	3.3%	0.6%	2.9%	100%
Respondents during school year, all ages (1)					
Hours	Agent Responsible for Care				Total
	Mother	Grandparent	Childcare Center	Others (2)	
6AM to 9PM	93.6%	2.0%	2.3%	2.1%	100%
9AM to 12PM	77.2%	3.1%	18.8%	0.9%	100%
12PM to 18PM	90.0%	3.6%	3.9%	2.5%	100%
18PM to 22PM	95.3%	1.5%	0.7%	2.5%	100%
Respondents during school year, children younger than age 3 (1)					
Hours	Agent Responsible for Care				Total
	Mother	Grandparent	Childcare Center	Others (2)	
6AM to 9PM	95.3%	2.4%	0.1%	2.2%	100%
9AM to 12PM	92.9%	3.6%	0.2%	3.3%	100%
12PM to 18PM	92.7%	3.2%	1.3%	2.8%	100%
18PM to 22PM	96.0%	1.1%	0.0%	2.9%	100%
Respondents during school year, children 4 to 6 (1)					
Hours	Agent Responsible for Care				Total
	Mother	Grandparent	Childcare Center	Others (2)	
6AM to 9PM	91.4%	0.1%	3.9%	4.6%	100%
9AM to 12PM	55.4%	0.1%	43.1%	1.4%	100%
12PM to 18PM	86.0%	2.4%	8.6%	3.0%	100%
18PM to 22PM	94.8%	0.1%	0.2%	4.9%	100%

Notes: 1. No. of respondents. All = 960; School period, All = 359, >3 = 156; 4-6 = 136
 2. Others = Older sister or brother, father, aunt, servant, neighbor

From the information presented we see that:

- Mothers continue to function as the responsible caregiver during the period from 6AM to 10PM, assuming responsibility for almost 90% of the child-hours for children from birth to age six. This responsibility varies with:
 - a. The time of day (77% during the period from 9AM to Noon and 93% from 6PM to 10PM)
 - b. The age of the child (for children aged under three, the percentage is never below 92%, regardless of the time of day; for children four or older, the percentage drops to 55% during the hours of 9 to 12 when many children are attending centers but is above 90% during the early morning and the evening hours.
- Grandparents have a relatively minor child caring role in terms of total caregiving time, accounting for less than 5% of the total time. Although these brief periods may be crucial they do not amount to much in the overall time frame. During the period before school began, grandmothers accounted for slightly above 6% of the caregiving time whereas during the school year the percentage drops to about 3%.
- Older sisters apparently make minimal contributions to caregiving in terms of total time, appearing as the responsible caregiver during less than 1% of total child hours.
- Fathers alone are seldom the responsible caregivers, accounting for less than 1% of the total time throughout the day.
- Use of extra-domestic care and/or education centers amounts to a relatively small portion of the total care hours (5% during the hours of 6AM to 10PM) but this percentage rises to 43% for children aged four to seven during the hours of 9 to 12 when preschools are in session and to 58% for children ages five and six during the same hours. This contrasts with about 2% for children younger than three and 9% for children aged three during the same 9 to 12 period.

In addition, we note that servants were virtually absent from the population interviewed, as is to be expected in low-income areas. And, very few individuals indicated that they left their child with an aunt or a neighbor to be cared for on an individual basis.

Comments

The amount of caregiving time that is spent in extra-domestic childcare or early education centers is low, particularly for children under the age of three but also for children aged three. Perhaps more surprising is that grandparents and older daughters are

not spending more time caring for young children since other studies have suggested greater presence (Knaul 1998, Deutsch 1998). The pattern seems to reflect the often-noted tendency for urban families to function as a nuclear unit, with less presence of grandparents. Only 4% of the families actually had a grandparent present in the household. It also reflects the increasing tendency for girls as well as boys to go on to secondary school.

2. How is attendance at some sort of extra-domestic childcare or early education institution related to age and gender of children and to the age, education, marital status and work status of mothers?

Overall, 23% of the families in the sample indicated that their child attended a childcare or early education center. This information is derived from a direct question: "Is your child cared for outside the home in some kind of care and/or education service?" (This is somewhat different from the information used in answering the first question, derived from asking who cares for the child during different hours of the day).¹⁷

There is no significant gender difference in the percentage of children being cared in some kind of center although the percentage for girls is slightly higher, so the analysis will be carried out for all children and not separately for boys and girls. However, the use of extra-domestic services of childcare and/or education does vary by: the time of year (whether schools are in session or not), the age of the child, maternal education, marital status, the mother's work status, and whether or not the family has a right to social security.

The time of year. The advent of the school year raises the overall use of childcare or education services by about 10 percentage points, from 18% prior to the start of school year, to 28% after the opening of school (to provide us with the average figure of 23% mentioned at the outset of this section).

TABLE 6. Rate of Use of Childcare and Early Education Centers, Before and After the Beginning of the School Year*							
Category	Ages						
	+0 to 1	+1 to 2	+2 to 3	+3 to 4	+4 to 5	+5 to 6	All
% attending before school year began	5.5	5.6	13.0	16.8	38.8	36.8	17.6
% attending during the school year	4.4	5.0	12.8	34.9	71.2	75.0	27.9

Notes: * The school year began on August 25th

**There were 666 children in the "before" group and 695 in the "during" group.

From Table 6 we can draw a number of conclusions:

¹⁷ A "center" was defined to include: formal and non-formal arrangements; public and private centers; registered and non-registered centers; community, workplace or public school centers, and even cases in which a child was cared for in the home of a neighbor with at least 4 other children at some point during the day.

- For children under three years of age, the pattern of use does not change with the advent of the school year but for older children there is a significant difference.
- Age makes a big difference. Whereas only 5% of the children under the age of three attend some kind of childcare or education center, the percentage rises to 75% for children ages five or six (who are not in primary school).
- There is a considerable increase in the use of centers as of the age of four. This is the official age for entry into preschool and seems to be accepted by most parents as a time when it is appropriate to enroll children in a center.
- The percentage of children in low-income areas aged five and who attend centers is at least 15% points below the national average of 90% for that age group.

Because of the differences in the use of services before and after school begins, the analysis that follows will be presented only for children and families interviewed after school began when attendance was highest. The data presented in Table 7 are only for the school period. Moreover, because there are such differences by age, Table 7 is organized by age grouping.

TABLE 7. Differences in the Use of Childcare and Education Services During the Period When School Is in Session, by Age of Child								
Variable	Percent who use a childcare or education service for children							
	> age 3		3 but >4		4 but > 7		All ages	
	N	%	N	%	N	%	N	%
Mother's education								
• None	7	14	9	0	21	48	37	30
• Primary	95	4	51	8	117	50	263	25
• Lower secondary	108	4	47	11	102	54	257	25
• Upper secondary	38	3	16	38	31	87	85	40
• Higher education	114	7	4	50	6	100	24	38
• All levels	262	4	127	13	277	57	666	28
Single Parenthood	21	14	11	9	31	61	63	36
Mother in Labor Force	33	12	14	29	26	65	73	34
Family Entitled to Social Security	115	5	53	17	108	71	276	33

From Table 7, we see that, among the children in families interviewed when school was in session:

- Maternal education makes a difference. During the school year, 39% of the children of mothers with more than a lower secondary education attended a center as contrasted with 26% of the children from mothers with less education. For children under three there is very little difference in the use of services among different educational levels. However, the comparison is striking for both the three to four and the four to six year old age groups. Whereas only one-half of the mothers of four to six year olds who have a primary school education or less enroll their child in a center, 100% of mothers with higher education and 87% of mothers with upper secondary do so. And, 38% of the mothers with upper secondary use a service for their three-year olds whereas the percentages are zero for mothers with no schooling and 8% for those with primary schooling only. It would seem that education not only influences the frequency of use but also the age at which it is acceptable to enroll a child in a childcare or early education service.
- Being a single parent makes some difference. As indicated earlier, approximately 11% of the families interviewed were single parent families, virtually all headed by women. Being a single mother results in a higher level of use of services: 36% compared to an average of 27% for other types of families. Although the numbers are relatively small, it seems that the influence is greatest for mothers with children aged under three. Still, the percentage of these mothers using extra-domestic care is only 14% (more than three times the general average but still relatively low).
- Mothers' participation in the labor force make some difference. During the school year, 34% of the children whose mothers worked outside the home were enrolled in childcare or early education centers as contrasted with 26% for non-working mothers. As with single parenthood, the effect of working seems to be greatest for the children under three, and is pronounced for three-year-olds.
- Participation in social security. During the school year, 33% of the children whose families have a right to social security attended a center, as contrasted with 24% in families without the right. The rates of enrollment for children aged zero to three are 5% for those with social security rights compared to almost 4% for those without. It may seem surprising that such families do not have a higher rate of use of services. However, the reader should keep in mind that: (1) the right to social security does not necessarily bring with it the right to childcare because the right is linked to working mothers; and (2) the number of places in centers operated by the social security system is limited and the centers are more likely to be in communities with higher incomes.
- When we examined the percentages for use among respondents in the period prior to the beginning of school, we found a rather dramatic difference, with use by 11.5% of the families with social security rights vs. 0.1% for those without.

- Not shown in Table 7, is the finding that the presence of grandparents or of older sisters does not have a significant difference on enrollment.

Comments

Although relationships are found, we had expected to find a stronger relationship between use of services and education, single motherhood and work status. One possible explanation is that the cultural norm that assigns childcare responsibilities to mothers continues to operate, moderating the expected relationships.

We also expected to find a lower use of services when grandparents or older sisters were present but that was not the case.

3. What are the characteristics of the different childcare and early education services used, as reported by parents and as determined from the case studies of communities and childcare and early education centers?

Preschool/kindergarten vs. childcare centers (“guarderías”). The difference between a preschool and a childcare center is not always easy to make. In this study, the main distinguishing characteristics were age of the child (centers attending children under four are classified as a childcare center) and the hours during which attention was provided (more than half day).

Using this classification, we found that although only 42% of all the children in the sample were officially of preschool age, 89% of the children attending centers were in some sort of preschool.

Private vs. public centers. In the population studied, 27% of all children using a service were in a private or community center. The percentages are 28.5% and 25.8% respectively for preschools and childcare centers.

At a national level, official statistics show that the percentage of preschool and early education centers classified as private is less than 10%. The general perception of private education and care is of expensive centers catering to middle and upper class children. It is somewhat surprising, therefore, to find such a high percentage in low-income communities. The relatively higher percentage seems to reflect both a lack of available spaces and a preference for centers that are more intimate and with a better ratio of adults to children, as well as more flexible hours. It suggests that the private and community centers are serving an important social function. We will return to this idea later in the document.

Children under three. As indicated earlier, there were very few children under 3 in any kind of center. Of the few who were, almost 50% were found to be in private centers, suggesting an important vacuum in government programs for children under three.

The data from the household survey do not allow us to say much more about the characteristics of centers but this topic will be treated in detail as part of the presentation of case study data.

4. What reasons do families give for not enrolling their children in centers or for not enrolling their children in the particular centers chosen? How important are such factors as cultural values, nearness, cost, the quality of services, and confidence in caregivers associated with childcare?

The most frequently mentioned reasons for NOT enrolling a child in a center were:

- The child is too small (25%, rising to 40% if the child is under three);
- Someone is available to care for the child – either because the mother does not work or another person is available (24% overall and also for children under three).
- Cost (7%)

Only three percent of the reasons mentioned referred to distance as a factor.

A number of responses indicated a lack of confidence in the center-based option either by the caregiver (5%), the spouse (1%) or a relative (0.3%). Likewise, caregivers said they lacked confidence (2.5%) or were not convinced of the value or were in disagreement (1.9%) or did not think the treatment would be good (0.6%). Putting all of these together, 11.3% of the reasons seem to reflect a lack of confidence in centers as an appropriate place for children to be. When this is set beside the reason that the child is too small (and perhaps even the idea that someone else is available as a first option for care) once can infer that cultural beliefs and values have a strong influence on the use for childcare centers, particularly as compared with such factors as distance and cost.

The most frequently mentioned reasons FOR enrolling a child in a center were:

- nearness (37%)
- the educational method or quality of the center (27%)
- low cost (12%)
- confidence in the staff of the center (7%)

Only 4% of the reasons given referred to the hours of the center.

5. What is the level of satisfaction with the centers in which children are placed?

Only 5% of those who placed their children in centers and who responded to this question indicated that they were *not* satisfied with their choice. This percentage was very similar for all age groups. Among those very few who expressed dissatisfaction, the responses concentrated on the quality of education or care.

Among those satisfied, reasons included satisfaction with the education or care provided (67.6% of the responses). Nearness was mentioned in 6.6% of the cases, confidence in staff by 3.9% and cost by only 3.4%. Less than 3% (in each category) of the reasons had to do with health, food, hours, and ease of access or additional offerings.

From this analysis it would seem that the level of satisfaction is high indeed. However, when we asked respondents whether they would like to change institutions, 22% indicated they would like to change institutions (and another 11% were not sure). This suggests a higher rate of dissatisfaction than that reported when the question was asked directly.

6. Do available options satisfy demand within the communities in which the families live?

Only one-third of the respondents thought available options satisfied local demand. Of the remainder, 43% thought explicitly that local demand was not satisfied and another 24% did not know. Among the reasons given why the options did not satisfy demand, approximately one-third referred to some component of the quality of the care provided (education, care, health, food); another 16% referred to nearness and 19% mentioned costs. Another 28% said they did not know.

It appears that when talking about the community in general and not their own case, respondents felt freer to express concerns and proximity and cost come into play in a much more forceful manner.

7. What are the costs associated with using childcare or early education centers?

The household survey contained a question asking families what they paid for the childcare or early education service they were using. Of the 311 children who were enrolled in a center, 143 reported having to pay some sort of fee to enroll their children and 179 reported paying a periodic quota.

In general the enrollment fees were not steep. Of those who reported paying inscription fees, 92% paid less than 200 pesos for the year, which represents 2% of a minimum salary or less. The range of inscription fees varied from 20 to 1,500 pesos, with the median at 110 pesos.¹⁸ Periodic quotas, standardized to payment on a monthly basis, ranged from 2 to 600 pesos per month, with the median at 32 pesos per month (about 5% of a minimum salary). Somewhat surprisingly, in these low-income communities, 13% of those with children in centers reported spending more than 50% of a minimum salary for care or education of their young children. This result points to the diversity that exists among families living in low-income areas.

VII. SECTION 3: THE COMMUNITY CASE STUDIES

The Sample of Communities

From the sample of 60 communities selected for the household survey, a subset of 10 was chosen randomly for the study of service availability and characteristics. Basic

¹⁸ In addition to these costs, a transportation cost was reported for 7 children, a cost for materials for 82 children, and costs for food for 39 children. For the most part, the assessed fee for materials was relatively low, averaging about 100 pesos per year. Food costs ran from 2 pesos a week to 150 pesos per week.

indicators of the socio-economic status of the 10 *colonias* selected are presented in Table 8. The information comes from the 1990 census, reclassified by the Arturo Rosenblueth Foundation to correspond to *colonias*. Although there has been movement in the population since 1990 and some improvement in the condition of the communities, it is probable that the relative income data for the communities in 1997 is similar to that of 1990.

<i>Colonia</i> **	Total Population	% of children aged 0-5	Average Income (min. salaries)	Labor Force Participation (percentage)	Average-Years of Schooling	Own Home	Services (percentage)	
							drain water	sewage
Las Vías	628	15	2.5	46.7	9.1	45	94	50
Levante Venaditos	677	14.5	2.5	46.0	8.8	63	91	52
Las Jícaras	785	14	2.6	43.9	9.4	68	81	54
Los Caminitos	1292	13.7	2.3	45.5	9.1	78	91	45
Pueblo Alto	1531	14	2.4	45.8	7.4	80	88	28
Jacal El Chico	1633	14	2.2	44.1	7.3	79	95	33
Las Cumbres	2263	14	2.2	46.6	6.4	91	0.9	0.45
Laberinto	6960	11.8	3.4	47.3	12.2	74	48	55
Colorines	8972	15	2.5	46.3	9.5	71	99	71
Paris 68	24129	13	2.5	46.6	9.1	80	96	65
Average		14.2	2.5	46.0	8.8	73	82	45.3

Notes: *The indicators by colonia come from a database created by the Fundación Arturo Rosenblueth Based on 1990 census data.

**The names of the colonias are pseudonyms.

The total population in the 10 communities in 1990 of 48,870 was unevenly distributed among communities varying in size from 628 to 24,129 inhabitants. The distribution of the population in the sub-sample is similar to the distribution in the 301 low-income communities originally identified. Conservatively, we estimate that the population of children under 6 in these 10 communities would be about 7,618 and the population under 4 would be about 4,418.¹⁹

The reader will also note significant variations in most of the variables included in the table reaffirming that even among low-income neighborhoods there can be significant differences. For instance, average income varies from 2.2 to 3.3 minimum salaries and

¹⁹ Applying the "under-five" percentages to the population figures for each colonia produces a total of 6543 children. If we figure another 2.2% of the population as children aged 5, that would add 1075 children to the total and number of children under the age of 6 would be 7618. According to our survey, 58% of the children in our sample of under-6 year olds were under 4, giving us a figure of 4,418.

average education varies from 6.4 years to 12.2 years. Labor force participation is more or less the same across the communities and the average of 46% is slightly higher than the average national level of 42%.

To carry out the case studies, visits were made to each community during which we interviewed key people (heads of social organizations, priests, medical personnel, storekeepers, etc.) and to identify childcare and early education centers which were then visited.

These interviews and observations produced additional information about the communities. For example, eight of 10 communities still have some streets unpaved. Lack of public transportation makes it difficult to arrive at two communities. All, according to the inhabitants, share problems of insecurity, related to delinquency of various forms and to drug addiction. In three communities their location on precarious hillsides or former sandpits put homes and inhabitants in continuous danger. Estimates by informants of the percentage of inhabitants employed in the informal sector were generally high, most above 50%. These estimates correspond with contemporary data for the Federal District. The figures is also consistent with the fact that only 44% of the families interviewed in the household survey said they have access to social security through one of the family members.

In seven of the 10 communities we encountered diverse social and political organizations with purposes such as defending the rights of those living in the community, regularizing ownership of land and housing, and negotiating services for the community. In three communities, organized groups had requested childcare and/or early education services from governmental organizations but had not been successful in their negotiations. There were also religious and sports organizations operating in some of the communities.

In brief, the communities studied, despite their differences, exhibit the difficult and unfavorable conditions common to most low-income urban communities and display some level of local organization.

Main Questions

Issues of accessibility, administration, flexibility and duration of hours, quality and cost helped to frame the key questions guiding the study of services offered in the 10 communities. The main questions were:

1. What childcare and early education services are available within the communities? Our hypothesis was that most children enrolled in centers would be in centers in their own communities. And, in line with what has been demonstrated in the household survey, we thought that most of the services we would find would be for children aged four to six and that services for under-fours would be scarce.
2. What are the characteristics of the available services? We expected to encounter considerable diversity with respect to administration (public or private or

community) and to find a significant number of unregistered private and social services in operation.

3. How extended and flexible are the hours during which services are provided?
4. What is the level of quality of the services? As indicators of quality we will look at the ratios of children to adults, at the preparation of the personnel, at the methodology used, at the physical characteristics of the centers and at the range of services provided. We hoped to shed light on whether or not private and community centers are of equal quality to public centers, realizing that the common impression is that private centers (particularly unregistered centers) in low-income areas are of very poor quality and may even be harmful to the development of young children.
5. What are the costs associated with running childcare and early education centers and how are those costs covered?

Accessibility to childcare and early education centers in the communities sampled

As shown in Table 9, 19 childcare and early education centers, enrolling a total of 1,490 children, were found within the limits of the 10 communities randomly chosen for intensive study. Surprisingly, all 19 were concentrated within only four of the ten communities. The 1,490 children who were enrolled in the 19 centers within the ten communities represent slightly more than 20% of the estimated 6940 children under six years of age in the ten communities.

However, not all 1,490 children enrolled in these centers are from the communities in which the centers are located. This is due in large part to the fact that in one large center, operated by IMSS, only five of 525 children enrolled are from the community in which the center is located. Indeed, overall, 643 children come from outside, meaning that centers in the community are serving only 857 children from the community,²⁰ or about 12% of the children aged zero to six. The reader may recall that, according to the household survey, approximately 28% of all children aged zero to six were enrolled in some sort of extra-domestic care or education center (we did not present data to show whether these centers are within or outside the communities studied). If we take this figure as representative, considerably more children from low-income communities are in centers outside than inside their communities, a finding that counters the hypothesis that most children would be enrolled in centers in their immediate communities.

Faced with the fact that six communities did not have centers within the community, we decided to try and get some idea of what centers look like that are outside the sample communities but are attended by children from the community. We sought out several such

²⁰ One immediate implication of our findings with respect to accessibility seems to be that the community is not the operative unit for planning of for surveying childcare and early education services. Whether or not this should be the case is, however, another question.

centers and collected information from them. Enrollments for these centers and their locations are indicated in the final column of Table 9.

TABLE 9. Number of Childcare and Early Education Centers and Levels of Enrollment, by *Colonia* and *Delegación*

Delegación	Community	Total population in colonia	Number of centers and enrollments in the communities		No. of centers outside* the Communities	
			Centers	Children	Centers	Children
Azcapotzalco	Las Vías	628	0		3	566
Álvaro Obregón	Levante Venaditos	667	0		2	71
Cuajimalpa	Las Jícaras	785	0		1	27
Iztapalapa	Los Caminitos	1,219	2	72	2	460
M. Contreras	Pueblo Alto	1,531	0		2	429
Gustavo A. Madero	Jacal el Chico	1,633	0		4	842
Tlalpan	Las Cumbres	2,263	2	236	0	
Coyoacán	Laberinto	6,960	7	681	0	
Venustiano Carranza	Colorines	8,972	0		1	85
Iztacalco	París 68	24,129	8	501	0	
TOTAL		48,870	19	1,490	15	2,480

Notes: *In this column, we present a number of centers nearby to the community, but not within the limits of the community, where residents have enrolled their children. This category of centers does not pretend to represent fully all of the centers outside the community that are used by residents.

The reader will see from Table 10 that all but one of these centers are public centers, probably because the public centers were more visible than private centers and we did not follow a systematic process of trying to locate all centers within a certain radius of the communities. Therefore, because these do not represent the universe of centers to which children in the sampled communities go, including them in the community analyses would introduce an unknown bias. We will therefore stick to looking at the 19 centers for the first part of our analysis, bringing them in later on when making comparisons among different kinds of centers.

Who is responsible for administering the centers?

Tables 10 and 11 show how the centers, within and nearby the communities sampled, are distributed among the public, private and social sectors. The tables also differentiate between registered and non-registered centers in the private sector. Concentrating on the data from Table 10, we see that:

Jacal Chico	4	842	4	842							
Caminitos	2	460	2	460							
Total	15	2480	14	2435	1	45					

Notes: *Only some of centers outside the communities, to which residents send their children, are included in the above figures. We do not know how many other centers outside the communities might be used by residents.

Table 12 presents a distribution of the children by age and within categories of public and private in the 19 centers of the four communities with centers. From the table we see that approximately one-half of all children enrolled are under four years of age. This statistic does not check against the results of the household survey, which showed that most children in centers are in the four to six age range. What accounts for this difference?

Again, the results are influenced heavily by the inclusion of the IMSS center, serving children from outside the communities sampled, where most of the children enrolled are under the age of four.

TABLE 12. Children Enrolled in Childcare and Early Education Centers by Age and by Administrative Responsibility						
Administrative Responsibility	Ages 0 to 3		Ages 4 to 6		Ages 0 to 6	
	Children	%	Children	%	Children	%
Public centers	637	50.3	630	49.7	1267	100
Private centers	84	37.7	129	62.3	223	100
All centers	721	48.4	759	51.6	1490	100

From Table 13, which looks only at children from within the communities enrolled in a center within the community, we find that only 22.6% of these children are under the age of four. If it were possible to make a finer cut on age and look at children under the age of three (as was done in the household survey), the percentage would again be reduced substantially. Here we see that private centers catering to community children include a larger percentage of children aged under four than public centers.

TABLE 13. Children enrolled in Childcare and Early Education Centers Within Their Own Communities, by Administrative Responsibility				
Administrative Responsibility	Ages 0 to 3		Ages 0 to 6	
	Children	%	Children	%
Public centers	122	18.8	649	100
Private centers	72	34.4	208	100
All centers	194	22.6	857	100

If we take a different cut at the problem, the picture is much less optimistic. We estimated earlier that approximately 4,400 children aged under four live in the 10 communities. If this is the case, the 194 places for children under four represent less than 5% of the total population of children of that age. Offerings within the community for children under 4 are, then, minimal.

Do centers operate at capacity? Are there waiting lists?

Operation at capacity and the presence of waiting lists should provide us with a good indicator of whether or not the need for childcare and early education is greater than the availability of centers. If the need is greater, we would expect to see centers operating at full capacity and with waiting lists. At the same time, this simple relationship between the number of families who need or want to place their children in a center and the availability or capacity of centers will be complicated by questions of nearness, quality, cost, confidence in the people running the centers, etc.²¹ Waiting lists may mean that a child is not being cared for in any center or may indicate a desire to move a child to a center that is nearer or better quality. Accordingly, the panorama is not as clear as we might like it to be.

In responding to this question, it seems appropriate to look at all 34 centers visited and not only at the 19 centers within the sampled communities. In those centers we find that:

- In general the public centers function at their level of installed capacity or slightly below. In one center, however, run by the city government, the number of children enrolled exceeded capacity by 20%, resulting in some crowding. It is interesting that this center was one of the 6 (out of 23) public centers that reported having a waiting list. The six centers with waiting lists included also: two other centers run by the city government, the large IMSS center and two preschools run by the SEP.
- Almost half of the private centers indicated that their installed capacity was significantly greater than their enrollment; the rest function approximately at capacity with one operating slightly over capacity. The center over capacity is the only one of the 11 private centers that reported having a waiting list.
- The directors of centers were also asked how enrollments at the time of the study compared with enrollments in their center the previous year. In both categories, public and private, enrollments showed a tendency to remain the same or increase from one year to the next. However, six public centers and three private centers indicated that their enrollments had decreased moderately. Whether an increase or decrease occurred seemed to depend very much on local circumstances.

How extended are hours and how flexible is the scheduling?

According to the literature, one characteristic of centers that influences demand is the daily schedule of a center. Among the centers studied, there was no uniformity in scheduling, but it was clear that in the majority of the cases, centers were open for less than

²¹ It is also possible that families will not put their children on a waiting list because they are skeptical or because they do not know about the centers (particularly the private centers) or because they know that the time they would have to wait is long, forcing them to look for another option with which they stay.

four hours a day. This short schedule is characteristic of centers that provide only preschool education, but is also found in some other centers (particularly DIF) that cater to younger children.

Among the publicly administered centers, three of the 23 were open for at least eight hours during the week. These were:

- The IMSS center followed its norm of providing services from 7AM to 7PM.
- One community-based center administered by the SEP and two administered by the city offered 8-hour programs.

Another community-based center of the SEP was open for seven hours. One public center, administered by the DDF, offered six hours of care, with flexible scheduling linked to training courses for women, sometimes from 8AM to 2 PM and sometimes from 3PM to 9PM, depending on the course being given.

The remaining 18 public centers (13 administered by the SEP, three by the city and two by DIF) offered less than four hours of service.

Hours were more variable among the 11 private centers. Five offered 8-hour days or more (one of which was a small day-care home). The total number of children enrolled in these five centers is only 98 and of these only 59 are under four years of age. In three of these five centers a regular preschool schedule of four hours is offered. Three other private centers were open for between five and seven hours daily, and three were open for four hours or less.

Summing up the above, it seems that:

- A relatively small proportion of the children from low-income communities who are theoretically eligible to enroll in childcare or early education programs are served by centers within their own communities. Use in general is low and among those who use a service, more use a center outside their community than inside. This pattern is even stronger for children under 4.
- Somewhere between 20% and 25% of the use of childcare or early education centers occurs in private centers.
- Public centers usually operate to capacity but some private centers seem to have unused capacity.
- The existence of waiting lists in certain centers that are already operating over capacity, or that are known to be of relatively high quality (as in the case of IMSS) suggest that these centers have characteristics making them especially attractive.
- Except for the IMSS center, efforts to respond to the need for childcare over the course of a full working day by extending hours are minimal within the public

sector and, although private centers do respond with longer and more flexible hours, the absolute number of children in these centers is relatively small.

What is the quality of the services offered?

We use five indicators of quality to respond to this question: (1) the number of children per adult caregiver/educator; (2) the preparation of the caregivers/educators; (3) the methodology used in the center; (4) the physical condition of the center; and (5) the variety of services offered by the center.

The relation of children per adult caregiver/educator. In Table 14, we present data for all the 34 centers visited, classified by the type of center, showing the number of children per caregiver/educator in the center.

TABLE 14. Number of Children per Caregiver (Educator), by Type of Center							
Community	Public Centers				Private Centers		
	IMSS	DDF	DIF	SEP	Reg.	Not reg.	CCD
Laberinto	6/12*	15		22	12	14 8	6
Paris 68		19 13	25	26		5/10 6/15 8/15 6	
Los Caminitos				33 25		23 6	
Las Cumbres		4/12		30			
Levante venaditos			13		20		
Las Vías				30 32 15			
Colorines		7/25					
Las Jícaras		13					
Pueblo Alto				40 40			
Jacal el Chico				37 35 30 30			

Notes: *The first number is the ratio of adults to children for children under four and the second is for children of preschool age.

From the data it is clear that, in general, the public centers run by the city government (DDF) and by Family Welfare (DIF), together with the childcare center run by Social Security (IMSS), have ratios that are much more favorable than the ratios found in centers run by the Secretary of Education (SEP). Ten of the 14 centers of the SEP have 30

or more children per educator and the ratio goes as high as 40. Even allowing for the fact that the children in most of the centers of the SEP are four and five years old, it is difficult to imagine an environment that promotes play and personal interaction in such cases. Rather, the ratio lends itself to practicing social control. The ratio is well above the norms cited previously.

Among the 11 private centers, one center has a ratio of 23 to one but all of the remaining centers present ratios of less than 15 to one; in general, these ratios are respectable, suggesting a relatively good level of quality according to this rough indicator. Indeed, if a parent is seeking personal attention for a child at the preschool level, the logical choice would be to choose a private center over a preschool run by the SEP, cost and nearness permitting.

Although there is a continuing debate about the ratio of adults to children in a center that will permit warm and personal relationships and allow children to develop and learn to their maximum, it is possible to cite norms linked to a child's age. We present two against which actual ratios can be compared.

TABLE 15. Ratio of Children to Adult in Day-care Centers		
Age of children	Ratios	
	Mexico/IMSS (personal communication)	European Countries (Moss 1998)
0-1	4:1	4:1
1-2	6:1	6:1
2-3	10:1	8:1
3-4	12:1	
3-5		15:1

Preparation and certification of personnel

It is commonly thought that caregivers or educators who have more and higher level certificates/degrees are better than those with lesser formal qualifications. Although we feel that experience and training on the job does not necessarily produce a certificate, it may be as effective as more formal training. We have nevertheless included this indicator in the study, recognizing at the same time that formal preparation is often a more secure path to obtaining the skills needed. Table 16 presents information for the 18 centers for which it was possible to obtain this information from the person interviewed.

The relationship encountered between the qualifications of caregivers and the type of center is not simple. In the publicly administered centers, for instance, we find the entire range of qualifications, from caregivers that are housewives without any particular title or certificate (but probably with some informal but uncertified training) to child development specialists. Nine of the 10 public centers have at least one officially certified teacher on staff, often accompanied by a certified assistant and/or by people with other professional skills – music teacher, journalist, and psychologist. The public center that does not is a center administered by the city government (by a delegation) and is staffed by local

community women without certification (housewives). However, this center is one of the centers mentioned earlier that has an enrollment slightly exceeding its installed capacity and is a center with a waiting list. The lack of formal qualifications has obviously not deterred parents from enrolling their children in this center.

TABLE 16. Qualification or Certification of Personal, by Public or Private Administration

Community	Adm. Resp.	Qualification or certification*
Las Vías	Public	educators
Colorines	Public	educators
Laberinto	Public	educator/assist. educator
Las Jícaras	Public	child educator (puericultor)
Pueblo Alto	Public	educators
París 68	Public	teachers/music/assist. educator/bachiller pedagogue/educator
Los Caminitos	Public	educators
Jacal el Chico	Public	pedagogue/educator/journalist/psychologist/ teachers
Las Cumbres	Public	educators
Las Cumbres	Public	housewives
Levante Venaditos	Private	assist. educator/accountant
Laberinto	Private	educator/assist. educator
Paris 68	PNR**	educator/bachiller/assist. educator
Los Caminitos	PNR**	teacher/assist. educator
Laberinto	PNR**	assist. educator
Paris 68	PNR**	educator/teacher/bachillerato/ technical career degree /child educator
Los Caminitos	PNR**	assist. educator
Laberinto	PNR**	housewife

Notes: *Roughly, "educator" is a qualified preschool teacher whereas "teacher" refers to a qualified primary or secondary school teacher, "assistant educator" refers to a preschool teacher's helper; a "child educator (puericultor)" usually has a certificate in early childhood development but functions as an assistant; a "pedagogue" has a higher degree in education; a "bachillerato" refers to a lower secondary school degree.

**Private Not Registered

The two private and registered centers vary, with one run by a certified teacher and assistant and the other a teacher assistant and a public accountant.

The six non-registered centers vary a great deal. One has a highly qualified and varied staff. Certified teachers assisted by qualified assistants run two others. Two are run by certified teacher assistants, without supervision or help from certified teachers on staff. The final non-registered private center is the home day-care center run by a housewife who is not certified but has had some training outside the official system. This range suggests that it is unwise to stereotype private non-registered centers as always of low quality as indicated by the qualifications of their staff. Some are, some are not.

Educational Methodology

Unfortunately, it was not possible to observe centers in action in any detail to obtain an idea of how staff interacts with children or to check on what informants (usually the directors) of the centers indicated was the methodology used in their center. What we can say is that the methodology used by almost all centers was reported to be the methodology suggested by SEP, albeit enriched on occasion by elements suggested by DIF or by another method, for instance one called *Mijares*. The IMSS has its own methodology. The home day-care center followed no particular educational methodology, indicating that the educational component had not, unfortunately, been incorporated into the approach by that center to daily care.

In brief, this indicator of quality, treated at the superficial level that the study allowed, did not serve us well.

Facilities

Another indicator of quality that is often used to judge centers is the nature of the physical facilities in which the program operates. Table 17 provides a bit of information about some of the centers based on observations made by the study team members. Unfortunately it was not possible to enter all of the centers and no standard observation sheet was used in the study.

From Table 17 we see that public centers are usually qualified as adequate and some appear to be very ample. Most have been built as preschools. This is not the case for two of the public centers, both administered by the city.

By way of contrast, many of the private centers, registered or unregistered, are located in homes that have been adapted, sometimes well, but often inadequately with little space for play and sometimes with unsanitary conditions.

It is clear that the unregistered services for which observations were made do not meet standards set by the SEP. Indeed, this is why they remain unregistered, avoiding supervision and control by the educational authorities. In some cases, the violations seemed to be to the detriment of the children; in others, where lack of space is the major offense, the difficulties did not seem very grave because play space was available outside the center and enrollments were not very high. In these cases, applying standards in a strict manner may be counterproductive because it inhibits registration and supervision and the possibility of helping a center improve itself with public funds. It is worth noting that several of the directors of private centers indicated that they had been required to pay bribes in order to keep operating outside the system.

TABLE 17. Physical Facilities, by Type of Center		
Community	Center	Facilities
Las Vías	Public	8 classrooms, kitchen, admin.areas, library, garden, music room, storeroom, bathrooms
Colorines	Public	5 classrooms, one kitchen-dining area, admin.areas consultation room, garden, play equipment, 8 bathrooms
Laberinto	Public	"adequate facilities"*
Las Jícaras	Public	on upper floor. dangerous. shared bath. small room. no garden or play equip.
Pueblo Alto	Public	"adequate facilities" abestos roof.
París 68	Public	ample space, patio, garden, bathrooms
Los Caminitos	Public	"adequate facilities"
Jacal el Chico	Public	6 classrooms. patio and garden. baths. insecure center
Las Cumbres	Public	poorly adapted home
Las Cumbres	Public	"adequate facilities"
Levante Venaditos	Private	adapted home. 2 bathrooms. no garden or play equipment
Laberinto	Private	adapted home, no garden or play equip. 1 bath
Laberinto	PNR	reduced space in room of home, not too clean
París 68	PNR	private home, adapted rooms as classrooms, inadequate cleanliness, one bath
Los Caminitos	PNR	no patio or garden
Los Caminitos	PNR	no patio or garden

*Note: "Adequate" in the opinion of the interviewer.

Cost

Without pretending that we can present a complete picture of the costs that centers charge families, we present two bits of information that shed some light on what a family has to pay to attend a center and what caregivers/educators earn monthly in different kinds of centers. Unfortunately, it was difficult to obtain information about operational costs. In some cases the directors of the centers did not seem to have a very good idea of what their actual costs were. In some private centers, there was a fear that the information might be transmitted to the government so it could audit or tax them.

Yearly Charges

In order to find out what a family was required by the center to pay, we asked about yearly enrollment fees and quotas charged by each center. This information is presented in the third and fourth columns of Table 18.

TABLE 18. Estimated Annual Costs (in pesos) to a Family of Childcare and Early Education Services, by Administrative Responsibility*				
Community	Administration	Enrollment fee	Yearly quota**	Salaries (month)
Levante Venado	Public (DIF)	30	1200	1800
Paris 68	Public (DIF)	30	760	1500
Paris 68	Public (DDF)	50	300	1900 to 3500
Paris 68	Public (DDF)	35	760	800
Colorines	Public (DDF)	60	K=600, CC=780	1800 to 3000
Las Jicaras	Public (DDF)	20	960	435
Laberinto	Public (DDF)	10	120	2600
Las Cumbres	Public (DDF)	0	480	480
Jacal	Public (SEP)	0	1440	1600 to 5000
Jacal	Public (SEP)	0	1800	2500 to 5400
Jacal	Public (SEP)	0	120	3600
Jacal	Public (SEP)	0	120	3600
Paris 68	Public (SEP)	0	100	2600 to 3400
Las Vias	Public (SEP)	0	100	1200 to 3000
Las Vias	Public (SEP)	0	180	?
Las Vias	Public (SEP)	0	180	?
Laberinto	Public (SEP)	130	840	2200
Las Cumbres	Public (SEP)	0	75	2800
Los Caminitos	Public (SEP)	0	120	2600
Los Caminitos	Public (SEP)	0	120	2600
Pueblo Alto	Public (SEP)	0	100	2800
Pueblo Alto	Public (SEP)	0	100	2800
Laberinto	Public (IMSS)	0	(soc. sec. Paymt)	?
Levante V	Private- R***	?	1560	850
Laberinto	Private- R	0	3600	1000
Paris 68	Private- non R	275	K=3240/CC=600	700 to 1500
Paris 68	Private- non R	120	?	500 to 600
Paris 68	Private- non R	0	K=1800/CC=480	700
Paris 68	Private- non R	50	K=1920/CC=300	600 to 800
Laberinto	Private- non R	550	6600	1900
Laberinto	Private- non R	40	1920	600
Los Caminitos	Private- non R	100	1800	1000
Los Caminitos	Private- non R	100	1800	600
Laberinto	Private-NR, home day-care	0	1440	No fixed rate

Notes: * Data come from the reports provided by the directors of the centers

** K= Kindergarden; CC= Child Care

*** R= Registered; non-R = not registered

It should be noted that the figures presented are those we were given by directors and we did not seek verification of the figures in any records of the center. Also, the annual quotas do not include such costs to families as transportation or uniforms or ad hoc assessments for programs during Mother's

Day or Christmas or other special occasions. In general, the cost of food to parents is included in the figures.

Enrollment fees. Presumably, public education services are free; accordingly, most centers run by the SEP did not charge any sort of entrance fee. Almost all centers administered by Family Welfare or by the city charged a small enrollment fee. Enrollment fees in private centers varied from zero to 550 pesos.

Quotas. In all kindergartens a very modest monthly fee was charged, sometimes set by the school and sometimes by the parents, to cover costs of educational materials. These fees ranged from 75 to 150 pesos per year. A fee of 150 pesos was, at the time, equivalent to about 2% of an annualized minimum wage. From the table we also see that in three centers administered by the SEP more substantial fees were charged; these centers were community-based centers run on a different basis from the standard preschool centers of the SEP.

The centers administered by DIF and the City also charged quotas amounting to somewhere in the neighborhood of one month's minimum salary.

As might be expected, yearly fees for private centers tended to be considerably higher, in one case amounting to 6,600 pesos which represented, at the time, about three-fourths of a yearly minimum salary. Fees also varied according to the number of hours per day a service was provided and whether or not a payment for food was incorporated into the quota. In some cases, food represented a separate charge.

What seems evident from Table 18 is that it would be difficult for a family living on one or two minimum wages to afford private childcare, even the low-cost version offered by several of the private centers. On the other hand, if putting a child in a center permitted a mother to enter the labor force, even at minimum salary, she could pay for a low-cost service and have a major portion of her earnings left over. One problem is that the work options are so limited for some mothers that they cannot expect to find a job outside the home paying even a minimum wage.

Salaries of educational and child care personnel

Because it was difficult to obtain cost data for the centers, we decided to focus our efforts on obtaining information about salaries, which constitute the major cost component in most centers. Looking at salaries also provides some insight into the degree to which centers, particularly private centers, are being subsidized by paying relatively low wages to women.

Table 18 does not produce any major surprises with respect to salaries. We see that the certified teachers in Ministry of Education centers receive, for the most part, a higher wage than the wages paid to caregivers and teachers in private centers. Many of the private centers pay less than a minimum wage, but it should be kept in mind that in those centers with a half-day program, the payment will be equivalent to more than one minimum wage, but less than two.

The difference in salaries between most public and private programs is related to certification levels, but not in all cases to the capacity to work with young children. Some uncertified women have managed to become well-trained and bring with them a wealth of experience that formally-trained teachers do not have.

A major difference not evident from the table is that women working in private centers (with one exception) do not receive any kind of health or other benefit whereas the better-paid education workers receive benefits.

VIII. SECTION 4: CONCLUSIONS AND IMPLICATIONS FOR POLICY AND PROGRAMMING

The results of the household survey and of the community studies of childcare and early education centers presented in previous sections of this paper lend themselves to a range of conclusions about centers and their use as a childcare option for children younger than six years of age in marginal communities within the Federal District of Mexico. In this section we will gather together specific conclusions about childcare patterns and the use of centers, about the availability of centers to low-income families, and about various characteristics of the available centers, including who administers them, their quality, their scheduling and their costs. We will then offer some policy and program implications that we think derive from the study.

Childrearing patterns and the use of centers as a care and education option

- At the present time, extra-domestic attention in childcare and early education centers accounts for only a small portion of the total time devoted to care and upbringing of young children. Although assumed and assigned childcare responsibilities vary with the age of the child and with the time of day, mothers still assume responsible, on average, for approximately 90 percent of the total childcare time for their children up to the time of formal entrance into primary school.
- As expected, fathers are virtually absent from direct involvement in the process of childcare. Not so expected was the finding that grandmothers and older daughters play a relatively minor role in childcare, even for very young children. Although their assistance may be very important in terms of covering particular moments when help is needed, they were rarely found to be the responsible caregiver.
- The use of childcare and education centers is lower for marginal populations than for the population as a whole, including the immediate preschool ages of 4 and 5. Less than 5% of children under three years of age are enrolled in centers at some point during the day.
- Use of centers is generally lower in families with lower educational levels and is higher in families where the mother works and/or is a single parent. These differences, although significant, were not as pronounced as we expected.

- Despite considerable effort to locate informal home day-care arrangements in which a local mother cares informally for several children, we found only one such case in the 10 communities studied intensively. Parents expressed a lack of confidence in this option, because the potential caregivers were often people they did not know and because of possible risks to their children.
- The most frequently cited reason for enrolling a child in a center was nearness, with educational or quality concerns lagging. Cost was a consideration for about one in eight families. The most important reasons given for NOT enrolling a child were related to cultural values such as: the age at which it is appropriate for a child to be cared for outside the home, the lack of confidence in extra-domestic options, and the availability of someone at home to take care of the child.
- Approximately half the families interviewed thought that available options do not satisfy demand within the local community. The most important reason for that response referred first to some aspect of the care or education provided, followed by a concern for costs and distance related to existing options. Among families whose children are enrolled in a center one in four would like to change institutions indicating an important level of dissatisfaction with existing arrangements.

The availability of extra-domestic childcare and early education services

- Although extra-domestic childcare and early education services have increased over the last decade, that improvement has come for the most part in formal preschools for children ages four and five that provide half-day sessions.
- The level of provision of extra-domestic childcare options for children under four from low-income families continues to be minimal. In the 10 communities studied in detail, the main options for local children were found to be community-based centers administered by the government of the Federal District (DDF), the Family Welfare system (DIF), or the Secretariat of Public Education (SEP), or privately administered centers. Although we know that independent community centers exist, there were no such centers in the sample of communities selected, suggesting that they play a relatively small numerical role in attending to children within the Federal District. One large center administered by Social Security (IMSS) also fell into the study, but 99% of the children cared in that center came from outside the community where it was located. Taken together, all the institutions encountered were serving less than 5% of the children under 4 from the communities in which they were located.
- In general, residents of a *colonia* are more likely to enroll children in a center outside the community than in it. This is, in part, an artifact of the planning systems of public education and welfare agencies that are based on criteria other than the political delineation and organization of *colonias*. However, it also has to do with

work patterns of parents (often working outside the community) and with the characteristics of the particular centers found within the community.

- The public sector is the main actor in providing attention to young children in extra-domestic centers of childcare or early education. However, our study suggests that somewhere between 20% and 25% of all places offered in low income communities are in privately administered centers. Ninety percent of the private centers offering childcare and early education services were found to be unregistered.
- Most centers offer care and education for a period of less than four hours a day. This is particularly so for centers administered by the SEP where the focus is on education and not on care. It was also the case for centers administered by DIF where we encountered a call by parents to extend the hours. There are very few options that combine good care and education and that would permit a working mother who is not employed in the formal sector to place her child in a center for a complete working day. (Even in the case of working women with a right to child care, the number of places provided by the social security system is severely limited.) Private centers tended to be more flexible in their hours and more likely to be open during a full day than public centers.

The quality of childcare and early education centers in low-income communities

- With the exception of the center administered by IMSS, which was of high quality, we found the quality of the service administered by other public institutions to be variable and sometimes minimal or even questionable.
- The preschool services administered by the SEP appear to be adequate in terms of facilities and space – even though various directors pointed to the need for improvements and better maintenance. In general, teachers are properly qualified. The centers indicated that they applied the curriculum designated by the SEP. However, in almost all preschool centers the ratio of children to adults was very high, usually 30 to one or greater, favoring a process of social control rather than a process of active learning as proposed by the official curriculum. On this measure of quality, the preschool centers do not hold up.
- Community-based centers administered by SEP, by DIF and by the DDF provide care and education of minimal quality but often include activities designed to improve the functioning of centers. In some cases these government-administered, community-based programs were located in facilities that needed improvement in order to qualify as adequate and the level of training of caregivers tended to be as assistants, with some staff uncertified. Ratios of caregivers to children were found to be more favorable in these centers than in the preschool centers, even allowing for age differences of the children served.
- The quality of private centers varied a great deal. Severe limitations related to facilities and available space were found in some centers. A relative high

percentage of caregivers in unregistered centers were qualified as assistants or were not certified (although some of the uncertified teachers had been trained in a variety of courses outside the official system). Ratios of children to adults in the private centers were generally favorable. In some cases, particularly the small home day-care center visited, little or no notion of a curriculum was present.

Costs

To parents

- The cost to parents of enrolling their children in public institutions is relatively low if expenses for uniforms, snacks, materials, and contributions for special occasions are not considered in the count. Most parents can afford to send their child to a public preschool. Working parents can easily afford to send their child to a center administered by social security.
- The quotas paid by parents for private childcare or early education vary widely, from about one-tenth of a minimum wage to a complete minimum wage, depending, among other things, on whether the center is primarily a preschool center with short hours or a childcare and education center with longer hours. Many parents in low-income communities can not afford to pay for private childcare.

To centers

- It was not possible to carry out a systematic costing exercise with the centers.
- With respect to the one element of cost that was explored --salaries-- we found that in the public institutions they are generally higher than those in private centers, with the exception of some publicly-administered community-based programs. A tendency is evident to exploit women by paying them very low salaries in the community-based public centers and in the private centers.
- From conversations with directors of private centers, we know that establishing an independent day-care center in low-income areas is difficult because few families can afford to pay the higher cost associated with caring for very young children and because the risk that something might happen to a young child is not worth taking unless there is some public backing. For this reason, the "market" cannot expect to function to meet the need and demand at the lower end of the income scale.

In general

- Even if "demand" is defined in terms of actual demand for places in quality centers rather than in terms of the entire population of children from birth until three or until entry into primary school, there is still an evident gap between the demand for and the availability of such centers. That gap was signaled by waiting lists and by opinions of residents of *colonias* that there were insufficient options.

- There is a clear educational bias in center-based government programs for young children that does not take into consideration the needs and demands of parents for alternative care and protection, as well as education, of their children while they work. This bias is overcome in programs administered by social security which offers long hours and quality attention to the integral development of the child; but it is evident in programs of the SEP which provide service only for 3 or 4 hours per day and concentrates on preparation for school.
- The forms of care provided in the community-related programs administered by the DDF, by DIF and by the SEP (in its program of early education) appear to be viable, but the quality of these programs needs to be strengthened and, in the case of DIF, the hours of service need to be extended if the program is to meet demand.
- Centers run by the private sector fill an important social void and the official statistics obviously underestimate their importance. Nevertheless, it is difficult for most families with scarce resources to turn to private services of high quality because costs will be relatively high and there are no subsidies. This circumstance favors: 1) offering of services of minimal or even poor quality and the selection of such services by low-income families that need extra-domestic alternatives for childcare while parents work, and 2) exploitation of women who work in private centers, of their own choice or by owners of centers who do not pay them at a reasonable level.

Implications for Policy and Programming

- It is necessary to re-orient policies directed at the care of children under four years of age in order to provide options for children of workers in the informal sector and to overcome a growing disparity between 1) childcare services of high quality for families that are well off and can afford it and/or for working mothers in the formal sector, and 2) services of minimal quality for working mothers in low-income families who have difficulty obtaining employment or who work in the informal sector and have no access to services. This implies a policy that both strengthens the hand of public organizations charged with providing services to low-income groups (DIF, SEP, DDF) and that supports work by, and with, community groups and private organizations in providing services.
- To respond to the childcare and education needs of low-income communities, it is necessary to expand coverage and to strengthen the quality of centers that guarantee integral attention to young children while their parents work. This means providing financing, training, supervision, technical assistance, and a review of the norms applied to facilities and staff. It means looking for ways to extend the hours that services are offered and to provide more flexible coverage. It may also mean supporting an even wider variety of models to seek flexibility rather than trying to promote one or two "flexible" models.

- A decision must be made whether to continue looking at community and private childcare and early education centers that are not registered as blots on the landscape to be wiped out, or, as social resources that can be encouraged, strengthened and built upon through programs of co-participation by providing support such as:
 - assisting with construction and remodeling of centers;
 - instituting programs of certification based on experience;
 - offering training in administration of centers as well as in education and child development;
 - providing legal assistance and support, including helping centers to become legal entities and assuming legal risk in the event of accidents;
 - offering scholarships to needy children attending the centers;
 - supporting sustainability by establishing a system of loans within a program of micro-enterprises, linked to the construction of local capital funds whose earnings, in time, would cover a portion of center expenses, including just salaries and benefits for personal that are not covered by quotas; and
 - providing tax relief or exemption should independent centers register.
- The Secretariat of Education needs to improve the quality of its preschool programs by continuing to reduce the ratio of children to teachers. This means continuing to expand the preschool system even as official statistics show that coverage is approaching a very high level for five-year olds.
- To respond to the needs of working families with children aged four and five, it is essential, given the decreasing intra-familial resources that can be called upon to provide child care, to seek forms of extending the hours of programs to provide care while parents work or to institute new programs for this age group. Neither IMSS nor ISSSTE have responsibility for this age group and SEP provides, on average only half-day programs for them. The programs of DIF and DDF are very limited and have even tried to lower the ages of children in their centers so as not to “compete” with SEP. In this vein, the model of “mixed kindergartens” merits closer examination. And, community or private groups might be stimulated to establish such programs, perhaps undertaken by existing centers, with modest subsidies from the public purse.
- The current trend within Social Security, Family Welfare and the SEP towards supporting community-based centers seems to make sense and could even be accelerated.
- Childcare and early education centers should be organized within large housing developments which have none. To do so may require modifications in laws governing land use (zoning).
- The survey showed that most of the time of children is still spent with parents and not in centers. A clear implication of this simple finding is that programs to

improve the integral development of young children must be directed at parents as well as to improving and extending the services offered for care and education in centers. Work to involve parents with centers is also needed so that they will be more attentive to the kind of treatment their child receives. And, there is reason to believe that parents would shift some of their thinking about childrearing if provided with better information and support. For instance, the survey results suggest the importance of trying to involve fathers more directly in childrearing. Programs of parental education should be viewed, however, as a complement to, and not a substitute for, center-based care and education. They should be directed not only to providing new knowledge but also toward changing the culture of childrearing to correspond with new social realities and knowledge.

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