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ABSTRACT

A cost analysis of day care in Denmark was initiated to determine what day care services cost, who pays for them, and how these costs relate to the quality of day care services. Some of the findings are: (1) group day care is considerably more expensive for children 0-3 years of age than for children 3-7 years of age; (2) group day care centers under municipal management are more expensive than group day care centers under private, nonprofit management; (3) staff salaries amount to 70 percent of total operating costs; and (4) family day care is significantly cheaper than group day care in Denmark. Implications of these findings for day care in the United States are suggested. As quality day care is expensive, a cost sharing plan (based on the Danish model) is proposed. In this plan, the national government, the local government, and the family of the day care child share costs. Quality control is linked to the government subsidy; the government collects parental fees, and the caretakers are free to focus on the best possible care for the child.
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A COST ANALYSIS OF DAY CARE IN DENMARK

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The urgent need for day care services for children in the United States is well documented. The questions before the American public and its representatives today are neither "do we need more day care" nor even "should we have more day care", but rather "what kind or kinds of day care should we provide" and "what will such day care cost and who will pay for it?". The evolution of the issues from the former questions to the latter questions prompts the necessity for the gathering of reliable data on what is known about kinds of day care and costs of day care. Because the United States has had limited experience with formal day care programs (as opposed to the informal, private arrangements of individual families) the author was sent by the World Health Organization in 1970 to survey day care programs in Eastern and Western Europe. This survey revealed that, of all the countries visited, Denmark has the most experience (over a century) with formal day care programs and the most highly developed system of day care services. Not only has Denmark had a wealth of experience with day care but, equally importantly, their day care programs reflect child development aims and educational aims essentially analogous to those of the United States.

For these reasons the author returned to Denmark and has spent over 2 years collecting detailed data on its extraordinary day care systems. The first task was to determine "what kind or kinds of day care" have evolved in Denmark. This effort resulted in three reports (Child Advocacy in Denmark, Group Day Care in Denmark, Family Day Care in Denmark) which were submitted to the Office of Child Development of the Department of Health, Education and Welfare and which are available on request from the Information Secretariat of the Interagency Panel on Early Childhood Research and Development of the Social Research Group of George Washington University in Washington D.C. These reports contain all of the information relevant to the kinds and quality of day care in Denmark. It is important in understanding and evaluating the subsequent cost figures of

this report to relate costs of day care in Denmark to the quality of day care services detailed in these previous reports.

The author's second task was to determine "what do such day care services cost and who pays for them". This effort resulted in the present report. What is known about costs of American day care is summarized, the costs of Danish day care are presented, and the implications of this data for the United States are discussed.

COSTS OF AMERICAN DAY CARE

Five major studies of costs of day care services in the United States have been conducted since 1968. Since the major purpose of this report is to describe Danish day care costs, the findings of these studies will be briefly summarized here.^{x)}

The first study was conducted by the Children's Bureau of the U.S. Department of Health, Education and Welfare and Day Care and Child Development Council of America in 1968 (CB-DCCDC). The data in this study is based on a standard-ten-hour-a-day program and a 250-day year (52 weeks with 10 holidays) using total enrollment figures. The quality of services paid for was divided into three levels: Minimal, acceptable and desirable. The findings of this study are summarized in Table I:

Table I

Day Care in the U.S, Cost per child per year, CB-DCCDC study

	<u>Minimal</u>	<u>Acceptable</u>	<u>Desirable</u>
<u>Group day care</u>	\$ 1,245	\$ 1,862	\$ 2,320
<u>Family day care</u>	\$ 1,423	\$ 2,032	\$ 2,372

These figures include the costs of donated goods and services (in-kind) and are for on-going, operational, "recurrent" costs and do not include "set-up" costs involved in establishing a new day care program.

^{x)}An excellent summary and critical evaluation of four of these studies may be found in Rowe, M.P. The Economics of Child Care. Hearings before the Committee of Finance, U.S. senate, September 23rd, 1971.

The second study of day care costs was conducted by ABT Associates in 1971 (ABT). The data in this study is also based on a standard ten-hour-a-day program and 250-day-year, but uses average daily attendance (ADA) rather than total enrollment figures. The ABT study surveyed only "high quality" day care programs. They found the recurrent cost, including all in-kind costs, per child per year in a group day care center for 25 children to be \$2,349.

The third cost analysis was conducted by the Westinghouse Learning Corporation and Westat Research Inc. (Westat) in 1971. This study used a seven-hour-day and did not specify the number of days per year used as a standard. They used total enrollment figures rather than average daily attendance. Although their figures are for recurrent costs, they failed to carefully include all in-kind services in their calculations. The day care centers surveyed were categorized into three levels of quality: Custodial, educational and developmental. The survey results indicate the day care costs averaged \$324 per child per year in a custodial program, \$540 a year in an educational program and \$1,368 a year in a developmental program.

A fourth study was completed in 1971 by Eva Galambos of the Southeastern Day Care project (Galambos). She used full enrollment figures and carefully included all in-kind services. She made no attempt, however, to categorize costs on the basis of quality. The annual recurrent costs for a child enrolled for 250 days per year was \$3,100 in this study.

A fifth study, a cost analysis of day care centers in Pennsylvania, was completed in 1973 (Penn). This study used total enrollment figures and included in-kind services. Cost figures are given for recurrent or operating costs, but there was no attempt to categorize costs on the basis of quality. Furthermore there was no indication of the hours of daily operation or the days per year of enrollment. They found the average cost per enrolled child per year in a day care center to be within the range of \$2,000 to \$3,000 depending on the location of the sample and concluded that "\$2,500 is a reasonable figure" for average annual operational cost per child. An important finding of this study was that the difference between the average "recurrent, operating cost" and the "total costs" which would include building and equipment costs (not starting-up costs) is about \$300 per child per year.

On the basis of the above studies, what can be concluded about cost of day care in the United States? With the exception of the Westat study, which has been heavily criticized by a number of experts with regard to its methods of data collection and data analysis, it can be seen that the cost figures for high quality group day care agree reasonably well - all in the range of \$2,000 to \$3,000 per child per year. Following an extensive and intensive critique of this work, Rowe ^{x)} concluded that, in order for a group day care center to meet federal interagency salary requirements, provide a homelike environment and meet the standard of "desirable" quality as defined in the CB-DCCDC study, its budget must reflect program costs of at least \$2,000 per child per year.

COST OF DANISH DAY CARE

While no two studies of costs of day care are perfectly comparable, if the details of the data used and program quality are adequately described, reasonable cost adjustments can be made for comparative purposes. It is important, then, to first define the data used in deriving the cost figures in Denmark. All day care services in Denmark are government subsidized and must meet all of the government's laws and regulations (see author's previous reports on day care in Denmark). This results in a near ideal situation for a study of costs of day care as the Danish government collects detailed fiscal data from every day care program in Denmark making it possible for the sample of this study to include the universe - all day care programs in Denmark. The cost figures are based on a ten-hour-day and a 250-day year. All figures are based on average daily attendance (ADA) rather than full enrollment. Researchers agree ADA is a much more realistic cost benefit figure but, with the exception of the ABT study, such data was not available in any U.S. study. Because all day care services in Denmark are heavily subsidized by the government, there is no in-kind service, eliminating this variable as a problem in the analysis since all budgets are fully costed. The Danish data used is for recurrent or operating costs and not for start-up costs. Usual Danish operating costs include building rental, building maintenance, furniture and equipment, and the figures given include this cost. The wealth of Danish data, however, makes it possible later in this report to separate out the building and equipment data for comparative purposes.

^{x)}Rowe, 1971, page 294

All Danish day care services are of nearly uniform quality because of close government surveillance and control. This eliminates the necessity of categorization of Danish day care costs by level of quality. National laws stipulate child staff ratios, levels of training of staff, etc. which ensure that every day care program in Denmark easily reaches or surpasses the "desirable" level of quality as defined by the CB-DCCDC study. Again the reader is referred to the previous reports in which the laws and regulations are given and the quality of the day care services are described based on direct author observation.

Danish day care programs include a rather comprehensive medical and dental service. Since such services are not ordinarily found in an American day care center and since these services in Denmark are separately budgeted, costs of these medical and dental services have not been included in this report.

In addition to the necessity of standardizing the data and controlling the level of quality costed in a comparative cost study such as this, it is also important to consider the question of pricing. Prices vary regionally (within a country, between countries) and as a result of inflation. With regard to regional price differences between countries, the current national average cost-of-living index for Denmark is close enough to that of the United States to make between country adjustments unnecessary. The within country regional cost differences are dealt with in this report by presenting cost figures for large urban, suburban and rural regions of Denmark.

In Denmark, as in United States, there has been steady inflation in recent years. As a consequence, the time period for data collection becomes important in comparing studies. Since the most recent complete cost figures in Denmark are available for the Danish fiscal year 1971-72 (May 1st, 1971 to April 30th, 1972) and since this time period is reasonably close to the time period for four of the U.S. studies (ABT, Galambos, Penn and Westat) the data presented is for this time period.

One final methodological issue met in the present study needs discussion - the international monetary exchange rates. It was important to express costs in American dollars which, of course, means converting figures from Danish kroner

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to dollars. During the time interval of data collecting and analyses the number of Danish kroner per American dollar varied from 5.5 to 6.7. It was decided to use 6.0 as the exchange rate for the present study, and all dollar figures in this report were calculated at this rate.

I. Costs of Group Day Care in Denmark.

All day group day care in Denmark consists of two separate programs: A program for children from 0 to 3 years of age and a program for children from 3 to 7 years of age (see previous report)

A. Group day care for children 0 to 3 years of age.

During the Danish fiscal year 1971-72 the characteristics of the group day care centers in Denmark for children from 0 to 3 years of age is shown in Table II:

Table II

Group Day Care Centers in Denmark
for children 0-3 years of age 1971-72

	<u>Total for Denmark</u>	<u>Average per center</u>
Number of centers	363	
Prescribed places	13,041	36
Enrolled children	11,857	32
Average daily attendance	10,251	28

The operational cost per child per year (calculated on average daily attendance) in these centers was \$2,965. This average cost varied, depending on the management of the center. Thus the average operational cost per child per year in the 230 centers having private management (private, non-profit organizations, not private individuals) was \$2,713 while in the 133 centers under municipal management it was \$3,445. The average cost was also a function of center location. Thus the average operational cost per child per year

in central Copenhagen (population 1 million, 100 centers) was \$3,368, in suburban Copenhagen (93 centers) was \$3,263, for the rest of Denmark (170 centers) was \$2,652.

The break down of the distribution of operational costs for these centers is given in Table III.

Table III

Distribution of operating costs in group day care centers in Denmark for children 0-3 years of age 1971-72

	<u>Cost per child per year</u>	<u>% of total cost per child per year</u>
Building (rental or payments)	\$ 347	11.7%
Staff salaries	\$ 2,070	69.8%
Food	\$ 116	3.9%
Utilities	\$ 49	1.7%
Furniture and equipment	\$ 56	1.9%
Administrative costs	\$ 106	3.6%
Consumable supplies	\$ 21	0.7%
Miscellaneous ^{x)}	<u>\$ 200</u>	<u>6.7%</u>
Total	\$ 2,965	100%

^{x)} Misc. includes: Insurance, special repairs of building, clothes for infants, parent meetings, cleaning of building.

As described in the previous report on group day care in Denmark the cost of group day care services for children 0-3 years of age is shared by the national government, the local government, and the parents as follows: Property costs, including rent, interest, tax, insurance and maintenance is subsidized 100% by public funds with 4/7 provided by the national government and 3/7 provided by the local government. Operational costs, exclu-

ding property costs, are shared by the public and the parents: 40% by the national government; 30% by the local government; 30% by parents (or in the few industrially located centers, by industry).

In 1971-72 the total income from these three sources for group day care centers for children 0-3 years of age was \$2,746 per child. The sources of this income is shown in Table IV.

Table IV

Sources of income in group day care centers in Denmark for children 0-3 years of age 1971-72

	<u>Contribution per child per year</u>	<u>% of total income</u>
National government	\$ 1,114	40.6%
Local government	\$ 906	33.0%
Family	<u>\$ 726</u>	<u>26.4%</u>
Total	\$ 2,746	100%

It should be noted that the cost to a family for full time group day care for one child under 3 years of age for one year is \$726 or \$14 a week.

B. Group day care for children 3-7 years of age.

During the Danish fiscal year 1971-72 the characteristics of the group day centers in Denmark for children 3-7 years of age is shown in Table V.

Table V

Group day care centers in Denmark
for children 3-7 years of age 1971-72

	<u>Total for Denmark</u>	<u>Average per center</u>
Number of centers	1,709	
Prescribed places	74,338	43
Enrolled children	67,888	41
Average daily attendance	57,434	33

The operational cost per child per year (calculated on average daily attendance) in these centers was \$1,568. This average cost varied depending on the center's management. The average operational cost per child per year in the 1,777 centers under private management (private, non-profit organizations) was \$1,426 while in the 532 centers under municipal management it was \$1,810. The average cost was also a function of center location. The average operational cost per child per year in central Copenhagen (359 centers) was \$1,787, in suburban Copenhagen (352 centers) was \$1,683, for the rest of Denmark (998 centers) was \$1,413.

The break down of the distribution of operational costs for these centers is given in Table VI.

Table VI

Distribution of operating costs in group day care
centers in Denmark for children 3-7 years of age, 1971-72

	<u>Cost per child per year</u>	<u>% of total cost per child per year</u>
Building (rental or payments)	\$ 190	12.1%
Staff salaries	\$1,084	69.1%
Food	\$ 43	2.7%
Utilities	\$ 26	1.7%
Furniture and equipment	\$ 28	1.8%
Administrative costs	\$ 55	3.5%
Consumable supplies	\$ 33	2.1%
Miscellaneous x)	\$ 109	7.0%
Total	\$1,568	100%

x) Misc. (for Table VI) includes: Insurance, special repairs of building, clothes for infants, parent meetings, cleaning of building.

The cost of group day care services in Denmark for children 3-7 years of age is shared by the national government, the local government, and parents in the same way as for the centers for children 0-3 years of age (see page 7).

In 1971-72 the total income from these three sources for group day care centers for children 3-7 years of age was \$1,493 per child. The sources of this income is shown in Table VII.

Table VII

Sources of income in group day care centers
in Denmark for children 3-7 years of age, 1971-72

	<u>Contribution per child per year</u>	<u>% of total income</u>
National government	\$ 593	39.7%
Local government	\$ 473	31.7%
Family	<u>\$ 427</u>	<u>28.6%</u>
Total	\$ 1,493	100%

It should be noted that the cost to a family for full time group day care for one child between 3 and 7 years of age for one year is \$427 or \$8 a week.

C. Group day care for children 0-7 years of age - averaging of cost.

All of the forgoing Danish cost figures are for two separate programs - group day care for children 0-3 years of age and group day care for children 3-7 years of age. Since in the United States such age segregated programs may not be planned, the figures from these two programs have been combined in this section to show the average cost in Denmark for group day care for children from 0-7 years of age.

These average operational costs per child per year in Denmark for children between 0-7 years of age are shown in Table VIII.

Table VIII

Average operational cost per child per year in Denmark for group day care for children 0-7 years of age, 1971-72

	<u>Number of centers</u>	<u>Cost per child per year</u>
All group day care centers in Denmark	2,072	\$2,267
Group day care centers with private management	1,407	\$2,070
Group day care centers with municipal management	665	\$2,628

Group day care centers in central Copenhagen	459	\$2,578
Group day care centers in suburban Copenhagen	445	\$2,473
Group day care centers in the rest of Denmark	1,168	\$2,033

In the same fashion the averaged sources of support for group day care centers in Denmark for children 0-7 years of age have been calculated in Table IX.

Table IX

Averaged sources of income in group day care centers in Denmark for children 0-7 years of age, 1971-72

	<u>Contribution per child per year</u>	<u>% of total income</u>
National government	\$ 854	40.3%
Local government	\$ 690	32.5%
Family	<u>\$ 576</u>	<u>27.2%</u>
Total	\$2,120	100%

Again it should be noted that the cost to a family for full time group day care for one child between 0-7 years of age for one year is \$576 or \$11 a week.

2. Costs of family day care in Denmark

Family day care (in private family homes) in Denmark is under the supervision and control of the local government and again the reader is referred to the previous report by the author on family day care in Denmark for a detailed description of this program. This program, unlike the group day care centers, is not age segregated but serves children from 0-7 years of age.

During the Danish fiscal year 1971-72 the characteristics of the children in family day care homes in Denmark (0-7 years) is shown in Table X.

Table X

Children in family day care
homes in Denmark in 1971-72

	<u>Total for Denmark</u>	<u>% of prescribed places</u>
Number of prescribed places	15,607	
Enrolled children	14,791	94.8%
Enrolled children under 3 years of age	8,892	57.0%
Average daily attendance	11,973	76.7%

The operational cost per child per year (calculated on average daily attendance) in family day care homes was \$1,782. This average cost varied depending on the location of the family day care home. The average operational cost per child per year in central Copenhagen (1,200 children) was \$1,986, in suburban Copenhagen (2,025 children) was \$1,988, for the rest of Denmark (12,382 children) was \$1,370.

The break down of the distribution of operational costs for these family day care homes is more difficult to ascertain because of the nature of the program. The family day care mother is paid a salary for each child (see later) and from this money she is expected to maintain her home and purchase food for the children under her care. The average cost per child per year for this family day care mother's salary (all of Denmark) which includes home maintenance and food is \$1,454 or 81.6% of total operational costs. The remaining 18.4% of the total operational costs, or \$328 per child per year is for miscellaneous costs which include administrative costs of the program (salaries for supervisors who provide assistance to and surveillance of the family day care mothers, etc.) and supplies and equipment provided to the family day care home by the program (baby furniture, toys, etc.).

The cost of family day care services for children in Denmark is shared by the national government, local government and parents. The parents contribute approximately 1/4 of the total operating costs and the national and local governments contribute the remaining funds.

The average cost to a Danish family for full time family day care for one child for one year in 1971-72 was \$408 or \$8 a week. This means that the family was contributing 23.0% of the total operating costs.

3. Salary levels for day care workers in Denmark.

As is apparent from the forgoing data, staff salaries are by far the largest cost item in day care programs. For this reason the present salary scales of day care workers in Denmark will be given. It is important to note that, since the salaries given here are the levels in Denmark in late 1973, these figures cannot be directly related to the previous cost figures. The annual salary for a fully trained worker in a group day care center in Denmark, both for children 0-3 years of age and children 3-7 years of age, ranges between \$6,938 and \$9,265 depending on experience and length of service. The annual salary for the director of a group day care center in Denmark ranges between \$8,111 and \$11,378 depending on experience, length of service and the size of the center.

While the cost of living in Denmark is not significantly different from that of the United States, Danish salary scales are slightly lower than equivalent salary scales in

the United States. The salaries just given for group day care workers in Denmark are within the same range as Danish salary scales for school teachers, nurses and social workers.

Family day care mothers are paid a weekly salary for each child placed in their home. The salary scale is negotiated by the national union of family day care mothers and the national government. Because the cost of living varies slightly in different areas of Denmark, the country is divided into 6 cost of living areas, and the salary scale for a family day care mother is slightly different in each area. The weekly payment to a family day care mother in Denmark for one child in full time day care in 1973 ranges between \$26 and \$35 depending on the area of Denmark. Thus in Copenhagen, located in the highest cost of living area, the family day care mother averages \$153 a month per child in full day care in 1973. This salary scale is tied to the cost of living index. There are also salary scales for children in part-time family day care.

4. Cost of training day care workers in Denmark.

What does it cost to train one day care worker in Denmark? This is most difficult to determine. Nevertheless, some rough approximations can be given.

The Author's previous report "Training of Group Day Care Workers in Denmark" described in detail the system of seminariums in Denmark which train group day care workers. A student attends such a day care seminarium for 3 years. During this period 10-months are spent in practice in a training group day care center. During this 10-month practice period the student receives a wage from the center and, since the student is not at the seminarium, this period is not included in the overall costs of seminarium training. It has been calculated that the remaining two years and two months of training at the seminarium costs the government \$ 7,500 per student (there are no tuitions). This figure includes the operating costs of the seminarium (building costs, staff salaries etc.) but includes neither start-up costs for a seminarium nor special loans available to the students from the government.

At the present time the costs involved in training family day care mothers in Denmark is negligible. As indicated in the report "Family Day Care in Denmark" there is informal inservice training given by the supervisor to the family day care mothers, but this is included in the administrative operating costs of the program. The cost per family day care

mother for the night school course designed for her is very small.

DISCUSSION

The first question this study has investigated is "what does day care cost?". With regard to group day care centers for children 0-7 years of age, the operating cost for the high quality day care found in Denmark is \$2,267 per child per year. This figure is based on average daily attendance, includes the cost of maintaining the building and does not include start-up costs or costs of initial basic training of the staff. If the cost of building maintenance-including rent, utilities, furniture and equipment - is subtracted, the operating cost per child per year is just about \$2,000.

With regard to group day care in Denmark we have learned several other important cost facts. First, as would be expected, group day care is considerably more expensive for children 0-3 years of age (\$2,965 per child per year) than for children 3-7 years of age (\$1,568 per child per year). The biggest increase in cost with the younger children is for the increased number of staff salaries required by the increased staff-child ratios. The younger children also require increased food costs (formulas must be prepared), increased building costs (smaller groups per room), and increased furniture and equipment costs (individual baby cribs, changing tables etc.).

The cost of group day care was also found to be more expensive in the large urban and suburban areas than in the smaller cities and rural areas. Since the quality of care in the different areas in Denmark is essentially the same, these costs differences are the result of different cost of living levels.

A surprising finding was the increased cost of group day care centers under municipal management as compared to private, non-profit management. This is not easily understood since both types of group day care centers come under the same laws and regulations in Denmark which are carefully constructed so as to completely eliminate the possibility of profit in the management of group day care centers. The Danes are very interested in this finding and have begun an investigation of this cost difference.

An important finding of this study is that staff salaries in group day care centers, regardless of the age of the children served, amount to 70% of total operating costs -

by far the largest single cost item. The second largest cost item, building maintenance (including rent, utilities, furniture and equipment), amounts to 15% of total operating costs regardless of the age of the children served. It is interesting to note that the 15% building costs equals just about \$300 per child per year.

What have we learned about the cost of family day care? Family day care in Denmark (\$1,782 per child per year) is significantly cheaper than group day care in Denmark (\$2,267 per child per year). As with group day care, staff salaries are the biggest single cost item in family day care. The average cost per child per year for the family day care mother's salary was \$1,454 as compared to the \$1,577 for the group day care staff's salary. When it is remembered, however, that the family day care mother's salary includes food and building maintenance costs, the difference is much greater. On the other hand, the cost of the family day care mothers' supervisors are not included in the above figures while the salaries of the group day care center directors are included. It appears that the biggest cost difference between group day care centers and family day care homes is the lack of the 15% budget item for the building housing the group day care center. In addition, total staff costs appear somewhat less in the family day care home system. Furthermore, the family day care homes require no start-up costs and no basic training for staff costs making the overall costs for this form of day care considerable less expensive than group day care centers.

The second question this study has investigated is "who pays for day care?". In Denmark parents pay approximately 25% of operating costs regardless of the type of day care their child uses. This amounts to \$11 a week per child for a group day care center and \$8 a week per child for a family day care home. The national and local governments share in providing the remaining 75% of the operating cost. Furthermore, the national and local governments provide 100% of the costs for the start-up of a day care program and 100% of the costs for the basic training of day care staff.

How do the cost findings of this study compare with the findings of the U.S. studies reviewed earlier in this report? With regard to the costs of group day care centers there is extraordinary agreement. The U.S. studies found high quality group day care to cost between \$2,000 and \$3,000 per child per year with an average in the neighborhood of \$2,500 per child per year. In Denmark their high quality group day care costs \$2,267 per child per year. The present study, however, calculated cost

on the basis of average daily attendance. The only U.S. study using average daily attendance was the ABT study which found the cost of high quality group day care to be \$2,349 per child per year in the U.S. - less than \$100 away from the Danish figure! It is also interesting to see that if the approximately \$300 per child per year building costs are subtracted from the Danish cost figures, the \$1,967 remaining is extremely close to the \$2,000 which Rowe felt would be a reasonable minimal operating cost level per child per year for quality group day care.

With regard to costs of family day care there is no such agreement between the present study and the U.S. studies. The only U.S. study which included family day care costs was the CB-DCCDC study where the cost of family day care was found to be essentially the same as that of group day care - \$2,372 per child per year. This is nearly \$600 a year more than the Danish cost figure for family day care - \$1,782. As indicated previously, it seems reasonable that family day care should be cheaper than group day care even when start-up costs and basic training of staff costs are not included. It appears there is an urgent need for further study of the costs of family day care homes in the United States.

What can be concluded from the present study? First, and probably most importantly, quality day care is not cheap. In fact the approximately \$2,000 per child per year just for operating costs puts it far outside the means of the majority of U.S. families. Quality day care is in the same price category as quality elementary and secondary education - and only a very few families in the U.S. can afford private elementary and secondary education for their children. Clearly if the U.S. wishes to provide a reasonable quality of day care for the millions of children desperately in need of this service, public subsidy will be required. And what about day care for profit? In light of the present study, this would appear to be an impossibility except for the minority of uppermiddle and high-income groups in the U.S.

It is clear from this study that the only effective way to substantially cut costs in group day care centers is to cut the quantity and/or quality of day care staff. Since it is agreed that the quality of day care staff and the child-staff ratios are the cornerstone of quality day care, it can only be concluded that cheap group day care is poor quality day care.

This study has shown quality family day care to be significantly cheaper than quality group day care. Since a system of family day care homes can be established much more quickly than several day care centers and at much less expense, family day care home systems such as that found in Denmark should be given very serious consideration in the U.S.

This study has found that a national day care funding mechanism which involves cost sharing by the national government, the local government, and the family can work effectively. Such a cost sharing has several advantages. First, since it is apparent from this and other studies in the U.S. that the majority of families needing day care services cannot support much more than 25% of the operating services, such cost sharing brings quality day care services to those who need it most. Secondly, the cost sharing mechanism allows quality control measures to be linked to the government subsidy - a very important fact in the light of what has been shown to be a close relationship between cost and quality. Thirdly, the cost sharing mechanism provides a means for removing fiscal matters from the important parent-caretaker relationship in day care. The government can, as it does in Denmark, act as a third party which collects the parental fees, adds its own subsidy, and then pays the child caretaking staff leaving the parents and caretakers free to focus their attention on the most important issue in day care - the best possible care of the child.