

**A Sociological Examination  
of the Child Care  
Auspice Debate**

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## CHAPTER I - INTRODUCTION

### Children and quality child care

A high quality child care program has been defined as one that supports and assists the child's physical, emotional, social, language, and intellectual development (Canadian Child Care Federation [CCCCF], 1991). There is considerable research evidence that poor quality child care has a negative impact on preschool children's well-being and development. This negative impact may carry through to the elementary school years where it shows itself in behaviour problems and poorer academic performance than would be expected from the child's apparent abilities. At the same time, a large number of Canadian children are receiving non-familial care on a regular basis. Research evidence suggests that a two-parent, middle-class home does not compensate for the negative impact of poor quality child care, at least in those situations where the preschool child is in full-time care (Doherty-Derkowski, 1995).

In 1993, 969,987 Canadian children under age six lived in families where both parents, or the lone parent, worked or studied for at least 20 hours a week (National Child Care Information Centre, Human Resources Development [NCCIC], 1994). Children of this age who are in child care, and whose parents are working or studying on a full-time basis, spend an average of nine hours, five days a week, in the child care setting (Human Resources Development Canada, 1994). This may mean that young children spend more of their waking hours in child care than with their own family.

Forecasts suggest that the high participation rate in the paid work force by women with children will continue; it is predicted that by the year 2005, the participation rate of women between the ages of 25 and 44 will be 91% (Employment and Immigration Canada, 1992). Therefore, the majority of young children will be cared for outside their immediate families. The first years of life are crucial for the development of basic social, language and thinking abilities. What happens to children in child care has a direct bearing on development of the skills required for success in later life.

### Responses to the demand for child care

#### ***Government involvement in child care as a result of World War II***

In response to the need to employ women in Canadian war-related industries during World War II, the federal government enacted the *Dominion-Provincial War-Time Agreement*. This arrangement made 50% federal cost-sharing available to the provinces for child care centres in which 75% of the parents were employed in industries deemed essential to the war effort. This *Agreement* marked the first time the federal government had played a role in child care. Only Ontario and Québec took advantage of this cost-sharing opportunity (Friendly, 1994).

#### ***Government withdrawal from child care after World War II***

After the war, it was assumed that mothers would leave the paid work force and return to full-time occupation as wives and mothers. In fact, the federal government's actions suggest an ideological position that married women's place was in the home. Universal Mother's Allowances were introduced in 1945 to help ease the transition back from paid work to the home. During the war, the

\$750 maximum annual salary a wife could earn before her husband lost his tax exempt status for her had been eliminated. In 1946, however, the *Income Tax Act* was changed back so that the maximum annual income for wives before the husband lost the tax exemption was reduced to \$250 (Pierson, 1976). The federal government also withdrew its child care cost-sharing agreement with the provinces.

The two provinces that had received federal funds for child care under the *Dominion-Provincial War-Time Agreement* announced that all their wartime child care programs were to be closed. In Québec, the last of the wartime child care centres was closed in 1945.

In Ontario, a coalition of concerned parties protested the proposed closures. This resulted in the passage of Ontario's *Day Nurseries Act*, Canada's first legislation specific to child care. The legislation shifted administrative responsibility from the provincial to the municipal level of government. It provided for 50% cost-sharing by the province to pay the operating costs of centres licensed under the *Act*, and set specific program requirements for a license.<sup>1</sup> While the legislation was an important first step towards government assumption of responsibility for child care quality, it generated problems. First of all, the lack of funds made it difficult for programs to meet the legislative requirements for a license. However, if they did not meet licensing requirements, they were not eligible for provincial cost-sharing. Secondly, it meant that programs could only receive provincial funds if a municipal government was prepared to contribute to the cost. In the period immediately following the implementation of the *Day Nurseries Act*, 12 of the then-existing 28 preschool centres in Toronto closed. By 1962, there were only 15 full-day municipal child care programs and a limited number of programs run by voluntary organizations in the whole of Ontario (Schultz, 1978).

### ***The move by for-profit organizations to address the need for child care***

Women, however, did not stay at home in spite of the apparent desire of the government that they do so. The work force participation of women with children continued to increase after the end of World War II. When Canadian figures about mothers in the labour force first became available in 1971, there were an estimated 1,380,000 children in Canada under the age of 14 whose mothers were in the paid work force (NCCIC, 1974). By 1983, the number had risen to 2,274,775 (NCCIC, 1983). Thus, there was a situation of government withdrawal from child care while the need for it increased.

Private (typically for-profit) child care centres and nursery schools were developed to fill the vacuum. By 1968, an estimated 75% of all child care spaces in Canada were located in centres operated on a for-profit basis.

### ***The development of non-profit parent co-operative programs***

After an initial flurry of enthusiasm, entrepreneurs began to realize that the provision of child care, even with the limited regulatory requirements in place in the 1970's, was not the road to quick profits. Providing child care, even at a minimal level of quality, is labour intensive. The decrease in the proportion of for-profit programs in the 1970's, combined with a growing need for the service, prompted women to begin organizing non-profit co-operative programs. As early as 1974, this type of program accounted for 12.8% of all child care spaces, up from 4.6% in the previous year (NCCIC, 1974). However, to be successful, a co-operative program requires a significant investment of time by the user-parents. The availability of such time has decreased as increased

numbers of two-parent families have found that both parents must work in order to earn an adequate income for the family.

***The current situation***

Canada still lacks a national child care system or national child care legislation. The federal government's involvement in child care has been limited to providing cost-sharing under the Canada Assistance Plan for the provision of child care to families in financial need, or deemed likely to become in need. The provinces and territories are all involved in child care at the level of regulation. In addition, some provide operating and other grants for child care programs.

In Ontario, and to a lesser extent Alberta<sup>2</sup>, municipal governments operate and/or fund child care. The involvement of municipalities has been decreasing since 1985. In 1991, it was estimated that spaces in municipal programs accounted for approximately 3.3% of all child care spaces in Canada (H. Clifford, personal communication, January, 1991).

Because of the small number of municipal child care spaces, the National Child Care Information Centre now includes municipal programs under the heading of non-profit programs. Using this approach, in 1993, non-profit programs accounted for 69.5% of all spaces in Canada. However, in some provinces, the percentage of spaces provided by the for-profit sector is much higher. For example, in 1993, 78% of the total number of centre-based spaces in Newfoundland, 70% in Alberta, 44% in New Brunswick, and 42% in Nova Scotia were located in for-profit programs (NCCIC, 1994). The following table illustrates the percentage of spaces provided by the for-profit sector.

**Table 1**  
**Interprovincial Comparison of Day Care Centre Spaces by Auspice, 1993**

<b>Province/Territory</b>	<b>Non-Profit Spaces</b>	<b>For-Profit Spaces</b>	<b>Total Spaces</b>	<b>% of Spaces For-profit</b>
Newfoundland	559	1995	2554	78.11
Prince Edward Island	1480	964	2444	39.44
Nova Scotia	4054	2935	6989	41.99
New Brunswick	4145	3199	7344	43.56
Québec	68910	12488	81398	15.34
Ontario	89344	29594	118938	24.88
Manitoba	20370	1183	11553	10.24
Saskatchewan	4136	165	4301	3.84
Alberta	12885	30730	43615	70.46
British Columbia	17430	10331	27761	37.22
Northwest Territories	610	165	775	21.29

Yukon Territory	557	195	752	25.93
National Totals	214480	93944	308424	30.46

Source: National Child Care Information Centre, Human Resources Development Canada (1994). *Status of day care in Canada 1993*. Table 6. Ottawa, Ontario: Minister of Supply and Services Canada.

### **Different sectors: different characteristics**

#### ***Current types of auspices in child care***

The term "auspice" refers to who or what operates a service. In Canada, child care programs are operated by:

- ◆ **non-profit organizations:** for example, a group of parents running a co-operative child care centre, a group of community volunteers who form a board of directors, a school board, or a non-profit charitable organization such as the YM/YWCA;
- ◆ **for-profit organizations:** this category includes situations where one person operates one or two child care centres as a business, but may or may not be incorporated, and for-profit incorporated organizations with shareholders, and operating several programs; and
- ◆ **municipal level of government:** for example, school boards. This category would include Indian Bands in Ontario since they function in a similar fashion to a municipal government for their community.

For economists, these represent three distinct sectors: for-profit, non-profit, and government. Each sector is believed to have a distinct model of operation which is characteristic of the sector. As noted above, the percentage of child care spaces provided through municipally-operated programs is small. Therefore, the remainder of this paper will concentrate on for-profit and non-profit programs.

#### ***Structural differences between non-profit and for-profit organizations***

Each province and territory has legislation to regulate for-profit and non-profit organizations. Usually two separate pieces of legislation (or separate sections of the same piece of legislation) govern for-profit and non-profit organizations respectively. In spite of differences between provincial and territorial legislation, the two sectors differ from each other in significant ways **regardless** of jurisdiction (Hansmann, 1980). The first difference is that for-profit organizations are allowed to redistribute their earnings to shareholders or members, while non-profit organizations are not; the second difference is that decision-making in non-profit organizations is done by a group of people, the board of directors. Members of the board do not have personal vested financial interest in the organization. In a for-profit organization, decision-making is done by an owner or group of owners. Each owner has a vested interest in whether the organization makes a profit.

These differences are relevant to the day-to-day operations of child care programs. In a for-profit situation, decisions regarding all facets of management can be made at the discretion of the owner(s). In other words, neither parents nor the representatives of the community at large necessarily have a voice in policy, administration, or programming decisions. This means there is no formal mechanism for accountability of the program to the community it serves.



In contrast, a non-profit organization has a board of directors typically made up of people from a variety of backgrounds who represent the community in general. In child care, the board often includes (or may be entirely made up of) parents who are currently using the service. The board is legally responsible for all policy, administrative and programming decisions. In practice, this responsibility is delegated to a program director who is hired by the board. While this program director can show considerable initiative in day-to-day operations, her or his decisions are subject to board approval. To the extent that the board is truly representative of the users and the community, there is a formal mechanism by which the program is held accountable to the community and to its users.

For-profit programs also differ from non-profit programs in the manner in which surplus revenue is handled. Non-profit programs are required to reinvest any "profit" back into the program. The owners of for-profit programs can use their discretion about how profit is handled. They can reinvest it back into the organization or keep some or all of it for their private use.

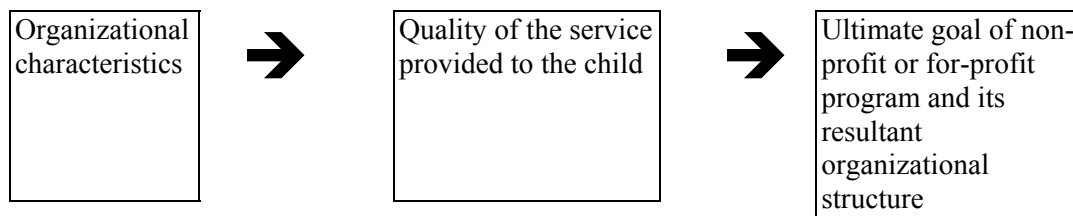
### ***Differences in organizational goals between non-profit and for-profit organizations***

One of the goals of a for-profit organization is obvious: to realize a profit. To say this does not imply that the goal of every for-profit organization is **only** to turn a profit, or that for-profit child care programs are only interested in the bottom line. Nevertheless, the orientation of a for-profit program is different from that of a non-profit program. Non-profit organizations do not have the pursuit of profit as even a peripheral goal. This does not mean that they are not concerned about income and expenses; non-profit programs must aim for a balanced budget at the end of the year. However, in a non-profit organization, a balanced budget rather than the maximization of profit is the major concern.

Sociological theory predicts that organizational goals drive decision-making regarding level and type of employee, permitted employee behaviour, the physical facility, and programming (Scott, 1987). Furthermore, the different goals associated with different types of organizations result in differences in authority structures within the organization, amount of rules, methods of social control, and types of social relations (Rothschild-White, 1979). In turn as Figure 1 shows, all these organizational characteristics have a direct and very important impact on the level of the quality of service offered.

**Figure 1**

#### **The effect of auspices on day care quality**



Translating the hypothesis in Figure 1 into child care operations, one would hypothesize that when forced to choose between spending \$1,000 on toys known to stimulate children's development and \$750 on toys which may not be as stimulating but will not harm the children, the owner/operator of

a for-profit program might choose the latter. In contrast, one would hypothesize that the director of a non-profit program would choose to spend the \$1,000 if there are funds for such an expenditure. Similarly, one would hypothesize that for-profit programs might hire people with lower educational levels than non-profit programs if this would enable them to pay lower salaries while charging similar fees to those in non-profit programs in the same community.

## CHAPTER II - RESEARCH EXAMINING THE IMPACT OF AUSPICES IN CHILD CARE

### The requirements for quality in child care

Research conducted in Canada, the United States, Bermuda, and western Europe has consistently found that high quality child care programs require:

- ◆ caregiver-to-child ratios (the number of children per caregiver) that enable frequent, personal interactions between caregiver and child;
- ◆ caregivers with appropriate levels and types of education;
- ◆ a stable group of caregivers so that the child can develop trust relationships, feel confident that the caregivers will be there, and will provide care; and
- ◆ caregiver behaviour that encourages optional child development, for example, through encouraging the child to explore and manipulate the environment (Doherty-Derkowski, 1995).

This chapter discusses the findings of research studies that have examined the impact of auspices using global measures of quality or by comparing the number of children per caregiver, the level of caregiver education, caregiver stability, or the type of interaction between the caregivers and children. Unless expressed as percentages, the findings reported in the 14 studies discussed in this chapter were found to be statistically significant.

### Studies comparing different auspices using a global measure of quality

Studies using a global measure of quality classify programs as high or low quality either on the basis of a standard, well-validated tool, such as the *Infant/Toddler Environment Rating Scale* (Harms, Cryer & Clifford, 1980), or by using factors that have already been demonstrated to be associated with desirable child outcome.

A Canada-wide study involving 927 centres asked provincial/territorial government officials to rate centres for which they were responsible on the basis of 27 items believed to be associated with quality, for example, the number of children per caregiver. On all ten items related to enhancing child development, non-profit centres tended to be ranked better than for-profit centres. On items related to administration, such as the presence of personnel policies, non-profit centres also tended to be ranked higher than for-profit centres. In addition, they ranked higher on parental support criteria, such as parent education and counselling. However, for-profit centres tended to be ranked higher on their flexibility of hours, and thus their ability to meet the needs of working parents (SPR Associates/National Mail Surveys Inc., 1986). A drawback of this study is that the evaluation of the centres was done by government officials who knew the purpose of the study. Furthermore, the data were retrospective and based on the informants' memory of the centre. There was no confirmation of their opinion through an on-site visit. Nevertheless, it should be noted that the findings are consistent with those of other studies as discussed below.

An American study, which sought to assess how auspices would effect quality of care in a state with relatively strict regulations regarding centre operations (Connecticut) examined 439 centres. Initial

data were collected by questionnaire, then the researchers did on-site observations in 57 randomly selected programs. The researchers found no significant difference between centres under different auspices in goal selection, curricular priorities, group sizes, utilization of community professionals, safety practices, or child behaviours. However, non-profit centres were consistently superior to for-profit programs in regard to the number of children per caregiver, the overall environment for children, caregiver encouragement and support of children, and the appropriateness of the caregiver supervision of children (Kagan & Newton, 1987).

A second large study conducted in the United States involved 227 centres in five different states with different levels of regulation. It used the *Infant/Toddler Environment Rating Scale* (Harms, Cryer & Clifford, 1980) or the *Early Childhood Environment Rating Scale* (Harms & Clifford, 1980), depending on the children's age, to measure quality. This study found that caregivers in non-profit centres were more likely to engage in appropriate interaction with and supervision of the children. They were also more sensitive to the children's needs, and less harsh with them, than their counterparts in for-profit centres. Although non-profit centres as a group had a better ranking on the provision of activities that were appropriate for the age of the children than did small independent for-profit centres, there was no statistically significant difference on this measure between non-profit centres and centres operated by large for-profit chains (Whitebook, Howes & Phillips, 1990).

Three smaller American studies, which together involved a total of 97 centres, also found that non-profit centres obtained higher scores on the *Early Childhood Environment Rating Scale* than did for-profit centres (Fiene & Melnick, 1990; Kontos & Stremmel, 1988; Kontos & Fiene, 1987)

A final American study compared 55 non-profit with 27 for-profit centres on the measure used for centre accreditation by the American National Association for the Education of Young Children. The researcher found that non-profit centres consistently received higher scores, indicating higher quality, than did for-profit centres (Jorde-Bloom, 1989). Caregivers in centres that have accreditation have been found to engage in greater amounts of appropriate behaviour with children, and to be more sensitive to their needs, than caregivers in centres without accreditation (Whitebook, et al, 1990).

### **Studies comparing the number of children per caregiver across auspices**

Too many children per caregiver makes it difficult for the caregiver to provide the children with individual attention or appropriate programming. As discussed in this section, research studies in both Canada and the United States have consistently found that for-profit centres tend to have more children per caregiver than non-profit centres.

A Toronto study involving 431 centres found that, in the previous year, 53.8% of the for-profit programs had been operating with a larger number of children per caregiver than permitted by legislation. This was found to be true for 15.1% of non-profit parent- or community-board centres and 45.5% of non-profit centres with an operator-appointed board.<sup>3</sup> This study is interesting in that non-profit centres with operator-appointed boards were more like for-profit centres than they were like other non-profit centres (West, 1987). Such a finding emphasizes the importance of accountability to the community and users. An operator-appointed board may feel primarily accountable to the operator, even when the program is legally non-profit.

A study in Québec involving all licensed centres in that province found that in the previous 12 months, there had been complaints found to be valid upon investigation by government officials in 9.7% of the for-profit versus 1.9% of the non-profit centres. Twenty-one percent of the valid

complaints against for-profit centres involved too many children per caregiver. This was true for only 6% of the valid complaints involving non-profit centres (DeGagné & Gagné, 1988).

Two recent large American studies, which together involved a total of 666 centres, both found that non-profit centres as a group had fewer children per caregiver than did for-profit programs (Kagan & Newton, 1989; Whitebook, et al., 1990). These findings are consistent with the findings in an earlier national study conducted in the United States (Roupp, Travers, Glantz & Coelen, 1979).

### **Studies comparing the level of caregiver education across auspices**

Education related to child development and the provision of child care provides a child caregiver with an understanding of how children develop. It also helps staff to understand the dynamics of group care situations.

A Canada-wide study involving 2,383 caregivers representing centres in all the provinces and territories found that 19.1% of caregivers in for-profit centres had a high school diploma or less versus 3.6% in municipal centres and 13.5% in other non-profit centres. Forty-nine percent of caregivers in for-profit centres had a certificate or diploma in early childhood education versus 75.8% in municipal centres and 57.3% in other non-profit centres (Canadian Child Care Federation [CCCCF] & Child Care Advocacy Association of Canada [CCAAC], 1992). An Ontario study of school-age child care programs also found that caregivers in non-profit programs had higher educational levels than their counterparts in for-profit programs (Park, 1992). These findings are consistent with those of a multi-state study in the United States that found that education levels, and the numbers of caregivers with training in early childhood education, were higher in non-profit than in for-profit centres (Whitebook, et al., 1990).

### **Studies comparing caregiver stability across auspices**

The term 'turnover rate' refers to the frequency with which caregivers leave a child care program. Just as relationships between adults are based on what they do together and their interactions over time, the relationship between the child and the adult is built upon what is shared. Provided that the child's experience with the adult is positive, on-going contact with the adult helps the child to develop a trust relationship. This is necessary for the child to feel sufficiently secure to explore the environment. Such exploration is essential for skill development.

A recent Canada-wide study involving 969 centres found that nationally, the mean number of years that caregivers had been working at their current centre was 2.9 in the for-profit centres, 3.3 in the municipal centres, and 3.7 in other non-profit centres (CCCCF & CCAAC, 1992). A study conducted in Québec found that the 12-month turnover rate was 37% in for-profit centres versus 24% in non-profit centres (Dumais, 1986). A second Québec study found that 35% of all for-profit centres had a turnover rate of 40% or higher in a 12-month period while only 20% of non-profit centres experienced such high turnover rates (DeGagné & Gagné, 1988). Similar findings have been obtained in Alberta (LaGrange & Read, 1990) and Ontario (Association for Early Childhood Education, Ontario, 1986).

Research has shown that salary level and job satisfaction level both predict staff turnover rates (Doherty-Derkowski, 1995). The recent national survey involving 969 centres representing all provinces and territories found that the hourly wage across all positions in municipal centres (all in Ontario) was \$13.88, in other non-profit centres it was \$10.07, and in for-profit centres it was \$8.07.

Caregivers in municipal and other non-profit centres were also more likely to get benefits, such as paid time for professional development and paid time for preparation during working hours (CCCF & CCAAC, 1992). This finding is consistent with an earlier national study which found that caregivers in for-profit centres were receiving 73% of the salary of workers in non-profit centres, and 51% of the salary received by their counterparts in municipal centres (Schom-Moffat, 1984).

### **Studies comparing the interaction between the caregiver and the child across auspices**

In an Ontario study involving 40 programs for school-aged children, the quality of the interaction between the adults and the children was assessed using an observation scale that measured, for example, the extent to which the adults encouraged independence and used positive approaches to help children to behave constructively. The researcher found that staff members in non-profit programs obtained higher scores on positive caregiver behaviours than did their counterparts in for-profit programs. They also provided a more balanced range of activities for the children (Park, 1992).

A large American study found that the extent to which caregivers were sensitive and responsive to the needs of the children, and the extent to which they provided activities that were appropriate for their developmental level, was lower in for-profit centres (Whitebook, et al., 1990). However, a second American study found no statistically significant differences between for-profit and non-profit centres on caregiver behaviours as measured by a modified version of the Child Development Associate (CDA) checklist. This checklist was developed by the National Association for the Education of Young Children to assess the nature of interaction between caregivers and children and the level of competency of the caregivers (Kagan & Newton, 1987).

### **Summary**

The studies discussed in this chapter indicate that quality is more likely to be found in a non-profit centre. This does not mean that there are not high quality for-profit programs, but it does suggest that overall, for-profit auspice is associated with lower quality. Statistically significant differences in favour of non-profit centres were found in the number of children per caregiver, staff education levels, staff turnover rates, caregiver wages and benefits, and the quality of interaction between the caregiver and child.

Researchers in both Canada (SPR Associates Inc., 1986) and the United States (Kagan & Newton, 1987) have suggested that the differences in quality consistently found between for-profit and non-profit centres are a result of the absence of direct government subsidy to the for-profit centres. However, two Canadian studies, both conducted at a time when government support was equally available to both for-profit and non-profit centres, found that non-profit centres were associated with indicators of higher quality (West, 1987; LaGrange & Read, 1990). In the United States, a five-state study involving 227 centres found that for-profit centres tended to provide lower quality programming whether or not they received government funding (Whitebook, et al., 1990). Therefore, it appears that something other than the availability of government funding is responsible for the differences in quality. As noted in the previous chapter, sociological theory suggests that the different outcomes are related to the different goals and organizational characteristics of the non-profit and for-profit sectors. The Calgary Day Care Study, discussed in the following chapter, explored this hypothesis.

## CHAPTER III - THE CALGARY DAY CARE STUDY

### Contextual considerations

In Canada, there is considerable variation in provincial and territorial rules regarding government funding for non-profit and for-profit child care programs. In some jurisdictions, centres under either auspices are funded at the same level while in others government funds are provided only to non-profit programs. The availability of funding could influence factors known to effect quality, for example, the number of child care teachers. For this reason, it is important to conduct research into the impact of auspices in an area where the availability of government funding is identical for both non-profit and for-profit centres. This puts the two types of auspices on an equal and competitive footing.

People who believe that child care services should be governed solely by the laws of supply and demand claim that too many regulations inhibit market competition. Therefore, they reject many of the studies that have found a difference in quality associated with auspices on the basis that regulation has prevented for-profit centres from responding to market forces. Regulations for licensed child care also vary considerably across the provinces and territories. Examining differences between auspices in a province with minimal regulations should, in theory, allow for-profit centres to be more responsive to user demands.

Given the two above considerations, Calgary was selected as the location for the study. At the time the research was conducted, Alberta's regulatory environment was extremely weak, and government funds were equally available to for-profit and non-profit centres. Also at the time of the study, Alberta's child care services were experiencing a vacancy rate of approximately 20% (Alberta Family and Social Services, 1990). In theory, this should have increased competition for users among child care programs, particularly those that were operated on a for-profit basis.

### Purposes

The purposes of the Calgary Day Care Study were to:

- ◆ examine the impact of auspices on quality in child care centres;
- ◆ examine the impact of different auspices on centres' organizational characteristics;
- ◆ determine the relationship between organizational characteristics and quality of care; and
- ◆ explore whether differences in quality found between centres under different auspices are the product of organizational differences rather than auspices per se. In other words, if organizational characteristics are kept constant across non-profit and for-profit centres, will quality be the same regardless of auspices?

### Sample

A random stratified sample of 50 (30%) of Calgary's 169 child care centres was selected. This resulted in 14 non-profit and 36 for-profit centres. The centres were contacted by letter, and then

through a follow-up telephone call. Forty-eight of the first 50 centres contacted agreed to participate. One non-profit and one for-profit centre declined and were replaced. Two centres later dropped out of the study and were not replaced. Three centres failed to return the director mail-in questionnaire. As a result, the final sample consisted of 45 centres: 13 (28.8%) non-profit and 32 (71.2%) for-profit.

### **Data collection**

Centres were visited on a pre-arranged day by at least one researcher from approximately 8.00 a.m. to mid-afternoon. Two measurement tools were used:

- ◆ the *Infant/Toddler Environment Rating Scale (ITERS)* (Harms et al., 1990). This Scale has 35 items which measure various aspects of a centre on a seven-point scale. A score of one is assigned for very poor quality on a particular item, and a score of seven is assigned if the quality on the item is excellent. The items examine the physical environment, program activities, the amount and type of interaction between caregivers and children, program policies, and the extent to which staff needs are met. An inter-rater reliability rating of .92 was achieved in pre-testing in centres not involved in this study. One researcher, who was not aware of the major focus of the study (auspice), administered all the ITERS tests; and
- ◆ a mail-in questionnaire for centre directors (see Appendix A). This was specifically designed for this study in order to collect data on a number of organizational characteristics. The questionnaire was pre-tested with one group of early childhood professionals and child care centre directors, revised, and tested again with a second group. No problems were encountered with the questions or format during the second pre-test.

While at each centre, the researchers asked the caregivers about their professional background, and sought information about daily routines and centre policies. Directors were also interviewed to provide policy information necessary to complete the ITERS.

Soon after beginning the on-site observations, it became obvious that caregiver-to-child ratios fluctuated throughout the day in many centres. Ratios were most often violated when staff were not replaced while taking coffee or lunch breaks. Therefore, the researchers began to record whether or not caregiver-to-child ratios were in compliance with government regulations during 10 independent spot-observation checks taken randomly throughout the day. These observations were completed in 39 centres.

Qualitative data collected during the on-site visits were recorded through the use of field notes. All data were collected between October, 1989 and December, 1990.

### **Data analysis**

#### *a) the differences in quality by auspices*

The ITERS total score can range between 35 (if all items receive a score of one) and 245 (if all items receive a score of seven). The total score on the ITERS was used to classify centres as providing poor quality care (those with total scores of 140 or less), adequate quality care (those with total scores ranging between 140 and 174), or good quality care (those with total scores over 175).



Cross-tabulations, a difference of means test, and a Pearson's correlation coefficient were used to scrutinize the relationship between quality as measured by the ITERS and centre auspices.

*b) the differences in organizational characteristics by auspices*

An analysis of variance was used to examine organizational characteristics by auspices. T-tests were performed to first contrast each auspice (for-profit independent, for-profit chain, and non-profit) with each other, and then to contrast all for-profit centres with all non-profit centres.

*c) the relationship between organizational characteristics and quality of care*

Pearson correlation coefficients were computed to test the relationship between each organizational characteristic examined and quality of care as measured by the ITERS.

*d) auspices, organizational characteristics, and quality of care*

To explore whether differences in quality as measured by the ITERS were purely the result of differences in organizational characteristics, a partial correlation coefficient was computed. Auspice was dummy coded and the 14 organizational characteristics that had been found to be significantly correlated to quality of care were held constant.

## **Findings**

*a) the difference in quality by auspices*

As illustrated by Table 2, on the following page:

- ◆ for-profit centres were more likely to offer poor quality child care (53.1%) than non-profit centres (15.4%); and
- ◆ non-profit centres were more likely to offer good quality care (61.5%) than for-profit centres (15.6%).

Statistical analysis showed that these differences between for-profit centres as a group, and non-profit centres as a group, are significant at the .01 level. An adjusted contingency coefficient measured the strength of the association at a respectable .42776.

Table 2

Quality by auspices

Quality of care as measured by ITERS	For-profit auspice	Non-profit auspice	Total
Good	5 (15.6%)	8 (61.5%)	13 (28.9%)
Adequate	10 (31.3%)	3 (23.1%)	13 (28.9%)
Poor	17 (53.1%)	2 (15.4%)	19 (42.2%)
<b>Total</b>	<b>37 (100%)</b>	<b>13 (100%)</b>	<b>45 (100%)</b>

The mean ITERS score was 143.3 for the for-profit centres and 174.2 for the non-profit centres (the higher the score, the higher the quality). The differences in means are statistically significant at the .01 level. Further statistical analysis revealed that 24% of the variance in ITERS scores is explained by auspices.

Within the sample, for-profit centres varied by the number of centres an owner might possess. Seventeen of the for-profit centres were each owned and operated by one person. Fifteen of the for-profit centres were part of 'chains', which within Calgary ranged from two to 17 centres. Almost all the non-profit centres were independently operated by boards of directors or associations. As illustrated by Table 3, there was more variability in quality ratings among the independent for-profit centres than among the chain centres. The independent for-profit centres were most likely to offer poor quality care; however, a greater percentage of them offered good quality care than occurred among chain centres. The chain centres tended to cluster in the 'adequate' category, although nearly as high a percentage of them offered poor quality care.

The differences between independent and chain for-profit centres illustrated by Table 3 are not statistically significant.

Table 3

A comparison of quality rating between independent and chain for-profit centres

Quality of care as measured by ITERS	Independent for-profit centres	Chain for-profit centres
Good	22.7%	6.0%
Adequate	12.0%	53.7%
Poor	65.3%	40.3%

<b>Total</b>	<b>100.0%</b>	<b>100.0%</b>
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*b) the differences in organizational characteristics by auspices*

The analyses of variance used to examine organizational characteristics involved examining differences between several sets of means: first, contrasting independent for-profit, chain for-profit, and non-profit centres; second, comparing both types of for-profit centres as a group with the non-profit centres; and, third, comparing the group means of the independent for-profit centres, the chain for-profit centres, and the non-profit centres.

Tables 4-7 presented in Appendices B-F identify the following findings:

- ◆ Appendix B - differences in operational characteristics, for example, the number of years the centre had been open, the percentage of the budget used to purchase equipment, and the extent of opportunities for parents to have input into decision-making;
- ◆ Appendix C - differences in organizational characteristics, for example, licensed capacity, group sizes, and the number of children per caregiver;
- ◆ Appendix D - differences in factors related to the centre director, for example, percentage of time the director spent on administration; and
- ◆ Appendix E and F - differences among caregivers, for example, differences in their level of training in early childhood education.

As Tables 4-7 show, in comparison with either independent or chain for-profit centres, non-profit centres: 1) had been in operation for a longer period of time; 2) provided more opportunities for parental involvement in decision-making; 3) offered more special services for children, i.e. English as a Second Language, special programming for children with disabilities; 4) had a higher proportion of staff members who had been with the centre for five years or more; 5) paid their directors and caregivers higher salaries and provided better benefits for their caregivers; 6) required a greater amount of training from beginning caregivers and had much smaller proportions of caregivers without early childhood training; 7) had greater proportions of caregivers with both early childhood diplomas and early childhood certificates; and, 8) provided a larger number of opportunities for caregivers to have input into the decision-making process. These differences were all statistically significant.

In comparison with non-profit or independent for-profit centres, chain for-profit centres: 1) reported spending a larger proportion of their budget on materials and equipment; 2) were more likely to offer a variety of care options (i.e. full-time, part-time, drop-in); 3) were licensed to care for significantly larger numbers of children and charged significantly more for infant and toddler care; and, 4) were more likely to offer in-service training (however, the minimal training possessed by caregivers in both types of for-profit centres were considerably lower than in non-profit centres). These differences were all statistically significant.

In comparison with non-profit and chain for-profit centres, independent for-profit centres had: 1) directors who spent considerably less time in administration; and 2) staff who had a greater degree of individual decision-making authority, probably because procedures were less precisely articulated. Both these differences were statistically significant.

While a number of the organizational characteristics showed no statistical difference between auspices, the means of non-profit centres were higher (indicating better) on every characteristic considered to be positively associated with quality child care. Their means were lowest on every characteristic considered to have a negative impact on child care, for example, staff without training in early childhood education. The only exceptions were that for-profit chain centres reported spending a larger proportion of their budget on materials and equipment, and offering more in-service training than did the non-profit centres. However, the minimum training possessed by caregivers in non-profit centres was considerably higher than those in for-profit centres, whether they were independently operated or part of a chain.

There were also important demonstrated differences between for-profit independent centres and for-profit chain centres. The former were found to have procedures which were much less clearly articulated, and directors who spent more time caregiving and significantly less time on administration.

*c) the relationship between organizational characteristics and quality of care*

The findings discussed to this point have established that: 1) as a group, the non-profit centres provided higher quality care than the for-profit centres; and, 2) there were significant differences in organizational characteristics between non-profit centres and for-profit centres.

Two questions arise from these findings:

- ◆ are the differences in organizational characteristics responsible for the differences found in the quality of care between non-profit and for-profit centres?
- ◆ do the individual organizational characteristics each contribute to fluctuations in the quality of care observed? If so, how?

To examine these questions, Pearson correlation coefficients were calculated between each organizational characteristic and a centre's ITERS score (the measure of quality used in this study). The results are presented in Appendix G.

Virtually all the organizational characteristics identified in the previous section (licensed capacity, group sizes, and the number of the children per caregiver) as distinguishing between auspices were significant predictors of quality care. There was a positive correlation between quality of care as measured by the ITERS and how long the centre had been open, the number of opportunities for parent involvement in decision-making, the number of special services available for children, and compliance with regulations regarding the permitted number of children per caregiver.

Every variable relating to caregivers, with the exception of the number of caregiver benefits, was found to be positively associated with the ITERS. In addition, utilization of higher proportions of caregivers between age 15 and 20 had a negative impact on the ITERS score (indicating a negative impact on quality). While greater proportions of caregivers with less than one year of experience did not seem to significantly influence quality, utilizing greater numbers of caregivers who had been at the centre for five years or more had a positive effect. Training, along with greater proportions of caregivers with early childhood diplomas and certificates also had a positive impact on quality, as did paying caregivers a higher salary and giving them more opportunities to be involved in decision-making.

*d) auspices, organizational characteristics, and quality of care*

The findings discussed to this point have established that: 1) centres under different auspices have different organizational characteristics; and, 2) differences in organizational characteristics influence the quality of care in child care.

Do these findings mean that differences in quality are solely the product of organizational differences and that auspice is irrelevant? To explore this possibility, a partial correlation was computed. Auspice was dummy coded, and the 14 organizational characteristics significantly correlated with quality of care (see Appendix G) were held constant.

When organizational characteristics were held constant by this statistical procedure, the relationship between auspice and quality completely disappeared. It therefore appears that differences in quality by auspice are explained entirely by differences in organizational characteristics, that is, by different ways of operating and by differences in the staff hired. This is not to say that auspice is irrelevant. Differences in organizational characteristics occur because the goals of the organization influence the decisions made, for example, the amount and type of formal education required of staff. Therefore, ultimately, it does make a difference if a centre is operated with the intention of making a profit, or is non-profit.

## Summary

The general findings of the Calgary Day Care Study are comparable to those of other studies, as discussed in Chapter II. Non-profit centres in Calgary consistently offered child care that was superior to that offered by for-profit centres. However, results also showed some non-profit centres exhibiting poor quality care (15.4%) and some for-profit centres exhibiting good care (15.6%). Thus, while auspice does not guarantee the level of quality in any centre, it is a reliable indicator of quality.

The differences identified between independent and chain for-profit centres are important. Independent for-profit centres: 1) displayed a wider range of quality; 2) had a higher proportion of staff between age 15 and 20, and fewer staff between age 26 and 30; and, 3) were less likely to have clearly articulated procedures

The greater variability of quality in the independent for-profit centres in comparison to the chain for-profit centres probably was a function of the variability of the personal characteristics of the owner/directors. Owner/directors of independent for-profit programs in this study had less child care experience than directors of for-profit chain centres. In addition, independent for-profit centres were less likely than for-profit chain centres to have clearly articulated procedures. Therefore, daily decisions about the program were left to either the owner or a caregiving staff characterized by youth, lack of training, and high turnover rates. While not statistically significant, directors of chain centres averaged even less child care education than directors of independent for-profit centres. Even so, fewer chain centres exhibited poor care. This is likely due to the degree of formally articulated procedures and because directors of these centres spent significantly more time on administrative duties than did directors of independent for-profit centres.

The organizational characteristics of non-profit centres were found to differ remarkably from either type of for-profit centre. Non-profit centres exhibited more of those organizational characteristics associated in the literature with good quality care on almost every variable examined. The

relationship between auspice and quality dropped to zero, when differences in organizational characteristics were controlled through a statistical procedure. This shows the importance of organizational characteristics as a determinant of quality.

The hypothesis that differences in government funding are responsible for the differences in quality found between for-profit and non-profit child care centres was not supported. Government funding was equally available to for-profit and non-profit centres, but the non-profit centres, as a group, provided higher quality care than the for-profit centres.

The hypothesis that a highly regulated climate inhibits competition, to the detriment of for-profit centres, also was not supported. At the time of the study, Alberta had a very weak regulatory environment and an average vacancy rate of 20%. In spite of these factors, the competition for users was not sufficient to motivate the for-profit centres to provide higher quality child care than the non-profit centres in order to attract parents.

## CHAPTER IV - A FINAL APPRAISAL

### Different goals, different operational characteristics, different quality

As noted in Chapter I, non-profit and for-profit organizations generally have different goals. In the child care field:

- ◆ the goals of for-profit centres can be characterized as: making a profit, being seen by potential users as providing a high quality service, and not harming children in their care; and
- ◆ the goals for non-profit centres can be characterized as: not running a deficit, providing high quality care, and making decisions that will be approved of by the board of directors.

The different goals of the organization influence the operational decisions that are made regarding staff characteristics, physical setting and equipment, programming, meeting children's special needs, and the like. Non-profit and for-profit organizations also differ with regard to who controls policy and operational decision-making. A non-profit organization is obliged to have a board of directors; in a for-profit organization, the owner makes the decisions and can do so without external input. The ultimate goals of the organization, combined with the decision-making constraints inherent in the type of auspices, are rarely questioned by those within the organization. Because these goals tend to be taken as absolutes, they pervade the day-to-day operations of the centre for the director and the staff alike.

As a result of the influence the different goals have on operational decisions, the organizational characteristics of non-profit and for-profit centres differ. In turn, these organizational characteristics, such as the proportion of caregivers with early childhood training and caregiver-to-child ratios, act as a mediating influence between auspices and quality. As the Calgary Day Care Study demonstrated, it is the differences in organizational characteristics that cause all the variation in quality care. When these differences are controlled for by a statistical procedure, the relationship between auspices and quality of care drops to zero.

What are the policy implications of these observations and the research findings? Will for-profit child care programs necessarily offer lower quality care than non-profit programs because of their goal orientation? If so, should governments legislate that child care can only be offered by non-profit organizations? Is it possible, and more desirable than eliminating for-profit child care, to change the organizational characteristics of for-profit programs so that they are the same as those of non-profit programs?

### Policy option one: The elimination of for-profit child care

Some have suggested that for-profit child care should be eliminated. The reasons are both ideological, (that is, money should not be made from an essential service for children), and related to the demonstrated relationship between for-profit child care and poor quality. The finding by the Calgary Day Care Study that the association between auspice and quality disappeared when organizational characteristics were held constant does not mean that auspice is irrelevant. The differences in organizational characteristics arise because of the different goals of for-profit and non-profit organizations.

Economists, such as Rose-Ackerman (1990) have defended the provision of social services by for-profit organizations by suggesting that: 1) for-profit organizations are often the first to enter an area to absorb the need for a service; 2) for-profit organizations will move into an area to provide service when there is a shortage of non-profit services; and, 3) competition between for-profit and non-profit services improves service.

Supporters of for-profit child care claim that for-profit programs are necessary to ensure child care availability, and that a mixture of for-profit and non-profit child care encourages quality in both auspices. Those proposing the elimination of for-profit child care respond that the social damage done by poor quality child care is too high a price to pay for additional child care spaces.

The claim that the presence of for-profit child care programs improves the overall quality of child care in both for-profit and non-profit centres has been challenged. Regardless of the ratio of for-profit to non-profit centres, non-profit child care centres have been found to provide higher quality care. A recent American study collected data from five different urban locations in five different states (Whitebook et al., 1990). Random samples of child care centres elicited percentages between non-profit and for-profit ranging from 86% non-profit in Boston, Massachusetts, to 69% for-profit in Phoenix, Arizona. In each state, non-profit programs were found more likely to provide high quality care than for-profit centres. Furthermore, the study showed that the average level of quality care in a geographic area increased as the proportion of non-profit centres to for-profit centres increased. Thus, having a majority of for-profit centres did not raise the quality of care. In fact, it had the opposite effect. Unfortunately, the results just cited are somewhat confounded by differences in the level of local regulations. The for-profit centres were a larger proportion of all centres in those states relatively free of regulatory constraints. Massachusetts, with the highest proportion of non-profit centres, also had the most stringent regulatory standards. Arizona, with the higher proportion of for-profit centres, had the least stringent regulations.

While the above study is informative, it is only one study. Unfortunately, no other North American research has examined the issue of quality as a function of the proportion of for-profit and non-profit child care programs in an area. No research has been conducted in areas where all child care is operated on a for-profit basis. Data from Sweden (Andersson, 1989) and Germany (Weigl & Weber, 1991), which have national child care programs, confirm the existence of very high quality in the absence of competition from for-profit child care. However, the not-for-profit programs in these two countries are supported by significant government funding and control. Whether or not the same level of quality would be realized without this government support is difficult to say.

### **Policy option two: Ensure quality in for-profit child care through regulation**

The finding from the Calgary Day Care Study that the association between level of quality and auspices disappears when organizational characteristics are statistically controlled raises the question of whether the quality issue could be addressed by changing the organizational characteristics of for-profit centres. This might be accomplished, for example, through changing regulatory requirements.

The five-state American study cited above found a statistically significant relationship between quality as measured by a standard assessment tool and the level of regulatory requirements in the state in which the centre operated. No similar Canadian research comparing quality across provinces has been conducted. It must be remembered that the American study also found the



percentage of non-profit centres was highest in the states with the strictest regulations. Regulation could clearly influence quality, for example, by requiring caregivers to have training in early childhood education and by restricting the number of children per caregiver so that interactions could be personal and supportive. However, is regulation sufficiently potent to overcome the influence of auspice?

The same American study assessed the effects on the level of quality of voluntary compliance with high standards, auspices, accreditation by the National Association for the Education of Young Children, and the level of government funding received by the centre. Auspice was the strongest predictor of high quality care.

Therefore, while regulation could play an important role in maintaining the level of quality in child care, auspice appears to be a more potent variable. In addition, while regulation could address important characteristics such as caregiver training and ratio, it could not address other characteristics of for-profit child care that probably influence quality levels. These include the frequent sale of centres, which decreases quality by reducing consistency, and the lack of formal mechanisms, such as a community board of directors and/or a parent advisory committee, to encourage accountability for quality as opposed to simply providing non-harmful care.

## **CONCLUSION**

The lack of attention paid to the important issue of quality child care is indicative of the relative lack of power and respect that children and child care have in postindustrial societies. Children are the least able, of any of us, to effect change in their immediate environments. While some providers will take advantage of this power differential regardless of auspice, as the Calgary Day Care Study shows, the worst abuses in child care are most likely to occur within the for-profit sector.

Research affirms that poor quality child care has a negative impact on preschool children's well-being and development. There is considerable research evidence that the negative impact of poor quality child care in situations where the preschool child is in full-time care is not compensated by two-parent, middle-class homes. And yet, a large number of Canadian children are receiving non-familial care on a regular basis.

Children are not the Canadians of the future; they are Canadians today. The respect for life, all life, as part of a civil society, demands that each stage of development be recognized with the respect and dignity it deserves. All children need warm, secure, stimulating, and stable care. Given the increasing need for child care, it is in Canada's interest to facilitate the development of each citizen's potential at every stage of life.



## Endnotes

1. It is interesting to note that prior to the introduction of the Canada Assistance Plan, the provincial funding provisions covered the operating costs of licensed centres.
2. In 1978, the system of funding for child care in Alberta was changed from subsidizing the operation of day care centres themselves to subsidizing fees for eligible families. This change in funding policy had a significant effect on municipalities which operated their own day care programs. In several instances the new provincial standards for licensing and funding were lower than the municipal standards. Municipalities which elected to continue to provide services at the higher standards were obligated to provide the additional funding necessary to support those standards. The result was a slow-down in the development of municipally supported or sponsored child care and an increase in the commercial child care sector (Read, Greenwood-Church, Hautman, Roche & Bagley, 1992, p. 138).

## References

- Alberta Family and Social Services. (1990). Meeting the need...A fairer, better system for Albertans. A White Paper on reforms to Alberta's Day Care Program. Edmonton, Alberta: Author.
- Andersson, B-E. (1989). Effects of public day care: A longitudinal study. *Child Development*, 60, 857-866.
- Association for Early Childhood Education, Ontario. (1986). *A regional analysis of Canada's national child care subsidy system: Salaries and work experience in the municipality of Hamilton-Wentworth*. Hamilton: Author.
- Canadian Child Care Federation. (1991). *National statement on quality child care*. Ottawa, Ontario: Author.
- Canadian Child Care Federation/Canadian Child Care Advocacy Association.(1992). *Caring for a Living*. Ottawa: Canadian Child Care Federation.
- DeGagné, C. & Gagné, M-P. (1988). Garderies à but lucratif et garderies sans but lucratif subventionnées vers un évaluation de la qualité. Montréal: Gouvernement du Québec, l'Office des services de garde à l'enfance.
- Doherty-Derkowski, G. (1995). *Quality matters: Excellence in early childhood programs*. Don Mills, Ontario: Addison-Wesley Publishers Limited.
- Dumais, F. (1986). À propos des garderies. Situation des garderies au Québec en 1985. *Études et Recherches*, 5, 207

- Employment and Immigration Canada. (1992). *Canadian occupational projection system, 1992*. Ottawa, Ontario: Author
- Fiene, R., & Melnick, S.A. (1990). *Licensure and program quality in early childhood and childcare programs*. Paper presented at the American Educational Research Association Annual Convention, Boston.
- Friendly, M. (1994). *Child care policy in Canada: Putting the pieces together*. Don Mills, Ontario: Addison-Wesley Publishers Limited.
- Hansmann, H. (1980). The role of the non-profit enterprise. *Yale Law Journal*, 890, 835-907.
- Harms, T., & Clifford, R. (1980). *The early childhood environment rating scale*. New York: Teachers College Press.
- Harms, T., Cryer, D., & Clifford, R. (1990). *Infant/toddler environment rating scale*. New York: Teachers College Press.
- Human Resources Development Canada. (1994). *Child care and development*. Ottawa, Ontario: Minister of Supply and Services.
- Jorde-Bloom, P. (1989). *The Illinois directors study*. Report submitted to the Illinois Department of Children and Family Services. Evanston, Illinois: National College of Education. E.D. 305-167.
- Kagan, S.L., & Newton, J.W. (1989). For-profit and non-profit child care: Similarities and differences. *Young Children*, November, 4-10.
- Kontos, S., & Stremmel, A.J. (1988). Caregiver's perceptions of working conditions in a child care environment. *Early Childhood Research Quarterly*, 3, 77-90.
- Kontos, S., & Fiene, R. (1987). Child care quality, compliance with regulations and children's development: The Pennsylvania Study. In D. Phillips (Ed.), *Quality in child care: What does the research tell us?* Washington, D.C: National Association for the Education of Young Children.
- LaGrange, A., & Read, M. (1990). *Those who care: A report on caregivers in Alberta day care centres*. Red Deer, Alberta: Red Deer College.
- National Day Care Information Centre, Health and Welfare Canada. (1983). *Status of day care in Canada, 1983*. Ottawa, Ontario: Minister of Supply and Services.
- National Child Care Information Centre, Child care Program Division, Human Resources Development Canada. (1994). *Status of day care in Canada, 1993*. Ottawa, Ontario: Minister of Supplies and Services.
- National Day Care Information Centre, Health and Welfare Canada. (1974). *The status of day care in Canada, 1974*. Ottawa, Ontario: Minister of Supply and Services.

- Park, N. (1992). *A comparative study of school-aged child care*. Toronto: Ontario Ministry of Education.
- Pierson, R. (1976). Women's emancipation and the recruitment of women into the Canadian labour force in World War II. Historical Papers, Canadian Historical Association, cited in M. Baker. (1985). *Child care services in Canada*. Ottawa, Ontario: Minister of Supplies and Services.
- Read, M., Greenwood-Church, M., Huatman, L., Roche, E. & Bagley, C. (1992). An historical overview of child care in Alberta. In A. Pence (Coordinating Ed.), *Canadian child care in context: Perspectives from the provinces and territories*, p. 138. Ottawa, Ontario: Statistics Canada and Health and Welfare Canada.
- Rose-Ackerman, S. (1990). Competition between non-profits and for-profits: Entry and growth. *Voluntas*, 1(1), pp. 13-25.
- Rothschild-White, J. (1979). The collectivist organization: An alternative to rational-bureaucratic models. *American Sociological Review*, 44(4), 509-527.
- Ruopp, R., Travers, J., Glantz, R., & Coelen, C. (1979). *Children at the center*. Final report of the National Day Care Study. Cambridge, Mass: Abt Associates.
- Schom-Moffat, P. (1984). *The bottom line: Wages and working conditions of workers in the formal child care market*. Paper prepared for the Task Force on Child Care. Ottawa, Ontario: Status of Women, Canada.
- Schultz, P.V. (1978). Day Care in Canada: 1850-1962. In K.G. Ross (Ed.), *Good day care: Fighting for it, getting it, keeping it*. Toronto, Ontario: The Women's Press.
- Scott, W.R. (1987). *Organizations: Rational, national and open systems*. 2nd edition. Englewood Cliffs, N.J: Prentice-Hall Inc.
- SPR Associates Inc./National Mail Surveys Inc. (1986). *An exploratory review of selected issues in for-profit versus not-for-profit child care*. A paper prepared for the Special Committee on Child Care. Toronto, Ontario: Author.
- Weigl, I., & Weber, C. (1991). Research in nurseries in the German Democratic Republic. In E. Melhuish & P. Moss (Eds.), *Day care for young children: International perspectives*. London, England: Routledge, pp. 56-74.
- West, S. (1988). A study on compliance with the Day Nurseries Act at full-day child care centres in Metropolitan Toronto. Prepared for the Toronto Area Office of the Ontario Ministry of Community and Social Services.
- Whitebook, M., Howes, C., & Phillips, D. (1990). *Who cares? Child care teachers and the quality of care in America*. Final report of the National Child Care Staffing Study. Oakland, California: Child Care Employee Project.



**A Sociological Examination of the Child Care Auspice Debate**

TABLE 4: DIFFERENCES IN OPERATIONS BETWEEN AUSPICES: ANOVA

Variable	df		SS	MS	F	C <sup>1</sup>	Value	S.E.	df	t	Mean	Ct <sup>2</sup>	Group Comp <sup>3</sup>				
													A	B	C		
Number of Years Open																	
Between Gps	2		428.84	214.42	5.11*	1	20.82	7.04	22.8	2.96**	8.54	13	A				
Within Gps	33		1386.13	42.00		2	14.36	4.64	22.5	3.10**	7.10	10	B			*	*
											15.00	13	C				
Formalization																	
Between Gps	2		29.96	14.90	6.27**	1	4.39	1.15	37.4	3.80***	4.24	17	A			*	*
Within Gps	42		100.35	2.39		2	2.47	0.77	40.3	3.22**	5.60	15	B				
											6.15	13	C				
Total Budget																	
Between Gps	1		62802115634.00	62802115634.00	2.75	1	568140.00	188578.00	12.0	3.01*	148801.00	5	A <sup>♦</sup>				
Within Gps	12		2.47E+11	22840174026.00		2	428361.00	123006.00	8.9	3.48**	0.00	0	B				
											288581.00	9	C				
Subsidy																	
Between Gps	1		69.43	69.43	0.16	1	42.00	25.18	5.0	1.67	15.00	1	A <sup>♦</sup>				
Within Gps	5		2114.00	422.80		2	33.00	16.79	5.0	1.97	00.00	0	B				
											24.00	6	C				
Equipment Budget																	
Between Gps	2		460.54	230.27	3.22	1	-12.58	12.66	8.2	-0.99	9.00	6	A				
Within Gps	17		1217.21	71.60		2	-12.94	9.55	4.1	-1.36	22.67	3	B			*	*
											9.36	11	C				
Parent Decision Making																	
Between Gps	2		14.31	7.15	4.89*	1	3.71	1.23	21.2	3.02**	2.24	17	A				
Within Gps	42		61.47	1.46		2	2.33	0.82	21.2	0.82**	2.67	15	B			*	*
											3.62	13	C				
Parent Communication																	
Between Gps	2		3.11	1.55	2.19	1	1.76	0.82	26.1	2.15*	3.77	17	A				
Within Gps	42		29.87	0.71		2	1.14	0.52	24.7	2.18*	3.87	15	B				
											4.39	13	C				
Special Services																	
Between Gps	2		48.13	24.06	8.38***	1	6.58	1.88	20.0	3.72**	1.94	17	A				
Within Gps	42		120.68	2.87		2	4.53	1.22	18.3	3.72**	1.53	15	B			*	*
											4.00	13	C				

\*p<.05    \*\*p<.01    \*\*\*p<.001

♦T-tests not performed with fewer than 3 non-empty groups.

<sup>1</sup>Group 1: All groups contrasted, Group 2: For-Profit and Non-profit contrasted.

<sup>2</sup>Count

<sup>3</sup>A=For-profit Independent, B=For-profit chain, C=Non-profit

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TABLE 5: DIFFERENCES IN ORGANIZATIONAL STRUCTURE BETWEEN AUSPICES: ANOVA

Variable	df	SS	MS	F	C <sup>1</sup>	Value	S.E.	df	t	Mean	Ct <sup>2</sup>	Group Comp <sup>3</sup>		
												A	B	C
Types of Care Options														
Between Gps	2	20.91	10.45	10.21***	1 <sup>‡</sup>	3.01	1.22	18.5	2.46*	2.12	17	A		
Within Gps	42	43.01	1.02		2	2.35	0.78	15.9	3.03**	1.07	15	B	*	*
										2.77	13	C		
Licensed Capacity														
Between Gps	2	3173.65	1586.82	3.32*	1	-22.82	18.91	31.4	-1.20	66.06	17	A		
Within Gps	42	20048.80	477.35		2	-20.84	12.26	32.3	-1.70	82.93	15	B	*	*
										64.08	13	C		
Fees for Infants														
Between Gps	2	8229.24	4114.62	3.57*	1 <sup>‡</sup>	-65.50	74.81	4.5	-0.88	351.25	16	A		
Within Gps	30	34595.00	1153.17		2	-53.25	49.79	4.4	-1.07	380.00	12	B	*	*
										339.00	5	C		
Fees for Toddlers														
Between Gps	2	7548.96	3774.48	4.70*	1	-56.78	30.66	20.0	-1.85	330.88	17	A		
Within Gps	41	32913.05	802.76		2	-44.82	20.12	19.2	-2.23	351.79	14	B	*	*
										318.92	13	C		
Fees for Preschoolers														
Between Gps	2	3821.58	1910.79	2.36	1	-21.74	30.62	20.4	-0.71	315.29	17	A		
Within Gps	41	33146.61	808.45		2	21.06	20.01	19.4	-1.05	335.00	14	B		
										314.62	13	C		
Infant Group size														
Between Gps	2	32.05	16.01	1.50	1	6.39	5.45	5.9	1.17	7.27	15	A		
Within Gps	30	457.36	15.25		2	4.66	3.61	5.8	1.29	6.08	13	B		
										9.00	5	C		
Toddler Group Size														
Between Gps	2	1.68	0.84	0.03	1	-1.23	5.18	27.7	-0.23	11.79	16	A		
Within Gps	41	1217.24	29.69		2	-0.74	3.31	27.1	-0.23	11.57	15	B		
										11.31	13	C		
Preschool Group Size														
Between Gps	2	10.45	5.23	0.19	1	2.90	5.47	23.5	0.53	14.56	16	A		
Within Gps	41	1121.22	27.35		2	2.05	3.49	21.6	0.59	14.21	15	B		
										15.41	13	C		
Infant Ratio														
Between Gps	2	0.59	0.29	0.29	1	-0.73	0.94	4.8	-0.78	2.89	15	A		
Within Gps	30	6.86	0.23		2	-0.56	0.62	4.6	-0.89	3.08	13	B		
										2.70	5	C		
Toddler Ratio														
Between Gps	2	2.58	1.29	2.60	1	-1.30	0.81	18.9	-1.61	4.87	16	A		
Within Gps	41	20.29	0.50		2	-0.95	0.53	17.6	-1.82	5.13	15	B		
										4.53	13	C		
Preschool Ratio														
Between Gps	2	14.69	7.34	2.21	1 <sup>‡</sup>	-0.73	1.64	27.2	-0.44	7.28	16	A		
Within Gps	41	135.72	3.31		2	-0.92	0.95	31.7	-0.97	8.57	15	B		
										7.47	13	C	*	
Ratio Compliance														
										8.38	16	A		



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Between Gps	2	4.47	2.23	0.48	1	1.28	2.29	15.9	0.56	7.77	13	B
Within Gps	36	168.46	4.68		2	1.06	1.56	16.9	0.68	8.60	10	C

\*p</05    \*\*p<.01    \*\*\*p<.001

‡One or more tests for Homogeneity of Variance violated, making inferences

tentative.

<sup>1</sup>Group 1: All groups contrasted, Group2: For-Profit and Non-profit contrasted.

<sup>2</sup>Count

<sup>3</sup>A=For-profit Independent, B=For-profit chain, C=Non-

profit

TABLE 6: DIFFERENCES IN DIRECTORS BETWEEN AUSPICES: ANOVA

Variable	df	SS	MS	F	C <sup>1</sup>	Value	S.E.	df	t	Mean	Ct <sup>2</sup>	Grp Comp <sup>3</sup>					
												A	B	C			
Age																	
Between Gps	2	82.97	41.49	0.49	1	-9.58	9.37	20.2	0.32	37.25	16	A					
Within Gps	38	3199.12	84.19		2	-6.43	6.15	19.6		37.36	14	B					
										34.09	13	C					
Hours Worked																	
Between Gps	2	9.25	4.62	0.25	1	-2.87	4.58	20.1	-0.63	43.06	17	A					
Within Gps	40	747.36	18.68		2	-1.73	2.99	19.0	-0.58	42.50	14	B					
										41.92	12	C					
Administration																	
Between Gps	2	3594.24	1797.12	3.87*	1	41.25	22.80	18.6	1.81	25.88	161	A	*	*			
Within Gps	40	18582.42	464.56		2	21.46	15.20	18.7	1.41	44.00	5	B					
										45.67	12	C					
Staff Observation																	
Between Gps	2	1159.96	579.98	2.48	1	-35.08	13.54	29.5	-2.59*	30.13	16	A					
Within Gps	40	9372.08	234.30		2	-22.46	8.62	30.7	-2.61*	27.33	15	B					
										17.50	12	C	*				
Caregiving																	
Between Gps	2	1948.22	974.11	2.18	1	-9.92	24.55	18.6	-0.40	37.50	16	A					
Within Gps	40	17878.25	446.96		2	-1.33	15.72	16.6	-0.09	21.67	15	B					
										28.92	12	C					
Centre Tenure																	
Between Gps	2	20.06	10.03	0.35	1 <sup>‡</sup>	4.38	6.10	19.5	0.72	4.41	17	A					
Within Gps	42	1189.14	28.31		2	2.95	3.91	17.4	0.75	4.33	15	B					
										5.85	13	C					
C.C. Experience																	
Between Gps	2	389.87	194.93	1.89	1	19.67	10.45	18.2	1.88	9.00	17	A					
Within Gps	42	4323.33	102.94		2	12.67	7.17	19.8	1.77	10.33	15	B					
										16.00	13	C					
E.C. Education																	
Between Gps	2	1.49	0.74	0.53	1	1.15	0.95	30.0	1.21	1.41	17	A					
Within Gps	42	47.76	1.14		2	0.79	0.61	30.2	1.30	1.33	15	B					
										1.77	13	C					
Salary																	
Between Gps	2	15.30	7.65	6.44**	1	3.98	1.23	18.3	3.25**	4.19	16	A					
Within Gps	39	46.32	1.19		2	2.50	0.80	17.3	3.12**	4.64	14	B					
										5.67	12	C	*	*			
No. of Benefits																	
Between Gps	2	49.74	24.74	2.84	1	7.01	2.58	29.5	2.72*	3.82	17	A					
Within Gps	42	366.17	8.72		2	4.53	1.71	30.1	2.64*	4.27	15	B					
										6.31	13	C	*				

\*p<.05 \*\*p<.01 \*\*\*p<.001

<sup>‡</sup>One or more tests for Homogeneity of Variance violated, making inferences tentative.

<sup>1</sup>Group 1: All groups contrasted, Group 2: For-profit and non-profit contrasted

<sup>2</sup>Count

<sup>3</sup>A=For-profit Independent, B=For-profit Chain, C=Non-profit

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TABLE 7: FULL-TIME, AGE AND TENURE DIFFERENCES IN CAREGIVERS BETWEEN AUSPICES: ANOVA

Variable	df	SS	MS	F	C <sup>1</sup>	Value	S.E.	df	t	Mean	Ct <sup>2</sup> Grp Comp <sup>3</sup>		
											A	B	C
% Full-Time										77.98	17	A	
Between Gps	2	279.93	139.97	0.45	1 <sup>‡</sup>	-11.16	21.19	18.5	-0.53	81.77	15	B	
Within Gps	42	13127.13	312.55		2	-8.70	13.53	16.1	-0.64	75.53	13	C	
% Age 15-20							11.57			18.38	17	A	
Between Gps	2	951.09	475.54	2.55	1	-31.26	7.36	31.1	-2.70*	15.21	15	B	
Within Gps	43	7630.82	186.12		2	-19.78		32.7	-2.69*	6.90	12	C	*
% Age 20-25										27.81	17	A	
Between Gps	2	52.33	26.16	0.10	1	-6.91	18.19	17.4	-0.38	28.41	15	B	
Within Gps	41	10389.00	253.39		2	-4.80	11.89	16.4	-0.40	25.71	12	C	
% Age 26-3										11.24	17	A	
Between Gps	2	1032.16	516.08	2.90	1	32.95	13.46	18.3	2.45*	12.77	15	B	
Within Gps	41	7291.51	177.84		2	21.46	9.19	19.6	2.34*	22.73	12	C	*
% Age 31-35										9.25	17	A	
Between Gps	2	14.25	7.13	0.09	1	3.46	8.03	27.2	0.43	10.02	15	B	
Within Gps	41	3439.61	83.89		2	2.05	5.35	27.7	0.38	10.66	13	C	
% Age 36-40										8.77	17	A	
Between Gps	2	876.03	438.01	2.73	1 <sup>‡</sup>	-11.89	11.52	18.7	-1.03	17.74	15	B	
Within Gps	41	6574.33	160.35		2	-10.92	8.23	22.0	-1.33	7.80	13	C	
% Age 41-45										8.85	17	A	
Between Gps	2	389.50	194.75	1.52	1	20.21	14.13	14.6	1.43	9.46	15	B	
Within Gps	41	5244.07	127.90		2	13.27	9.39	14.4	1.41	15.79	13	C	
% Age 46-50										5.79	17	A	
Between Gps	2	10.91	5.45	0.07	1 <sup>‡</sup>	3.09	11.48	13.8	0.27	5.47	15	B	
Within Gps	41	3334.99	81.34		2	2.17	7.69	14.0	0.28	6.71	13	C	
Work less than 1yr										41.72	17	A	
Between Gps	2	1745.68	872.84	1.15	1	-18.71	26.69	24.5	-0.70	53.84	15	B	
Within Gps	42	31915.40	759.89		2	-16.51	17.50	24.0	-0.94	39.52	13	C	
Work 5 yr or more										9.94	17	A	
Between Gps	2	2728.90	1364.45	4.61*	1	48.02	20.44	17.8	2.35*	5.31	15	B	
Within Gps	42	12421.09	295.74		2	33.56	13.27	16.3	2.53*	24.41	13	C	* *

\*p<.05    \*\*p<.01    \*\*\*p<.001

<sup>‡</sup>One or more tests for Homogeneity of Variance violated, making

inferences tentative.

Chain, C=Non-profit

<sup>1</sup>Group 1: All groups contrasted, Group 2: For-Profit and Non-profit contrasted.

<sup>2</sup>Count    <sup>3</sup>A=For-profit Independent, B=For-profit

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TABLE 8: TRAINING, REMUNERATIVE AND INPUT DIFFERENCES IN CAREGIVERS BETWEEN AUSPICES: ANOVA

Variable	df	SS	MS	F	C <sup>1</sup>	Value	S.E.	df	t	Mean	Ct <sup>2</sup>	Group Comp <sup>3</sup>		
												A	B	C
Required C.C. Experience														
Between Gps	2	2.43	1.22	2.46	1 <sup>‡</sup>	0.62	0.69	15.8	0.90	1.00	17	A		
Within Gps	42	20.81	0.50		2	0.24	0.50	20.0	0.48	1.53	15	B *		
Required Training														
Between Gps	2	35.53	17.77	24.56**	1 <sup>‡</sup>	5.94	1.02	14.4	5.85***	1.18	17	A		
Within Gps	42	30.38	0.72		2	3.89	0.70	15.7	5.59***	1.40	15	B		
Inservice Training														
Between Gps	2	1.37	0.68	3.47*	1	0.50	0.45	24.1	1.11	1.47	17	A		
Within Gps	42	8.28	0.20		2	0.20	0.29	22.1	0.70	1.87	15	B *		
No E.C. Training														
Between Gps	2	14936.57	7468.28	13.68***	1	-116.82	26.47	19.6	-4.41***	57.45	17	A		
Within Gps	42	22933.07	546.03		2	-79.95	17.03	17.7	-4.69***	63.66	15	B		
E.C. Diploma (1 yr)														
Between Gps	2	2686.09	1343.05	10.89***	1 <sup>‡</sup>	43.68	12.74	20.9	3.43**	11.90	16	A		
Within Gps	41	5056.75	123.34		2	31.61	8.04	18.1	2.93***	4.42	15	B		
E.C. Certificate (2 yrs)														
Between Gps	2	4383.89	2191.94	9.93***	1 <sup>‡</sup>	66.39	19.42	14.0	3.42**	6.70	16	A		
Within Gps	41	9049.19	220.71		2	42.51	12.99	14.1	3.27**	11.95	15	B		
Salary														
Between Gps	2	4.39	2.20	7.04**	1 <sup>‡</sup>	1.99	0.69	16.1	2.88*	3.00	17	A		
Within Gps	41	12.79	0.31		2	1.37	0.45	15.3	0.45**	2.86	15	B		
No. of Benefits														
Between Gps	2	71.29	35.64	5.61**	1	7.51	2.14	29.7	3.50***	4.35	17	A		
Within Gps	42	266.71	6.35		2	5.32	1.45	30.6	3.66***	3.40	15	B		
D.M. Input														
Between Gps	2	6.93	3.46	4.41*	1	2.56	0.95	18.6	2.70*	1.94	17	A		
Within Gps	42	32.98	0.79		2	1.73	0.64	19.0	2.72*	1.87	15	B		

inferences tentative.

\*p<.05 \*\*p<.01 \*\*\*p<.001

<sup>‡</sup>One or more tests for Homogeneity of Variance violated, making

Chain, C=Non-profit

<sup>1</sup>Group 1: All groups contrasted, Group 2: For-Profit and Non-profit contrasted.

<sup>2</sup>Count <sup>3</sup>A=For-profit Independent, B=For-profit

APPENDIX G

Table 9

CORRELATION OF DAY CARE OPERATIONS, STRUCTURE, DIRECTORS AND CAREGIVERS WITH ITERS  
(QUALITY CARE)

CORRELATED WITH ITERS	r	N
OPERATIONS:		
Number of years open	.4539**	36
Formalization	.1044	45
Total Budget	.3773	14
Subsidy	-.0073	7
Equipment Budget	.0222	20
Parental D.M.	.3756*	45
Parent Communication	.0578	45
Special Services	.3759*	45
ORGANIZATIONAL STRUCTURE		
Options	.2317	45
Licensed Capacity	-.0489	45
Fees for Infants	.2516	33
Fees for Toddlers	.1576	44
Fees for Preschoolers	-.2258	44
Infant Group Size	-.1775	33
Toddler Group Size	-.0495	44
Preschool Group Size	-.0315	44
Infant Ratios	.0583	33
Toddler Ratios	-.0368	44
Ratio Compliance	.0495**	39
DIRECTORS:		
Age	-.2269	43
Hours Worked	-.1461	43
Administration	.1312	43

Staff Observation	-.0397	43
Caregiving	-.0201	43
Centre Tenure	.0763	45
C.C. Experience	.2232	45
E.C. Education	.1113	45
Salary	.3687*	42
No. of Benefits	.3585*	45

CAREGIVERS:

% Full-time	.2852	45
% Age 15-20	-.4403**	44
% Age 21-25	.0330	44
% Age 26-30	.1543	44
% Age 31-35	.1982	44
% Age 36-40	-.0988	44
% Age 41-45	-.0948	44
% Age 41-50	.0959	44
% Worked < 1 Year	.0161	45
% Worked 5 Years +	.3359*	45
Required C.C. Exp.	.0532	45
Required Training	.3447*	45
Inservice Training	.0442	32
No. E.C. Training	-.3769*	45
E.C. Diploma	.4332**	44
E.C. Certificate	.3412*	44
Salary	.3729*	44
No. of Benefits	.2618	45
D.M. Input	.3987**	45
Preschool Ratios	-.2750	44

\*p<.05

\*\*p<.01

\*\*\*p<.001



