

Toward the Ecology of Day Care in Canada: A Research Agenda for the 1980s

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With more preschool and school-aged children in need of day care, the need for research to inform policy evaluation and development in this area becomes more pressing. Research on day care has traditionally been fragmented between the disciplines of early childhood education, child development, and child care, with each discipline focusing on isolated aspects of the day care experience. This paper will argue that day care is an interdisciplinary phenomenon including individual, familial, governmental, and societal factors which interact with and impact upon each other. The paper presents an ecological approach to the study of day care, addressing the interaction of such factors as the developmental needs of children, the role of family structure and dynamics, and the impact of governmental funding and regulatory policies in the context of social and cultural values regarding the family and the socialization of children. Recent research on the ecology of day care in Canada and elsewhere is reviewed, and a day care research agenda for Canada in this decade is presented.

Le nombre croissant d'enfants d'âge pré-scolaire et scolaire qui ont besoin de garderies rend nécessaire la recherche en vue d'établir et de développer des politiques à ce sujet. Traditionnellement, la recherche sur les garderies a été divisée entre plusieurs disciplines: éducation des tout-petits et développement et soins des enfants, chacune de ces disciplines étant centrée sur des aspects isolés des garderies. Dans cette communication, on avance que la garde des enfants est un phénomène inter-disciplinaire qui inclut des facteurs familiaux, gouvernementaux et sociaux qui agissent et s'influencent mutuellement. La communication présente une approche écologique à l'étude des garderies, en tenant compte de l'interaction de facteurs tels que les besoins en développement des enfants, le rôle de la structure et de la dynamique familiales et l'effet du financement et des politiques régularisatrices du gouvernement dans le contexte des valeurs sociales et culturelles de la famille et de la socialisation des enfants. On étudie des recherches récentes sur l'écologie des garderies au Canada et ailleurs on présente le calendrier des recherches au Canada pour cette décennie.

INTRODUCTION

Two decades ago, day care was not thought of as part of the legitimate province of either early childhood education or child development. One decade ago, many in

these related fields were still either ignoring it or hoping it would go away, or, even worse, were denouncing it as a modern version of the "institutionalization" which had been proven detrimental to the development of children during the 1950s. Today, no one can ignore it, even though there are still quite a few who wish it would go away. (Caldwell & Freyer, 1982, p. 341)

Despite these wishes, day care in the 1980s is an increasingly important social and educational issue in Canada that must be addressed comprehensively and systematically by early childhood educators, child developmentalists, and child care specialists. The increasing number of families needing care for their preschool and school-age children and the shortage of licensed facilities have focused attention on the day care issue, to reveal that the scope and content of much research on day care is conceptually and methodologically limited (Belsky & Steinberg, 1978; Belsky, Steinberg, & Walker, 1982; Bronfenbrenner, 1977, 1979; Travers, Beck, & Bissell, 1982). Further, recent reviews of Canadian research in early childhood education (Biemiller, 1982; Milburn, 1982) report a serious dearth of research on Canadian day care.

This paper will argue that if day care is to become a major focus of research in early childhood education, in psychology, and in child care, the conceptual and methodological limitations of traditional research must be replaced by perspectives which accurately describe and analyze the complexity of day care. This paper reviews the narrowness of previous research, rephrases the research questions on day care, and describes an ecologically valid approach to the study of day care. Examples of recent, current, and proposed studies on the ecology of day care in Canada and elsewhere are reviewed. In conclusion, a framework is proposed for guiding research on the educational and policy issues of day care in Canada in this decade.

The scope and complexity of day care in Canada support Caldwell and Freyer's argument that day care can no longer be approached through one-dimensional answers to one-dimensional questions. The complexity of day care arises from the inter-relatedness of numerous social and educational factors including: (1) the precise number of children needing care; (2) parental preferences for types of day care; (3) the quality, educational content, and effects of various day care settings; (4) the developmental needs of individual children; (5) the relationship between day care and schooling; and (6) the role of family structure and dynamics in benefiting from day care. These factors affecting a family's need for and satisfaction with day care are embedded within broader social policy considerations such as day care funding mechanisms and governmental involvement in the administration, regulation, and implementation of day care services.

Traditionally, the study of day care has been fragmented across disciplines and has led to, at best, partial and, at worst, misleading information. Psychologists in general and child developmentalists in particular have been largely concerned either with the mother-child bonding of children in day care or with other aspects of the children's social, emotional, and cognitive development. This research usually took the form of a dichotomous question concerning the positive or negative effect of day care on the child. The child was the sole focus of the research, and the setting itself, home or day care, was considered the major independent variable. Differences among families, children, and day care settings were usually not incorporated into either the conceptual orientation or research designs.

The fragmentation of research on day care is also reflected in the differing development of day care and early childhood education in North America. Almy (1982) has supported Caldwell and Freyer's claim that early childhood education has tended to ignore day care, arguing that this was due to the more "educational" orientation of many early childhood educators who advocated kindergarten and nursery school programs. In the *Yearbooks* of the National Society for the Study of Education which were devoted to early childhood education (Whipple, 1929; Henry, 1947), most of the articles dealt with kindergarten and nursery school programs which were described in the psychological literature of the day as "the most effective of the institutions dealing with the education of the young child" (Barrett & Koch, 1930, p. 102). The scant attention these volumes did give to day care was negative, claiming, for example, that day care is concerned "largely about physical care of children with insufficient attention given to other basic needs and interests of children" (Engleman & Nash, 1947, p. 367). In a more condemnatory tone, it was argued that children in day care could be categorized as "loved, unloved and pseudo-loved" with children in the latter two categories as "disorganized and hostile" and "having a hard time developing a strong inner self" (Levinger & Murphy, 1947, p. 36). Conversely, the social workers and child care workers who largely staffed and serviced day care programs were operating from a health, welfare, and human service perspective. In their view there was a serious "concern about an overemphasis on education" (Almy, 1982, p. 480) which further distanced them from the preschool and kindergarten advocates within early childhood education.

A number of developments over the past 20 years have begun to draw the fields of day care, early childhood education, child development, and child welfare closer together. The Head Start compensatory education programs in the United States drew on professional cooperation and

expertise in all these fields. In addition, the increased demand for day care services among middle-class families has begun to alter the image of day care as a strictly welfare service. The greater emphasis on educational aspects of day care and curriculum skills among day care workers on the one hand and the need for full-day and after-school programs for preschool and elementary school-age children on the other has further diminished the disciplinary gulf between the related fields and emphasized possible overlap.

While the implementation of day care programs has begun to draw the fields closer together, research on day care continues to suffer from limited disciplinary and conceptual perspectives. This paper will argue that the complexity of the phenomenon and the inter-relatedness of the educational and social dimensions of day care require a rephrasing of the research questions and the development of ecologically valid research approaches to the study of day care. This paper begins to reexamine day care in Canada and to consider research models which can address the relationship between the individual, familial, and societal factors which constitute the ecology of Canadian day care in the 1980s.

DAY CARE IN THE CANADIAN CONTEXT

A basic but major issue in the study of day care is the number of children and families affected. As documented in detail elsewhere (Day Care Information Office, 1981, 1984; Macredie & Levesque, 1981; Pence & Goelman, 1982; Shaw, 1982; Swan, 1982), a major change in Canadian families over the past 15 years has been the increasing number of mothers of preschool children entering the work force. There has not, however, been an equal and concomitant rise in the number of spaces in licensed day care facilities. Although some disagreement exists regarding the precise figures, a conservative estimate is that just over 50% of mothers of young children work at least part time.

It has been difficult to gauge the precise nature of the demand for day care due to varying methods of tabulation across provinces and different methodologies used by different agencies such as the National Day Care Information Office and Statistics Canada. Some provinces, for example, report the number of available spaces in licensed facilities while others report the actual number of children enrolled in the facilities. Provinces also differ in how they report children enrolled part-time and full-time in day care and children enrolled in both kindergarten and day care.

Despite these differences in tabulation, most authoritative sources (e.g., Shaw, 1982) estimate that licensed day care facilities can accom-

moderate approximately 15% of the preschool children whose mothers work full-time. With the addition of children needing part-time care, it appears that most of Canada's young children are being cared for outside licensed day care facilities.

Thus, in reorienting the direction of day care research in Canada, it is clear that the very term *day care* should not be considered synonymous with "enrolment in a day care centre." Centre care, although considered by many to be *model* day care, can certainly not be considered the *modal* day care setting for Canada's children. One basic demographic need arising from this situation is to determine the settings or combinations of settings of child care. Related to this are parental reasons for selecting these day care alternatives, and the effects these arrangements have on the child in particular and the family in general.

While the figures cited above indicate the scope of the current situation, population predictions indicate that the day care question will assume even greater proportions. British Columbia, one of the provinces reporting echo baby booms, has recorded a 25% increase in births from 1981 to 1983. A recently concluded study conducted by the Economics Department of the British Columbia Central Credit Union states that this boom "will have a major impact on the provincial school system, medical services, retail trade and numerous other sectors ... By 1990 at the latest, it will be the 0 to 4 year olds who will likely be the largest groups in B.C." (*Economic Analysis of British Columbia*, 1984, p. 2).

Other social changes having impact on the ecology of day care in Canada include the increasing number of single parent families, teenage parents, children under joint custody of separated or divorced parents, and reconstituted or blended families. The volatile economic situation has also resulted in irregular employment patterns for many families. Long- and short-term unemployment, part-time jobs for one or both parents, career changes, and relocation are just a few of the employment-related factors directly affecting a family's need, preference for, and ability to afford various day care alternatives.

Canada's ethnic composition adds another factor to the day care equation since different caregiving values and patterns can be found among and within various ethnic and immigrant groups. These groups have diverse views concerning the need for day care and the extent to which the immediate family, extended family, and society at large are seen as responsible for providing that care. Recent work in this area has been conducted in the United States by Schieffelin and Ochs (1984) on immigrant Chinese and Vietnamese families, and by Anderson and Stokes (1984) on Black and Hispanic families. These studies have found

dynamic relationships existing between the family's traditional structure and role models and the family's access to and uses of various agencies of socialization (day care centres, preschools and public schools) which their children encounter. Family and cultural values interact with economic realities and governmental policies and services in terms of the kinds of day care arrangements these families prefer and select.

In summary, it is becoming increasingly clear that just as the term *family* no longer connotes a Victorian ideal of a working father and a mother at home with the children, the term *day care* can no longer imply a uniform type of setting or set of experiences. We find in-home and out-of-home day care, with relatives and non-relatives, in centre and home settings, on full and part-time bases. This mix presents a complex mosaic of day care arrangements selected or designed by families to suit their idiosyncratic needs, preferences, and expectations in the context of limited spaces in licensed day care facilities. Until recently, this mosaic has not been studied fully, and little is known regarding how broader social and economic factors interact with a family's specific day care needs, resources, and neighborhood networks. In response to this lack of information on how these factors relate, a number of recent studies, described in detail below, have begun to address the ecology of day care in the Canadian context.

It is precisely the complexity of this mosaic which the ecological approach is designed to address. By conceptualizing the ecology of day care as an interactive system rather than a series of discrete and separable parts, this approach can generate accurate data in appropriate social and educational contexts. In the next section the ecological approach and examples of Canadian and other ecological studies are examined.

ON THE ECOLOGY OF DAY CARE

General Review

Bronfenbrenner (1977, 1979), Belsky & Steinberg (1978), Belsky, Steinberg, & Walker (1982), and Travers, Beck & Bissell (1982) have argued that the ecology of day care can be conceptualized as four concentric circles. Within the inner-most circle is the *microsystem* of day care which is the immediate environment containing the developing individual under study. The microcosm would include the children themselves in their own homes, day care centres, or family day care homes. The second concentric circle is the *mesosystem* which involves the interaction of the various microsystems. For example, the relationship between the home and day care environments is central to the mesosystem of day care. Bronfenbrenner defines the third circle, the *exosystem*, as an

extension of the mesosystem embracing other specific social structures – both formal and informal, that do not themselves contain the developing system but impinge upon or encompass the immediate settings in which that person is found and thereby influence, delimit, or even determine what goes on there. (1977, p. 515)

Exosystem factors would include the roles and influences of various government agencies and policies in day care, the world of work, parental employment needs and work patterns, and aspects of neighborhood life and resources. The circle which encompasses the micro-, meso- and exosystems is the *macrosystem* which includes the attitudes and value systems of a given societal context. In terms of day care, attitudes towards the nuclear family, the role of motherhood, and appropriate environments for young children can all be considered macrosystem factors influencing and reflecting to some degree each interior circle.

From an ecological perspective, much previous research on day care is severely limited. As Belsky and Steinberg (1978) and Belsky, Steinberg, and Walker (1982) point out, much of the research has focused almost exclusively on the microsystem of care and within the microsystem has considered a narrow range of settings and methodologies. Many studies throughout the 1960s and early 1970s were conducted on high quality, well-funded, and usually university-affiliated day care centre programs (e.g., Caldwell, Wright, Honig, & Tannenbaum, 1970) which demonstrated the positive effects of model day care on disadvantaged preschoolers. This type of model day care, however, cannot be considered typical of the day care settings used by most children in care. Over the past ten years increasing attention has been paid to more modal types of day care: e.g., the New York Infant Day Care Study (Golden, Rosenbluth, Grossi, Policare, Freeman, & Brownlee, 1978), the National Day Care Home Study (Fosberg, 1980, 1981), and work reported by Clarke-Stewart (1981), Schwarz (1983), Everson, Sarnat, and Ambron (1984), and Rubenstein and Howes (1979).

A second restriction of much of the research on the microcosm of day care has been the emphasis on standardized outcome measures without reference to the possible impact of the educational, social, physical, and interactional characteristics of the specific day care environment from which the children were drawn. In the context of day care research, *centre care*, *home care*, or *family day care* do not describe and explain outcome differences as well as does a consideration of the activities, materials, interactions, size, and age composition of the group in which the child is enrolled. As Schwarz, Strickland and Krolick (1974) argue, the conflicting findings about children's social and emotional development in day care may be program specific. Some day care programs may facilitate positive

social skills; some may foster and encourage negative ones. While some researchers (Prescott, 1973; Prescott, Jones, Kritchevsky, Milich, & Haselhof, 1975; Rubenstein & Howes, 1979; Stallings & Porter, 1980) have long argued that process variables and the child-child and child-adult interactions must be studied in the microsystems of day care, it is only recently (McCartney, 1982, 1983; McCartney, Scarr, Phillips, Grajek, & Schwarz, 1982) that the relationships between process and outcome variables have begun to be addressed more directly and systematically.

Increasing numbers of researchers have begun to address questions regarding the mesosystem of day care, both as a focus of study of its own and as a study of the effect of mesosystem factors on the microsystem. Schwarz (1983), for example, has calculated *family advantage* scores to be used as a covariate in analyzing children's scores on standardized measures of development. Everson et al. (1983), Clarke-Stewart (1981), Hwang and Lamb (1981), and Steinberg and Green (1979) have collected a wide range of data on family background, structure, values, and attitudes to examine various day care settings, influence on the focal child as well as other family members. Increased attention is also being directed to caregiver factors in the mesosystem (Wandersman, 1981; Winetsky, 1978).

Research on the mesosystem increasingly concerns the degree of continuity between the home and day care settings. Powell (1977, 1980) and Long, Peters, and Garduque (in press) have contributed greatly to clarifying the conceptual and methodological issues in studying continuity. Long et al. identify child-rearing beliefs, adult-child interactions, and perceptions of the child as major components of continuity. To these components of continuity Powell adds socio-economic status, language, values, and the nature of the physical environments. Recent studies on continuity include research on how day care workers perceive parents (Kontos, Moore, Soto, & Wells, 1984), adult-child interactions at home and in family day care (Long, 1984), attitudes, perceptions, and beliefs of parents and caregivers (Goelman & Pence, in preparation), and socialization experiences of toddlers in their own homes and in day care centres (Howes, Goldenberg, Golub, Lee, & Olenick, 1984).

One point of divergence among researchers is the degree to which continuity between home and day care is desirable and beneficial. As with many other questions in day care research, the issue must be rephrased as a non-dichotomous question. Instead of "Is continuity positive or negative?" the question must be "Under what circumstances is continuity beneficial or detrimental?" Elsewhere (Goelman & Pence, 1984), we have proposed an interactive model of continuity which can be described as

"factor by setting by child." This model can allow for the study of the interaction of specific aspects of continuity (e.g., language, child-rearing values, and socio-economic status), the specific day care setting under study (centre, home, relative), and the needs and characteristics of the child (age, day care history).

Studies on the exosystem and macrosystem of day care have addressed the importance and interaction of income, employment, neighborhood resources, the availability of day care, and government-provided subsidy for day care services. Powell and Eisenstadt (1983) have analyzed how parents find day care for their children and the extent to which they use both formal and informal social networks in their neighborhoods in their search. Studies of the impact of the availability of day care on parental employment patterns appear to demonstrate that while "the provision of day care does not significantly affect the labor force participation of women" (Travers et al., 1982, p. 143) there are some work-related benefits, the most obvious being increased family income (Peters, 1973). Travers, Beck, and Bissell suggest that research in this area has had too narrow a perspective, and questions relating to patterns of employment and income levels should consider the level of economic stress, job and personal satisfaction, and family dynamics. An example of this approach can be seen in Hill-Scott's (1984) recent study of how day care subsidy policies influence family functioning.

Canadian Research

The study of the ecology of day care in English-speaking Canada has a rather brief and recent history. Fowler's excellent work (1978) on high quality intervention programs examined changes in children's development and their home environments. This involved collecting data on the microsystem of care (the child in the day care environment) as well as the mesosystem (the relationship between the home and day care settings). The children's development was assessed through both standardized outcome and observational measures. Further, the parents of the children were observed and interviewed over a three-year period in order to examine their attitudes to their children, their interactions with their children, and possible changes in the home environment which might be attributed to the day care experience. The ecological validity of this work is enhanced by the attention focussed on both the child and the family as well as by the different research perspectives and instruments used. One limitation to the study's ecological validity is that, as indicated above, such high quality, model day care programs, while facilitating the development of disadvantaged children, are not typical of the day care experience

of most Canadian children. This limitation would also apply to the research conducted on the model preschool program at the University of Western Ontario (Wright, 1983). This half-day demonstration nursery school program was shown to benefit greatly the disadvantaged children for whom it was designed. Again, however, this kind of model program cannot be considered typical of most day care environments in Canada.

Intensive and extensive observational work has been conducted on children in community day care centres by Strayer and Noel (in press) and Strayer and Trudel (manuscript submitted for publication). These researches on day care microsystems have generated much data on the social ecology of these environments. Using fine-grained ethological approaches to study the children's social interactions, Strayer and his associates have been able to examine developmental changes in a wide range of social behaviours. The ecological validity of these studies is enhanced by the observation of children interacting with their peers in day care and with their parents at home and in lab settings. The representativeness and generalizability of this work is similarly enhanced by virtue of its focus on a community-based day care centre with families from a wide range of socio-economic levels. The application of these ethological techniques to other day care environments, notably family day care homes with homogeneous and heterogeneous age groupings, could yield valuable information on the effects of these differently structured social environments on children's development.

A major contribution to research on the mesosystem of day care is Lero's (1981) study of parents' preferences for and search strategies in finding day care for their preschool children. In this study, Lero interviewed parents who used a wide range of day care settings for their children, including day care centres, family day care, and *informal* or unlicensed care. In examining the parents' needs, preferences, attitudes, and search strategies, Lero reported that selecting a day care setting involved a complex interaction of many factors. Various socio-demographic variables (perceptions and opinions of types of care, the child's day care history, and the degree of social networking) all influenced the decision to select a day care setting. By focusing on family background variables and including a wide range of day care settings, Lero has generated much useful information which could never be addressed in studies of the microsystem alone. On the basis of her findings, Lero recommends a number of policies designed for parents with a range of needs, preferences, and backgrounds.

In focussing on a different aspect of the mesosystem of day care, research by Brockman (in progress) and Stuart and Pepper (in progress) addresses the background, training, effectiveness, and personalities of

family day care providers. Brockman has developed three methods of training these providers and is currently assessing their effectiveness through pre- and post-training observations and ratings of the day care settings. Stuart and Pepper are conducting a detailed study of the backgrounds, personalities, and vocational interest profiles of the providers, and they are also observing and rating the family day care homes. These studies can enhance our understanding of the personal and social context of family day care providers which, in comparison to the work on centre care, has been inadequately studied.

Research on the exosystem of day care in Canada would include the work of Krashinsky (1977, 1984), Grant, Sai-Chew and Natarelli (1982) and Mayfield (1984). Krashinsky has studied the impact of existing and proposed governmental day care funding policies. He has specifically argued against direct government funding of day care facilities in favour of revised tax codes which would allow parents to divert more of their disposable income towards their preferred mode of day care. Grant et al. and Mayfield have studied the need, provision, quality, and effects of employer-sponsored care. These researchers have identified different models of employer-sponsored day care in current use in Canada, and they have considered how these types of delivery models could be implemented in order to meet employer productivity goals and employee day care needs.

Perhaps the largest day care study in Canada, with much to recommend its ecological validity, was Project Child Care which was conducted in Toronto in the late 1970s (Johnson, 1977, 1978; Johnson & Dineen, 1981; Lightman and Johnson, 1977). This study involved extensive interviews with parents and caregivers of children primarily in unlicensed and informal day care settings. Project Child Care attempted to describe the ecology of day care in Toronto by interviewing the parents and caregivers on a range of needs, preferences, attitudes, socio-demographic factors, and perceptions of the day care settings. While this study generated a great deal of information about day care in Toronto when there was a serious dearth of such information, there are some problems with the reported conclusions. For example, as Kyle (1980) has pointed out, the claim that most parents prefer supervised group care arrangements for preschool children (Social Planning Council of Metropolitan Toronto, 1979) is not supported by a closer analysis of the data reported in Johnson (1977) where, in fact, most parents express their preference for some form of home-based child care arrangements. The percentage favouring home care increases dramatically among parents of toddlers and infants. These and other concerns notwithstanding, Project Child Care can be appreciated for its ecological validity in focusing on a mode of care used

by many Canadians and by studying it from the perspectives of families and caregivers.

Michelson (1982) and his associates at the Child in the City Programme at the University of Toronto conducted an ecological study of the impact of employment and marital status on the everyday lives of families of single and married mothers. This study involved detailed interviews and observations which focused on a wide variety of logistical and interactional factors of home life, including time allocated to travel, shopping, personal interactions, television watching, meal preparation, and household management. The study included families whose children were: (1) at home with a parent; (2) at the home of a relative; (3) in a day care centre; (4) at a family day care home; (5) at preschool; or (6) "latch key" school-age children who cared for themselves until their parents returned from work. While the study addressed a wide range of issues the major question regarding day care was specific: "What effect does the use of selected child care arrangements have for women's ability to fulfill daily responsibilities?" (p. 92)

The results of the study suggest that while the availability of day care may facilitate the mother's needs and wishes to work, the use of day care makes more time and travel demands upon the parents and children without necessarily translating into a less busy and more satisfactory way of dealing with family responsibilities. Thus, for example, while families using centre day care acknowledged its value, the additional travel time and the need to work within the centre's time schedule tended to add to the family's pressures and tensions. The use of grandparents offered a similar "good news-bad news" profile where the arrangement's flexibility appeared to be accompanied by a greater personal investment by the mother and, subsequently, did not significantly reduce the working mother's time pressures. Thus, while the study concluded that day care provided necessary support to working parents, "there are dysfunctions reflecting the timetables and locations of some arrangements" (p. 97).

The study's ecological design permitted the researchers to surpass the one-dimensional questions of whether day care benefits the child or what kind of care parents prefer. By examining the role and impact of different child care arrangements on the daily activities of families, the researchers were able to present a more realistic and ecologically valid picture of interacting day care factors. These data thus assume greater importance in describing the need for and effects of different day care arrangements, enhancing their value in the realm of policy evaluation and development.

Many ecological features of day care cited in these previous studies have been incorporated into the Victoria Day Care Project (Goelman & Pence,

1984; Pence & Goelman, 1982). This is a SSHRCC-funded two-year (1983–5) study of the children, parents, and caregivers in three day care environments: (1) licensed day care centres; (2) licensed family day care homes; and (3) unlicensed family day care homes. There are four research components in the project (see Table 1). The parent questionnaire is administered as a structured one-hour interview which addresses a wide range of factors including demographic background variables, day care search strategies, expectations for and satisfaction levels with the day care environment, and child-rearing beliefs. The caregiver interview focuses on that individual's personal and professional background and perceptions of the parent, child, and quality of the day care experience. The observation component rates the day care setting on a standardized scale, while observing the child's activities and interactions while in day care. The outcome measures include standardized and non-standardized measures of the children's cognitive, language, and social development, and they are administered at 6-month intervals over an 18-month period. There is also a 5-item child interview form designed to elicit the child's own perceptions and opinions of the day care experience.

The ecological design of the Victoria project will enable the researchers to examine each component individually as well as in combination with the other research components. Thus, the data on the parent questionnaire can be analyzed on their own as well as in the context of the results of the caregiver questionnaires. This will facilitate the computation and analysis of the degree of continuity between parents and caregivers on a number of key dimensions including child rearing values, perceptions of the day care environment, perceptions of the child, and satisfaction with the day care arrangements.

The design of the study will make it possible to consider the results on the standardized outcome measures in the context of personal, familial, and environmental factors. Relevant data on the child's personal day care history would include the child's age when beginning day care and the length of time spent in the current day care arrangement. In a modification of Schwarz's (1983) *family advantage* covariates, the family background variables considered include income, educational level, and family structure. The environmental factors to be examined would include educational and social quality and other characteristics of the day care setting itself.

Thus, the design represents an attempt to rephrase the outcomes question which has traditionally been presented as a dichotomous one: "Is day care beneficial or detrimental to the child's development?" The rephrased question must address the many factors contributing to the quality of a child's experience in day care, with an examination of the

TABLE 1
Research Components in the Victoria Day Care Project 1983–1985

<i>Outcome Measures</i>	<i>Observation Component</i>	<i>Parent Questionnaire</i>	<i>Caregiver Questionnaire</i>
1. Peabody Picture Vocabulary Test	1. Early Childhood Environment and Day Care Home Rating Scales	1. Day Care History and Research	1. Caregiver's History
2. Expressive One-Word Picture Vocabulary Test	2. Child Observation Form	2. Present Day Care Arrangement and Your Child	2. Supply of and/or Search for Children
3. Preschool Interpersonal Problem-Solving Test (PIPS)	3. Caregiver Post-Impression Form	3. Parent's Perception of the Caregiver	3. Caregiver's Perception of the Parent and Child
4. Child Questionnaire	4. Child Post-Impression Form	4. Opinions on Working Mothers	4. Caregiver's Perception of the Day Care Environment and the Child
		5. Parent's Satisfaction with Arrangement	5. Caregiver's Satisfaction with the Day Care Arrangement
		6. Child Management Situations	6. Child Management Situations
		7. Personal Job History	7. Caregiver's Family Background, Work History, and Health

extent to which those factors might, together or separately, contribute to the child's cognitive, language, social, and emotional development.

In summary, it can be seen that researchers are giving increasing attention to the complex reality of current Canadian day care. The research questions are being rephrased in order to focus on the simultaneous interaction of social and educational aspects of day care. The questions are drawing researchers to study a wider range of day care settings, to use analyses of process and interactions as well as standardized outcome measures, and to consider the interaction of broader familial and social factors in the day care equation. In the following section we identify a number of areas for the focus of the ecological study of day care in the coming years.

A DAY CARE RESEARCH AGENDA

Canadian day care's complexity and multi-dimensionality demands an orienting framework that is holistic and systemic in nature. The conceptualization of ecological research as proposed by Bronfenbrenner (1977, 1979) provides such a framework. Bronfenbrenner's model challenges researchers to surpass controlled environments and the limitations of traditional disciplinary boundaries. An understanding of each of the interactive systems of day care within its natural social context is both the reward and the challenge of ecological research.

The parts of the day care puzzle are many, and they interact dynamically with each other. A major challenge for day care research in this decade will be not only to design appropriate methodologies to describe and analyze the complex ecology of day care but also to shape the research questions which accurately reflect the intricate mosaic of day care. These questions must be based on an understanding of the detail of the ecological systems and of their impact on the other systemic levels which, together, constitute the ecology of day care in Canada. The research questions discussed in this section represent not an exhaustive and comprehensive list of research topics but, rather, an attempt to adopt an ecological research orientation towards the individual, familial, societal, and policy dimensions of day care.

Research on the microsystems of day care must address three major issues: (1) the wide range of day care settings used; (2) the nature of the social and physical environments in these settings; and (3) the possible impact of these variables on the child's cognitive, language, and social development. In paraphrase of Willie Sutton, who explained that he robbed banks because "that's where the money is," the complete spectrum of family, informal, and unlicensed day care settings must be studied

because "that's where the children are." The microsystem of day care must be described and analysed according to a more ecologically valid and representative range of current Canadian day care settings.

While previous studies have addressed the interactional aspects and the outcome effects of day care, these two important areas have rarely been studied in conjunction. While some characteristics of day care centres (group size, teacher-child ratio) have been determined to have salutary effects on development (Ruopp, Travers, Glantz, & Coelen, 1979), more work is needed on the different patterns of interactions in family and informal day care settings and their possible contributions to a child's development. Even within specific caregiving arrangements, researchers must face great diversity in age, sex, and number of children, in caregiver attitudes and training, in the physical environment, and in the socio-emotional support available within that environment. These more finely grained interactional analyses must be studied in the context of the individual differences in the child's day care history as well as in the longitudinal context of the child's subsequent entrance into and performance in school.

Research on the mesosystem of day care must include some of the foci of microsystem research to contextualize information on the microsystem. Thus, child development outcome measures must also be considered in the context of the child's family background and the relationship between the home and day care environments. The precise definition of continuity between home and day care as well as the possible impact of continuity on the child remain open theoretically and empirically. In assessing the effects of day care, then, these effects must include the possible impact on the well-being and functioning level of the entire family, not just the child in day care.

A second major area in the mesosystem of care is how work and family interact. As Kamerman (1982) has persuasively argued, the possibilities and constraints offered by parental employment patterns have definite implications for family functioning. The family's need for work, the availability of work in the community, salary, logistics, and job satisfaction all influence workers and their family life, perspectives, commitments, and roles. Much research is needed in this uncharted area of the relationship between work and family, and the subsequent ripple effects on the selection, nature, and effects of a day care environment.

Each province, for its own historical, legislative, and philosophical reasons, represents a unique exosystem which in turn influences meso- and microsystems of day care. Contributing to the need for a broad contextual base for understanding Canadian day care is the uniqueness of the approach to funding and service delivery in each province and territory. Some provinces, such as Alberta, have a large proportion of

profit-oriented day care centres while other provinces such as Nova Scotia and Newfoundland have few centres of any kind. Family day care homes in British Columbia are treated in the welfare subsidy system as independent operators while Ontario's payments to private home day care providers are largely administered through coordinating agencies. These legislative, regulatory, and administrative aspects of the exosystem, which appear to be distant from individual families, actually directly influence families in terms of the type, availability, accessibility, and affordability of day care alternatives for families.

At the macrosystem level as well, Canada is unique in many ways. Without the U.S. melting pot approach to cultural pluralism, the rich cultural and linguistic diversity in Canada must be considered in studying day care. For many Canadian families, attitudes towards employment, child care, and child rearing are principally determined by culturally derived beliefs and values. Social class, the availability of an extended family, parental levels of education, and cultural and familial values powerfully influence familial attitudes to day care.

It should be pointed out that different government bodies are currently studying issues related to parental need, preferences, and attitudes towards day care and governmental roles in funding day care services. These include the Federal Ministry Responsible for the Status of Women Task Force on Child Care, the Inter-Provincial Task Force on Child Care, and the newly-formed all-party Parliamentary Task Force on Child Care.

The careful and contextual investigation both within and across the systemic levels of day care must be given priority in day care research if it is to yield information accurately reflecting the reality of day care which will be useful and important in developing appropriate family, education, and day care policies. No one research project can hope to capture the full, vibrant picture of Canadian day care. As researchers, we should ensure that that portion which we can examine is placed within the larger context, in order to add to an appreciation and understanding of the ecology of day care in Canada.

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Indem eine zunehmende Anzahl von Vorschul- und Schulkindern Kindertagspflege brauchen, besteht ein dringendes Bedürfnis nach Forschungen, die über die Bewertung und Entwicklung von Verfahrensweisen auf diesem Gebiet informieren können. Forschungen über Kindertagspflege sind üblicherweise auf den Wissenszweigen der frühen Kindheit-

sausbildung, Kinderentwicklung und Kinderpflege verteilt worden, indem jeder Wissenszweig sich auf Einzelaspekte der Tagespflegeerfahrung konzentriert. In dieser Arbeit wird behauptet, daß Tagespflege ein interdisziplinäres Phänomen sei, das Einzel-, Familien-, Staats- und Gesellschaftsfaktoren umfaßt, die auf- und ineinander wirken. Dieser Aufsatz zeigt eine ökologische Behandlung der Untersuchung von Tagespflege, die sich an die Wechselwirkung von solchen Faktoren wie Entwicklungsbedürfnisse der Kinder, der Rolle der Familienstruktur und der Dynamik, und der Einwirkung von Staatsunterstützung und Ausführungstaktik im Zusammenhang von gesellschaftlichen und kulturellen Werten bezüglich der Familie und Sozialisierung von Kindern wendet. Ein Überblick der jüngsten Untersuchungen über die Ökologie von Tagespflege in Kanada und woanders wird aufgeführt und eine Tagesordnung der Untersuchungen über Tagespflege für Kanada in diesem Jahrzehnt wird dargestellt.

Con el número cada vez creciente de niños de edad escolar y preescolar que necesitan cuidado diurno, existe una necesidad apremiante por investigación que pueda servir de base a la evaluación y desarrollo de políticas en esta área. Tradicionalmente, la investigación acerca del cuidado del niño durante el día se ha visto fragmentada en las disciplinas de educación temprana, desarrollo del niño y cuidado del niño, cada una enfocando aspectos aislados de la experiencia del cuidado diurno del niño. Este artículo presenta el argumento que el cuidado diurno del niño es un fenómeno interdisciplinario que incluye factores individuales, familiares, gubernamentales y sociales que actúan y tienen efecto uno sobre el otro. El artículo presenta un encaramiento ecológico al estudio del cuidado diurno del niño, enfoque que puede tomar en cuenta la intracción de factores tales como las necesidades de desarrollo del niño, el papel de la estructura y dinámica familiares, y el efecto del subsidio gubernamental y políticas de reglamentación en el contexto de los valores sociales y culturales sobre la familia y la socialización del niño. Se examina la investigación reciente en Canadá y en otras partes del mundo acerca de la ecología del cuidado del niño durante el día y se presenta un programa de investigación para Canadá para esta década.

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