The language of caregiving and caretaking in child care settings

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Abstract

This paper discusses the importance of the study of language in child care settings through the examination of complementary research studies that have focused on different aspects of language and child care. Discourse analyses of child-child and adult-child language interactions have demonstrated the richness and diversity of these interactions and the impact of these discourse patterns on children's receptive and expressive language abilities. Research is also presented on the contextual factors and governmental policies that impact upon the quality of care and the development of language in child care settings. The paper attempts to integrate psycholinguistic analyses of discourse patterns, the social and emotional context of the child care setting, the impact of child care on children's language prior to school entry, and the broader context of governmental policy and programs that frame and influence child care experiences for increasing numbers of children. The paper concludes with a consideration of the concepts of caretaking and caregiving as seen through the lens of language interactions in child care settings.

Introduction

There are a number of compelling reasons for researchers and practitioners to focus on questions of language development and language interactions in early childhood child care settings. First, increasing numbers of children in North America are participating in paid, non-parental child care programs outside of the child's home for at least part of the parent's work or study week. In turn, research on child care has shifted from a focus on what Belsky and Steinberg (1978) refer to as *model* child care programs, such as pilot or demonstration projects, to the more community-based *modal* child care programs that are much more representative of the majority of child care settings. A second critical reason for the increased focus on language develop-

ment in child care is the critical importance that the early years play in child language development. While much research has focused on the facilitative effects of 'motherese' in home situations, much less is known about the ways in which children acquire receptive and expressive language enriched child care environments in interactions with adults and other children in the program.

Third, in contrast to the number of studies of children's cognitive, social, or emotional development in child care, far less research has focused specifically on language development. Further, there is a dearth of research that examines not just the language outcomes as measured on standardized tests, but that attempts to link those outcomes to fine-grained analyses of the discourse in the child care program itself. Finally, little work has been done to examine the interactions and outcomes of language development in child care programs in the context of government policies that frame, facilitate, and/or limit the growth of child language in child care.

This paper draws upon a series of research programs that address four related sets of questions regarding language in early childhood child care settings. The first set of questions examines the relationship between the quality of child care programs and children's performance on standardized measures of language development. The second set of questions focuses on the relationships between the nature of language interactions in child care programs and children's performance on standardized measures of language development. The third set of questions addresses the social and emotional climate of child care as observed in the behaviour of the child care staff and the extent to which these interactions reflect either a culture of care*giving* or a culture of care*taking*. The fourth set of questions examines the ways in which broader contextual and policy factors contribute to the facilitation of language in child care programs.

Question 1

To what extent does the quality of a child care program impact upon the child's expressive and receptive language development?

Following on Belsky and Steinberg's (1978) distinction between *model* versus *modal* child care programs, the Victoria Day Care Research Project focused on children who participated in community-based child care centres family child care homes (Goelman & Pence, 1987). This study was part of a broader attempt to break down the notion that 'child care' was a monolithic treatment variable whose effects were either uniformly positive or uniformly negative. Rather, this study was based upon the view that child care programs varied on what have been defined as both 'structure' and 'process' variables. The former were seen as variables that pertained to regulatory or administrative factors that governed the organization and implementation of the child care program. Structure variables included, for example, regulations on group size, adult-to-child ratios, and required levels of teacher education. Process

variables referred to the nature of the adult-child and child-child interactions in the child care setting. These included both social and emotional factors (adult sensitivity or detachment; child cooperation or engaging in conflicts) as well as language interactions among the children and adults. Taken together, both process and structure variables were seen as factors that could determine a program's quality in terms of both its organization and implementation, as well as with respect to how the human ecology of the program manifested itself. Thus, two specific sub-questions emerged: What was the variability among community-based child care programs, and how did this variability impact on child language development?

This study involved 105 triads of children, parents, and caregivers in three types of child care. There were 52 triads in licensed child care centres (CDC), 27 triads in licensed family day care (LFDC) and 25 triads in unlicensed family day care. The mean age for children was 50.5 months in CDC, 38.8 months and 39.8 months in UFDC. Parents completed questionnaires that included parental demographic, income, education and employment, as well as sections on the family's search for and satisfaction with their child care arrangement. Caregivers completed questionnaires that also dealt with demographic and employment history, training, and perspectives on the field of child care.

Two observational measures and two outcome measures were used in the study. Children were observed during free play sessions in their child care environments using a time and event sampling technique. These observations focused on the nature of the activity (i.e., fine motor, dramatic play, art, and music) and in the context of this study these were seen as indicators of process quality. The child care programs – or structural quality – were also rated, using the *Early Childhood Education Rating Scale (ECERS)* in the child care centres and the *Day Care Home Environment Rating Scale (DCHERS)* in the family day care homes. *The Peabody Picture Vocabulary Test (PPVT)* was used as a measure of receptive language, and the *Expressive One-Word Picture Vocabulary Test (EOWPVT)* was used to measure expressive language.

The results showed that the quality of child care programs did vary tremendously both within and across the types of child care included in the study. (All reported significance levels at the .05 level). The mean quality scores for both the licensed centres (4.8) and the licensed family day care homes (3.5) were both significantly higher than the quality score in the unlicensed family day care homes (2.97). A further analysis of those centre and family day care homes that fell either one standard deviation above or below the mean also revealed differences in children's play activities. These results (see Figure 1) showed that children in low-quality family child care programs were observed watching both educational and non-educational television significantly more than children in high-quality family child care homes and in both high- and low-quality child care centres. Further, the children in these low-

quality family child care homes were observed taking part in significantly fewer 'informational' exchanges with the caregiver than children in the other three groups (see Figure 2). Thus, children in better-quality programs, in terms of the structural variables, participated in more language facilitative activities than did children in poorer-quality environments.

The same pattern of findings on structure and process quality was mirrored in the results on the *PPVT* and *EOWPVT* scores as well, with children in CDC and LFDC performing significantly better than the children in UFDC (see Figure 3). Significant positive correlations were found in both FDC groups between ratings of the environment and the language scores. In FDC, the *PPVT* correlated positively with the *DCHERS* sub-scale in social development and the *DCHERS* total score. Similarly, *EOWPVT* correlated positively with the total score, the sub-scale on social development and the sub-scale on learning materials. Analyses of the child observation data also revealed differences. Multiple regressions revealed two major predictors of children's scores on both the *PPVT* and the *EOWPVT* maternal education levels and the *ECERS/DCHERS* quality scores. Maternal education levels have a long and distinguished history as a major predictor of child language development (and subsequent school success).

These regression data, taken together with the correlational and inferential analyses cited above, indicated that the quality of the non-maternal child care environment also played an important role in the child's development of language. These data strongly – and not surprisingly – suggest that the child's level of language and literacy development at school entry can be influenced by the perhaps exponential combination of enriched home and child care environments, as measured by maternal education and overall program quality. What is not clear from these data is precisely what it is about either maternal education or program quality that leads to this enhanced level of language development. That is, these data revealed very little regarding the nature of the mother-child and caregiver-child language interactions in the caregiving environments that would facilitate child language development. This, then, became the major question in our next set of inquiries in our approach to the second research question.

Question 2

What is the nature of the language interactions in child care and to what extent do these interactions facilitate children's language and literacy development?

The Vancouver Day Care Research Project was undertaken to deepen our understanding of the nature of language interactions in family child care settings. Family child care was selected as the focus, due to the fact that the previous research project had found that the family child care quality scores had a much wider range than did the quality scores in the centre-based programs. The intensive focus of this proj-

ect was to provide a more fine-grained analysis of specific discourse patterns between adults and children during semi-structured play situations. The theoretical framework adapted for this study was the work of Olson (1977) and Pellegrini (1985), both of whom have postulated that in the three- to five-year-old age range, children begin to develop what they call a "literate orientation to oral language discourse." This literate orientation was characterized by a number of critical features that appeared to reflect a higher degree of explicitness and specificity in their language, a metalinguistic awareness of ways of maintaining and extending the discourse, and the use of certain metalinguistic and cognitive verbs that also indicated the child's awareness of the ways in which language itself could be objectified and reflected upon. The specific discourse features used in this study are described below.

Twenty children in family day care homes were videotaped in semi-structured play situations on separate occasions, with their mother and their family child care provider. The mean age of the children was 46 months. On average, the children had been in non-parental child care for 28 months and had been in their current family day care arrangement for the previous 20 months. They were in care for an average of 31.4 hours per week and there was an average of 4.8 children in the family child care homes in which they participated. The family daycare home was rated using the *DCHERS* and the *HOME Scale*, a frequently used tool that has been used to gauge the level of intellectual stimulation available to the child in a home environment. The *HOME Scale* was also used to collect data on the child's own home environment. Children were also assessed on the *PPVT* and the *EOWPVT*.

Play sessions were transcribed and analyzed for specific features of metalinguistic awareness. *Endophoric utterances* made explicit references to a person, an object, or an event that had been named previously in the conversation and were designed to maintain, further, or extend a specific topic in the discussions. *Cognitive* (or *metalinguistic) verbs* were verbs that were reflected the speaker's awareness of an inner mental state (e.g., 'remember' and 'believe'). *Other verbs* were all non-cognitive verbs and were tabulated as a measure of total talk. Four different kinds of 'demands' made by the interlocutors were also identified. *Labelling demands* were those in which the speaker asked the name of a person or object. *Recall demands* were requests for a previously told story or event to be recounted. *Describing demands* were made when the speaker wanted to know descriptive details of an object, a person, or an event. A speaker made an *explanation demand* when they wanted to know the answer to 'why' something was the way it was. So-called *3R demands* were requests to know, for example, how a word was spelled, what a certain word meant, or how to draw a certain letter or basic mathematical calculation.

As seen in Table 1, the intellectual stimulation in the child's own home, as measured by the *HOME* total score and two of the sub-scores, correlated with both the *PPVT* and *EOWPVT*. Earlier we reported that maternal education levels were sig-

nificant predictors of *PPVT* and *EOWPVT* scores. The results of the correlations between own-home *HOME* scores and children's performance on the measures of language development suggest that own-home environments can be enriched, not simply through maternal education levels, but through the facilitative nature of the environments themselves. Interestingly, neither the *HOME Scale* nor the *DCERS* in the family daycare home correlated with the *PPVT*, but both correlated positively with the *EOWPVT*. This may have been due to the fact that the almost four-year-old cohort of children found the receptive language tasks fairly easy, and the expressive tasks more challenging. In confirmation of the global pattern found in Study 1, then, the overall stimulation provided to children in home environments is related to their levels of language development.

The more critical question addressed in this study, however, is not the nature of the environment *per se*, but the nature of the **language interactions** within the environment. Specific features of discourse in mother talk, caregiver talk, and child talk were found to be associated with higher scores on the *PPVT* and *EOWPVT*. Table 2 summarizes the correlations between mother's talk, children's talk, and the children's *PPVT* and *EOWPVT*. Scores were significantly when higher their mothers spoke more; when they used more cohesive language (in the form of endophoric references); and when they used language that reflected a higher level of metalinguistic awareness. Not only was the mother's talk strongly associated with the child's test performances, but so too was the child's own talk. In their talk to their mothers, the children demonstrated aspects of metalinguistic awareness and a wide range of question types, including higher level questions such as *explanation* and *3R demands*, all of which correlated with the child's scores on the *EOWPVT*.

A similar pattern was found in the caregiver-to-child and the child-to-caregiver discourse (Table 3). As in the mother's talk, we found that caregivers' use of endophoric references and psychological verbs correlated positively with children's scores on both measures of language development. Here, again, we found that the child's language was also correlated with higher levels of expressive and receptive language development. Thus, high levels of intellectual stimulation in the home and caregiving environments and the use of specific features of oral discourse were found to be linked to enhanced performance on children's measures of receptive and expressive language. That is, these results indicate that not only is the global quality of a child care environment important in facilitating positive language development in the preschool years, but the nature of the individual daily language interactions within the environments are critical for expressive and receptive language development.

The data presented thus far point to the importance of the intellectual stimulation that the child receives at home and in child care, the nature of the adult-child and child-child discourse patterns, the quality of the child care program, and the frequency of different kinds of play activities in which the child engages in child care.

Less understood are the social and emotional contexts of the caregiving environment and their possible relationships to the language found in child care settings. To address this issue, we then progressed to the third of our four research questions.

Question 3

In what ways is the social and emotional climate of a child care environment reflected in the language of the care environment?

As indicated in the previous two studies, quality in child care centres is frequently measured by the *Early Childhood Environment Rating Scale (ECERS),* which has consistently demonstrated positive associations between child care quality and the language outcomes for children in child care centres. In this discussion, we will explore the ways in which the language generated from the social and emotional environments of child care may also be linked to program quality overall and to the children's language development in particular.

Data on the social and emotional features of child care programs were collected as part of a Canada-wide study of process quality, entitled *You Bet I Care!* Staff members in a total of 234 child care centres in six provinces and one territory participated in a multi-methodological study that included: (a) questionnaires completed by the staff and directors; (b) observations in selected classrooms in the centres; and (c) interviews with the teachers in the observed classrooms. The questionnaires focused on a range of issues related to the wages and working conditions of the child care staff, as well as on features related to the organizational and administrative aspects of the centres.

Of the 234 centres, 155 operated under not-for-profit auspices and 72 operated as commercial centres. Of the 1,297 staff who completed questionnaires, 318 agreed to participate in the classroom observations as well. Of this group, 114 were staff in infant-toddler (zero- to three-year-old) classrooms and 204 were staff in preschool (three- to five-year-old) classrooms. Two observation instruments were used by observers who had undergone training and who had achieved high levels of inter-rater reliability. The *ECERS* was used in the preschool classroom and its more recently adapted counterpart, the *Infant-Toddler Environment Rating Scale (ITERS),* was used in the infant-toddler rooms.

In both preschool and infant-toddler rooms, the *Caregiver Interaction Scale (CIS)* was also used. The validity and reliability of the *CIS* has been established, and the measure has been used extensively in studies of the social and emotional climate in child care centres. Observers rate the teachers on three dimensions: *sensitivity*, *harshness,*and *detachment.* Each dimension is operationally defined by a list of specific descriptors and the observer is instructed to indicate whether the specific

dimensions occurred 'not at all,' 'somewhat,' 'quite a bit,' or 'very much.' A four-point Likert scale was used to assign relative weights to each of these values.

An examination of the descriptors for each dimension reveals that the language of the observed caregiver is central in determining the score the caregivers receive. For example, in the cluster of descriptors for *sensitivity* we find:

- "speaks warmly to children"
- "listens attentively when children speak to him/her"
- "when the children misbehave, explains the reason for the rule they are breaking"
- "encourages children to try new experiences"
- "talks to children on a level they can understand"

harshness is assessed by using descriptors such as:
- "speaks with irritation or hostility to the children"
- "threatens children when trying to control them"
- "punishes children without explanation"

detached caregivers are described in the following ways:
- "seems distant or detached from the children"
- "spends considerable time in activity not involving interaction with the children"
- "doesn't seem interested in the children's activities"
- "doesn't supervise the children very closely"

When coupled with the data from the staff and centre questionnaires, a certain profile of the staff who used 'more sensitive' and 'less harsh' language began to emerge. The data showed that the staff who used more sensitive language towards the children had more years of ECCE training and had more years of experience working in child care than caregivers who used less sensitive language. Overall, they expressed greater satisfaction with their work, worked fewer hours per week, and received higher wages and better benefits than staff who used less sensitive language. The centre environment in which they worked also made a difference, as more sensitive caregivers were found in centres that had favourable adult-to-child ratios, were student practicum sites, received subsidized rent/utilities, and were operated by not-for-profit societies.

What these results on the *CIS* contribute to our understanding of the language in and of child care is that the language is used for far more than managing children's activities and conducting cohesive conversations replete with metalinguistic devices. The results also demonstrate that we cannot rely on well-constructed child-centred environments to simply generate rich and varied language. The results very powerfully suggest that there is a language of caregiving that communicates to children at semantic, syntactic, pragmatic, and social-emotional levels. In these situa-

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tions, the children are exposed to language that reflects inner feelings, language that defines and can help resolve interpersonal conflicts, and language that demonstrates the importance of taking another person's perspective. All of these uses both model and manifest the ways in which language constructs and reifies a culture of caring. Further, the absence of language that invites interaction, the detachment of teacher from child, the inability or lack of interest in maintaining a set of shared experiences through expressions of feelings and perspectives are characteristics of young children. These factors indicate a sense of withdrawal and distance that suggests that these settings are much better described as ones in which care*taking* is found; but not the sense of sharing and engagement that we can better describe as care*giving*.

Language, quality, and caregiving: these critical factors are interrelated to one another in the real world of child care, a world that includes children, parents, staff, regulations, training, fees, and salaries. In the final section of this paper, we examine the ways in which child care policy can facilitate or inhibit the development of factors that impact on language, quality, and caregiving.

Question 4

What are the broader contextual and policy factors that contribute to the facilitation of language in child care programs?

In this section we return to our discussion of program quality with which we began this paper. In that initial section, data demonstrated that program quality and the kinds of activities in which the children engaged while in their child care settings were correlated with the children's performance on standardized measures of receptive and expressive language development. Having established that enhanced language development can be one of the outcomes of program quality, we now focus our attention on the question of the inputs or predictors of program quality, which was the primary focus of the *You Bet I Care!* project. In addressing this question, we relied upon Bronfenbrenner's (1979) notion of the ecology of human development. As called for in the ecological model, our data were collected in the 'real world' of children, not in artificial, contrived, or decontextualized laboratory situations. The ecological model also calls for the importance of context and focus. In studies of children in child care, we interpret this to mean that research must specifically be considered in the context of the regulatory, legislative, and legal realities that frame and govern the ways in which child care programs are organized and administered.

The *You Bet I Care!* project gathered a wide range of individual, programmatic, inter-personal, financial, and socio-demographic data on each child care centre where language interactions were observed. These data provide a unique opportunity to examine the interaction among these variables and to offer some insight into the complex ecology of child care programs and how this ecology can contribute to program quality – which, in turn, has a major impact upon the language

development of the children in that child care setting and is a major predictor of child language development.

It is beyond the scope of this paper to review the entire program of data analysis that led to the proposed predictive model presented in both Table 4 and Figure 2. In brief, following a series of univariate comparisons and multiple regressions, a PATH analysis was conducted on the diverse variables that were shown to be related to the outcome measure of program quality. PATH analysis is used to identify both direct predictors of specific outcomes as well as indirect predictors. That is, the resulting model can illustrate the relations of the key variables to outcome measures as well as the relations among the variables themselves. The results illustrate the ways in which individual, programmatic, and administrative variables interact with one another and, together, can predict the level of program quality.

These data revealed two key aspects of the observed caregiver's background and attitude that help to predict program quality: the staff member's educational background and level of satisfaction with the colleagues and work environment in which s/he works. The critical program variables identified by the PATH analysis were the adult-to-child ratio in the observed room, the number of staff in the observed room, and the presence of ECE student teachers in the observed room. Financial variables that predicted program quality were staff wages, parental fees, and the provision of subsidized rent and/or utilities. The most critical organizational factor was the auspice of the child care program: the quality in not-for-profit centres was significantly higher than the quality in private, for-profit centres.

A profile, then, of the child care room that facilitates child language development would likely include the following features. The staff in this room is well trained in early childhood education. This training would manifest itself both in the creation of a developmentally appropriate environment and in using language in appropriate, cohesive, and engaging ways with the children. Based on higher than usual parent fees, the staff wages are also higher than usual, contributing to a greater degree of satisfaction with the work environment and, presumably, less staff turnover and more consistency. With these kinds of incentives, the centre can maintain advantageous adult-to-child ratios. The centre can afford higher salaries for a number of reasons. As a not-for-profit organization, the largest proportion of parent fees (and other possible grants) would go directly into staff salaries. Further, the provision of free and/or subsidized rent and/or utilities would enable the centre to put these funds towards staff salaries and program development. Under these kinds of supportive working conditions, high-quality child care programs also attract student teachers from ECE training programs. These student teachers provide one more adult language model in the classroom and one more adult with whom the child can interact. Student teachers are supervised by staff from their ECE training programs, thereby providing the students with additional guidance and direction.

This confluence of factors contributes to a climate of positive and nurturing caregiving. These environments provide the intellectual, language, and social-emotional nurturing that characterizes the kind of responsive and contingent care that is conveyed in the term caregiving. In contrast stand situations where caretaking – that is, the custodial care of children's basic needs – is provided. No one factor can immediately transform caretaking into caregiving. Research is beginning to show the ways in which caregiving environments can be supported and facilitated through training, regulation, and the financing of child care programs. The outcomes of such programs will enhance children's school readiness and early language and early literacy levels that provide the foundation for future success. Critics are correct in pointing to the costs that such programs entail. The question is not, however, whether we as a society can afford to provide quality child care programs. The question is whether we can afford not to.

Table 1 -Summary of correlations between *HOME* scores in own-home and family daycare homes and children's scores on the *PPVT* and the *EOWPVT* (Vancouver Daycare Research Project)

	PPVT with	**EOWPVT with**
Own-home *HOME* Scores	*HOME* Total Score	*HOME* Sub-scale on Toys, Games & Reading
	HOME Sub-scale on Toys, Games & Reading	*HOME* Sub-scale on the Physical Environment
	HOME Sub-scale on the Physical Environment	
Family daycare home *HOME* Scores	No significant correlations	*HOME* Total Score
		HOME Sub-scale on Toys, Games & Reading
Family daycare home *DCHERS* Scores	No significant correlations	*DCHERS* Total Score
		DCHERS Language Development Sub-scale
		DCHERS Learning Activities Sub-Scale
		Social development Sub-scale

Table 2 -Summary of correlations between mother and child talk and the child's *PPVT* and *EOWPVT* scores (Vancouver Daycare Research Project)

|	**PPVT**	**EOWPVT**
Mother-to-child talk	Endophoric references	Endophoric verbs
	Other verbs	Other verbs
	Psychological verbs	
Child-to-mother talk	Psychological verbs	Psychological verbs
		Labelling demands
		Recall demands
		Describing demands
		Explanation demands
		'3R' demands

Table 3 -Summary of correlations between caregiver and child talk and the child's *PPVT* and *EOWPVT* scores (Vancouver Daycare Research Project)

	PPVT	**EOWPVT**
Caregiver-to-child talk	Endophoric verbs	Endophoric verbs
	Other verbs	Other verbs
Child-to-caregiver talk	Labelling demands	Labelling demands
		Endophoric verbs
		Psychological verbs

Table 4 -Summary of PATH analyses of direct and indirect predictors of program quality (Adapted from Goelman, et. al, 2000)

Types of Predictors	Infant-Toddler Rooms	Preschool Rooms
Direct predictors of program quality	1) The observed staff member's wages 2) Whether the centre was used as a student-practicum placement setting 3) Whether the centre received subsidized rent and/or utilities	1) The observed staff member's wages 2) The observed staff member's level of satisfaction with the working climate and his/her colleagues 3) The adult:child ratio at the time of the observation 4) Whether the centre was used as a student-practicum placement setting 5) Whether the centre received subsidized rent and/or utilities
Direct **and** Indirect predictors of program quality	1) The observed staff member's level of ECCE-specific education 2) The number of adults in the observed room	1) The observed staff member's level of ECCE-specific education 2) The number of adults in the observed room
Indirect predictors of program quality	1) Auspice of the centre 2) Full-time fees	1) Auspice of the centre 2) Full-time fees

Figure 2: Direct and indirect predictors of child care quality (Adapted from Goelman, et. al, 2000)
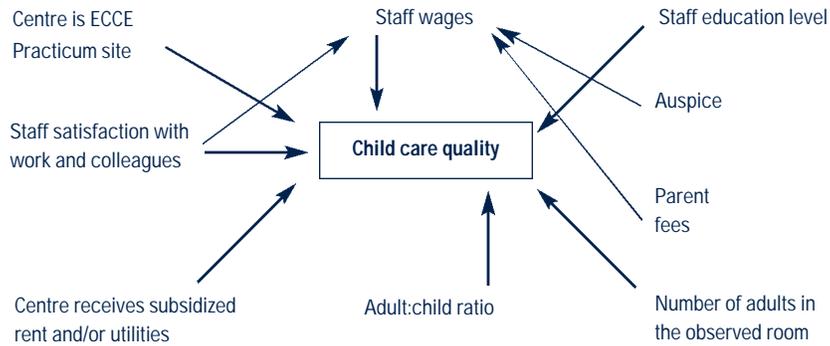
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