

■ Using Culturally Appropriate Methodology to Explore Dene Mothers' Views on Language Facilitation

■ Recourir à une méthodologie adaptée à la culture pour explorer le point de vue des mères dénées sur la facilitation du langage

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Abstract

This study aimed to identify the differences in the beliefs and educational practices related to language acquisition of Dene and non-Aboriginal mothers. A survey of 30 Dene mothers in a Northern community was carried out using research methodology that was culturally adjusted to the Dene culture and language. The 30 non-Aboriginal mothers completed a conventional survey form. The survey evaluated the mothers' beliefs about language acquisition and their current practices of supporting their children's language learning. The study revealed subtle differences between the Dene and the non-Aboriginal mothers with regards to both their beliefs and practices. The Dene mothers valued spirituality and their child's connection to traditional faith and beliefs more highly than the non-Aboriginal mothers. They also supported the use of child-directed speech to facilitate their children's language development. They felt that Elders and grandparents had an important role to play in their children's lives, and they favoured teaching by providing a combination of verbal and hands-on instruction. The Dene mothers reported frequent use of language facilitation strategies. By adjusting the survey in a culturally appropriate way, the participation in the research was facilitated for the Dene mothers.

Abrégé

La présente étude vise à repérer les différences de croyances et de méthodes d'éducation concernant l'acquisition du langage entre les mères dénées et les mères non autochtones. On a mené une enquête auprès de 30 mères dénées d'une communauté du Nord en utilisant une méthode de recherche adaptée à la culture et à la langue dénées. Les 30 mères non autochtones ont rempli un formulaire de sondage classique. L'enquête cherchait à évaluer les attitudes des mères sur l'acquisition du langage et leurs pratiques actuelles pour favoriser l'apprentissage du langage chez leur enfant. L'étude a montré des différences entre les mères dénées et les mères non autochtones, tant sur le plan de leurs attitudes que de leurs pratiques. Les mères dénées valorisent davantage la spiritualité et le lien de leur enfant avec la foi et les croyances traditionnelles que ne le font les mères non autochtones. Elles soutiennent aussi le recours à la parole adaptée aux enfants pour faciliter l'acquisition du langage. Elles sont d'avis que les aînés et les grands-parents ont un rôle important à jouer dans la vie de leurs enfants, et elles favorisent une méthode d'éducation qui allie les instructions verbales et pratiques. Les mères dénées ont dit utiliser fréquemment des stratégies de facilitation du langage. L'adaptation de l'enquête à la culture a facilité la participation des mères dénées à la recherche.

Key terms: Aboriginal, Dene, children, language, mother-child interaction

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Background

The country of Canada spans not only a vast geographical space but also comprises a multitude of diverse populations and cultural heritages. The Aboriginal peoples of Canada are an important component of this cultural diversity. The Constitution Act of 1982 names three groups recognized as being Aboriginal: Indian, Métis, and Inuit (McCue, 2000). Aboriginal peoples are made up of diverse languages, cultures, and traditions. The term First Nation is widely used in Canada and refers to the Indian Aboriginal people. Unfortunately, Aboriginal Canadians have often found themselves in an economically and politically marginalized position. The provision of services to meet the specific needs of the different Aboriginal cultural groups has been hampered by an incomplete understanding of their cultural values, knowledge, and beliefs. Such a lack of understanding may also affect the provision of services related to communication disorders.

One way to bridge a gap in knowledge is through quantitative and qualitative research. However, research in the field of communication disorders in Canada is normally carried out by university-trained researchers who do not have an Aboriginal cultural background and who typically are not immersed in Aboriginal ways of life. Therefore, the research undertaken in Aboriginal communities may be considered cross-cultural. The goal of this paper is to create awareness for specific adjustments to research paradigms that may be used with Aboriginal populations in Canada.

Researchers conducting cross-cultural studies in communities with cultures distinct from their own may face a variety of challenges, particularly those related to establishing rapport and trust. This especially holds true for many of the First Nation communities in Canada that have often been historically disadvantaged by research endeavours. Smith (1999) comments pointedly that "the term *research* is inextricably linked to European imperialism and colonialism. The word *research* itself is probably one of the dirtiest words in the Indigenous world's vocabulary" (p. 115).

Ethical guidelines for research in Aboriginal communities

In Canada, medical research in Aboriginal communities is regulated by a set of guidelines developed by the Canadian Institutes of Health Research (CIHR, 2007). These 15 guidelines establish the ground rules for carrying out research with Aboriginal participants. These new guidelines supplement, and sometimes supercede, previous codices such as those by the Royal Commission on Aboriginal People (RCAP, 1993), the *Ethical Principles for the Conduct of Research in the North* by the Association of Canadian Universities for Northern Studies (ACUNS, 1992), and the *Tri-Council Policy Statement: Ethical Conduct for Research Involving Humans* (1998) by three of Canada's research funding agencies. The CIHR (2007) guidelines were developed to protect and preserve the unique cultural

heritage of Aboriginal peoples and to emphasize that researchers conducting research with Aboriginals need to respect their viewpoints, experiences, and territory.

Battiste (2005) discusses potential challenges for conducting research with Aboriginal participants. These challenges can relate to language difficulties, the perception of personal space, the intrusion upon sacrosanct knowledge, the use of inappropriate research methodologies, and the differences in the understanding of the informed consent process. Piquemal (2001) described how the consent process could go awry in Aboriginal cultures and developed four recommendations for the pursuit of free and informed consent from Aboriginal research participants. These include:

1. Negotiating responsibilities prior to seeking free and informed consent;
2. Obtaining free and informed consent from the relevant authorities;
3. Confirming consent to ensure that consent is ongoing; and
4. Completing the circle: providing the community with the research data and findings.

Aboriginal perspectives on communication disorders

The Aboriginal peoples of Canada will often have their own unique perspectives on scientific, agricultural, technical, and ecological knowledge (Daes, 1993). This also includes medical and psychological aspects of human behaviour, such as communication disorders. However, as with all cultures, there is intra-culture variation, and thus Aboriginal peoples must not be regarded as a uniform group (Loppie, 2007).

Recent cross-cultural studies such as Johnston and Wong (2002) and Simmons and Johnston (2007) noted differences in language learning between specific cultural groups. Scollon and Scollon (1984) noted substantial differences in the discourse patterns between Athabaskan natives of northern Alberta and non-Aboriginals, often resulting in communicative breakdowns between the two cultural groups. Discourse patterns are very much a part of a person's personality and culture (Schieffelin, 1983; Givon, 1985). A number of studies observed that Aboriginal children speak less and are quieter than non-Aboriginal children (Crago, 1990; Philips, 1983; Scollon & Scollon, 1984). Children of different language and cultural communities may exhibit differences in narrative production (Fiestas & Pena, 2004; Kay-Raining Bird & Vetter, 1994; Michaels, 1981; Price, Roberts, & Jackson, 2006; Young, Diehl, Morris, Hyman, & Bennetto, 2005). Examples of these differences are story length, vocabulary, moral of the story, syntactic complexity, verb tenses, and the sequence of action. In general, Aboriginal narratives are often structured thematically, while Western narratives are sequential and are structured in three distinct parts: beginning, middle, and end.

Ball, Bernhardt, and Deby (2006) and Ball and Lewis (2005) documented how Aboriginal native languages are

central to how children participate in cultural traditions. Aboriginal children may differ from Western children in their communicative behaviours in terms of body language, eye contact, learning style, verbal response time, and speaking volume and frequency. However, such language differences displayed by Aboriginal children may not be understood by non-Aboriginal educators and could be interpreted as language delays or disorders.

This is described in a poem by an unknown Aboriginal author, framed as a mother's letter to her child's teacher:

He doesn't speak standard English, but he is no way "linguistically handicapped." If you will take the time and courtesy to listen and observe carefully, you will see that he and the other Indian children communicate very well among themselves and with other Indians. They speak "functional" English, very effectively augmented by their fluency in the silent language, the subtle, unspoken communication of facial expression, gestures, body movement and the use of personal space. ... Will you help my child to learn to read; or will you teach him that he has a reading problem? Will you help him develop problem solving skills; or will you teach him that school is where you try to guess what answer the teacher wants? (Respect My Child, 1978, p. 34)

The poem also describes how a different parental philosophy in Aboriginal cultures emphasizes practical experiential learning styles:

He is not accustomed to having to ask permission to do the ordinary things that are part of normal living. He is seldom forbidden to do anything; more usually the consequences of an action are explained to him and he is allowed to decide for himself whether or not to act. His entire existence since he has been old enough to see and hear has been an experiential learning situation, arranged to provide him with the opportunity to develop his skills and confidence in his own capacities. Didactic teaching will be an alien experience to him. (Respect My Child, 1978, p. 34)

The difference in discourse and learning patterns becomes important in mainstream classrooms. The discourse style of the Aboriginal child's home environment may differ quite dramatically from the discourse of the classroom. Academic success in the classroom is influenced by one's narrative style. Aboriginal children who struggle academically may have discourse styles that are "at variance with the teacher's own literate style and expectations" (Doughty, Thornton, & Doughty, 1977, p. 165). Philips (1983) remarked on the traditional Western *Show and Tell* activities that reflect interaction organization patterns of the whole classroom; the teacher chooses who will speak, when they will speak, and what they will speak about. This pattern may be incongruent with the collectivist culture of Aboriginals who often value collaborative group work more than individualistic statements and achievements

(Westby & Vining, 2002). Translation of Aboriginal languages into English is uncommon, due to Aboriginal languages' inherent history of oracy. For many Aboriginal people, English is not their first language, or they may speak a dialect of English, therefore, even when English words are used by Aboriginal speakers, the meaning may differ subtly (Santa Ana, 2004) from what the speaker intended.

Goals of the present study

The differences in attitudes towards language learning are a key topic that all educators and specialists working with Aboriginal children should understand. This is a particularly challenging topic for speech-language pathologists (S-LPs) in rural settings in Canada. Depending on the geographical location, Aboriginal children can represent a large proportion of clinicians' caseloads. Many Aboriginal communities are working hard to preserve their native languages. These efforts need to be supported by clinicians and educators and recognized for the contribution they can make to preserving Aboriginal culture. The cultural traditions specific to the community must be taken into consideration when studying the perspectives of Aboriginal mothers' beliefs and practices towards language learning.

The goal of the present study was to evaluate Dene mothers' attitudes to language acquisition and spoken communication. The study explored the attitudes and beliefs of Dene mothers regarding language acquisition in one remote First Nation community, Lac Brochet, Manitoba. Specifically, the following questions motivated the study:

1. How do the Dene mothers promote their children's language development through their parenting?
2. Which discourse practices do the mothers perceive as being helpful for the language development of their children?

The attitudes of Dene and non-Aboriginal mothers were evaluated using culturally sensitive methodology. In order to ensure that the study design was culturally appropriate for both groups of participants, an asymmetrical research design with different interview techniques for the two groups was used. This required adopting the attitude that "different from" is not the same as "worse than" or "better than," and that the same measure will not necessarily assess all mothers fairly.

Materials and Methods

Participants

Participant inclusion criteria for the Dene group specified the following: (a) female, (b) agreed to participate in the study, (c) self-reported Dene ancestry, and (d) presently caring for children in the age range of 2 to 6 years or having cared for children in this range within the last two years. Participant inclusion criteria were the same for the non-Aboriginal mothers except for self-report of Aboriginal ancestry. The two groups' demographic information was balanced as much as possible.

The majority of the 30 Western mothers were low-income earners, over 35 years of age, had Grade 12 diplomas. All used English as their first language. They were recruited from a small Winnipeg neighbourhood. The mothers were identified by daycare centre managers. The 30 Dene mothers lived in Lac Brochet in the most northern part of Manitoba. Most were low-income earners, younger than 35 years, and reported Dene as their first language. Only two Dene mothers had Grade 12 diplomas.

Methods

An asymmetrical survey study was used to gather Dene and non-Aboriginal mothers' responses. A 36-item survey was adapted with permission from Johnston and Wong (2002). The first 14 items were reworded by the first author in order to adjust for the specific populations and research questions at hand. To ensure the cultural appropriateness of the first 14 questions (Balnaves & Caputi, 2001), the first author consulted with a cultural informant from the Dene community. The wording of the remaining 10 "belief" items was not altered from the original survey. The final 12 items of the survey queried frequency of language facilitation "practices" and focused on practices related to language support and parental scaffolding. After the last survey item, the mothers were invited to add their comments or to share additional observations. The survey form may be found in Appendix A.

The 30 non-Aboriginal mothers (in Winnipeg) received the written English form of the survey through their children's daycare facility. These mothers were identified by the daycare centre managers, who distributed 100 survey packages to mothers. The package included the survey, a consent form, a brief description of the study, and a stamped return envelope. After two months, 30 mothers had mailed back their surveys.

The 30 Dene mothers in Lac Brochet completed the survey in a face-to-face interview format administered by a research assistant who was a community member. Recruitment took the form of an information meeting that was chaired by the primary researcher and the research assistant. Any additional recruitment after this meeting was done by the research assistant.

The research assistant was a Dene woman who was literate and bilingual in Dene and English. She was compensated with an hourly wage for her time. The research assistant administered all 30 surveys to the Dene mothers.

Two translators from the community translated the English version of the survey to Dene and then back to English. At the time of the survey administration, the Dene participants had the choice of (a) listening to the audio-taped, translated version (the Dene language is used almost exclusively in oral form in the community), (b) listening to the research assistant read the questions in English, or (c) listening to the research assistant read the questions in Dene. All participants chose to have the research assistant read the survey questions to them in English, with clarification in Dene when necessary.

Results

Univariate analysis

The responses of the Dene and the non-Aboriginal mothers were compared using two-sample *t*-tests. The tests probed for significant differences between the answers of the 36 survey items. Table 1 displays the percentages of Dene and non-Aboriginal mothers agreeing (4) or strongly agreeing (5) with each of the 24 statements related to the mothers' beliefs about language acquisition. Using a Bonferroni-adjustment procedure, each test used a 0.005 level of significance, which resulted in an experiment-wide level of significance of 0.12. Statistically significant group differences were found for 4 of the 24 belief questions (10, 18, 20, and 24).

An analogous type of analysis was conducted for the remaining 12 practice statements. Table 2 indicates the percentage of mothers in each group who reported using each practice *almost always* (4). Three items of the 12 practice items showed significant group differences (28, 32, and 35) at $\alpha = .01$.

Linear discriminant analysis

A linear discriminant analysis of the data was used to examine all independent variables simultaneously. Linear discriminant analysis allows for a discriminant rule to be created, which is then used to predict group membership based only on a participant's responses on the independent variables. The discriminant analysis indicated that the belief items taken as a set could reliably differentiate members of the groups (Wilks' lambda = 0.221, $p < .0001$, multiple $R^2 = 0.773$).

Magnitudes of correlations for all other independent variables were less than 0.2.

Using the "cross-validation" classification method, each individual was deleted from the data set and a discriminant rule was constructed to predict group membership. Using this method, 26 of the non-Aboriginal caregivers and 21 of the Dene mothers were correctly classified, for an overall accuracy rate of 78.33%. A further stepwise procedure was conducted using the survey items in Table 2 in a discriminant analysis. The belief items taken as a set could reliably differentiate members of the groups (Wilks' lambda = 0.311, $p < .0001$, multiple $R^2 = 0.689$). Using this discriminant function, the cross-validation method correctly classified 26 of the non-Aboriginal and 27 of the Dene mothers, for an accuracy rate of 88.33%.

Using the same multivariate test procedures, a discriminant function was derived for the practice items. The linear discriminant function could reliably differentiate members of the groups (Wilks' lambda = 0.645, $p < .029$, multiple $R^2 = 0.355$). The cross-validation classification method correctly classified 20 of the Western caregivers and 20 of the Dene mothers, for an accuracy rate of 66.67%. A stepwise procedure using only Questions 28 and 35 demonstrated that the practice items taken as a set could reliably differentiate members of the groups (Wilks' lambda = 0.742, $p < .0001$, multiple $R^2 = 0.258$).

Table 1

Percentage of Dene and Non-Aboriginal mothers agreeing (4) or strongly agreeing (5) with each of the 24 belief statements

Belief Item	Western	Dene
1. Children play outside	30.00	30.00
2. Children play inside/toys	63.33	43.33
3. Parent request help with S/L	66.67	76.67
4. Parent concern child not speaking by K	93.33	93.33
5. Ear infections affect speech	53.33	43.33
6. Parent comfortable copying child's play	100.00	80.00
7. Ok for child not to respond	13.33	33.33
8. Child can sit and listen without pictures	36.67	70.00
9. Siblings teach young child new words	56.67	76.67
10. Child's connection to spirituality	53.33	96.67*
11. Child will talk to a familiar older person	90.00	93.33
12. K/Nursery are important for children	86.67	93.33
13. Tell my child a story for a purpose	73.33	76.67
14. Child learns best by doing	76.67	66.67
15. Parent should ask child to repeat word	83.33	93.33
16. Children understand words before they speak	96.67	90.00
17. Speech is important for children making friends	80.00	90.00
18. Using baby talk will impede your child's speech	66.67	26.67*
19. Three-year-olds are too young to do chores	26.67	50.00
20. Children learn best through instruction	90.0	93.33
21. Words are better than gestures	86.67	80.00
22. Children learn important things with play	96.67	90.00
23. Children should be allowed to take turns in conversation	70.00	56.67
24. Grandparents give good advice	43.33	96.67

* $p < .005$. See Appendix A for full survey item.

A high correlation of 0.805 between Question 28 and the discriminant function was the reason why only two variables were taken into consideration. Question 28 discriminated between the two groups almost as well as all 12 variables together. Using this discriminant function, the cross-validation method correctly classified 19 of the non-Aboriginal mothers and 22 of the Dene mothers, for an accuracy rate of 68.33%.

Qualitative analysis of survey comments

In addition to the information provided by the participants' ratings, a comment section at the end of the survey

provided another data source. The comments were analyzed qualitatively and the major recurring themes were identified. The two participant groups delivered two different messages.

Almost all comments made by the Dene mothers were brief and related to culture and language preservation. As one mother said, "It is important for children to learn the English language but even more important that they keep their Dene language. It is getting more difficult though, because of technology."

The comments written by the non-Aboriginal group were longer, more in-depth, and pertained to specific survey items. They often remarked on specific speech or language challenges their children had encountered and how they facilitated language. For example, one non-Aboriginal mother wrote, "[Item #25] We never tell her it's wrong, instead we gently say the correct sentence back to her," or "[Item #31] We don't want to make her feel bad or embarrassed so we just lead by example."

Discussion

This study was an investigation of differences between Dene and non-Aboriginal mothers' attitudes related to language acquisition. Several modifications were made to the research methods in an attempt to make them more appropriate for the Dene participants. These modifications included the use of a Dene research assistant, the translation of the survey into the Dene language, different methods of survey administration for the two participant groups, and consultation with cultural informants.

The linear discriminant analysis differentiated clearly between the two groups of participants when all questionnaire items related to beliefs were included. An overall identification accuracy of 78.33% was a satisfactory result for the relatively small group of participants ($N = 60$) and demonstrated that the questionnaire items reliably elicited different response patterns from the two groups. With a cross-validation approach, the identification accuracy was

Table 2*Percentage of Western and Dene mothers reporting using a practice almost always (4)*

Frequency Item	Western	Dene
25. Tell my child s/he uses the wrong word	33.33	60.00
26. Read a book to my child at bedtime	46.67	36.67
27. Ignore the fact my child's speech is incorrect	33.33	10.00
28. Follow along with my child's topic	50.00	90.00*
29. Repeat what my child says	30.00	70.00
30. Practice parallel talk	33.33	70.00
31. Tell my child s/he leaves out words	26.67	63.33
32. Change my words when child not understanding	40.00	90.00*
33. Talk to my child about what happened that day	50.00	86.67
34. Use picture books to teach child	33.33	73.33
35. Ask my child to repeat	23.33	80.00*
36. Ask my child to tell family member about events	43.33	73.33

* $p < .01$. See Appendix A for full survey item.

further improved to 88.33%. When the same analyses were used to evaluate the discriminative power of the practice items, the accuracy was lower with 66.67% correct group assignment. Cross-validation only improved the rate to 68.33%, which indicates that the ratings between the Dene and the non-Aboriginal mothers were not as far apart as were the differences for the belief items; however, there were a greater number of belief items (24) than frequency items (12), which may have contributed to the above difference. It is important to keep in mind that the chance level for the linear discriminant classification was 50%.

While the linear discriminant analysis could clearly differentiate between the two groups, the detailed univariate analysis of the questionnaire items revealed that only 7 of the 36 questions (19.4%) elicited significantly different ratings from the group of Dene mothers. Statistically significant group differences were found for 4 of the 24 belief questions (17%) (10, 18, 20, and 24) while 3 of the 12 practice items showed significant group differences (28, 32, and 35). The sample of Dene mothers in this study may be regarded as bicultural (Westby & Vining, 2002) in that these Dene mothers will likely use a blend of Western and traditional child-rearing practices. The survey items that yielded clear statistical differences will be discussed in more detail in the following paragraphs.

Belief statement # 10. My child's connection to spirituality is important to me.

The Dene respondents strongly agreed with this statement. One of the key aspects of traditional knowledge is the belief that spirit is in everything (Fitznor, 1998). As

with other remote communities in Canada's north, the Jesuit priests instilled a strong Christian faith when they first came to Lac Brochet. Most residents have blended Christian beliefs with their traditional animistic philosophy (Westby & Vining, 2002) and their respect towards the land and the animals.

Belief statement # 18. If parents use "baby talk" (like "wawa" for water or "jammies" for pajamas) their child won't learn to speak well.

Dene mothers in general were less in agreement with this statement than the non-Aboriginal mothers. Although there is no evidence in the literature that a child's speech is hindered by baby talk, some of the current literature on language development does not encourage the use of baby talk (motherese, child-directed speech; Wasserman, 2007). Ball et al. (2006) observed that Dene

mothers tended to use more nicknames and humorous word play in their native language, which may account for their greater acceptance of word simplifications or modifications.

Belief statement # 20. Young children learn best when they are given instructions.

There was strong agreement with this statement from both groups; however, the Dene caregivers' responses were significantly stronger. The strong support for this statement may have stemmed from the Dene mothers' belief that children are taught through explanations, oral teachings, and stories. The term *instructions* may have a degree of vagueness. The cultural informant felt that the mothers would have agreed equally if the question would have read, "young children learn best when they are shown how to do things." *Instructions* may have been interpreted as a combination of explanation and hands-on demonstrations.

Belief statement # 24. Grandparents or older family members give good advice about the way that young children grow up.

There was a clear distinction between the Dene and non-Aboriginal groups in response to this item. The Dene mothers felt that the Elders or grandparents gave good advice but most non-Aboriginal mothers disagreed with this statement. These findings can be interpreted to mean that Dene culture may place more value on traditional ways of learning in which knowledge is passed on from the older generation.

The 12 discourse practice items listed in the second part of the survey are referred to in the communication disorders literature as language facilitation techniques (Muir et al., 2000). Of the 12 practice statements, items 28, 32, and 35 (25%) showed a significant difference between the groups.

Practice statement # 28. Follow along with my child's topic of conversation.

Dene caregivers responded by stating that they practiced this technique very often, while non-Aboriginal mothers responded more neutrally. Aboriginal culture is often described as collectivist. Sharing ideas and experiences are viewed as important values by many Aboriginal peoples (Westby & Vining, 2002).

Practice statement # 32. Change my words or sentence when my child does not understand me.

The Dene mothers almost uniformly reported to do this *Almost Always*. The non-Aboriginal mothers also responded positively but showed a lower average rating value. Since the Dene mothers were raising their children bilingually in English and Dene, they may have interpreted this question in terms of facilitating bilingual language acquisition.

Practice statement # 35. Ask my child to repeat a sentence after me.

The non-Aboriginal mothers responded variably, while the Dene mothers reported to use this practice *Almost Always*. Again, it is possible that the Dene mothers interpreted this question in reference to the bilingualism in the community and the need to teach the words specific to each language. Parenting a child in two languages may require a more structured approach to language interaction (Daigneault-Hammersmith, Tavares, Mercredi, & Settee, 2007; Northwest Territories Learning Council, 2007), so the parents may have a heightened awareness of language facilitation strategies.

The qualitative analysis of the survey comments provided only limited additional insights. The Dene mothers made brief comments that mostly related to culture and language preservation. While the non-Aboriginal mothers made more extensive and specific comments, there was less of a common theme in their comments because the comments were addressing specific speech or language challenges that their children had encountered.

The current study succeeded in recruiting 30 Dene mothers from a small rural community in Manitoba. Recruitment in Aboriginal communities is often difficult, and the local buy-in into the study was probably improved by the culturally sensitive way in which the study was introduced to the community and carried out. Implementing the survey through a local bilingual research assistant who came to the participants' homes very likely improved the compliance of the participants. No such adjustments were made for the non-Aboriginal mothers in the urban setting.

It is therefore unclear whether the asymmetrical research design may also have led to asymmetries in the research results. It would be interesting to directly compare the compliance of both Aboriginal and non-Aboriginal research participants using traditional Western methodology and the culturally sensitive research methodology. Speaking from our experience, it seems likely that a Western paper survey method would result in lower participation and compliance with the research procedures in Aboriginal communities. However, further research should assess whether the non-Aboriginal participants would also prefer the culturally sensitive research procedures that were used with the Dene mothers.

It should be noted that the results can only represent the views of the Dene mothers in Lac Brochet who participated in the current study. While other Aboriginal peoples in Canada may have similar values and philosophies regarding language learning, the Aboriginal peoples must not be regarded as a uniform group (Loppie, 2007).

Conclusion

This study successfully identified a number of subtle differences in the beliefs and educational practices related to language acquisition of Dene and non-Aboriginal mothers. The Dene mothers valued spirituality and their child's connection to traditional faith and beliefs. These mothers also supported the use of child-directed speech to facilitate their children's language development. They felt that Elders and grandparents had an important role to play in their children's lives, and they favored teaching by providing a combination of verbal and hands-on instruction. The Dene mothers reported frequent use of language facilitation strategies. The participation in the research was facilitated for the Dene mothers by adjusting the way the survey was carried out to ensure that it was completed in a culturally appropriate manner.

References

- Association of Canadian Universities for Northern Studies. *Ethical Principles for the Conduct of Research in the North*. (Association of Canadian Universities for Northern Studies, Ottawa, 1992).
- Ball, J., Bernhardt, B., & Deby, J. (2006). First Nations English dialects in young children: Forum proceedings. University of Victoria, School of Child and Youth Care, & University of British Columbia, School of Audiology and Speech Sciences.
- Ball, J. & Lewis, M. (2005). First nation elders' and parents' views on supporting children's language development. Report presented at the Canadian Association of Speech-Language Pathologists and Audiologists, Regina, Saskatchewan, May 6.
- Balnaves, M. & Caputi, P. (2001). *Introduction to quantitative research methods: an investigative approach*. London: Sage Publications.
- Battiste, M. (2005). *Indigenous Knowledge: Foundations for First Nations*. Retrieved October 17, 2006, from <http://www.win-hec.org>.
- Canadian Institutes of Health Research. (2007). *CIHR Guidelines for Health Research Involving Aboriginal People* (May 2007). Retrieved July 2007, <http://www.cihr-irsc.gc.ca/e/29134.html>
- Crago, M. (1990). Development of communicative competence in Inuit children: Implications for speech-language pathology. *Journal of Childhood Communication*, 13, 73-83.
- Daes, E. (1993). Study of the protection of the cultural and intellectual property rights of Indigenous peoples. Paper presented at the sub-commission on prevention of discrimination and protection of minorities. Commission, United Nations Economic and Social Council, 2.
- Daigneault-Hammersmith, B., Tavares, T., Mercredi, N., & Settee, H. *Aboriginal Learners and Linguistic Diversity*. PowerPoint presentation. Winnipeg, MB. Feb 22-23, 2007.

Doughty, P., Thornton, G., & Doughty, A. (1977). *Language study: The school and the community*. New York: Elsevier.

Fiestas, C. E., & Pena, E. D. (2004). Narrative discourse in bilingual children: Language and task effects. *Language, Speech, and Hearing Services in Schools*, 35(2), 155-168.

Fitznor, L. (1998). The circle of life: affirming Aboriginal philosophies in everyday living. In D. C. McCance (Ed.), *Life ethics in world religions*. University of Manitoba Studies in Religion 3. Atlanta: Scholar Press.

Genesee, F., Paradis, J., & Crago, M. (2004). *Dual language development and disorders: A handbook on bilingualism and second language learning*. Baltimore, Maryland: Paul H. Brookes Publishing Company, Inc.

Givon, T. (1985). Function, structure, and language acquisition. In D. I. Slobin (Ed.) *The Cross Linguistic Study of Language Acquisition: Vol. 2 Theoretical issues* (pp. 1005-10027). Hillsdale, NJ: Lawrence Erlbaum

Johnston, J. & Wong, M. Y. A. (2002). Cultural Differences in Beliefs and Practices Concerning Talk to Children. *Journal of Speech, Language, and Hearing Research*, 45, 916-926.

Kay-Raining Bird, E., & Vetter, D. K. (1994). Storytelling in Chippewa Cree children. *Journal of Speech and Hearing Research*, 37(6), 1354-1368.

Loppie, C. (2007). Learning from the grandmothers: Incorporating Indigenous principles into qualitative research. *Qualitative Health Research*, 17 (2), 276-284.

Michaels, S. (1981). Sharing time: children's narrative styles and differential access to literacy. *Language and Society*, 10, 432-442.

McCue, H. (2000). *The learning circle: classroom activities on first nations in Canada—ages 4-7*. Department of Indian and Northern Affairs and Northern Development.

Muir, N., Gerylo, K., Gompf, M., Burke, T., Lumsden, P., & McCaig, S. (2000). *Talk, talk, talk. Tools to facilitate language*. Greenville, SC: Thinking Publications.

Northwest Territories Learning Council, Yellowknife, NT. Accessed electronically on December 13, 2007, <http://www.nwt.literacy.ca/resource/aborgcrd/ab-cards.pdf>

Phillips, S. (1983). A comparison of Indian and Anglo communicative behavior in classroom interaction. In *The Invisible Culture. Communication in classroom and community on the Warm Springs Indian Reservation*. New York: Longman Inc.

Piquemal, N. (2001). Free and informed consent in research involving Native American communities. *American Indian Culture and Research Journal*, 25 (1), 65-79.

Price, J. R., Roberts, J. E., & Jackson, S. C. (2006). Structural development of the fictional narratives of African American preschoolers. *Language, Speech, and Hearing Services in Schools*, 37(3), 178-190.

Respect my child: He has the right to be himself. (1978). *Media and Methods*, 15, 34-35.

Royal Commission of Aboriginal Peoples. (1996). *Gathering Strength: Report on the Royal Commission of Aboriginal Peoples* (Volume 3, Chapter 5, 3.1). Retrieved January 23, 2007, from http://ainc-inac.gc.ca/ch/rcap/sg/si43_e.htm

Santa Ana, O. (2004). *Tongue-tied: the lives of multilingual children in public education*. Maryland: Rowan & Littlefield Publishers.

Schieffelin, B. B. (1983). Talking like birds: sound play in a cultural perspective. In E. Ochs & B. B. Schieffelin (Eds.) *Acquiring conversational competence* (pp. 177-188). London: Routledge & Kegan Paul.

Scollon, R. & Scollon, S. (1984). Cooking it up and boiling it down. Abstracts in Athabaskan children's story retellings. In D. Tannen (Ed.), *Coherence in spoken and written discourse*. Norwood, NJ: Ablex.

Simmons, N. & Johnston, J. (2007). Cross-cultural differences in beliefs and practices that affect the language spoken to children: mothers with Indian and Western heritage. *International Journal of Language & Communication Disorders*, 42(4), 445-465.

Smith, L. (1999). The indigenous peoples project: setting a new agenda. In *Decolonizing methodologies. Research and indigenous peoples* (pp.107-120). Dunedin: University of Otago Press.

Wasserman, L. (2007). The correlation between brain development, language acquisition, and cognition. *Early Childhood Education Journal*, 34(6), 415-418.

Westby, C. & Vining, C. B. (2002). Living in Harmony: providing services to Native American children and families. In D. E. Battle, *Communication disorders in multicultural populations* (3rd ed.). Boston: Butterworth-Heinemann.

Young, E. C., Diehl, J. J., Morris, D., Hyman, S. L., & Bennetto, L. (2005). The use of two language tests to identify pragmatic language problems in children with autism spectrum disorders. *Language, Speech, and Hearing Services in Schools*, 36(1), 62-72.

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Editor Note

The review of this contribution was coordinated and overseen by Dr. Tim Bressman, with valuable help and input from Dr. Alice Eriks-Brophy.

Received: September 23, 2008

Accepted: January 31, 2009



Appendix A

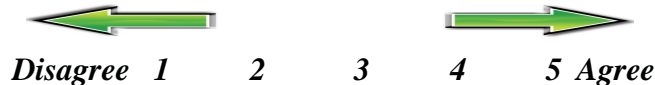
Survey

Thank you for your consent to complete this survey with you. You have the option for this survey to be read to you in English or Dene. We are doing this survey to educate ourselves on how your children learn language. There are many different ways that adults and children talk and play together. We want to find out about how the caregivers in your community talk and play with their children. It is important for us to understand this so that we can assess your children's language in a fair way, and offer appropriate suggestions to you if your child is having trouble learning language or how to speak.

There are no right or wrong answers. The format of the survey is such that you will be asked to choose a number from 1-5 that shows how much you agree with the statement.

For example:

It is important that your child eats breakfast every day.



If you strongly disagree with this statement you would answer 1.

If you agree with this statement, but not overly agree, you would tell me 4.

If you really have no preference one way or the other, you would answer with 3.

When answering these questions, try to think about your children who are in the range of 3-5 years of age or in pre-school.

1. My child spends much of the day playing outside.

Disagree 1 2 3 4 5 Agree

2. My child spends much of the day inside with books and toys (blocks, trucks, play-dough, coloring books, etc.).

Disagree 1 2 3 4 5 Agree

3. I would like to be taught how to help my child to understand and say more words.

Disagree 1 2 3 4 5 Agree

4. I would be concerned if my 4-year-old child was not speaking in Nursery/Headstart.

Disagree 1 2 3 4 5 Agree

5. A lot of ear infections may change how a child speaks.

Disagree 1 2 3 4 5 Agree

6. I feel comfortable copying my child's play on the floor (e.g. They are playing with blocks and you go down and play with the blocks too).

Disagree 1 2 3 4 5 Agree

7. It is ok for my child to not respond to me right after I ask a question.

Disagree 1 2 3 4 5 Agree

8. My child can easily sit and listen to a story without picture books.

Disagree 1 2 3 4 5 Agree

9. My child's brothers and sisters teach him/her new language as much as I do.

Disagree 1 2 3 4 5 Agree

10. My child's connection to spirituality is important to me.

Disagree 1 2 3 4 5 Agree

11. My child will easily talk to an older person (who they know) if given a chance.

Disagree 1 2 3 4 5 Agree

12. My 4-5 year old should attend Nursery/Kindergarten 3-5 days a week.

Disagree 1 2 3 4 5 Agree

13. When I tell my child a story, it is usually for a purpose (example: teaching).

Disagree 1 2 3 4 5 Agree

14. Children learn best by doing (provided they are out of danger), for example, how to make toast.

Disagree 1 2 3 4 5 Agree

15. Parents should ask young children to repeat new words in order to help them learn to talk.

Disagree 1 2 3 4 5 Agree

16. Children understand some words even before they can speak.

Disagree 1 2 3 4 5 Agree

17. Speech is especially important because it helps young children to make friends.

Disagree 1 2 3 4 5 Agree

18. If parents use 'baby talk' (like wawa for water, or 'jamies' for pajamas) their child won't learn to speak well.

Disagree 1 2 3 4 5 Agree

19. Three year olds are too young to help with household chores.

Disagree 1 2 3 4 5 Agree

20. Young children learn best when they are given instructions.

Disagree 1 2 3 4 5 Agree

21. Young children should always be encouraged to communicate with words rather than gestures.

Disagree 1 2 3 4 5 Agree

22. Young children learn important things while playing.

Disagree 1 2 3 4 5 Agree

23. Young children should be allowed to take a turn in conversations that include adults who are not family members.

Disagree 1 2 3 4 5 Agree

24. Grandparents or older family members give good advice about the way that young children grow up.

Disagree 1 2 3 4 5 Agree

The following 12 questions will be answered in terms of how often these practices occur. For example, whether or not it always happens or never happens. You will choose the number according to how often it occurs:

Hardly ever
1

Sometimes
2

Very often
3

Almost always
4

25. Tell my child if s/he uses the wrong word.

Hardly ever
1

Sometimes
2

Very often
3

Almost always
4

26. Read a book to my child at bedtime or naptime.

Hardly ever
1

Sometimes
2

Very often
3

Almost always
4

27. Ignore the fact that I do not understand something my child says.

Hardly ever
1

Sometimes
2

Very often
3

Almost always
4

28. Follow along with my child's topic of conversation.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

29. Repeat what my child says, adding new words.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

30. Talk about what is going on when my child and I are playing or doing things together. Example: When playing tea party, "Now, I'm pouring my tea. You're eating a tea cake. Is it good?"

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

31. Tell my child if s/he leaves some words out of a sentence.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

32. Change my words or sentence when my child does not understand me.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

33. Talk with my child about what happened that day when I wasn't there. Example: at preschool or at home while I was at work.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

34. Use picture books or flash cards to teach my child new words.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

35. Ask my child to repeat a sentence after me.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

36. Ask my child to tell another family member about something that we did together.

<i>Hardly ever</i>	<i>Sometimes</i>	<i>Very often</i>	<i>Almost always</i>
1	2	3	4

COMMENT SECTION

Sometimes surveys do not allow you to explain yourself well enough. Please use this page to expand on certain issues that are important to you and your child's language/culture.

Thank-you!