

Understanding Child Care in First Nations Communities

March 2018



FNIGC Research Series

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Executive Summary



Historically, the needs and experiences of First Nations people living in reserve and northern communities have largely been neglected from national-level research processes. While emerging research has attempted to address this issue, there remains a significant gap in research examining factors associated with: child-care use, types of child-care arrangement, and satisfaction with available child-care options within First Nations communities. The lack of relevant information on child care has meant that policy and programming decisions that affect First Nations communities are too often based on research conducted within populations that do not represent the lived experiences of families living in these communities.

Employing data from the First Nations Early Childhood, Education and Employment Survey (FNREEES, or

REEES) a 2016 national-level First Nations on-reserve survey, this report uses a combination of descriptive statistics, and bivariate and multivariate regression models to explore the realities of child care in First Nations communities. The report looks at child-care use, types of child-care arrangement, and satisfaction with available child-care options within First Nations communities, with a focus on connections to language and culture. It also provides an exploratory assessment of the short- and long-term outcomes associated with attending early childhood programs specifically designed for First Nation children (such as the Aboriginal Head Start On Reserve Program). Due to the differing child-care needs of younger children (aged 0 to 4) and school-aged children aged 5 to 11, separate analyses were conducted for each age group.

Key Findings

Child Care Use

- ✦ In First Nations communities, 28.9% (nearly one-third) of First Nations children age 0 to 4, and 20.3% (1 in 5) of children age 5 to 11 are in regular child care.
- ✦ Lone-parent families, families with at least one parent/guardian who had some postsecondary education or higher, and families in which at least one parent/guardian was employed, were more likely to use child care.
- ✦ First Nations families living in rural areas were less likely to use child care than families living in urban areas, which suggests that families living in rural communities may experience challenges accessing reliable child care.
- ✦ Parents/guardians of 5- to 11-year-old children who placed greater importance on their child learning traditional teachings were more likely to use child care.

Type of Child-Care Arrangement

- ✦ More than two-thirds (67.1%) of 0- to 4-year-old First Nations children in regular child care were in formal care arrangements (e.g., day care centres or before- and after-school programs) compared to nearly one-third (32.9%) who were in informal care arrangements (e.g., cared for by a relative or in a private home care). Among school-aged children (5- to 11-year-olds), in regular child care, half were in formal care arrangements (50.3%) and half were in informal care arrangements (49.7%).
- ✦ For both age groups, parents/guardians who placed a greater importance on their child learning traditional teachings were more likely to use informal care arrangements. Given that the most common form of informal care arrangement used was care in their own home by a relative (First Nations Information Governance Centre [FNIGC], 2016), parents/guardians who place greater importance on learning traditional teachings may feel that their relatives are best suited to provide that learning.

- ✦ Lone parents and those with postsecondary education were less likely to use informal child care; while those who sometimes had people they could turn to for help were more likely to use informal child care than those who rarely/never had people they could turn to for help. Community size was also related to type of care, in so far as families in medium-sized communities were less likely to use informal care compared to those in large communities.
- ✦ Among older children (5- to 11-year-olds), children living in crowded households were more likely to be in informal care arrangements than those who lived in less crowded households.

Satisfaction with Child Care

- ✦ A large majority of (98%) of First Nations parents/guardians reported being “satisfied” or “very satisfied” with their main child-care arrangement (available responses were ‘very satisfied’, ‘satisfied’, ‘dissatisfied’, or ‘very dissatisfied’). More than half (56.8%) of parents/guardians of 0- to 4-year-old First Nations children, and nearly two-thirds (65.8%) of parents/guardians of 5- to 11-year-old First Nations children reported being very satisfied with their child-care arrangements.
- ✦ Characteristics of child care found to be most highly related to satisfaction were: the quality of the child care and the frequency of learning traditional teachings at child care.

Outcomes of First Nations Early Childhood Programs

- ✦ Among children aged 2- to 4-years-old, the short-term benefits of attending early childhood programs designed specifically for First Nations children (e.g., Aboriginal Head Start On Reserve Programs) included: greater knowledge of a First Nations language, greater ability to speak and understand the language, and greater mastery of developmental and communications milestones.
- ✦ Long-term benefits were less clear. Only one significant difference was found between 5- to 11-year-old children who had not attended an early childhood program designed for First Nations children and those who had: a significantly larger proportion of those who had not attended an early childhood program were unable to read in a First Nations language, compared to those who had. It is possible that the initial differences seen between those who had and those who had not attended these programs may dissipate once children begin attending school full-time.



Introduction



Research shows that the period from infancy to early childhood is foundational to an individual's lifelong learning journey (Battiste, 2005). During this relatively short period of time, a child's emotional, physical, intellectual and spiritual capacities are developed providing a basis for their future development.

Historically, First Nations children spent the first few years of their lives living with their extended family who assumed a shared responsibility for their upbringing (Royal Commission on Aboriginal Peoples [RCAP], 1996). In this environment, children received the language, values and knowledge needed to survive in life and on the land. While traditional child-rearing practices are still being used in many First Nations families, colonization and social change disrupted the practice in others.

Given the changing social environment, First Nations leaders, organizations, scholars, and parents have increasingly called for formalized services designed to meet children's learning and care needs, commonly referred to as Early Learning and Child Care¹ (ELCC) (Assembly of First Nations [AFN], 1989; 2005; 2012; Greenwood and Shawana, 2000; Native Council of Canada, 1990; Native Women's Association of Canada, 2005).

ELCC has been linked to a host of benefits for children, including greater school readiness, higher post-secondary attendance, increased earnings, and more pro-social behaviour (Barnett, 1995; Muennig et al, 2009; Reynolds et al, 2011). This is particularly important in light of recent research that shows 60% of First Nations children on-reserve are currently living in poverty (Macdonald and Wilson, 2016) and that living in poverty can negatively impact children's

brain development (Noble et al, 2015). Families are also believed to benefit, primarily because child care programs allow parents to participate in the labour force (National Council of Welfare, 1999; Shellenback, 2004).

Building on the findings within *The National Report of the First Nations Regional Early Childhood, Education, and Employment Survey* (FNIGC, 2016) this report was prepared using national-level data to explore the following research questions:

1. What factors are associated with child care use in First Nations communities?
2. What factors are associated with the type of child care arrangement used by families in First Nations communities?
3. What factors are associated with parental satisfaction with their child care in First Nations communities?
4. What are the short-term outcomes associated with attending an early childhood program designed for First Nations children?
5. What are the long-term outcomes associated with attending an early childhood program designed for First Nations children?



¹ Early Learning and Child Care (ELCC) refers to learning and care services provided for infants and young children. In the literature, the terms "early childhood education and care", "early childhood development services", and "early childhood care and development", among others, are also used. These terms are largely considered to be synonymous. The term early learning and child care (ELCC) is used in this paper as it is the most commonly used term in the Canadian context.

Background



CONCEPTUALIZING EARLY LEARNING AND CHILD CARE

Despite the historical and cultural diversity among First Nations communities and people, most share a common understanding of learning as being a holistic, lifelong process (Battiste, 2005).² Seen from this perspective, learning involves formal and informal opportunities and is fundamentally connected to land, language, spirit, and culture. As Battiste (2002, p. 14-15) states:

Learning is viewed as a life-long responsibility that people assume to understand the world around them and to animate their personal abilities. Knowledge teaches people how to be responsible for their own lives, develops their sense of relationship to others, and helps them model competent and respectful behaviour. Traditions, ceremonies, and daily observations are all integral parts of the learning process. They are spirit-connecting processes that enable the gifts, visions, and spirits to emerge in each person.

As this quotation illustrates, learning is a process of coming to know how to live in the world through participation and relationships, not only with other people and communities, but with all of nature (Cajete, 1994). All things, animate and inanimate, are respected and understood as having teachings to share. First-hand experience, including observing, listening, and acting within the natural environment, is highly valued as a mode of learning (Ireland, 2009). Individuals are said to have a “learning spirit”, which is conceptualized as “an entity that emerges from the complex interrelationships between the learner and his or her learning journey” (Canadian Council on Learning [CCL], 2007, p. 7). This spirit is continually shifting and changing, evolving as the learner comes to know their gifts and capacities. It is said that when this spirit is missing, learning can be difficult and unfulfilling (CCL, 2007).

As a holistic process, learning in a First Nations context is also intertwined with well-being, which is understood to mean the overall health of the person (body, mind, heart and spirit) within the total environment (Dumont, 2005). These linkages have been well-documented in the literature. For example, it has been shown that learning one’s traditional language and culture contributes to well-being by promoting a positive self-identity and by enabling greater access to traditional healing ceremonies (McIvor et al, 2016) and that cultural continuity (a measure of the intergenerational transmission of culture) acts as a protective factor against suicide for youth (Chandler and Lalonde, 1998). It has also been shown that First Nations youth who are proficient in a First Nations language have higher levels of “life balance” (FNIGC, 2016, p. 43).

With regard to formal education, individuals with higher levels of educational attainment tend to have greater job security, better access to healthy environments, more social supports, higher income, and are better able to understand and use health information, all of which contribute to greater well-being (Cummins et al, 1999; Reading and Wien, 2009; Richmond et al, 2007).

Previous research on First Nations learning, however, has focused narrowly on formal attainment and has too often been conducted from a deficit perspective. Existing studies have tended to use Eurocentric theories of education, focusing on comparisons between First Nations peoples and the general Canadian population (Das, 1971; Lipton, 1962). Studies such as these have neglected First Nations’ beliefs about education and learning, overlooked the strengths of First Nations peoples and knowledges, and ignored the varied sources and kinds of learning that are important to First Nations. Research studies focused on First Nations education also often failed to address the historical, political, and social contexts that impact the learning experiences of First Nations children.

² This brief introduction cannot do justice to the breadth and complexity of Indigenous theories of learning and education. See Battiste (2002), Cajete (1994), and Debassige (2012) for a more detailed overview.

Fortunately, a great deal of work has been done by First Nations and allied scholars and community members to reframe the conversation around First Nations education and learning (Battiste, 2002; Castellano, Davis, and Lahache, 2000; CCL, 2007, 2009; Debassige, 2012; Ireland, 2009; Stonechild, 2006). Notably, the Canadian Council on Learning's (CCL's) Aboriginal Knowledge Learning Centre, which was headed-up by Marie Battiste, shifted the focus away from learning deficits and refocused attention on the learning spirit (CCL, 2009).

The First Nations Holistic Lifelong Learning model, which was also developed by CCL, frames learning as engaging and developing all aspects of the individual and the community, something that occurs throughout life, fundamentally connected to lived experience, rooted in language and culture, spiritually oriented, draws from traditional and contemporary knowledge, and is a process in which family, Elders, and community all have roles and responsibilities (FNIGC, 2016).

FIRST NATIONS ELCC EXPERIENCES

While there is a large and established body of research that focuses on Early Learning and Child Care (ELCC) in the general Canadian population, there has been little research looking into the ELCC experiences of First Nations children and families living on-reserve.

The literature that does exist generally assumes that First Nations children experience the same benefits from ELCC as other children, including improved school-readiness and health-promoting behaviours (AFN, 2012; Ball, 2008; Preston et al, 2012; RCAP, 1996).

However, ELCC has also been theorized as having additional benefits in the First Nations context, such as:

- a means of reinforcing culture, language, and identity (AFN, 1989; RCAP, 1996; McIvor and Parker, 2016);
- a hub for community engagement and inter-sectoral service delivery (Ball, 2005; Ball, 2009);
- a “critical site for cultural rejuvenation, for the (re) building of community, and for the establishment of healthy Aboriginal communities in the future” (Greenwood, 2009, p. ii); and
- an integral part of self-government (Greenwood and De Leeuw, 2004).

Findlay and Kohen (2010) examined factors associated with child care use among First Nations children living off-reserve using data from the 2006 *Aboriginal Children's Survey* (Statistics Canada). Overall, it was found that more than half (52%) of First Nations children who lived off-reserve were attending some type of child-care arrangement; and that, of these, a daycare centre was the most common type of care arrangement (46%), followed by preschool or an Aboriginal Head Start On Reserve Program (17%) (Findlay and Kohen, 2010, p. 84-86).

Using logistic regression, the authors found that certain factors (i.e., living in a lone-parent household, living with a parent who was employed, living in a higher income household, and living with a parent with more than a high school education) were associated with these children being enrolled in child care. This same study also found that children who were in child care that incorporated traditional cultural activities and customs, were rated (by their parents) as having more pro-social behaviours when compared to children who were in child care that did not include these activities and customs. This finding was the same even when socio-demographic characteristics and child-care factors were controlled.

For families living in First Nations communities, a 2011 Assembly of First Nations (AFN) study suggested a link between community size and the availability of ELCC. In this study, it was found that the proportion of schools that offered preschool programming increased as the size of the community increased, ranging from a low of 51% in communities with less than 250 people to a high of 77% in communities with more than 3,000 people (AFN, 2011, p. 6). In addition to this, it was estimated that 78% of children aged 5 years (and younger) who lived in First Nations communities did not have access to licensed child care (AFN, 2011, p. 10).

However, not all early learning initiatives are created equal and some doubts have been raised as to whether modestly funded ELCC initiatives have the same substantial positive outcomes as the high-cost, high-quality programs on which much of the existing ELCC literature is based (Friesen and Krauth, 2012). It is perhaps, then, not surprising that much of the existing First Nations literature has focused on understanding and defining ‘quality’ in First Nations ELCC contexts and defining best practices (Ball, 2009; Best Start Resource Centre, 2010; Greenwood, 2009; Greenwood

and Shawana, 2000; Preston, 2008; Preston et al, 2012; Public Policy Forum, 2015; Stairs and Bernhard, 2002). A key theme running throughout this literature is that, for First Nations ELCC to be worthwhile and high-quality, it must be culturally based and community driven. The right of First Nations communities to control their own systems of education has long been asserted, and early learning is considered to be one piece of the larger education framework (AFN, 1989; AFN, 2010; National Indian Brotherhood, 1972; Native Council of Canada, 1990; Native Women's Association of Canada, 2005; RCAP, 1996).

The arguments for First Nations control of education have been remarkably consistent over the last 40 years and are echoed in the First Nations ELCC literature today. At the core, First Nations communities assert that education is critical to the transmission of cultural and linguistic identity. This is vital not only to the continuation of First Nations languages and cultures, but also to fostering pride and a positive sense of self in First Nations children.

Ball and Lewis (2014, p. 229) interviewed 65 First Nations Elders, grandparents and parents of young children, and found that 92% wanted programs to support children's early learning and 83% wanted programs to support school readiness. When asked how existing programs for young children could be improved, suggestions included "better information about programs; more spaces; better accessibility; more trained, caring, and committed teachers; more community commitment; more focus on family participation and learning; and more support for Indigenous language and cultural learning" (Ball and Lewis, 2014, p. 229).

A second theme in the literature on quality First Nations ELCC is the importance of caregiver and extended family involvement (Best Start Resource Centre, 2010; Greenwood, 2009; Greenwood and Shawana, 2000; Preston, 2008; Preston et al, 2012). Involving caregivers and extended family members (including Elders) in the ELCC environment can promote intergenerational linkages and help children to feel safe and nurtured in the early learning centre. This is reflective of traditional First Nations practices, in which all community members have a role and responsibility in the care and education of children (RCAP, 1996).

The importance of including caregivers in decision-making processes is also emphasized, which is seen both

as a way to help ensure that programming is meeting each child's needs and that the caregiver is being empowered.

Involving caregivers and community members in ELCC initiatives may also contribute to broader community engagement. In a study of three First Nations communities in British Columbia, Ball (2005, 2009) found that community-based child care services can act as a 'hook' to bring community members together and promote greater access to a wide range of wellness programs and supports. In these communities, the child care centre is designed as a 'hub' in a larger system of family and community-centred supports, including health services and cultural activities.

Parents and service providers stated that while parents are often hesitant to seek supports for themselves or other family members, they are willing and interested in accessing child care services. By co-locating the child care services with other community supports, parents become aware of and eventually more comfortable with accessing a wide range of programs and activities. In the communities studied, this mobilized community members in support of child development and promoted social cohesion.

Only a handful of evaluative studies have been conducted examining the effectiveness of ELCC programming in meeting stated objectives and promoting positive outcomes, and all have been focused on Aboriginal Head Start Programs (AHSPs) (Cruz and McCarthy, 2010; Health Canada, 2003, 2010; Mashford-Pringle, 2012; Public Health Agency of Canada, 2002; 2012). AHSPs are a federally funded initiative that provides primarily centre-based programming for pre-school age children. Separate funding mechanisms exist for on-reserve and off-reserve populations.

The off-reserve component, known as Aboriginal Head Start in Urban and Northern Communities (AHSUNC), was established in 1995, while Aboriginal Head Start On Reserve (AHSOR) began in 1998.

Both programs have been found to be highly regarded by children, parents, community members, and federal bureaucrats. Findings from evaluation studies suggest that the Head Start programs improve children's school-readiness, promote healthy behaviours, and increase cultural knowledge (Health Canada, 2003; Mashford-Pringle, 2012; Public Health Agency of

Canada, 2012). Anecdotal evidence suggests that families and communities also benefit, but this has not been consistently tracked (Ball & Moselle, 2013; Mashford-Pringle, 2012; Public Health Agency of Canada, 2012). It should be noted, however, that the methodological shortcomings of these studies (which include small sample sizes, cross-sectional designs, and inability to capture program variations) have limited the conclusions that can be drawn about program outcomes and have in many ways highlighted the challenges associated with determining appropriate and measurable evaluative criteria. Nonetheless, the findings have been encouraging. The 2008/2010 survey cycle of the First Nations Regional Health Survey (FNRHS or RHS), also known as RHS Phase 2, provided some information about the ELCC experiences of First Nations families living in First Nations communities (FNIGC, 2012). RHS Phase 2 data show that slightly more than one-quarter (28.8%) of First Nations children under age 12 living on-reserve were attending some form of non-parental child care (FNIGC, 2012, p. 345).

While many parents may choose to stay home with their child, RHS data showed that 1 in 5 First Nations adults (18- to 29-years-old) living in First Nations communities struggle to afford child care (20.8%) (FNIGC, 2012, p. 25).

First Nations children on-reserve who were in child care spent on average 21.1 hours per week in care. These figures were slightly higher when considering children under the age of six: 39.2% of children from birth to age five were in child care and spent an average of 23.8 hours per week in care (FNIGC, 2012, p. 345-346).

More than half (58.0%) of First Nations children who received child care were cared for in informal, home-based settings, primarily by a relative (53.8%). However, a sizeable proportion of children were cared for in formal settings (39.2%) (FNIGC, 2012, p. 346).

A little more than one-third (36.4%) of children age 0 to 11 had attended an AHSP at some point in their lives. While attending an AHSP did not have a statistically significant effect on whether a child had ever repeated a grade, children who had attended one were more likely to be able to speak or understand a First Nations language (55.8%) than those who had not attended (45.6%) (FNIGC, 2012, p. 354).

The RHS did not include information regarding specific attributes of the child care arrangements,

challenges finding and maintaining care arrangements, or satisfaction with their care arrangements (FNIGC, 2012).

Fortunately, data from the First Nations Regional Early Childhood, Education and Employment Survey (FNREEES) provides this much-needed information. The FNREEES National Report showed that nearly one-quarter (21.3%) of First Nations children age 0 to 11 years old living on-reserve received regular child care; for those attending regular child care the average hours per week in child care was 21.9.

The majority (84.3%) of parents of children who were not attending regular child care indicated that it was simply not needed, while smaller proportions stated that it was not available for their child's age (6.3%), and that no child care was accessible close to home (2.1%).

The overwhelming majority (90.5%) of parents and guardians of children attending regular child care on-reserve reported that this care was provided by First Nations caregivers, and almost all parents and guardians (98.1%) were satisfied with their care arrangements overall (FNIGC, 2016, p. 21-22).

The FNREEES also included information about learning a First Nations language, finding that nearly 90% of primary caregivers felt that it was "somewhat" or "very" important for their child to learn a First Nations language (FNIGC, 2016, p. 22). While family members were most commonly reported as people who assisted their child in learning and improving their First Nations language, early childhood educators and AHSP teachers were also found to provide this assistance. Similar results were found in relation to learning about the traditional teachings of their people (FNIGC, 2016).

GENERAL RESEARCH FINDINGS

In the ELCC literature regarding the general Canadian population, there is some indication of factors associated with ELCC use, type of care arrangement, satisfaction, and outcomes, though these are not specific to First Nations families. Results of Statistics Canada's 2011 General Social Survey show that the child's age is an important factor in child care use, with it being highest for children aged 2 to 4 years old (Sinha, 2014). Differences were also found by province, with Quebec having the highest child care utilization rate, followed by New Brunswick, while utilization rates were lowest in Manitoba.

Families in which both parents worked for pay, lone-parent families, and higher household income were also factors associated with higher child care use. Similar findings were documented in Byrne and O'Toole's (n.d.) study of child care arrangements in Ireland, in which high-income households, households in which the primary caregiver was employed full-time, lone-parent families, and households in which all parents worked for pay were more likely to use child care.

When it came to the type of child care arrangement, a child's age, province of residence, and family household income were found to be associated with the type of care used, according to the 2011 General Social Survey (Sinha, 2014). For example, parents in Quebec were much more likely than parents in other regions to have their child in a home daycare, while home daycare usage was comparatively low in the Atlantic provinces and in Ontario. In terms of age, very young children (under the age of 1) were more often placed in the care of family or other private arrangements. By the age of four, daycare centres were the leading type of care arrangement used. For families with household incomes below \$40,000, daycare centres were the most common type of care arrangement used. Home daycare was most prevalent among families with household incomes of \$40,000 to \$100,000, while daycare centres and private arrangements were most common among families with household incomes above \$100,000.

The General Social Survey asked parents specifically why they chose the type of care arrangement that they did. The most common reasons were the following:

- the location of the child care service (33%),
- a sense of trust in the care provider (18%),
- the affordability of care (11%), and
- the perception that it was the only option (11%).

Other research has found that the perceived quality of care arrangements is important to parents in making decisions about child care, as well as cost, location and hours of availability (Forry et al, 2013).

Satisfaction with care arrangements was also assessed in the General Social Survey. While overall it was found that most parents were satisfied with their child care arrangements, the results were not examined to determine whether satisfaction varied by different household characteristics or by type of care arrangements. Studies of child and family outcomes associated with ELCC programs have reached divergent conclusions.

For example, Baker et al (2008) found a negative association between cognitive and behavioural child outcomes and the introduction of universal child care policies in Quebec, while Datta Gupta and Simonsen (2010) found that, on average, children in non-parental care have similar outcomes to children cared for in their home. Meanwhile, Romano et al (2010) found that high-quality care arrangements are associated with greater pro-social behaviours among Canadian children, and there is a relatively large body of literature showing that disadvantaged children benefit from high quality child care (Blau and Currie, 2006; Knudsen et al, 2006). A common take-away that can be gleaned from these studies is that outcomes associated with child care are dependent on the quality of that care and the socio-demographic background of the family.

Despite the emerging research of First Nations children's ELCC experiences, there remains a significant gap in research that provides an in-depth examination of factors associated with child care use, type of care arrangement, and/or satisfaction among First Nations families living on reserve. The lack of information available to date has meant that ELCC policy and programming has commonly been based on research conducted with non-Indigenous populations. Two of the primary sources of data on ELCC experiences and preferences in Canada have been the National Child Care Survey (conducted in the late 1980s) and the National Longitudinal Survey of Children and Youth conducted through the 1990s to 2009. First Nations communities were excluded from the sampling frame of both of these surveys.

More recently the federal government, in reporting on indicators of child well-being committed to under the 2000 Federal-Provincial/Territorial Communiqué on Early Childhood Development, used the Aboriginal Children's Survey to provide information on the early learning and care experiences of Aboriginal children (Human Resources and Skills Development Canada [HRSDC], 2012). This survey also excluded First Nations families living on-reserve.

Academic early learning research and evaluation studies have also largely excluded Indigenous families. In a review of early childhood research, Niles, Byers, and Krueger (2007) found that Indigenous children were absent from even the largest and most well-known studies. This is especially problematic, because "many in the early childhood field remain committed to implementing early childhood programs with Indigenous communities

based on these formal research studies and programs, even with limited or no evidence that Indigenous children would experience similar results” (Niles et al, 2007, p. 113).

The Native Women’s Association of Canada (NWAC) and the Council of Ministers of Education, Canada (CMEC) have both drawn attention to this issue, noting that there is virtually no reliable data available on First Nations ELCC outcomes or experiences, or on how early childhood programs could best support First Nations families (NWAC, 2005; CMEC, 2012). Therefore, this present study addresses an important gap in the literature.

There is some guidance in the literature in terms of factors that should be examined in relation to child care use, type of care arrangement, satisfaction with

care arrangements, and outcomes associated with child care for First Nations children and families. Generally, the existing research shows that socio-demographic characteristics (such as the age of the child, household income, family structure, parental education, parental work status, and place of residence) are important factors.

Factors related to the care arrangements that are typically considered in relation to outcomes include the type of care, total hours in care, and the number of care arrangements. The literature also clearly demonstrates the importance of First Nations languages and cultures to children’s well-being and the necessity of understanding both child care environments and the outcomes associated with child care arrangements in relation to First Nations languages and cultures.



Method



SURVEY

The data source for this study was the First Nations Regional Early Childhood, Education and Employment Survey (FNREEES). Administered by the First Nations Information Governance Centre (FNIGC) and its 10 regional partners, the FNREEES is a cross-sectional survey measuring early childhood development, education and employment among First Nations children, youth and adults living in First Nations reserves and Northern communities across Canada.

FNREEES data collection occurred between November 2013 and May 2015. A total of 20,428 surveys were completed, representing 70% of the target sample. This report uses data from the child questionnaire, which was completed by primary caregivers. The FNREEES child questionnaire was completed for 7,158 children aged 0 to 11. For detailed information about the FNREEES questionnaire, sampling, data collection, and weighting please see the FNREEES national report, *Now is the Time: Our Data, Our Stories, Our Future, The National Report of the First Nations Regional Early Childhood, Education and Employment Survey* (FNIGC, 2016), which is available at FNIGC.ca.

VARIABLES

Family Factors

Family structure

Based on the question “What is your marital status?” the family structure variable was created by grouping widowed, separated, divorced, or single/never married into “lone-parent” and married or common-law into “married/common-law”.

Family socio-economic status

Three measures of family socioeconomic status were included: employment, education, and struggling to meet basic needs. The parents’/guardians’ employment status was grouped as “employed” or “not employed”. A case was categorized as “employed” if either parent/guardian was employed. This approach was taken rather than including the employment status of each parent/

guardian due to the large percentage of single parent families. Although the education level of each parent/guardian within a family was measured separately, only the highest was analyzed as the parents’/guardians’ highest level of education. This indicator was grouped as “less than high school graduate”, “high school graduate”, or “any postsecondary education”. For basic needs, respondents were asked, “In the past 12 months did you ever struggle to meet any of the following needs...”, with shelter and utilities specified. If a respondent indicated they had struggled to meet either need they were categorized as “yes”; those who had not struggled to meet either need were categorized as “no”.

Social support

Respondents were asked “How often do you have people you can turn to for help when you need it?” Responses were grouped as “Always”, “Sometimes”, and “Rarely/Never”.

Crowding

To determine household occupancy and crowding, respondents were asked how many adults and children lived in the house and the number of rooms in the house. Crowding was defined as more than one person per habitable room, excluding bathrooms, halls, closets and rooms used for business purposes (FNIGC, 2016).

Community Factors

Community remoteness

Community remoteness was categorized as “urban”, “rural”, and “remote/special access”. Community remoteness was based on the geographic zones (1–4) from Indian and Northern Affairs Canada’s Band Classification Manual (Indian and Northern Affairs Canada, 2000). Urban communities (Zone 1) are within 50 km of the nearest service centre with year-round road access; rural communities (Zone 2) are between 50 km and 350 km from the nearest service centre with year-round road access; remote communities (Zone 3) are more than 350 km from the nearest service centre with year round road access; and special access communities (Zone 4) are defined as having no year-round road access to a service centre.

Community size

Based on the community of residence, respondents were categorized as living in a small community (<300 people), medium community (300 to 1,500 people), or a large community (>1,500 people).

Language and Cultural Factors

Three variables related to language and culture were included in the analyses. Two measured the importance that the parent/guardian placed on their child learning their First Nations language and culture.

Respondents were asked, “How important is it to you that [child] speaks and understands a First Nations language?” and “How important is it to you that [child] learns about the traditional teachings of your peoples?” For both variables, the responses were grouped as “very important”, “somewhat important”, and “a little, or not important”.

The third factor measured whether a parent or guardian spoke a First Nations language as their mother tongue, and was categorized as “yes” or “no”.

Child Care Factors

The FNREEES includes a number of detailed questions about ELCC arrangements. Three of the variables are dependent variables in this study: child care use, main type of care arrangement, and satisfaction with child care arrangement. A number of additional child care variables were included in the analyses as independent variables.

Child care use

If a respondent indicated that their child was receiving regular child care or that their child spent his/her time after school in an after school program they were categorized as utilizing child care.

Main type of care arrangement

Type of care arrangement was categorized as “informal”, which included care by a relative or non-relative in an individual’s home, and “formal”, which included daycare centres and before and after school programs.

Satisfaction with main care arrangement

Given that 98.1% of all respondents indicated that they were satisfied overall with their main child care

arrangement (FNIGC, 2016), this analysis focuses on understanding factors associated with being “very satisfied”. Responses were grouped as “very satisfied”, and “satisfied, dissatisfied, or very dissatisfied”.

Number of care arrangements

Respondents were grouped as “one care arrangement” or “two or more care arrangements” depending on the number of types of care arrangements they reported using.

Language and culture

Two questions assessed the extent of a child’s exposure to First Nations language and culture at child care. Respondents were asked how often their child is exposed to a First Nations language at child care, and how often their child learns traditional teachings at child care. Exposure to a First Nations language at child care was categorized as “most or all of the time”, “some of the time”, and “not at all”, and frequency of learning traditional teachings at child care was categorized as “at least weekly” and “less than weekly”. Due to the relatively large number of respondents who answered “don’t know” to these questions, “don’t know” was also included as a category in each variable to preserve cases for the analyses.

Caregiver

Respondents were asked if their child interacts with a First Nations caregiver at their main child care arrangement, with responses coded as “yes”, “no”, and “don’t know”.

Location

The location of the main child care arrangement was categorized as being in a First Nations community or outside a First Nations community.

Licensed

Responses to “Is [child’s] main child care arrangement licensed?” were categorized as “yes”, “no”, and “don’t know”.

Subsidized

Responses to “Is your main child care arrangement subsidized?” were categorized as “yes”, “no”, and “don’t know”.

Child care quality

To assess child care quality, the survey asked respondents whether their main child care arrangement included the 13 different features listed below:

- ✦ Plenty of child-friendly conversation
- ✦ Provider has specialized training in early childhood education
- ✦ Neat, clean and orderly physical setting
- ✦ Sufficient indoor play area
- ✦ Sufficient outdoor play area
- ✦ Materials and equipment available that are developmentally appropriate for children of all age levels
- ✦ Planned activities that are developmentally appropriate for children of all age levels
- ✦ Constant adult supervision
- ✦ Is able to reach parent or caregiver in an emergency
- ✦ Follows sanitary procedures such as hand washing
- ✦ Healthy nutrition
- ✦ Provision for sick children
- ✦ Natural light (i.e., windows)

Each “yes” response was counted, and a variable created with three categories based on the number of “yes” responses: “all features” (13), “most features” (10 to 12), and “some features” (1 to 9). There were no respondents who indicated their child care arrangement had none of the features.

Program designed for First Nations children

All respondents were asked if their child had ever attended an early childhood program specifically designed for First Nations children. This was grouped as “yes” and “no”.

Short- and Long-Term Outcomes

Milestones

Early childhood milestones for 2- to 4-year-olds were assessed by asking respondents a series of yes/no questions about whether their child had ever performed various developmental and communications tasks. The number of “yes” responses was counted to create two variables, one measuring the number of developmental milestones reached (ranging from 0 to 6) and another measuring the number of communications milestones reached (ranging from 0 to 5). The six developmental milestones measured were the following:

- ✦ the child knowing his/her own age,
- ✦ the child knowing his/her own gender,
- ✦ dressing him/herself,
- ✦ being toilet trained,
- ✦ sorting items into groups, and
- ✦ finding something he/she needs with or without being told.

The five communications milestones measured were as follows:

- ✦ the ability to tell or retell a story in the child’s own words,
- ✦ counting to 10,
- ✦ counting three objects correctly,
- ✦ giving three of something when asked, and
- ✦ saying the names of four colours.

These milestones were used to assess outcomes for children aged 2 to 4 years only.

Knowledge of a First Nations language

Children’s knowledge of a First Nations language was assessed by first asking a yes/no question about whether the child had any knowledge, even if only a few words. Those who said yes were then asked follow-up questions about the child’s ability to speak, understand, read, and write in the First Nations language. Responses to each of these four questions were categorized as “cannot [speak/understand/read/write]”, “only a few words”, and “basic to fluent”. Respondents who said their child had no knowledge of a First Nations language in the first question were coded as “cannot” in each of the four follow-up questions. For children aged 2 to 4, only the ability to speak and understand a First Nations language was assessed. Children age 5 to 11 were also assessed on their ability to read and write a First Nations language.

Cultural activities

Frequency of participation in cultural activities was measured by a question asking “How often does [child] participate in or attend cultural activities (e.g., drumming, singing, storytelling, powwow, traditional dancing, hunting and gathering, beading, ceremonies, etc.)?” Of the five response options provided, “never” and “less than once a month” were grouped as “less often than one a month”; and “1-3 times per month”, “1-3 times per week”, and “4 or more times per week” were grouped as “at least once a month”.

School-related Outcomes

Respondents with children who were attending school were asked whether their child had ever repeated a grade, skipped a grade, or required additional help or tutoring. Responses to each question were grouped as “yes” and “no”. A subjective measure of the child’s overall school performance was available from the question “Overall, how well did [child] do in his/her last year of school?” Response categories were “above average”, “average”, and “below average”. These factors were assessed only as long-term outcomes for children aged 5 to 11, as well as 4-year-olds who were attending school.

STATISTICAL ANALYSIS

IBM SPSS version 20 (or higher) was used for all analyses. Estimates were weighted and confidence intervals were calculated using the SPSS Complex Samples Module. The module goes beyond the simple-random sampling assumptions of standard statistical analyses, producing estimates based on the relevant details of the sample’s design. The weights and specifications of the FNREEES’s complex stratified sample were programmed into the module to produce appropriate design-based variance estimates.

For statistical reliability, the estimates with a coefficient of variation (CV) between 16.6% and 33.3%, reflected moderate to high sampling variability and were supplemented with an ‘E’ to advise cautious interpretation. The estimates with a coefficient of

variation (CV) greater than 33.3%, reflecting extreme sampling variability, or cell counts less than 5, for both confidential and statistical reliability, were suppressed (denoted by an ‘F’ within tables).

Due to differing child care needs and arrangements based on the age of a child, particularly related to whether a child is attending school, all analyses were conducted separately for children age 0 to 4 and 5 to 11. Given that some 4-year-olds are attending school full time, 4-year-olds who were attending school were grouped with the 5- to 11-year-olds.

To answer research questions one, two, and three, descriptive statistics were calculated for all study variables as a first step. Next, bivariate logistic regression was used to determine whether each of the variables predicted the outcome variable of interest. As a last step, multiple logistic regression analysis was used. Missing cases were excluded list-wise: each set of analyses addressing each of the research questions includes only complete cases for the variables used to address that specific research question. Therefore, the descriptive, bivariate, and multiple logistic regression analyses for a specific research question use the same denominator.

The analyses to answer research questions four and five followed the same steps as noted above, but due to their exploratory nature multiple logistic regression analyses were not run at this time.



Results



This section presents the results of the analyses, moving from descriptive statistics to bivariate statistics, and finally to multivariate results for each of the research questions as applicable.

Child Care Use

Age 0 to 4

The majority of First Nations children aged 4 or younger lived with parents/guardians who were married/common-law (59.5%, 95% CI [55.2, 63.6]), had at least one parent/guardian who was employed (61.8%, 95% CI [57.7, 65.8]), lived in a rural community (50.4%, 95% CI [42.9, 57.9]), lived in a large community (54.6%, 95% CI [48.6, 60.5]), and lived in a household that was not crowded (58.0%, 95% CI [51.9, 63.8]). The highest level of education completed by parents/guardians varied; for 40.6% of First Nations children, the highest level of education obtained by a parent/guardian was less than a high school diploma (95% CI [34.0, 47.6]), 27.1% had a parent/guardian with a

high school diploma (95% CI [22.7, 32.1]), and 32.3% had at least one parent/guardian with postsecondary education or higher (95% CI [26.2, 38.9]). Two-thirds of children lived with a parent/guardian who did not report struggling to meet basic needs in the last 12 months (66.4%, 95% CI [59.4, 72.7]), and close to half lived with a parent/guardian who stated they always had people they could turn to for help when they need it (47.3%, 95% CI [42.4, 52.2]). The children's parents/guardians tended to report that having their child learn traditional teachings was very important (58.4%, 95% CI [53.1, 63.6]), as was their child's ability to speak/understand a First Nations language (60.3%, [54.1, 66.2]). Two-fifths of the children had at least one parent/guardian whose mother tongue was a First Nations language (41.7%, 95% CI [35.1, 48.6]).

More than one-quarter of 0- to 4-year-olds were in regular child care (28.9%, 95% CI [25.6, 32.5]). See *Table 1*.

Table 1. Descriptive Results for 0- to 4-year-old First Nations children

VARIABLE	%	95% CI
FAMILY STRUCTURE		
Lone parent	40.5	[36.4, 44.8]
Married/Common-law	59.5	[55.2, 63.6]
PARENT/GUARDIAN EDUCATION		
Some postsecondary or higher	32.3	[26.2, 38.9]
High school graduate	27.1	[22.7, 32.1]
<High school graduate	40.6	[34.0, 47.6]
PARENT/GUARDIAN EMPLOYMENT		
Not employed	38.2	[34.2, 42.3]
Employed	61.8	[57.7, 65.8]
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS		
Yes	33.6	[27.3, 40.6]
No	66.4	[59.4, 72.7]
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP		
Always	47.3	[42.4, 52.2]
Sometimes	38.8	[32.5, 45.4]
Rarely/Never	14.0	[10.4, 18.6]

VARIABLE	%	95% CI
HOUSEHOLD CROWDING		
Crowded	42.0	[36.2, 48.1]
Not crowded	58.0	[51.9, 63.8]
COMMUNITY REMOTENESS		
Remote or special access	20.8	[16.2, 26.4]
Rural	50.4	[42.9, 57.9]
Urban	28.7	[22.3, 36.2]
COMMUNITY SIZE		
Small <300	4.5	[3.6, 5.5]
Medium 300 to 1,500	40.9	[35.3, 46.7]
Large >1,500	54.6	[48.6, 60.5]
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS		
Very important	58.4	[53.1, 63.6]
Somewhat important	27.6	[23.2, 32.5]
A little or not important	14.0	[11.1, 17.4]
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE		
Very important	60.3	[54.1, 66.2]
Somewhat important	26.9	[22.5, 31.9]
A little or not important	12.7	[10.0, 16.0]
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE		
Yes	41.7	[35.1, 48.6]
No	58.3	[51.4, 64.9]
REGULAR CHILD CARE		
Yes	28.9	[25.6, 32.5]
No	71.1	[67.5, 74.4]

Table 2 presents the bivariate relationships between regular child care use and each of the independent variables for children aged 4 or younger. Of the family factors, struggling to meet basic needs was the only variable not significantly related to child care use. Lone parents were more likely to use child care, as were families in which at least one parent/guardian was employed. Families in which at least one parent/guardian had some postsecondary education were also more likely to use child care compared to those in which the highest level of education was less than a high school diploma. Crowded households were less likely to have their child in child care, and those in which the primary parent/guardian sometimes had people to turn to for help used child care less than those who reported always having people to turn to and rarely/never having people to turn to.

Both community factors were found to be significantly related to child care use, as child care use was lower in remote/special access and rural communities than in urban communities, and higher in small and medium sized communities than in large communities.

Finally, families in which the parent/guardian reported it was “very important” for their child to learn traditional teachings were more likely to use child care than those who said it was “a little or not important”. The importance the parent/guardian placed on their child speaking a First Nations language and whether the parent(s)/guardian(s) spoke a First Nations language as their mother tongue were not related to child care utilization.

Table 2. Bivariate Relationships between Child Care Use and Family, Community, and Language and Cultural Factors for 0- to 4-year-old First Nations children

	In Child Care		Not in Child Care		Bivariate Odds Ratio For Being in Child Care	
VARIABLE	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	33.3	[27.5, 39.6]	66.7	[60.4, 72.5]	1.42	[1.02, 1.98]
Married/Common-law	26.0	[22.3, 30.0]	74.0	[70.0, 77.7]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	43.3	[35.2, 51.7]	56.7	[48.3, 64.8]	3.13	[1.93, 5.06]
High school graduate	25.7	[20.1, 32.3]	74.3	[67.7, 79.9]	1.42	[0.90, 2.22]
<High school graduate	19.6	[15.2, 25.0]	80.4	[75.0, 84.8]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	16.7	[12.0, 22.6]	83.3	[77.4, 88.0]	0.35	[0.23, 0.53]
Employed	36.5	[32.3, 40.8]	63.5	[59.2, 67.7]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	27.3	[22.8, 32.3]	72.7	[67.7, 77.2]	0.89	[0.63, 1.26]
No	29.7	[25.0, 34.9]	70.3	[65.1, 75.0]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Always	34.6	[29.2, 40.3]	65.4	[59.7, 70.8]	1.02	[0.65, 1.58]
Sometimes	20.1	[15.6, 25.6]	79.9	[74.4, 84.4]	0.49	[0.28, 0.83]
Rarely/Never	34.2	[25.7, 43.9]	65.8	[56.1, 74.3]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	21.4	[17.4, 26.0]	78.6	[74.0, 82.6]	0.52	[0.37, 0.74]
Not crowded	34.4	[29.2, 40.0]	65.6	[60.0, 70.8]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	24.5	[18.1, 32.3]	75.5	[67.7, 81.9]	0.47	[0.29, 0.75]
Rural	23.9	[19.1, 29.4]	76.1	[70.6, 80.9]	0.45	[0.29, 0.70]
Urban	41.0	[34.5, 47.8]	59.0	[52.2, 65.5]	1 (referent)	-
COMMUNITY SIZE						
Small <300	42.4	[31.2, 54.4]	57.6	[45.6, 68.8]	2.44	[1.39, 4.27]
Medium 300 to 1,500	35.2	[29.6, 41.1]	64.8	[58.9, 70.4]	1.80	[1.23, 2.63]
Large >1,500	23.2	[18.5, 28.6]	76.8	[71.4, 81.5]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	33.9	[29.5, 38.6]	66.1	[61.4, 70.5]	2.29	[1.40, 3.76]
Somewhat important	23.8	[17.9, 30.9]	76.2	[69.1, 82.1]	1.40	[0.83, 2.36]
A little or not important	18.3 ^E	[12.6, 25.7]	81.7	[74.3, 87.4]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	32.1	[26.9, 37.8]	67.9	[62.2, 73.1]	1.70	[0.77, 3.78]
Somewhat important	25.1	[19.5, 31.7]	74.9	[68.3, 80.5]	1.21	[0.57, 2.57]
A little or not important	21.7 ^E	[11.7, 36.8]	78.3	[63.2, 88.3]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	23.8	[18.2, 30.5]	76.2	[69.5, 81.8]	0.65	[0.41, 1.01]
No	32.6	[27.7, 37.9]	67.4	[62.1, 72.3]	1 (referent)	-

Note: ^E High sampling variability, interpret with caution.**Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Logistic regression results for 0- to 4-year-old First Nations children are shown in Table 3. After controlling for other variables in the model, and consistent with the bivariate results, lone parents/guardians, families with at least one parent/guardian with some postsecondary education, and families in which at least one parent/guardian was employed were significantly more likely to use child care.

Families living in rural areas were less likely to use child care than those in urban communities, and families in

medium-sized communities were more likely to use child care than those in large communities.

Household crowding, social support, and the importance placed on the child learning traditional teachings were associated with child care use in the bivariate analysis, but were no longer associated with child care use once entered into the full model.

Table 3. Logistic Regression Predicting Child Care Use for 0- to 4-year-old First Nations Children

VARIABLE	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	-0.79	0.40	0.46	
FAMILY STRUCTURE				
Lone parent	0.54	0.17	1.72	[1.22, 2.42]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	0.68	0.22	1.97	[1.27, 3.05]
High school graduate	0.00	0.22	1.00	[0.64, 1.56]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	-0.98	0.20	0.38	[0.25, 0.56]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	-0.21	0.18	0.81	[0.57, 1.15]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Always	-0.17	0.25	0.84	[0.52, 1.37]
Sometimes	-0.54	0.28	0.58	[0.34, 1.01]
Rarely/Never			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	-0.16	0.20	0.85	[0.57, 1.25]
Not crowded			1 (referent)	
COMMUNITY REMOTENESS				
Remote or special access	-0.55	0.29	0.58	[0.32, 1.04]
Rural	-0.86	0.21	0.42	[0.28, 0.64]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	0.46	0.25	1.58	[0.96, 2.60]
Medium 300 to 1,500	0.46	0.18	1.59	[1.11, 2.27]
Large >1,500			1 (referent)	

VARIABLE	B	SE	Odds Ratio	
			OR	95% CI
Very important	0.45	0.29	1.56	[0.89, 2.76]
Somewhat important	0.06	0.31	1.07	[0.57, 1.99]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	0.32	0.38	1.37	[0.65, 2.89]
Somewhat important	0.11	0.37	1.12	[0.54, 2.32]
A little or not important			1 (referent)	
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	-0.21	0.20	0.81	[0.55, 1.21]
No			1 (referent)	

Nagelkerke $R^2 = .209$

Correctly classified cases=73.8%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Age 5 to 11

Similar to children aged 4 or younger, the majority of First Nations children aged 5 to 11 years old lived with parents/guardians who were married/common-law (58.8%, 95% CI [55.3, 62.2]), had at least one parent/guardian who was employed (67.8%, 95% CI [64.9, 70.6]), and lived in a household that was not crowded (56.0%, 95% CI [52.8, 59.2]) (see Table 4). Roughly half lived in a rural community (49.1%, 95% CI [43.7, 54.6]), and approximately half lived in a large community (49.9%, 95% CI [45.2, 54.5]).

The highest level of education completed by a parent/guardian was varied, with 35.1% having less than a high school diploma (95% CI [31.6, 38.8]), 28.3% being high school graduates (95% CI [25.2, 31.5]), and

36.6% having some postsecondary or higher (95% CI [33.5, 39.9]). Two-thirds of parents/guardians of 5- to 11-year-olds had not struggled to meet basic needs in the last 12 months (67.1%, 95% CI [64.1, 70.0]), and about half stated that they always had people they could turn to for help when they need it (50.2%, 95% CI [47.1, 53.3]).

Having their child learn traditional teachings was very important to over half of the parents/guardians (59.7%, 95% CI [56.7, 62.6]), as was their child's ability to speak/understand a First Nations language (61.8%, [59.2, 64.4]). About two-fifths of the children had at least one parent/guardian whose mother tongue was a First Nations language (39.3%, 95% CI [36.0, 42.8]).

Only 20.3% of children aged 5 to 11 years old were in regular child care (95% CI [17.7, 23.3]).



Table 4. Descriptive Results for 5- to 11-year-old First Nations children

VARIABLE	%	95% CI
FAMILY STRUCTURE		
Lone parent	41.2	[37.8, 44.7]
Married/Common-law	58.8	[55.3, 62.2]
PARENT/GUARDIAN EDUCATION		
Some postsecondary or higher	36.6	[33.5, 39.9]
High school graduate	28.3	[25.2, 31.5]
<High school graduate	35.1	[31.6, 38.8]
PARENT/GUARDIAN EMPLOYMENT		
Not employed	32.2	[29.4, 35.1]
Employed	67.8	[64.9, 70.6]
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS		
Yes	32.9	[30.0, 35.9]
No	67.1	[64.1, 70.0]
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP		
Always	50.2	[47.1, 53.3]
Sometimes	33.1	[30.1, 36.2]
Rarely/Never	16.7	[13.9, 20.0]
HOUSEHOLD CROWDING		
Crowded	44.0	[40.8, 47.2]
Not crowded	56.0	[52.8, 59.2]
COMMUNITY REMOTENESS		
Remote or special access	22.2	[17.8, 27.2]
Rural	49.1	[43.7, 54.6]
Urban	28.7	[23.8, 34.2]
COMMUNITY SIZE		
Small <300	5.8	[4.8, 7.1]
Medium 300 to 1,500	44.3	[39.8, 48.9]
Large >1,500	49.9	[45.2, 54.5]
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS		
Very important	59.7	[56.7, 62.6]
Somewhat important	25.8	[23.3, 28.5]
A little or not important	14.5	[12.5, 16.6]
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE		
Very important	61.8	[59.2, 64.4]
Somewhat important	26.5	[24.2, 29.0]
A little or not important	11.7	[9.9, 13.7]
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE		
Yes	39.3	[36.0, 42.8]
No	60.7	[57.2, 64.0]
REGULAR CHILD CARE		
Yes	20.3	[17.7, 23.3]
No	79.7	[76.7, 82.3]

Bivariate relationships between regular child care use and each of the independent variables for 5- to 11-year-old children are shown in Table 5. While family structure, struggling to meet basic needs, social support, and household crowding were not related to child care use for 5- to 11-year-olds, families in which at least one parent/guardian had some postsecondary education were more likely to use child care than those in which the highest level of education was high school graduate or less than high school graduate. Employment was also significantly related to use, with families in which at least one parent/guardian was employed being more likely to use child care.

Of the two community factors, community size was not significantly related to child care use but community

remoteness was found to be related. Families in rural communities used child care less than those in urban communities.

Finally, families in which the parent/guardian reported it was “very important” or “somewhat important” for their child to learn traditional teachings were more likely to use child care than those who said it was “a little or not important”. Similarly, families in which the parent/guardian reported that it was “very important” that their child learn to speak a First Nations language were more likely to use child care than those who said it was “a little or not important”. Whether the parent(s)/guardian(s) spoke a First Nations language as their mother tongue was not related to child care use.

Table 5. Bivariate Relationships between Child Care Use and Family, Community, and Language and Cultural Factors for 5- to 11-year-old First Nations children

	In Child Care		Not in Child Care		Bivariate Odds Ratio For Being in Child Care	
Variable	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	20.6	[18.0, 23.6]	79.4	[76.4, 82.0]	1.03	[0.75, 1.42]
Married/Common-law	20.1	[16.1, 24.8]	79.9	[75.2, 83.9]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	28.9	[24.1, 34.3]	71.1	[65.7, 75.9]	2.29	[1.64, 3.19]
High school graduate	15.7	[12.9, 19.0]	84.3	[81.0, 87.1]	1.05	[0.70, 1.58]
<High school graduate	15.1	[11.5, 19.5]	84.9	[80.5, 88.5]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	11.1	[7.9, 15.2]	88.9	[84.8, 92.1]	0.38	[0.27, 0.53]
Employed	24.8	[21.7, 28.1]	75.2	[71.9, 78.3]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	20.5	[15.1, 27.1]	79.5	[72.9, 84.9]	1.01	[0.68, 1.49]
No	20.3	[17.8, 23.1]	79.7	[76.9, 82.2]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Always	20.0	[17.6, 22.6]	80.0	[77.4, 82.4]	0.64	[0.32, 1.27]
Sometimes	16.9	[13.9, 20.4]	83.1	[79.6, 86.1]	0.52	[0.24, 1.11]
Rarely/Never	28.1 ^E	[16.6, 43.4]	71.9	[56.6, 83.4]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	16.9 ^E	[11.8, 23.4]	83.1	[76.6, 88.2]	0.68	[0.43, 1.05]
Not crowded	23.1	[20.6, 25.8]	76.9	[74.2, 79.4]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	21.6 ^E	[13.0, 33.7]	78.4	[66.3, 87.0]	0.76	[0.40, 1.45]
Rural	16.2	[14.0, 18.6]	83.8	[81.4, 86.0]	0.53	[0.40, 0.71]

Variable	In Child Care		Not in Child Care		Bivariate Odds Ratio For Being in Child Care	
	%	95% CI	%	95% CI	OR	95% CI
Urban	26.5	[22.7, 30.7]	73.5	[69.3, 77.3]	1 (referent)	-
COMMUNITY SIZE						
Small <300	20.8 ^E	[14.3, 29.2]	79.2	[70.8, 85.7]	1.17	[0.66, 2.09]
Medium 300 to 1,500	22.6	[20.1, 25.2]	77.4	[74.8, 79.9]	1.30	[0.88, 1.92]
Large >1,500	18.3	[13.6, 24.3]	81.7	[75.7, 86.4]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	22.8	[19.6, 26.4]	77.2	[73.6, 80.4]	3.26	[2.13, 4.97]
Somewhat important	21.4	[17.0, 26.6]	78.6	[73.4, 83.0]	3.00	[1.87, 4.82]
A little or not important	8.3 ^E	[5.9, 11.7]	91.7	[88.3, 94.1]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	21.7	[18.5, 25.2]	78.3	[74.8, 81.5]	1.66	[1.12, 2.46]
Somewhat important	20.0	[15.7, 25.0]	80.0	[75.0, 84.3]	1.50	[0.95, 2.36]
A little or not important	14.3	[10.7, 18.8]	85.7	[81.2, 89.3]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	17.7 ^E	[12.0, 25.2]	82.3	[74.8, 88.0]	0.76	[0.46, 1.24]
No	22.1	[19.7, 24.7]	77.9	[75.3, 80.3]	1 (referent)	-

Note: ^E High sampling variability, interpret with caution.

Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

As shown in Table 6, after controlling for other variables in the model, families in which at least one parent/guardian had postsecondary education were more likely to use child care for their 5- to 11-year-old child than those who had not completed high school, and families with at least one parent/guardian who was employed were more likely to use child-care than those who were not employed. Living in a rural community was associated with lower child-care utilization compared to living in an urban community, and those who placed greater importance on their child learning traditional teachings were more likely to use child care. These findings were all consistent with the bivariate analysis, with one exception: the relationship between child care use and the importance of child speaking a First Nations

language was no longer significant once controlling for other variables.

Two of the variables that were not found to be predictors of child care use in the bivariate analysis became significant after other variables were controlled: family structure and social support. In the full model, lone parents/guardians were more likely to use child care than those who were married/common-law, and families with high levels of social support, signified by “always” having people to turn to for help when needed, were less likely to use child care compared to those who rarely/never had people to turn to for help.



Table 6. Logistic Regression Predicting Child Care Use for 5- to 11-year-old First Nations Children

Variable	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	-1.39	0.34	0.25	
FAMILY STRUCTURE				
Lone parent	0.30	0.13	1.35	[1.04, 1.77]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	0.50	0.18	1.64	[1.16, 2.33]
High school graduate	-0.13	0.20	0.88	[0.59, 1.30]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	-0.81	0.17	0.45	[0.32, 0.62]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	-0.07	0.16	0.93	[0.68, 1.29]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Always	-0.63	0.29	0.53	[0.30, 0.94]
Sometimes	-0.66	0.36	0.52	[0.25, 1.05]
Rarely/Never			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	-0.23	0.17	0.79	[0.57, 1.10]
Not crowded			1 (referent)	
COMMUNITY REMOTENESS				
Remote or special access	-0.03	0.31	0.97	[0.53, 1.78]
Rural	-0.46	0.15	0.63	[0.47, 0.84]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	-0.27	0.23	0.77	[0.48, 1.21]
Medium 300 to 1,500	0.11	0.18	1.12	[0.78, 1.60]
Large >1,500			1 (referent)	
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS				
Very important	1.07	0.29	2.92	[1.66, 5.13]
Somewhat important	1.09	0.25	2.97	[1.82, 4.85]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	-0.13	0.30	0.88	[0.48, 1.59]
Somewhat important	-0.11	0.25	0.90	[0.55, 1.46]
A little or not important			1 (referent)	
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	-0.26	0.17	0.77	[0.56, 1.07]
No			1 (referent)	

Nagelkerke R^2 = .120

Correctly classified cases=79.2%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Type of Child Care Arrangement

Age 0 to 4

Table 7 provides descriptive statistics for the approximately 28.9% (95% CI [25.6, 32.5]) of First Nations children aged 4 or younger who attend regular child care. The majority of these children had at least one parent who was employed (80.1%, 95% CI [75.2, 84.2]), and lived with parents/guardians who were married/common-law (54.7%, 95% CI [49.3, 60.0]) and had not recently struggled to meet basic needs (67.3%, 95% CI [61.6, 72.5]). Approximately half had at least one parent/guardian who had postsecondary education (50.0%, 95% CI [44.4, 55.6]), and just over half always had people they could turn to for help (56.7%, 95% CI [50.3, 62.8]).

The majority lived in households that were not crowded (67.9%, 95% CI [62.2, 73.1]). In relation to community remoteness, 42.5% lived in rural communities (95% CI [36.8, 48.5]), 39.4% in urban communities (95% CI [33.5, 45.6]), and 18.1% in remote or special access

communities (95% CI [13.8, 23.4]). Large (41.9%, 95% CI [35.6, 48.5]) and medium (51.3%, 95% CI [45.2, 57.4]) sized communities were most common, with few living in small communities (6.8%, 95% CI [5.4, 8.4]).

While only one-third had a parent/guardian whose mother tongue was a First Nations language (33.1%, 95% CI [27.4, 39.3]), most parents/guardians felt it was very (65.4%, 95% CI [59.8, 70.6]) or somewhat (24.6%, 95% CI [20.4, 29.4]) important that their child learned to speak a First Nations language. Learning traditional teachings was also important to parents/guardians (very important = 67.0%, 95% CI [61.6, 72.0]; somewhat important = 23.8%, 95% CI [19.4, 28.8]). Approximately two-thirds were in formal care arrangements (67.1%, 95% CI [60.0, 73.5]), compared to one-third in informal care arrangements (32.9%, 95% CI [26.5, 40.0]). For 0- to 4-year-olds, “formal care arrangements” primarily refers to daycare centres, while most children in informal care were being cared for in their own home by a relative or, less commonly, in someone else’s home by a relative. Fewer than 10% of those in informal care arrangements were cared for by a non-relative.



Table 7. Descriptive Results for 0- to 4-year-old First Nations Children in Child Care

Variable	%	95% CI
FAMILY STRUCTURE		
Lone parent	45.3	[40.0, 50.7]
Married/Common-law	54.7	[49.3, 60.0]
PARENT/GUARDIAN EDUCATION		
Some postsecondary or higher	50.0	[44.4, 55.6]
High school graduate	23.2	[18.3, 28.8]
<High school graduate	26.8	[21.3, 33.2]
PARENT/GUARDIAN EMPLOYMENT		
Not employed	19.9	[15.8, 24.8]
Employed	80.1	[75.2, 84.2]
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS		
Yes	32.7	[27.5, 38.4]
No	67.3	[61.6, 72.5]
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP		
Always	56.7	[50.3, 62.8]
Sometimes	26.0	[20.2, 32.9]
Rarely/Never	17.3	[14.1, 21.0]
HOUSEHOLD CROWDING		
Crowded	32.1	[26.9, 37.8]
Not crowded	67.9	[62.2, 73.1]
COMMUNITY REMOTENESS		
Remote or special access	18.1	[13.8, 23.4]
Rural	42.5	[36.8, 48.5]
Urban	39.4	[33.5, 45.6]
COMMUNITY SIZE		
Small <300	6.8	[5.4, 8.4]
Medium 300 to 1,500	51.3	[45.2, 57.4]
Large >1,500	41.9	[35.6, 48.5]
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS		
Very important	67.0	[61.6, 72.0]
Somewhat important	23.8	[19.4, 28.8]
A little or not important	9.3	[7.3, 11.7]
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE		
Very important	65.4	[59.8, 70.6]
Somewhat important	24.6	[20.4, 29.4]
A little or not important	10.0	[7.2, 13.7]
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE		
Yes	33.1	[27.4, 39.3]
No	66.9	[60.7, 72.6]
TYPE OF CARE ARRANGEMENT		
Informal	32.9	[26.5, 40.0]
Formal	67.1	[60.0, 73.5]

Table 8. Bivariate Relationships between Type of Care Arrangement and Family, Community, and Language and Cultural Factors for 0- to 4-year-old First Nations Children

	Informal Care		Formal Child Care		Bivariate Odds Ratio For Informal Care Utilization	
Variable	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	27.1	[19.8, 36.0]	72.9	[64.0, 80.2]	0.62	[0.36, 1.06]
Married/Common-law	37.7	[28.8, 47.4]	62.3	[52.6, 71.2]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	24.8	[19.9, 30.4]	75.2	[69.6, 80.1]	0.42	[0.20, 0.90]
High school graduate	37.9	[26.6, 50.5]	62.1	[49.5, 73.4]	0.78	[0.33, 1.87]
<High school graduate	43.7 ^E	[27.5, 61.4]	56.3	[38.6, 72.5]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	34.5 ^E	[22.7, 48.5]	65.5	[51.5, 77.3]	1.09	[0.58, 2.06]
Employed	32.5	[25.6, 40.2]	67.5	[59.8, 74.4]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	34.5 ^E	[23.6, 47.2]	65.5	[52.8, 76.4]	1.11	[0.62, 1.99]
No	32.1	[25.3, 39.9]	67.9	[60.1, 74.7]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Always	26.3	[21.4, 31.9]	73.7	[68.1, 78.6]	0.81	[0.38, 1.73]
Sometimes	48.9	[34.1, 63.9]	51.1	[36.1, 65.9]	2.18	[0.85, 5.54]
Rarely/Never	30.5 ^E	[17.9, 46.9]	69.5	[53.1, 82.1]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	40.5 ^E	[26.8, 55.8]	59.5	[44.2, 73.2]	1.64	[0.85, 3.17]
Not crowded	29.3	[23.7, 35.6]	70.7	[64.4, 76.3]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	48.7 ^E	[28.5, 69.4]	51.3 ^E	[30.6, 71.5]	1.86	[0.69, 5.01]
Rural	25.3	[19.9, 31.6]	74.7	[68.4, 80.1]	0.66	[0.37, 1.19]
Urban	33.8	[24.1, 45.1]	66.2	[54.9, 75.9]	1 (referent)	-
COMMUNITY SIZE						
Small <300	35.9 ^E	[23.8, 50.1]	64.1	[49.9, 76.2]	0.76	[0.35, 1.67]
Medium 300 to 1,500	24.7	[19.8, 30.4]	75.3	[69.6, 80.2]	0.44	[0.25, 0.80]
Large >1,500	42.5	[30.3, 55.7]	57.5	[44.3, 69.7]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	41.3	[33.0, 50.0]	58.7	[50.0, 67.0]	2.78	[1.45, 5.34]
Somewhat important	14.3	[10.4, 19.4]	85.7	[80.6, 89.6]	0.66	[0.37, 1.21]
A little or not important	20.2 ^E	[12.7, 30.4]	79.8	[69.6, 87.3]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	39.4	[31.3, 48.0]	60.6	[52.0, 68.7]	2.17	[1.07, 4.39]
Somewhat important	19.7 ^E	[12.4, 29.8]	80.3	[70.2, 87.6]	0.82	[0.37, 1.80]
A little or not important	23.0 ^E	[14.2, 35.2]	77.0	[64.8, 85.8]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	41.6 ^E	[27.5, 57.3]	58.4	[42.7, 72.5]	1.78	[0.90, 3.52]
No	28.6	[23.4, 34.4]	71.4	[65.6, 76.6]	1 (referent)	-

Note: ^E High sampling variability, interpret with caution.

Bold numbers indicate statistically significant odds ratios (p≤.05).

As shown in Table 8, very few of the variables examined for children aged 4 or younger were found to be significantly related to the type of child care used (formal or informal child care) in the bivariate analysis. Only parent/guardian education, community size, importance of learning traditional teachings, and importance of learning how to speak a First Nations language were significant. Families in which a parent/guardian had postsecondary education were less likely to use informal child care arrangements than those in which the parent(s)/guardian(s) had not graduated from high school. Living in a medium sized community was also associated with a lower likelihood of utilizing informal child care compared to living in a large community. Parents/guardians who said it was “very important” for their child to learn First Nations traditional teachings were more likely to use informal child care than those who said it was “a little or not important”, as were those who felt it was “very important” for their child to learn to speak a First Nations language.

When all independent variables were entered into the regression model (see Table 9), the bivariate findings related to parent/guardian education, community size, and the importance of learning traditional teachings were maintained. That is, families in which a parent/guardian had postsecondary education were less likely

to use informal child care arrangements than those in which neither parent/guardian had graduated from high school; those who lived in a medium sized community had a reduced likelihood of utilizing informal child care than those living in a large community; and parents/guardians who said it was “very important” for their child to learn First Nations traditional teachings were more likely to use informal child care than those who said it was “a little or not important”.

Family structure became significant once other variables were controlled, with lone parents/guardians being less likely to use informal care arrangements than those who were married/common-law. Social support also became significant, with those who “sometimes” had people they could turn to for help being more likely to use informal child care than those who “rarely/never” had people they could turn to for help. Finally, counter to the bivariate findings, there was no significant relationship between type of child care arrangement and having a parent/guardian who felt that it was “very important” that their child learn to speak a First Nations language. Further, it was found that having a parent/guardian who felt it was “somewhat important” that their child learn to speak a First Nations language was associated with a lower odds of utilizing informal child care than having a parent/guardian who felt it was “a little or not important”.



Table 9. Logistic Regression Predicting Informal Care Arrangement for 0- to 4-year-old First Nations Children

Variable	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	-0.62	0.62	0.54	
FAMILY STRUCTURE				
Lone parent	-0.57	0.23	0.56	[0.35, 0.90]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	-0.84	0.31	0.43	[0.23, 0.80]
High school graduate	-0.12	0.33	0.89	[0.46, 1.72]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	-0.15	0.30	0.86	[0.47, 1.57]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	-0.01	0.26	0.99	[0.59, 1.65]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Always	0.31	0.37	1.36	[0.65, 2.84]
Sometimes	1.17	0.40	3.21	[1.46, 7.05]
Rarely/Never			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	0.19	0.23	1.21	[0.76, 1.91]
Not crowded			1 (referent)	
COMMUNITY REMOTENESS				
Remote or special access	0.27	0.30	1.32	[0.72, 2.40]
Rural	-0.30	0.29	0.74	[0.42, 1.31]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	-0.18	0.30	0.83	[0.46, 1.51]
Medium 300 to 1,500	-0.72	0.26	0.49	[0.29, 0.81]
Large >1,500			1 (referent)	
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS				
Very important	1.36	0.36	3.90	[1.91, 7.97]
Somewhat important	0.13	0.33	1.14	[0.59, 2.21]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	-0.39	0.35	0.68	[0.34, 1.36]
Somewhat important	-1.02	0.34	0.36	[0.18, 0.71]
A little or not important			1 (referent)	
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	-0.09	0.28	0.92	[0.53, 1.60]
No			1 (referent)	

Nagelkerke R^2 =.250

Correctly classified cases=76.0%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Age 5 to 11

First Nations children aged 5- to 11-years-old in regular child care are described in Table 10. Overall, their characteristics were quite similar to the 0- to 4-year-old age group.

The majority had at least one parent who was employed (82.7%, 95% CI [77.7, 86.8]), and lived with parents/guardians who were married/common-law (57.7%, 95% CI [48.7, 66.2]) and who had not recently struggled to meet basic needs (67.2%, 95% CI [59.4, 74.1]). Approximately half had at least one parent/guardian with postsecondary education (53.3%, 95% CI [46.2, 60.3]), and who always had people they could turn to for help (49.5%, 95% CI [42.2, 56.8]). The majority lived in households that were not crowded (63.9%, 95% CI [53.5, 73.2]).

For community remoteness, 38.6% lived in rural communities (95% CI [31.9, 45.8]), 37.2% lived in urban communities (95% CI [30.1, 44.9]), and 24.2%^E lived in remote or special access communities (95% CI [15.3, 36.0]). Large (46.0%, 95% CI [35.3, 57.1]) and medium

(48.1, 95% CI [38.0, 58.4]) sized communities were most common. Few lived in small communities (5.9%, 95% CI [4.4, 7.9]). About one-third had a parent/guardian who spoke a First Nations language as their mother tongue (34.1%, 95% CI [24.5, 45.3]). Most parents/guardians felt that it was “very” (66.6%, 95% CI [61.8, 71.0]) or “somewhat” (25.4%, 95% CI [21.0, 30.4]) important that their child learned to speak a First Nations language. Learning traditional teachings was also important to parents/guardians (very important = 66.0%, 95% CI [60.9, 70.7]; somewhat important = 28.0%, 95% CI [23.6, 32.9]).

Approximately half were in formal care arrangements (50.3%, 95% CI [44.5, 56.1]) and half in informal care arrangements (49.7%, 95% CI [43.9, 55.5]). For 5- to 11-year-olds, “formal care arrangement” primarily refers to a before and/or after school program, while most children in informal care arrangements were being cared for in their own home by a relative or, less commonly, in someone else’s home by a relative. Fewer than 10% of those in informal care arrangements were being cared for by a non-relative.

Table 10. Descriptive Results for 5- to 11-year-old First Nations Children in Child Care

Variable	%	95% CI
FAMILY STRUCTURE		
Lone parent	42.3	[33.8, 51.3]
Married/Common-law	57.7	[48.7, 66.2]
PARENT/GUARDIAN EDUCATION		
Some postsecondary or higher	53.3	[46.2, 60.3]
High school graduate	22.1	[18.1, 26.6]
<High school graduate	24.6	[19.0, 31.3]
PARENT/GUARDIAN EMPLOYMENT		
Not employed	17.3	[13.2, 22.3]
Employed	82.7	[77.7, 86.8]
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS		
Yes	32.8	[25.9, 40.6]
No	67.2	[59.4, 74.1]
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP		
Always	49.5	[42.2, 56.8]
Sometimes	27.0	[20.8, 34.2]
Rarely/Never	23.5 ^E	[13.8, 37.2]
HOUSEHOLD CROWDING		
Crowded	36.1	[26.8, 46.5]
Not crowded	63.9	[53.5, 73.2]

Variable	%	95% CI
COMMUNITY REMOTENESS		
Remote or special access	24.2 ^E	[15.3, 36.0]
Rural	38.6	[31.9, 45.8]
Urban	37.2	[30.1, 44.9]
COMMUNITY SIZE		
Small <300	5.9	[4.4, 7.9]
Medium 300 to 1,500	48.1	[38.0, 58.4]
Large >1,500	46.0	[35.3, 57.1]
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS		
Very important	66.0	[60.9, 70.7]
Somewhat important	28.0	[23.6, 32.9]
A little or not important	6.0	[4.3, 8.3]
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE		
Very important	66.6	[61.8, 71.0]
Somewhat important	25.4	[21.0, 30.4]
A little or not important	8.0	[6.3, 10.1]
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE		
Yes	34.1	[24.5, 45.3]
No	65.9	[54.7, 75.5]
TYPE OF CARE ARRANGEMENT		
Informal	49.7	[43.9, 55.5]
Formal	50.3	[44.5, 56.1]

Note: ^E High sampling variability, interpret with caution.

Table 11 provides bivariate results for type of care arrangement for 5- to-11-year-old First Nations children. Three variables were found to be significantly related to type of care arrangement for this age group. Children who lived in crowded households were more likely to be in informal care arrangements than those who did not. Living in a remote or special access community or in a rural community was associated with a greater likelihood of being in an informal care arrangement compared to living in an urban community. Children who had a parent/guardian who felt it was “very important” that they learn traditional

teachings were more likely to be in informal care arrangements.

In the logistic regression model with all independent variables included (see *Table 12*), household crowding and the importance placed on the child learning traditional teachings continued to be significantly positively related to being in an informal care arrangement. Community remoteness was no longer significant once other variables were controlled.

Table 11. Bivariate Relationships between Type of Care Arrangement and Family, Community, and Language and Cultural Factors for 5- to 11-year-old First Nations Children

Variable	Informal Care		Formal Care		Bivariate Odds Ratio For Informal Care Utilization	
	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	50.1	[43.1, 57.1]	49.9	[42.9, 56.9]	1.02	[0.69, 1.51]
Married/Common-law	49.5	[41.6, 57.3]	50.5	[42.7, 58.4]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	43.7	[37.1, 50.4]	56.3	[49.6, 62.9]	0.55	[0.28, 1.09]
High school graduate	54.7	[45.8, 63.3]	45.3	[36.7, 54.2]	0.86	[0.41, 1.82]
<High school graduate	58.3	[41.9, 73.1]	41.7 ^E	[26.9, 58.1]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	51.2 ^E	[29.9, 72.0]	48.8 ^E	[28.0, 70.1]	1.07	[0.43, 2.68]
Employed	49.4	[44.4, 54.4]	50.6	[45.6, 55.6]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	50.8	[39.7, 61.7]	49.2	[38.3, 60.3]	1.06	[0.62, 1.84]
No	49.2	[42.2, 56.2]	50.8	[43.8, 57.8]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Always	49.9	[44.4, 55.4]	50.1	[44.6, 55.6]	0.85	[0.39, 1.82]
Sometimes	45.5	[36.8, 54.5]	54.5	[45.5, 63.2]	0.71	[0.31, 1.64]
Never	54.1 ^E	[36.1, 71.1]	45.9 ^E	[28.9, 63.9]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	64.5	[54.8, 73.1]	35.5	[26.9, 45.2]	2.57	[1.68, 3.94]
Not crowded	41.4	[36.6, 46.3]	58.6	[53.7, 63.4]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	59.0	[42.8, 73.5]	41.0 ^E	[26.5, 57.2]	2.09	[1.03, 4.26]
Rural	52.5	[45.6, 59.3]	47.5	[40.7, 54.4]	1.60	[1.11, 2.32]
Urban	40.8	[34.3, 47.6]	59.2	[52.4, 65.7]	1 (referent)	-
COMMUNITY SIZE						
Small <300	44.0	[36.0, 52.3]	56.0	[47.7, 64.0]	0.79	[0.45, 1.38]
Medium 300 to 1,500	50.2	[44.1, 56.2]	49.8	[43.8, 55.9]	1.01	[0.64, 1.59]
Large >1,500	50.0	[39.9, 60.1]	50.0	[39.9, 60.1]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	50.7	[44.9, 56.4]	49.3	[43.6, 55.1]	2.10	[1.12, 3.93]
Somewhat important	51.0	[36.5, 65.4]	49.0	[34.6, 63.5]	2.12	[0.98, 4.58]
A little or not important	32.9 ^E	[21.4, 46.9]	67.1	[53.1, 78.6]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	51.3	[45.5, 57.1]	48.7	[42.9, 54.5]	1.17	[0.74, 1.86]
Somewhat important	46.2 ^E	[31.2, 62.0]	53.8	[38.0, 68.8]	0.96	[0.44, 2.07]
A little or not important	47.3	[37.8, 57.1]	52.7	[42.9, 62.2]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	51.9	[41.0, 62.6]	48.1	[37.4, 59.0]	1.14	[0.71, 1.83]
No	48.6	[42.8, 54.3]	51.4	[45.7, 57.2]	1 (referent)	-

Note: ^E High sampling variability, interpret with caution.**Bold** numbers indicate statistically significant odds ratios (p≤.05).

Table 12. Logistic Regression Predicting Informal Care Arrangement for 5- to 11-year-old First Nations Children

Variable	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	-1.16	0.54	0.31	
FAMILY STRUCTURE				
Lone parent	0.19	0.17	1.21	[0.87, 1.68]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	-0.50	0.28	0.61	[0.35, 1.07]
High school graduate	0.03	0.30	1.04	[0.57, 1.87]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	-0.28	0.33	0.75	[0.39, 1.45]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	-0.11	0.32	0.89	[0.47, 1.69]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Always	0.28	0.32	1.32	[0.70, 2.49]
Sometimes	-0.22	0.33	0.80	[0.42, 1.53]
Rarely/Never			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	0.99	0.19	2.68	[1.84, 3.92]
Not crowded			1 (referent)	
COMMUNITY REMOTENESS				
Remote or special access	0.45	0.32	1.57	[0.84, 2.96]
Rural	0.38	0.20	1.47	[0.99, 2.18]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	-0.01	0.27	0.99	[0.58, 1.68]
Medium 300 to 1,500	-0.05	0.20	0.96	[0.64, 1.43]
Large >1,500			1 (referent)	
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS				
Very important	0.88	0.43	2.40	[1.03, 5.63]
Somewhat important	1.13	0.36	3.11	[1.51, 6.39]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	-0.07	0.36	0.93	[0.46, 1.90]
Somewhat important	-0.46	0.38	0.63	[0.30, 1.33]
A little or not important			1 (referent)	
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	0.01	0.21	1.01	[0.66, 1.54]
No			1 (referent)	

Nagelkerke R^2 = .120

Correctly classified cases = 62.6%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Satisfaction with Child Care Arrangements

Age 0 to 4

Table 13 shows information about the characteristics of child care arrangements for First Nations children 4 years old and younger who are in regular child care. These variables, in combination with the family, community, language, and cultural factors shown in Table 7, were used to examine the factors associated with child care satisfaction in First Nations communities.

Formal child care arrangements were most common for the 0- to 4-year-old demographic (69.3%, 95% CI [62.3, 75.5]), as was having only one care arrangement (87.6%, 95% CI [83.3, 90.9]).

Approximately half of 0- to 4-year-olds were exposed to a First Nations language at their child care arrangement some of the time (51.9%, 95% [46.1, 57.6]), and an additional 21.9% were exposed most or all of the time (95% CI [16.3, 28.7]). While a relatively large proportion of respondents did not know if their child learned traditional teachings at

child care (18.7%, 95% CI [14.0, 24.4]), 45.4% reported that their child learned traditional teachings at least weekly (95% CI [39.4, 51.6]).

Most child-care arrangements were located in a First Nations community (88.7%, 95% CI [86.1, 90.8]), and most children interacted with a First Nations caregiver (78.8%, 95% CI [73.0, 83.7]). The child care was subsidized for about half of the children (48.5%, 95% CI [42.9, 54.1]).

With respect to child care quality, 45.1% of parents/guardians reported that their child care arrangement had all 13 of the quality features (95% CI [39.5, 50.8]), 28.1% said their child care arrangement had most of the quality features (95% CI [23.3, 33.5]), and 26.8% (95% CI [20.6, 34.0]) had some. As previously noted, nearly all parents/guardians reported being satisfied with their child care arrangement, so these analyses focused on factors associated with being *very* satisfied. Just over half of parents/guardians reported that they were very satisfied (56.8%, 95% CI [51.2, 62.2]).

Table 13. Characteristics of Child Care Arrangements for 0- to 4-year-old First Nations Children

Variable	%	95% CI
TYPE OF CARE ARRANGEMENT		
Informal	30.7	[24.5, 37.7]
Formal	69.3	[62.3, 75.5]
NUMBER OF CARE ARRANGEMENTS		
Two or more	12.4	[9.1, 16.7]
One	87.6	[83.3, 90.9]
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE		
Don't know	10.6	[7.8, 14.2]
Most or all of the time	21.9	[16.3, 28.7]
Some of the time	51.9	[46.1, 57.6]
None of the time	15.7	[13.0, 18.8]
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS		
Don't know	18.7	[14.0, 24.4]
At least weekly	45.4	[39.4, 51.6]
Less than weekly	35.9	[31.1, 41.0]
INTERACT WITH FIRST NATIONS CAREGIVER		
Don't know	10.3 ^E	[6.0, 17.1]
Yes	78.8	[73.0, 83.7]
No	10.9	[9.0, 13.1]
LOCATED IN FIRST NATIONS COMMUNITY		
Yes	88.7	[86.1, 90.8]
No	11.3	[9.2, 13.9]

Variable	%	95% CI
LICENSED		
Don't know	4.3 ^E	[2.6, 7.0]
Yes	70.9	[65.1, 76.1]
No	24.8	[18.9, 31.9]
SUBSIDIZED		
Don't know	10.2 ^E	[6.9, 14.7]
Yes	48.5	[42.9, 54.1]
No	41.3	[34.9, 48.0]
QUALITY		
All quality features	45.1	[39.5, 50.8]
Most quality features	28.1	[23.3, 33.5]
Some quality features	26.8	[20.6, 34.0]
VERY SATISFIED WITH CARE ARRANGEMENT		
Yes	56.8	[51.2, 62.2]
No	43.2	[37.8, 48.8]

Note: ^E High sampling variability, interpret with caution.

Based on the bivariate results (see *Table 14*), a number of variables were found to be associated with child care satisfaction. Lone parents were less likely than married/common-law parents to be very satisfied, as were high school graduates when compared to those with less than high school, and parents/guardians who struggled to meet basic needs compared to those who did not. Community size was related to satisfaction in so far as families in medium sized communities were less likely to be very satisfied than those living in large communities.

Many of the characteristics of the child care arrangements were also significantly related to satisfaction. Parents/guardians whose main child care arrangement was an

informal care arrangement were significantly more likely to be very satisfied than those using formal care arrangements. Children exposed to First Nations language at their child care arrangement some of the time had parents/guardians who were less likely to be very satisfied compared to those who were never exposed to First Nations language at child care. Child care arrangements located in a First Nations community and whether the child interacted with a First Nations caregiver were both associated with lower levels of being very satisfied. Similarly, parents/guardians of children in licensed care arrangements were less likely to be very satisfied than those in unlicensed arrangements.

Table 14. Bivariate Relationships between Satisfaction with Child Care and Family, Community, Language, Cultural, and Child Care Factors for 0- to 4-year-old First Nations Children

	Very Satisfied				Bivariate Odds Ratio For Being Very Satisfied	
	Yes		No			
Variable	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	48.3	[40.0, 56.7]	51.7	[43.3, 60.0]	0.53	[0.34, 0.83]
Married/Common-law	63.7	[56.6, 70.2]	36.3	[29.8, 43.4]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	55.1	[47.5, 62.5]	44.9	[37.5, 52.5]	0.61	[0.34, 1.08]
High school graduate	49.9	[40.1, 59.8]	50.1	[40.2, 59.9]	0.49	[0.25, 0.99]
<High school graduate	66.8	[55.1, 76.8]	33.2 ^E	[23.2, 44.9]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	63.0	[49.3, 74.9]	37.0 ^E	[25.1, 50.7]	1.38	[0.73, 2.61]
Employed	55.3	[48.9, 61.5]	44.7	[38.5, 51.1]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	43.7	[34.9, 52.8]	56.3	[47.2, 65.1]	0.45	[0.28, 0.73]
No	63.0	[56.0, 69.6]	37.0	[30.4, 44.0]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Always	55.0	[48.7, 61.1]	45.0	[38.9, 51.3]	1.20	[0.80, 1.79]
Sometimes	64.6	[51.7, 75.7]	35.4 ^E	[24.3, 48.3]	1.79	[0.95, 3.35]
Never	50.5	[41.2, 59.7]	49.5	[40.3, 58.8]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	57.7	[46.6, 68.1]	42.3	[31.9, 53.4]	1.06	[0.63, 1.79]
Not crowded	56.4	[49.8, 62.7]	43.6	[37.3, 50.2]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	59.7	[46.5, 71.6]	40.3	[28.4, 53.5]	1.03	[0.55, 1.93]
Rural	53.5	[44.8, 62.1]	46.5	[37.9, 55.2]	0.80	[0.51, 1.27]
Urban	58.9	[51.1, 66.4]	41.1	[33.6, 48.9]	1 (referent)	-
COMMUNITY SIZE						
Small <300	58.8 ^E	[34.5, 79.5]	41.2 ^E	[20.5, 65.5]	0.67	[0.23, 1.98]
Medium 300 to 1,500	47.7	[41.7, 53.7]	52.3	[46.3, 58.3]	0.43	[0.26, 0.71]
Large >1,500	68.0	[58.3, 76.4]	32.0	[23.6, 41.7]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	59.4	[52.9, 65.7]	40.6	[34.3, 47.1]	1.20	[0.73, 1.99]
Somewhat important	50.3	[39.7, 60.9]	49.7	[39.1, 60.3]	0.83	[0.44, 1.58]
A little or not important	54.9	[43.4, 65.9]	45.1	[34.1, 56.6]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	58.3	[51.9, 64.4]	41.7	[35.6, 48.1]	1.60	[0.78, 3.26]
Somewhat important	57.0	[47.2, 66.3]	43.0	[33.7, 52.8]	1.52	[0.68, 3.36]
A little or not important	46.6 ^E	[30.5, 63.5]	53.4	[36.5, 69.5]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	63.7	[53.4, 72.8]	36.3	[27.2, 46.6]	1.53	[0.93, 2.51]
No	53.4	[47.1, 59.6]	46.6	[40.4, 52.9]	1 (referent)	-

	Very Satisfied				Bivariate Odds Ratio For Being Very Satisfied	
	Yes		No			
Variable	%	95% CI	%	95% CI	OR	95% CI
TYPE OF CARE ARRANGEMENT						
Informal	70.7	[59.4, 79.9]	29.3 ^E	[20.1, 40.6]	2.35	[1.28, 4.31]
Formal	50.6	[44.2, 57.1]	49.4	[42.9, 55.8]	1 (referent)	-
NUMBER OF CARE ARRANGEMENTS						
Two or more	63.9	[51.0, 75.1]	36.1 ^E	[24.9, 49.0]	1.40	[0.80, 2.45]
One	55.8	[49.9, 61.5]	44.2	[38.5, 50.1]	1 (referent)	-
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE						
Don't know	50.1 ^E	[28.5, 71.6]	49.9 ^E	[28.4, 71.5]	0.40	[0.14, 1.11]
Most or all of the time	69.4	[54.0, 81.4]	30.6 ^E	[18.6, 46.0]	0.90	[0.42, 1.95]
Some of the time	48.4	[42.1, 54.7]	51.6	[45.3, 57.9]	0.37	[0.23, 0.61]
None of the time	71.5	[62.0, 79.5]	28.5	[20.5, 38.0]	1 (referent)	-
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS						
Don't know	44.9	[32.8, 57.7]	55.1	[42.3, 67.2]	0.69	[0.36, 1.33]
At least weekly	63.7	[55.4, 71.3]	36.3	[28.7, 44.6]	1.49	[0.93, 2.36]
Less than weekly	54.2	[45.6, 62.4]	45.8	[37.6, 54.4]	1 (referent)	-
INTERACT WITH FIRST NATIONS CAREGIVER						
Don't know	F	F	F	F	F	F
Yes	52.6	[46.5, 58.7]	47.4	[41.3, 53.5]	0.43	[0.26, 0.72]
No	72.1	[61.3, 80.8]	27.9 ^E	[19.2, 38.7]	1 (referent)	-
LOCATED IN FIRST NATIONS COMMUNITY						
Yes	53.3	[47.2, 59.3]	46.7	[40.7, 52.8]	0.22	[0.12, 0.38]
No	84.0	[75.7, 89.9]	16.0 ^E	[10.1, 24.3]	1 (referent)	-
LICENSED						
Don't know	48.7 ^E	[27.8, 70.0]	51.3 ^E	[30.0, 72.2]	0.39	[0.11, 1.36]
Yes	52.3	[45.7, 58.9]	47.7	[41.1, 54.3]	0.45	[0.24, 0.86]
No	70.8	[58.3, 80.8]	29.2 ^E	[19.2, 41.7]	1 (referent)	-
SUBSIDIZED						
Don't know	69.2	[52.3, 82.2]	30.8 ^E	[17.8, 47.7]	1.65	[0.69, 3.94]
Yes	53.4	[46.1, 60.6]	46.6	[39.4, 53.9]	0.84	[0.52, 1.36]
No	57.7	[47.8, 67.0]	42.3	[33.0, 52.2]	1 (referent)	-
QUALITY						
All quality features	59.8	[52.0, 67.1]	40.2	[32.9, 48.0]	1.64	[0.81, 3.32]
Most quality features	60.8	[52.5, 68.5]	39.2	[31.5, 47.5]	1.72	[0.83, 3.57]
Some quality features	47.5	[32.9, 62.5]	52.5	[37.5, 67.1]	1 (referent)	-

Note: ^E High sampling variability, interpret with caution.

Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

The logistic regression results with all variables included in the model (see *Table 15*) provides a much different picture of satisfaction compared to the bivariate findings, particularly in relation to the characteristics of the child care arrangement. After controlling for other variables in the model, parents/guardians of children who learned traditional teachings at child care on at least a weekly basis were more likely to be very satisfied than those who learned traditional teachings less often. The quality of the child care arrangement was also a significant predictor of being very satisfied, with those whose child care arrangement had all or most of the quality features having greater odds of being very satisfied than those whose child care arrangement had fewer of the features.

The likelihood of being very satisfied continued to be lower for those whose child care arrangement was located

in a First Nations community and for those whose child care was licensed. Exposure to a First Nations language at child care was also negatively associated with satisfaction, with a lower likelihood of being very satisfied for those whose child was exposed to a First Nations language “most or all of the time” or “some of the time” compared to those who were not exposed to a First Nations language at child care.

Being a lone parent, having higher levels of education, struggling to meet basic needs, and living in a medium-sized community (compared to a large community), continued to be associated with a lower likelihood of being very satisfied. However, the type of care arrangement and whether the child interacted with a FN caregiver were no longer significant.

Table 15. Logistic Regression Predicting Being Very Satisfied with Child Care Arrangement for 0-to 4-year-old First Nations Children

Variable	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	2.83	0.74	16.98	
FAMILY STRUCTURE				
Lone parent	-0.82	0.23	0.44	[0.28, 0.69]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	-0.80	0.30	0.45	[0.25, 0.81]
High school graduate	-0.99	0.32	0.37	[0.20, 0.70]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	0.51	0.32	1.67	[0.89, 3.15]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	-0.88	0.23	0.42	[0.26, 0.66]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Always	0.30	0.28	1.34	[0.77, 2.36]
Sometimes	0.41	0.31	1.50	[0.81, 2.79]
Rarely/Never			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	-0.19	0.28	0.82	[0.47, 1.43]
Not crowded			1 (referent)	

Variable	B	SE	Odds Ratio	
			OR	95% CI
COMMUNITY REMOTENESS				
Remote or special access	-0.47	0.32	0.63	[0.34, 1.18]
Rural	-0.22	0.29	0.80	[0.45, 1.44]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	-0.34	0.41	0.71	[0.32, 1.61]
Medium 300 to 1,500	-0.77	0.32	0.46	[0.24, 0.88]
Large >1,500			1 (referent)	
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS				
Very important	0.54	0.46	1.72	[0.69, 4.25]
Somewhat important	0.27	0.40	1.31	[0.59, 2.92]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	-0.08	0.43	0.92	[0.40, 2.14]
Somewhat important	0.16	0.39	1.18	[0.55, 2.53]
A little or not important			1 (referent)	
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	0.49	0.30	1.63	[0.90, 2.95]
No			1 (referent)	
TYPE OF CARE ARRANGEMENT				
Informal	0.58	0.41	1.78	[0.79, 3.98]
Formal			1 (referent)	
NUMBER OF CARE ARRANGEMENTS				
Two or more	0.28	0.30	1.33	[0.73, 2.43]
One			1 (referent)	
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE				
Don't know	-1.10	0.62	0.33	[0.10, 1.14]
Most or all of the time	-1.00	0.49	0.37	[0.14, 0.98]
Some of the time	-1.69	0.43	0.18	[0.08, 0.43]
None of the time			1 (referent)	
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS				
Don't know	-0.13	0.36	0.87	[0.43, 1.78]
At least weekly	1.02	0.26	2.78	[1.65, 4.67]
Less than weekly			1 (referent)	
INTERACT WITH FIRST NATIONS CAREGIVER				
Don't know	1.06	0.60	2.89	[0.88, 9.52]
Yes	0.63	0.34	1.88	[0.96, 3.69]
No			1 (referent)	
LOCATED IN FIRST NATIONS COMMUNITY				
Yes	-2.14	0.35	0.12	[0.06, 0.24]
No			1 (referent)	

Variable	B	SE	Odds Ratio	
			OR	95% CI
LICENSED				
Don't know	-1.32	0.67	0.27	[0.07, 1.01]
Yes	-1.20	0.44	0.30	[0.13, 0.72]
No			1 (referent)	
SUBSIDIZED				
Don't know	1.18	0.43	3.27	[1.38, 7.73]
Yes	-0.06	0.26	0.94	[0.56, 1.57]
No			1 (referent)	
QUALITY				
All quality features	1.88	0.34	6.54	[3.33, 12.82]
Most quality features	1.66	0.32	5.27	[2.79, 9.97]
Some quality features			1 (referent)	

Nagelkerke $R^2 = .405$

Correctly classified cases = 77.8%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

Age 5 to 11

As shown in Table 16, just over half of First Nations children aged 5 to 11 years old who were in regular child care were in formal care arrangements (53.7%, 95% CI [48.2, 59.1]) and most families used only one child care arrangement (84.3%, 95% CI [79.7, 88.1]).

Half of the children learned traditional teachings at child care at least weekly (50.4%, 95% CI [42.7, 58.1]), and were exposed to a First Nations language some of the time (49.8%, 95% CI [42.2, 57.3]) at child care. An additional 21.1%^E were exposed to a First Nations language most or all of the time at child care (95% CI [13.0, 32.3]).

Most of these children interacted with a First Nations caregiver (82.7%, 95% CI [77.5, 87.0]), and most care

arrangements were located within a First Nations community (91.8%, 95% CI [89.3, 93.7]). About half of the child care arrangements were licensed (55.4%, 95% CI [48.9, 61.6]), and one-third were subsidized (34.2%, 95% CI [28.4, 40.5]).

In relation to child care quality, there was a relatively even distribution between the three categories: 29.6% had all 13 quality features (95% CI [23.5, 36.5]), 33.6% had most (95% CI [28.5, 39.1]), and 36.8% had some (95% CI [30.2, 43.9]).

Approximately two-thirds of parents/guardians were very satisfied with their child care arrangement (65.8%, 95% CI [59.0, 72.0]).



Table 16. Characteristics of Child Care Arrangements for 5- to 11-year-old First Nations Children

Variable	%	95% CI
TYPE OF CARE ARRANGEMENT		
Informal	46.3	[40.9, 51.8]
Formal	53.7	[48.2, 59.1]
NUMBER OF CARE ARRANGEMENTS		
Two or more	15.7	[11.9, 20.3]
One	84.3	[79.7, 88.1]
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE		
Don't know	7.5 ^E	[5.3, 10.5]
Most or all of the time	21.1 ^E	[13.0, 32.3]
Some of the time	49.8	[42.2, 57.3]
None of the time	21.7	[17.0, 27.2]
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS		
Don't know	12.6	[9.9, 15.8]
At least weekly	50.4	[42.7, 58.1]
Less than weekly	37.0	[31.0, 43.4]
INTERACT WITH FIRST NATIONS CAREGIVER		
Don't know	5.6 ^E	[3.5, 8.8]
Yes	82.7	[77.5, 87.0]
No	11.7	[8.7, 15.5]
LOCATED IN FIRST NATIONS COMMUNITY		
Yes	91.8	[89.3, 93.7]
No	8.2	[6.3, 10.7]
LICENSED		
Don't know	8.4	[6.0, 11.6]
Yes	55.4	[48.9, 61.6]
No	36.3	[31.2, 41.6]
SUBSIDIZED		
Don't know	21.3	[16.6, 26.9]
Yes	34.2	[28.4, 40.5]
No	44.5	[38.1, 51.1]
QUALITY		
All quality features	29.6	[23.5, 36.5]
Most quality features	33.6	[28.5, 39.1]
Some quality features	36.8	[30.2, 43.9]
VERY SATISFIED WITH CARE ARRANGEMENT		
Yes	65.8	[59.0, 72.0]
No	34.2	[28.0, 41.0]

Note: ^E High sampling variability, interpret with caution.

Table 17 presents the bivariate results for child care satisfaction for First Nations children between the ages of 5 and 11. Similar to the 0 to 4 age group, lone parents were less likely to be very satisfied with their care arrangement than those who were married or common-law, and living in a medium-sized community was associated with being less satisfied than living in a large community. For the 5 to 11 age group, however, parents/guardians who were not employed were significantly less likely to be very satisfied with their care arrangement, and parents/guardians living in rural communities were more likely to be very satisfied compared to those living in urban communities.

Parents/guardians who felt it was very important that their child spoke a First Nations language were more

likely to be very satisfied with their care arrangement, as were families in which at least one parent/guardian spoke a First Nations language as their mother tongue.

When it came to the characteristics of the child care arrangement, greater exposure to First Nations traditional teachings was positively associated with satisfaction. Parents/guardians of children in licensed care arrangements were more likely to be very satisfied, as were parents/guardians who reported that their child care arrangement had all or most of the 13 quality features assessed compared to those whose child care arrangement only had some of the quality features.

Table 17. Bivariate Relationships between Satisfaction with Child Care and Family, Community, Language, Cultural, and Child Care Factors for 5- to 11-year-old First Nations Children

Variable	Very Satisfied				Bivariate Odds Ratio For Being Very Satisfied	
	Yes		No			
	%	95% CI	%	95% CI	OR	95% CI
FAMILY STRUCTURE						
Lone parent	58.2	[50.0, 66.0]	41.8	[34.0, 50.0]	0.56	[0.35, 0.90]
Married/Common-law	71.4	[63.2, 78.3]	28.6	[21.7, 36.8]	1 (referent)	-
PARENT/GUARDIAN EDUCATION						
Some postsecondary or higher	70.3	[62.2, 77.4]	29.7	[22.6, 37.8]	1.54	[0.90, 2.62]
High school graduate	58.7	[50.1, 66.8]	41.3	[33.2, 49.9]	0.92	[0.49, 1.75]
<High school graduate	60.7	[47.4, 72.5]	39.3	[27.5, 52.6]	1 (referent)	-
PARENT/GUARDIAN EMPLOYMENT						
Not employed	40.9	[28.7, 54.4]	59.1	[45.6, 71.3]	0.30	[0.18, 0.51]
Employed	69.5	[63.6, 74.9]	30.5	[25.1, 36.4]	1 (referent)	-
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS						
Yes	65.0	[48.9, 78.3]	35.0 ^E	[21.7, 51.1]	0.95	[0.50, 1.80]
No	66.2	[61.3, 70.7]	33.8	[29.3, 38.7]	1 (referent)	-
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP						
Rarely/Never	F	F	F	F	F	F
Sometimes	60.7	[51.7, 69.0]	39.3	[31.0, 48.3]	0.71	[0.46, 1.10]
Always	68.5	[63.1, 73.5]	31.5	[26.5, 36.9]	1 (referent)	-
HOUSEHOLD CROWDING						
Crowded	70.7	[54.8, 82.7]	29.3 ^E	[17.3, 45.2]	1.39	[0.69, 2.82]
Not crowded	63.4	[58.0, 68.5]	36.6	[31.5, 42.0]	1 (referent)	-
COMMUNITY REMOTENESS						
Remote or special access	F	F	F	F	F	F
Rural	70.4	[61.9, 77.7]	29.6	[22.3, 38.1]	1.52	[1.01, 2.29]
Urban	61.0	[54.6, 67.0]	39.0	[33.0, 45.4]	1 (referent)	-

	Very Satisfied				Bivariate Odds Ratio For Being Very Satisfied	
	Yes		No			
Variable	%	95% CI	%	95% CI	OR	95% CI
COMMUNITY SIZE						
Small <300	62.5	[54.9, 69.5]	37.5	[30.5, 45.1]	0.58	[0.31, 1.10]
Medium 300 to 1,500	58.9	[53.1, 64.4]	41.1	[35.6, 46.9]	0.50	[0.28, 0.90]
Large >1,500	74.2	[61.8, 83.6]	25.8 ^E	[16.4, 38.2]	1 (referent)	-
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS						
Very important	70.0	[62.8, 76.3]	30.0	[23.7, 37.2]	1.08	[0.52, 2.23]
Somewhat important	54.1	[44.5, 63.4]	45.9	[36.6, 55.5]	0.55	[0.26, 1.15]
A little or not important	68.4	[51.6, 81.4]	31.6 ^E	[18.6, 48.4]	1 (referent)	-
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE						
Very important	70.6	[63.2, 77.1]	29.4	[22.9, 36.8]	2.03	[1.19, 3.45]
Somewhat important	56.2	[45.5, 66.3]	43.8	[33.7, 54.5]	1.08	[0.59, 2.00]
A little or not important	54.2	[43.7, 64.3]	45.8	[35.7, 56.3]	1 (referent)	-
PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE						
Yes	76.8	[65.0, 85.5]	23.2 ^E	[14.5, 35.0]	2.14	[1.22, 3.76]
No	60.7	[55.0, 66.1]	39.3	[33.9, 45.0]	1 (referent)	-
TYPE OF CARE ARRANGEMENT						
Informal	69.8	[62.0, 76.6]	30.2	[23.4, 38.0]	1.40	[0.96, 2.04]
Formal	62.3	[54.2, 69.9]	37.7	[30.1, 45.8]	1 (referent)	-
NUMBER OF CARE ARRANGEMENTS						
Two or more	59.9	[49.2, 69.8]	40.1	[30.2, 50.8]	0.74	[0.46, 1.19]
One	66.9	[59.5, 73.5]	33.1	[26.5, 40.5]	1 (referent)	-
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE						
Don't know	61.9	[45.8, 75.7]	38.1 ^E	[24.3, 54.2]	0.89	[0.42, 1.88]
Most or all of the time	F	F	F	F	F	F
Some of the time	58.8	[52.2, 65.1]	41.2	[34.9, 47.8]	0.79	[0.49, 1.25]
None of the time	64.5	[55.4, 72.6]	35.5	[27.4, 44.6]	1 (referent)	-
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS						
Don't know	47.3	[36.7, 58.2]	52.7	[41.8, 63.3]	0.70	[0.44, 1.11]
At least weekly	77.3	[69.2, 83.8]	22.7	[16.2, 30.8]	2.65	[1.74, 4.02]
Less than weekly	56.3	[49.1, 63.3]	43.7	[36.7, 50.9]	1 (referent)	-
INTERACT WITH FIRST NATIONS CAREGIVER						
Don't know	48.2 ^E	[27.9, 69.0]	51.8 ^E	[31.0, 72.1]	0.40	[0.14, 1.14]
Yes	66.4	[58.7, 73.3]	33.6	[26.7, 41.3]	0.84	[0.45, 1.59]
No	70.1	[58.9, 79.3]	29.9 ^E	[20.7, 41.1]	1 (referent)	-
LOCATED IN FIRST NATIONS COMMUNITY						
Yes	66.0	[58.9, 72.5]	34.0	[27.5, 41.1]	1.13	[0.64, 1.97]
No	63.3	[50.8, 74.2]	36.7	[25.8, 49.2]	1 (referent)	-
LICENSED						
Don't know	21.9 ^E	[13.2, 34.1]	78.1	[65.9, 86.8]	0.17	[0.09, 0.33]
Yes	75.0	[65.5, 82.6]	25.0 ^E	[17.4, 34.5]	1.84	[1.02, 3.33]
No	61.9	[54.4, 69.0]	38.1	[31.0, 45.6]	1 (referent)	-

SUBSIDIZED						
Don't know	58.4	[38.9, 75.5]	41.6 ^f	[24.5, 61.1]	0.75	[0.33, 1.73]
Yes	71.3	[61.6, 79.4]	28.7	[20.6, 38.4]	1.34	[0.84, 2.12]
No	65.1	[59.5, 70.3]	34.9	[29.7, 40.5]	1 (referent)	-
QUALITY						
All quality features	82.0	[74.0, 87.9]	18.0 ^f	[12.1, 26.0]	5.39	[3.13, 9.28]
Most quality features	73.5	[66.0, 79.8]	26.5	[20.2, 34.0]	3.29	[2.01, 5.37]
Some quality features	45.8	[37.1, 54.7]	54.2	[45.3, 62.9]	1 (referent)	-

Note: ^f High sampling variability, interpret with caution.

Bold numbers indicate statistically significant odds ratios ($p \leq .05$).

The logistic regression findings with all variables entered into the model are shown in Table 18. After controlling for other variables, lone parents continued to be significantly less likely to be very satisfied with their care arrangement than those who were married/common-law; living in a rural community continued to be associated with a higher likelihood of being very satisfied than living in an urban community; and families in which at least one parent/guardian spoke a First Nations language as their mother tongue were more likely to be very satisfied.

Placing greater importance on having a child learn traditional teachings was associated with lower odds of being very satisfied in the full model. Parents/guardians who rarely/never or sometimes had people to turn to for

help were less likely to be very satisfied than those who always had people to turn to for help.

Of the child care characteristics included in the model, using an informal care arrangement was associated with higher odds of being very satisfied, as was more frequent exposure to traditional teachings at child care, and having all or most of the quality features. Parents/guardians of children who interacted with a First Nations caregiver at their child care arrangement were less likely to be very satisfied than those who did not, and child care arrangements in which the child was exposed to First Nations language some of the time were associated with lower satisfaction compared to those with no exposure to First Nations language at child care.



Table 18. Logistic Regression Predicting Being Very Satisfied with Child Care Arrangement for 5- to 11-year-old First Nations Children

Variable	B	SE	Odds Ratio	
			OR	95% CI
INTERCEPT	0.42	0.70	1.52	
FAMILY STRUCTURE				
Lone parent	-0.45	0.19	0.64	[0.43, 0.93]
Married/Common-law			1 (referent)	
PARENT/GUARDIAN EDUCATION				
Some postsecondary or higher	0.10	0.31	1.10	[0.60, 2.03]
High school graduate	-0.04	0.34	0.96	[0.49, 1.89]
<High school graduate			1 (referent)	
PARENT/GUARDIAN EMPLOYMENT				
Not employed	-0.32	0.32	0.73	[0.39, 1.36]
Employed			1 (referent)	
PARENT/GUARDIAN STRUGGLED TO MEET BASIC NEEDS				
Yes	0.20	0.23	1.22	[0.77, 1.95]
No			1 (referent)	
PARENT/GUARDIAN HAS PEOPLE TO TURN TO FOR HELP				
Rarely/Never	-1.04	0.27	0.35	[0.21, 0.61]
Sometimes	-0.49	0.24	0.61	[0.38, 0.99]
Always			1 (referent)	
HOUSEHOLD CROWDING				
Crowded	0.25	0.23	1.28	[0.81, 2.03]
Not crowded			1 (referent)	
COMMUNITY REMOTENESS				
Remote or special access	0.00	0.27	1.00	[0.59, 1.70]
Rural	0.78	0.22	2.19	[1.41, 3.41]
Urban			1 (referent)	
COMMUNITY SIZE				
Small <300	-0.01	0.37	0.99	[0.48, 2.05]
Medium 300 to 1,500	-0.21	0.28	0.81	[0.46, 1.41]
Large >1,500			1 (referent)	
IMPORTANCE OF CHILD LEARNING TRADITIONAL TEACHINGS				
Very important	-1.13	0.44	0.32	[0.14, 0.77]
Somewhat important	-1.17	0.46	0.31	[0.12, 0.78]
A little or not important			1 (referent)	
IMPORTANCE OF CHILD SPEAKING FIRST NATIONS LANGUAGE				
Very important	0.06	0.37	1.06	[0.51, 2.20]
Somewhat important	0.08	0.38	1.08	[0.51, 2.32]
A little or not important			1 (referent)	

PARENT/GUARDIAN HAS FIRST NATIONS MOTHER TONGUE				
Yes	0.49	0.23	1.63	[1.05, 2.56]
No			1 (referent)	
TYPE OF CARE ARRANGEMENT				
Informal	1.03	0.21	2.80	[1.83, 4.27]
Formal			1 (referent)	
NUMBER OF CARE ARRANGEMENTS				
Two or more	-0.47	0.28	0.63	[0.36, 1.10]
One			1 (referent)	
FREQUENCY OF EXPOSURE TO FIRST NATIONS LANGUAGE				
Don't know	0.71	0.41	2.03	[0.89, 4.61]
Most or all of the time	0.67	0.41	1.95	[0.87, 4.37]
Some of the time	-0.75	0.30	0.47	[0.26, 0.87]
None of the time			1 (referent)	
FREQUENCY OF EXPOSURE TO TRADITIONAL TEACHINGS				
Don't know	-0.49	0.27	0.61	[0.36, 1.03]
At least weekly	0.88	0.22	2.40	[1.56, 3.70]
Less than weekly			1 (referent)	
INTERACT WITH FIRST NATIONS CAREGIVER				
Don't know	-0.92	0.52	0.40	[0.14, 1.11]
Yes	-0.87	0.38	0.42	[0.20, 0.89]
No			1 (referent)	
LOCATED IN FIRST NATIONS COMMUNITY				
Yes	0.59	0.35	1.80	[0.89, 3.61]
No			1 (referent)	
LICENSED				
Don't know	-1.33	0.36	0.26	[0.13, 0.53]
Yes	0.53	0.29	1.70	[0.95, 3.03]
No			1 (referent)	
SUBSIDIZED				
Don't know	-0.28	0.33	0.76	[0.40, 1.45]
Yes	0.04	0.28	1.04	[0.60, 1.79]
No			1 (referent)	
QUALITY				
All quality features	1.98	0.27	7.24	[4.20, 12.48]
Most quality features	1.33	0.22	3.79	[2.45, 5.85]
Some quality features			1 (referent)	

Nagelkerke $R^2=0.422$

Correctly classified cases=79.2%

Note: **Bold** numbers indicate statistically significant odds ratios ($p \leq .05$).

First Nations Early Childhood Program Outcomes

Short-term Outcomes

This section provides an exploratory analysis of short-term outcomes associated with attending an early childhood program designed for First Nations children. Among First Nations children age 2 to 4 years old (see Table 19), 39.8% had attended an early childhood program designed for First Nations children (95% CI [35.4, 44.4] and more than half had some knowledge of a First Nations language (57.1%, 95% CI [51.7, 62.4]).

31.2% could speak only a few words (95% CI [27.2, 35.5]), while 22.3% could be considered basic to fluent speakers (95% CI [19.0, 25.9]).

In terms of understanding the language, 25.8% could understand only a few words (95% CI [21.8, 30.2]), while 29.5% were considered to have a basic to fluent understanding (95% CI [23.9, 35.8]). Of the developmental and communications milestones, First Nations children age 2 to 4 years old had on average met five of the six developmental milestones (95% CI [4.9, 5.1]) and 3.4 of the five communication milestones (95% CI, [3.2, 3.6]).

Table 19. Descriptive Results for 2- to 4-year-old First Nations Children for Short-term Outcomes

Variable	%	95% CI
ATTENDED FIRST NATIONS EARLY CHILDHOOD PROGRAM		
Yes	39.8	[35.4, 44.4]
No	60.2	[55.6, 64.6]
KNOWLEDGE OF FIRST NATIONS LANGUAGE		
Yes	57.1	[51.7, 62.4]
No	42.9	[37.6, 48.3]
ABILITY TO SPEAK A FIRST NATIONS LANGUAGE		
Cannot speak	46.5	[41.0, 52.0]
Only a few words	31.2	[27.2, 35.5]
Basic to fluent speaker	22.3	[19.0, 25.9]
ABILITY TO UNDERSTAND A FIRST NATIONS LANGUAGE		
Cannot understand	44.7	[39.4, 50.3]
Only a few words	25.8	[21.8, 30.2]
Basic to fluent understanding	29.5	[23.9, 35.8]
DEVELOPMENTAL MILESTONES		
Mean score out of 6	5.0	[4.9, 5.1]
COMMUNICATION MILESTONES		
Mean score out of 5	3.4	[3.2, 3.6]

Table 20. Bivariate Relationships between Attending an Early Childhood Program Designed for First Nations Children and Short-term Outcomes for 2- to 4-year-old First Nations Children

Variable	Attended a Program Designed for First Nations Children			
	Yes		No	
	%	95% CI	%	95% CI
KNOWLEDGE OF FIRST NATIONS LANGUAGE				
Yes	70.2	[63.8, 75.8]	48.0	[40.7, 55.4]
No	29.8	[24.2, 36.2]	52.0	[44.6, 59.3]
ABILITY TO SPEAK A FIRST NATIONS LANGUAGE				
Cannot speak	33.3	[27.5, 39.6]	55.9	[48.0, 63.5]
Only a few words	39.5	[33.5, 45.8]	25.8	[20.8, 31.4]
Basic to fluent speaker	27.2	[21.5, 33.6]	18.4	[14.3, 23.2]
ABILITY TO UNDERSTAND A FIRST NATIONS LANGUAGE				
Cannot understand	32.9	[27.0, 39.4]	53.2	[45.7, 60.5]
Only a few words	34.9	[29.1, 41.2]	20.2	[15.8, 25.6]
Basic to fluent understanding	32.2	[26.6, 38.3]	26.6	[19.4, 35.4]
Developmental Milestones				
Mean score out of 6	5.4	[5.3, 5.5]	4.7	[4.6, 4.9]
Communication Milestones				
Mean score out of 5	4.1	[3.9, 4.2]	3.0	[2.7, 3.2]

Note: **Bold** numbers indicate a statistically significant difference between column percentages (95% confidence interval for each estimate does not overlap $p \leq .05$).

All of the short-term outcomes were found to be positively associated with attendance in an early childhood program designed for First Nations children (see Table 20). Children who had attended an early childhood program designed for First Nations children were significantly more likely to have knowledge of a First Nations language, to be able to speak a few words, and to be able to understand a few words compared to those who had not. These children had also achieved a higher number of developmental and communication milestones on average.

Long-term Outcomes

More than three-quarters of First Nations children ages 5 to 11 had some knowledge of a First Nations language (77.3%, 95% CI [72.5, 81.5]). The ability to speak and understand the language was higher than the ability to read or write in the language (see Table 21).

Overall, 38.7% were considered basic to fluent speakers (95% CI [34.2, 43.3]), 40.2% had a basic to fluent understanding (95% CI [35.9, 44.7]), 17.2% could read at a

basic to fluent level (95% CI [15.0, 19.6]), and 14.5% could write at a basic to fluent level (95% CI [12.6, 16.5]). Close to half of the children participated in cultural activities at least once-a-month (45.2%, 95% CI [41.5, 49.0]).

In relation to academic outcomes, 8.2% had repeated a grade (95% CI [6.7, 10.0]), and 1.7%^E had skipped a grade (95% CI [1.2, 2.6]). About one-quarter of parents/guardians reported that their child required additional help or tutoring (24.1%, 95% CI [21.8, 26.5]), and most felt that their child had performed at (67.8%, 95% CI [65.1, 70.5]) or above (25.6%, 95% CI [23.2, 28.3]) average in the last school year.

In the bivariate analysis (see Table 22), only one significant difference was found between those who had and had not attended an early childhood program designed for First Nations children. A significantly larger proportion of those who had not attended an early childhood program were unable to read in a First Nations language compared to those who had.

Table 21. Descriptive Results for 5- to 11-year-old First Nations Children for Long-term Outcomes

Variable	%	95% CI
ATTENDED FIRST NATIONS EARLY CHILDHOOD PROGRAM		
Yes	62.2	[57.8, 66.3]
No	37.8	[33.7, 42.2]
KNOWLEDGE OF FIRST NATIONS LANGUAGE		
Yes	77.3	[72.5, 81.5]
No	22.7	[18.5, 27.5]
ABILITY TO SPEAK A FIRST NATIONS LANGUAGE		
Cannot speak	26.2	[22.5, 30.4]
Only a few words	35.1	[31.1, 39.4]
Basic to fluent speaker	38.7	[34.2, 43.3]
ABILITY TO UNDERSTAND A FIRST NATIONS LANGUAGE		
Cannot understand	27.8	[23.9, 32.1]
Only a few words	32.0	[28.1, 36.1]
Basic to fluent understanding	40.2	[35.9, 44.7]
ABILITY TO READ A FIRST NATIONS LANGUAGE		
Cannot read	62.3	[59.1, 65.4]
Only a few words	20.5	[18.3, 23.0]
Basic to fluent reading	17.2	[15.0, 19.6]
ABILITY TO WRITE IN A FIRST NATIONS LANGUAGE		
Cannot write	66.5	[63.6, 69.3]
Only a few words	19.0	[17.1, 21.1]
Basic to fluent writing	14.5	[12.6, 16.5]
FREQUENCY OF PARTICIPATING IN CULTURAL ACTIVITIES		
Less often than once a month	54.8	[51.0, 58.5]
At least once a month or more	45.2	[41.5, 49.0]
REPEATED A GRADE		
Yes	8.2	[6.7, 10.0]
No	91.8	[90.0, 93.3]
SKIPPED A GRADE		
Yes	1.7 ^E	[1.2, 2.6]
No	98.3	[97.4, 98.8]
REQUIRES ADDITIONAL HELP/TUTORING		
Yes	24.1	[21.8, 26.5]
No	75.9	[73.5, 78.2]
SCHOOL PERFORMANCE LAST YEAR		
Above average	25.6	[23.2, 28.3]
Average	67.8	[65.1, 70.5]
Below average	6.5	[5.1, 8.2]

Note: ^E High sampling variability, interpret with caution.

Table 22. Bivariate Relationships between Attending an Early Childhood Program Designed for First Nations Children and Long-term Outcomes for 5- to 11-year-old First Nations Children

Variable	Attended a Program Designed for First Nations Children			
	Yes		No	
	%	95% CI	%	95% CI
KNOWLEDGE OF FIRST NATIONS LANGUAGE				
Yes	80.1	[76.0, 83.7]	72.0	[65.0, 78.1]
No	19.9	[16.3, 24.0]	28.0	[21.9, 35.0]
ABILITY TO SPEAK A FIRST NATIONS LANGUAGE				
Cannot speak	23.1	[19.5, 27.3]	32.1	[26.6, 38.1]
Only a few words	38.0	[33.7, 42.5]	29.1	[23.3, 35.6]
Basic to fluent speaker	38.9	[35.0, 42.9]	38.8	[30.6, 47.8]
ABILITY TO UNDERSTAND A FIRST NATIONS LANGUAGE				
Cannot understand	24.7	[21.3, 28.5]	33.0	[27.0, 39.7]
Only a few words	35.0	[31.1, 39.2]	26.8	[21.1, 33.4]
Basic to fluent understanding	40.2	[36.4, 44.1]	40.2	[32.3, 48.7]
ABILITY TO READ A FIRST NATIONS LANGUAGE				
Cannot read	58.5	[54.8, 62.1]	68.8	[63.7, 73.5]
Only a few words	22.8	[19.6, 26.2]	16.8	[14.3, 19.7]
Basic to fluent reading	18.7	[15.5, 22.5]	14.3	[11.1, 18.3]
ABILITY TO WRITE IN A FIRST NATIONS LANGUAGE				
Cannot write	64.5	[60.8, 67.9]	69.8	[64.8, 74.3]
Only a few words	19.6	[17.2, 22.2]	17.9	[15.2, 21.0]
Basic to fluent writing	16.0	[13.4, 19.0]	12.3	[9.3, 16.1]
FREQUENCY OF PARTICIPATING IN CULTURAL ACTIVITIES				
Less often than once a month	53.0	[48.9, 57.0]	57.1	[49.5, 64.4]
At least once a month or more	47.0	[43.0, 51.1]	42.9	[35.6, 50.5]
REPEATED A GRADE				
Yes	8.1	[6.1, 10.8]	8.4 ^f	[5.8, 11.9]
No	91.9	[89.2, 93.9]	91.6	[88.1, 94.2]
SKIPPED A GRADE				
Yes	2.0 ^f	[1.2, 3.3]	1.4 ^f	[0.8, 2.4]
No	98.0	[96.7, 98.8]	98.6	[97.6, 99.2]
REQUIRES ADDITIONAL HELP/TUTORING				
Yes	25.5	[22.8, 28.5]	20.5	[17.0, 24.6]
No	74.5	[71.5, 77.2]	79.5	[75.4, 83.0]
SCHOOL PERFORMANCE LAST YEAR				
Above average	27.2	[24.1, 30.6]	23.7	[19.2, 28.9]
Average	65.7	[62.3, 69.0]	70.8	[65.3, 75.7]
Below average	7.0	[5.2, 9.4]	5.5 ^f	[3.8, 8.0]

Note: ^f High sampling variability, interpret with caution.

Bold numbers indicate a statistically significant difference between column percentages (95% confidence interval for each estimate does not overlap p<.05).

Discussion



This report sought to examine the factors associated with child care use, type of child care arrangement, satisfaction with child care arrangement, and short- and long-term outcomes associated with attending an early childhood program designed for First Nations children living on reserve. It used FNREEES data for children aged 0 to 11. Due to the very different child care needs of school-aged children compared to infants and toddlers, analyses were conducted separately for children aged 0 to 4, and 5 to 11.

The FNREEES results indicate that 28.9% of First Nations children aged 0 to 4 and 20.3% of First Nations children aged 5 to 11 living on-reserve, are in regular child care. These proportions are considerably lower than the 52% of First Nations children living off-reserve (Findlay and Kohen, 2010), and 46% of children in the general Canadian population (Sinha, 2014), reported to be using some type of child care. Limited access to licensed child care is an issue in many First Nations communities (AFN, 2011), but further research on the relationship between historical, cultural, socioeconomic, and community factors and child care use may provide additional explanations for the discrepancies.

Consistent with the existing literature on child care use, parental education, parental employment, and family structure were found to be associated with child care use for both age groups of children. The analyses also found that families living in rural areas were less likely to use child care than families living in urban areas, even when other variables in the model were controlled. This was true for 0- to 4-year-olds and 5- to 11-year-olds, suggesting that families living in rural communities may experience challenges accessing reliable child care. While there have been numerous studies of child care access and quality in rural communities, better understanding the issue specifically as it relates to First Nations communities warrants further exploration.

Of the language and cultural factors examined in the models, parents/guardians of 5- to 11-year-old children who placed greater importance on their

children learning traditional teachings were found to be more likely to use child care. One possible reason could be that these parents/guardians are more likely to seek out child care opportunities that will provide their child with traditional teachings. However, given the lack of previous research in this area it is difficult to know why this may be based on the survey results alone, and the finding warrants additional study.

There was less consistency in the findings related to the type of child care arrangement used, categorized as formal or informal, with results differing greatly for the 0- to 4-year-old age group and the 5- to 11-year-old age group. Among children aged 0 to 4, approximately one-third of those in regular child care were in informal care arrangements, compared to roughly half of children aged 5 to 11.

The only common finding between the two age groups was that parents/guardians who placed greater importance on their child learning traditional teachings were more likely to use informal care arrangements. Given that the most common form of informal care arrangement used was care in their own home by a relative (FNIGC, 2016), parents/guardians who place greater importance on learning traditional teachings may feel that their relatives are best placed to provide that learning. Somewhat counter to this, however, for children 4 years old and younger, parents/guardians who felt it was somewhat important that their child learn to speak a First Nations language were less likely to use informal care arrangements than those who said it was a little or not important, when controlling for other factors.

For 5- to 11-year-olds, the only other variable found to be significantly related to type of child care arrangement in the multivariate model was household crowding. Slightly more than one-third of 5- to 11-year-old First Nations children in regular child care lived in crowded conditions, and children who lived in crowded households were more likely to be in informal care arrangements. Children living in these households may be more likely to have an older sibling or relative who is able to provide care for them.

Among the 0 to 4 age group, lone parents and those with postsecondary education were less likely to use informal child care, while those who sometimes had people they could turn to for help were more likely to use informal child care than those who rarely/never had people they could turn to for help. Community size was also related to type of care for this age group, in so far as families in medium-sized communities were less likely to use informal care compared to those in large communities. While these findings are not necessarily surprising or counterintuitive, it is difficult to determine precisely why these associations exist. Much existing research on how parents/guardians choose particular care arrangements focus on the decision as a function of factors such as price, quality, location, and hours of availability (Johansen, Leibowitz, and Waite, 1996; Peyton et al, 2001). Future exploration is needed to investigate the association between these factors and the decision of First Nations parents/guardians living on reserve to use a specific type of care arrangement.

The child care characteristics that were found to be most highly related to satisfaction with the care arrangement (for the 0- to 4- and 5- to 11-year-old groups) were the quality of the child care arrangement and the frequency of learning traditional teachings at child care. As shown in the descriptive findings, almost all parents/guardians felt it is at least somewhat important that their child learn traditional teachings; therefore it is not surprising to find that parents/guardians tend to be more satisfied with child care arrangements that include traditional teachings at least weekly.

There were a few counterintuitive findings related to satisfaction that warrant additional research. For the 0- to 4-year-old group, likelihood of being very satisfied was lower for those whose child care arrangement was located in a First Nations community and for those whose child care was licensed. Exposure to a First Nations language at child care was also negatively associated with satisfaction, with a lower likelihood of being very satisfied for those whose child was exposed to a First Nations language “most or all of the time” or “some of the time” compared to those who were not exposed to a First Nations language at child care.

For 5- to 11-year-olds, parents/guardians of children who interacted with a First Nations caregiver at their child care arrangement were less likely to be very satisfied than those who did not, and child care arrangements in which the child was exposed to First Nations language

some of the time were associated with lower satisfaction compared to those with no exposure to First Nations language. Further examination is required to better understand these findings and to account for a multitude of potentially mediating and/or moderating factors.

A key limitation of the satisfaction analysis is that it is differentiating primarily between being “satisfied” and being “very satisfied”. While it is encouraging that almost all First Nations families were satisfied with their child care arrangements, the distinction between these two units of measurement is not clearly defined. In addition, there was a relatively large proportion of parents/guardians who used informal care arrangements reporting that their care arrangement was licensed and/or subsidized. Given that most informal care arrangements involved a relative caring for the child, primarily in the child’s home, it raises questions about how respondents were interpreting questions related to subsidized and licensed child care and thus how to interpret findings related these variables. Finally, many of the variables in the satisfaction analyses were flagged for having high sampling variability, reducing the confidence we can have in interpreting these estimates.

The preliminary findings provided here related to the short- and long-term outcomes associated with participation in an early childhood program designed for First Nations children, such as AHSP, suggest that children aged 2 to 4 experience a number of benefits from participating in an early childhood program designed for First Nations children, including greater knowledge of a First Nations language, greater ability to speak and understand the language, and greater mastery of developmental and communications milestones.

The longer-term benefits are less clear however, and it is possible that the initial differences seen between those who had and had not attended these programs may dissipate once children begin attending school full-time. However, caution must be taken in drawing any firm conclusions as the analyses did not control for other relevant factors that may be influencing the findings. A key limitation is that the data available does not identify when the child participated in the program or for how long, and there is no information available about their language knowledge or cognitive capacities prior to beginning the program. Further research, preferably utilizing a longitudinal design, is needed to more accurately examine the short- and long-term outcomes associated with attending an early childhood program designed for First Nations children.

While many of the areas for additional research noted above would require additional data collection, there are also additional analyses that could be done with the existing FNREEES data set that were beyond the scope of this report. As just one example, the survey included a question asking parents/guardians why they were using off-reserve child care. About 10% of parents/guardians reported that their main child care arrangement was off-

reserve, and the data could be used to further explore the reasons why as well as to examine the relationships between off-reserve child care use and other socio-demographic factors (e.g., community size, community remoteness, etc.). Overall, further examination of the FNREEES data could provide a more comprehensive picture of the child care experiences of First Nations families.



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