Prairie Children... Prairie Futures
Understanding the Early Years

2010

Community Mapping Study of Southeast Saskatchewan

Prepared by Nazeem Muhajarine, Kathryn Green, Fleur Macqueen Smith, Chassidy Puchala, Trevor McKenzie-Smith and Paula Ghiglione, Healthy Children research team, Saskatchewan Population Health and Evaluation Research Unit, University of Saskatchewan, and Ruth Barker, Prairie Children... Prairie Futures Community Coordinator
For Prairie Children...Prairie Futures Understanding the Early Years

www.prairiechildrenuey.com

This project is funded by the Government of
Canada's Understanding the Early Years Initiative.

Photographs in this report are of children and families in the Prairie Children...Prairie Futures Understanding the Early Years region. All photographs are used with permission.

This report and other information related to this project can be found on the project's website at: www.prairiechildrenuey.com and on the website of the Saskatchewan Knowledge to Action Network for early childhood development, kidSKAN, at www.kidskan.ca.

Table of Contents

LIST OF MAPS

LIST OF FIGURES

LIST OF TABLES

A message from Ruth Barker, the study's Community Coordinator

This Community Mapping Report would not have been possible if it were not for the passion, commitment and dedication of the many individuals, groups and organizations working towards improving the lives of young children and their families in Southeast Saskatchewan. In particular, we wish to express our deepest gratitude to the following people and organizations.

RESEARCH

A special thanks is extended to Dr. Nazeem Muhajarine and his Healthy Children research team (Fleur Macqueen Smith, Kathryn Green, Chassidy Puchala, Paula Ghiglione, and Trevor McKenzie-Smith) in the Saskatchewan Population Health and Evaluation Research Unit (SPHERU) at the University of Saskatchewan who partnered with us in 2007 for this study, advised on research methods, conducted data analysis, and prepared our mapping reports. Thanks also to Lori Verishagen, graphic designer with Printing Services Document Solutions & Distribution at the University of Saskatchewan, for making this report look so good.

- Prairie Children…Prairie Futures staff including Research Administrative Assistants Amanda Penner and Janet Stadel and Delilah Trenaman, and the Research Survey Team, Shaun Cornish and Courtney Schell.
- The Offord Centre for Child Studies staff, McMaster University, and
- Statistics Canada for the 2006 Census of Canada data.

APPLICANT

Application for the Understanding the Early Years project was made by the Southeast Regional Intersectoral Committee. We extend special thanks to Ellery Peters, Madeleine Valentine, June Oryschak, and Danae Heywood. Appreciation is extended to the RIC Coordinator, Amanda Dunbar, for her support, encouragement and input throughout the project.

SPONSOR

Holy Family RCSSD No. 140, and in particular Lisa Kuntz, Superintendent of Education, for her commitment and involvement in supervision, as well as the Finance Department, Director of Education and School Board members.

COALITION

The Prairie Children...Prairie Futures Coalition has evolved over the course of this project and amalgamated with the Southeast Early Childhood Development Committee. Membership of the Coalition includes: Holy Family Roman Catholic, South East Cornerstone, Good Spirit, Christ the Teacher, and Prairie Valley School Divisions; Horizon School Division (for George Gordon Education Centre and Punnichy Elementary School); St. Augustine RCSSD No. 220; Yorkton, File Hills Qu'Appelle, and Touchwood Agency Tribal Councils; Treaty 4 Indicators; Sunrise, Sun Country and Regina Qu'Appelle Health Regions; South East and Parkland Regional Libraries; Early Learning and Child-Care provincial and regional representatives; Regina, Parkland, Southeast, and Weyburn and Area Early Childhood Intervention Programs (ECIP); Regional KidsFirst Community Developers; KidsFirst Yorkton; Regional

Social Services, and various community-based organizations and interested community members.

THE COMMUNITY

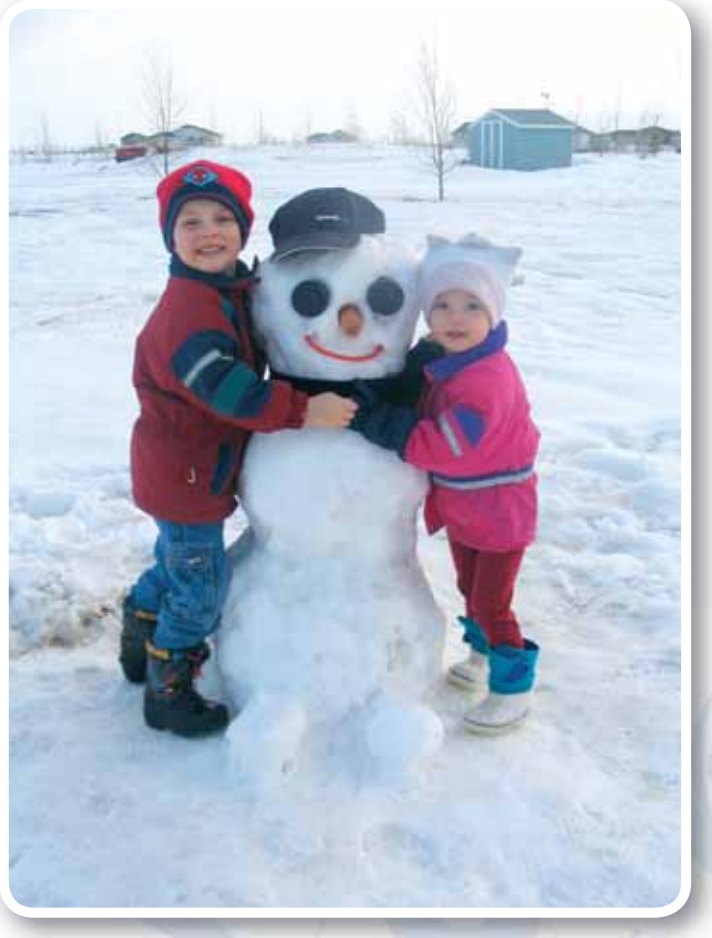
We also wish to thank all those involved in providing community programs and services. Thank you for the tremendous work you do each day in the community, enhancing the lives of young children and families. Also, thank you for sharing with us photographs of children in your communities for use in our publications, including this one; all photographs have been used with permission.

FUNDING

Appreciation is also extended to the Government of Canada for funding this community research project.

Thank you all for your support. While our research region is large and expansive, it is the spirit of collaboration, dedication and commitment that continues to draw us together in what we affectionately refer to as "the Saskatchewan Way." May this same spirit move us forward as we continue to "Invest in the lives of Prairie Children…Ensuring a Thriving Prairie Future."

Ruth Barker, Community Coordinator
Southeast Saskatchewan, Understanding the Early Years, Prairie Children…Prairie Futures



Executive Summary

The early years of life are a fundamentally important time, with impacts that last far beyond childhood. Research has found that many of the health and social challenges adults face are influenced by early childhood experiences.

Children's development during these critical years is shaped by the environments within which they live, independent of and in combination with their biological characteristics. Access to services, programs and amenities, such as libraries, health care facilities, and child care has an impact on children's development and parents' ability to provide adequate care and stimulating learning. Thus, efforts to improve early childhood development should not focus solely on parents, but also consider the environments in which families live.

The Prairie Children . . . Prairie Futures Understanding the Early Years (UEY) study described in this report is about children and their early environments—specifically, children during their kindergarten year and their communities. It is part of a national research and community development project, funded by the Government of Canada's Understanding the Early Years initiative, that is designed to enable community members to work together to address the needs of young children. The project focuses on raising community awareness of factors that can influence young children's development, and strengthening communities' capacity to use local data to inform decisions so as to enhance children's lives.

HOW THE STUDY WAS CONDUCTED

The project described here was carried out in Southeast Saskatchewan. An area of 125,000 km^2, it has a population of approximately 160,000, including large rural areas, many small communities, a city of 15,000, and 23 First Nations communities governed by three tribal councils. One in five kindergarten students is Aboriginal. For the purpose of this study, the region was divided into 27 study areas, based on school division and tribal council boundaries.

The main outcome studied is "readiness to learn." Every kindergarten student in the region was assessed by his or her kindergarten teacher using the Early Development Instrument (EDI) in five developmental domains: physical health and wellbeing; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge. The report focuses on the percentage of children considered *vulnerable* in each domain (i.e., scoring below the cut-off points for the bottom 10% of a normative group of Canadian children). Four of the domains are divided into sub-domains; for these, we present the percentage of children considered *challenged* in each sub-domain (i.e., scoring below the challenge cut-off that indicates poor or no skills). The EDI was administered in all study areas in 2008-09; in addition, some of the school divisions in the region had used it as early as 2005 and so we report these earlier data for comparison, grouping the study areas into four sub-regions due to small sample

sizes. In addition, a trained assessor evaluated the cognitive development of a subgroup of the children, and the parents of some of these children were interviewed about their behaviour and mental and physical health.

To understand the environment in which children and their families live, two contextual measures were created for each study area. The Social Risk Index rates study areas based on whether they exceed the provincial average on six indicators (single parent families, low education, transience, home rentals, receipt of government transfers, and low income). The Resource Access and Availability score describes the extent of programs and services available and accessible to children and families in each study area. Scores were based on an inventory of community programs and services, adjusted for accessibility (e.g., hours of operation, fees, transportation, physical accessibility). Additional environmental factors were assessed through the parent interview mentioned above, through questions on family functioning, use of community resources, and neighbourhood characteristics.

FINDINGS OF THE STUDY

- Compared to the Canadian norm, kindergarten students in the Southeast Saskatchewan region are more likely to be considered vulnerable in the domains of physical health and wellbeing and language and cognitive development, and equally or less likely to be vulnerable in terms of social competence, emotional maturity, and communication skills and general knowledge, as assessed by their teachers using the EDI.
- Overall, one in four, or 461 children in the region are vulnerable in at least one domain, and half of these children, or 227, are vulnerable in two or more domains.
- In two domains—physical health and wellbeing and language and cognitive development—15 of 27 study areas have above normal percentages of children considered vulnerable, followed by 10 study areas with above normal percentages in the domain of emotional maturity, 8 for social competence, and 4 for communication skills and general knowledge.
- The percentage of children considered vulnerable in a domain varies greatly across study areas: from 1.8% to 39% for physical health and wellbeing; from 0% to 25.6% for social competence; from 0% to 29.3% for emotional maturity; from 2.6% to 28.6% for language and cognitive development; and from 0% to 15.4% for communication skills and general knowledge. The proportions considered challenged in sub-domains vary even more, from 0 to almost 75%. This indicates significant disparities within the region.
- The percentage of children considered vulnerable in at least one domain ranges across study areas from 9.6 to 57.3%. Of particular concern are the 10 study areas in which more than one in four children is considered vulnerable in at least one domain.
- Ten study areas have a higher than normal percentage of children considered vulnerable in two or more domains, with the proportion in this category ranging from 0 to 30.5%.
- Six study areas (Canora, Esterhazy, Fillmore, Southey, Springside, and White City) were below the norm in terms of the percentage of children considered vulnerable for all five EDI domains, while two study areas, Kamsack and Touch Touchwood Agency Tribal

Council, were above the norm in all five domains.

- Overall, study areas with higher social risk did not have more children considered vulnerable, nor was greater access to and availability of resources associated with lower levels of vulnerability.
- Over the past several years, the study areas in the North sub-region and, to a lesser extent, the Central sub-region have seen a decrease in the proportion of children considered vulnerable, while in the study areas in the South, there has been a general increase in vulnerability. Children in the First Nations study areas, assessed only in 2009, were considerably more likely to be considered vulnerable in each domain and in one or more domains, compared to the other sub-regions.
- The children in Southeast Saskatchewan tended to score lower than the Canadian average on measures of receptive vocabulary, number knowledge, and literacy skills, when evaluated by a trained assessor. Scores in the South sub-region were somewhat higher than other sub-regions in these areas, while those in the First Nations sub-region were substantially lower.
- The prevalence of children with behavioural problems according to parent interviews was comparable to the Canadian average, with the exception of the First Nations sub-region, where there was a higher likelihood of children being inattentive.
- In terms of the prevalence of physical health problems, children in the region were very similar to the Canadian average, with little difference across sub-regions; the same was true for symptoms of depression, but children in all sub-regions except the South were somewhat more likely than the norm to experience anxiety.
- Families in this region were comparable to the Canadian average in terms of overall functioning and prevalence of maternal depression, but they were considerably more likely to practice a 'neglectful' parenting style and less likely to use an 'authoritative' style, which is associated with better developmental outcomes for children.
- A majority of families used child care at least part-time, most often in someone else's home by a non-relative, but the type of care varies across sub-regions; families in the First Nations sub-region were much more likely to have their children cared for in their home by a relative, while the South was the sub-region most likely to use a child care centre or care in the home by a non-relative.
- Parents in the region were as or slightly more likely than parents in other parts of Canada to believe that their communities or neighbourhoods are safe and cohesive and to report good levels of social support; but they were less likely to perceive their communities to be of high quality overall. However, in the First Nations sub-region, all aspects of the community and social support were rated lower than the national average.

1 Introduction

The early years of life are a fundamentally important time, with impacts that last far beyond childhood. Research has found that many of the health and social challenges adults face—including mental health problems, obesity, heart disease, criminality, and difficulties with literacy and numeracy—are influenced by early childhood experiences.

Children's development during these critical years is shaped by the environments within which they live, independent of and in combination with their biological characteristics. Their relationships with parents and other caregivers are considered the 'building blocks' of healthy development (Shonkoff & Phillips, 2000), and, as the creators of children's first environments, caregivers play a primary role in early childhood; but their capacity to foster children's development is in turn influenced by the social systems that they are part of, such as neighbourhoods and communities (Shonkoff & Phillips, 2000; Willms, 2002). Access to services, programs and amenities, such as libraries, health care facilities, and child care has an impact on children's development and parents' ability to provide adequate care and stimulating learning environments (Shonkoff & Phillips, 2000) and so efforts to improve early childhood development cannot focus solely on parents, but must consider the environments in which families live. The study described in this report is about children and their early environments—specifically, children during their kindergarten year and their communities.

The report provides insights into children's development from birth to age six in the Prairie Children . . . Prairie Futures (PCPF) Understanding the Early Years (UEY) Southeast Saskatchewan Region. It provides a visual representation of the cognitive, social, emotional, and physical development of kindergarten students in this region, set against the socio-demographic milieu of their communities. The report is organized into four sections:

1. *Introduction* briefly describes the Understanding the Early Years project, the organizations involved, and its goals and objectives;
2. *How the Study was Conducted* describes how the region was divided into study areas and explains how the main concepts in the study were measured;
3. *Findings* uses maps, tables, and graphs to present the proportion of children considered not on track in various developmental domains, in relation to the risks and resources within each study area;
4. *Conclusions and Topics for Community Discussion* summarizes and discusses the key findings, and suggests some possible next steps to consider.

This is the second of two community mapping reports for the PCPF UEY project. The first report, produced in March 2008, includes a detailed description of community programs and social risk variables. This report builds on the first by presenting findings on school readiness in relation to community resources and risks.

1.1 THE NATIONAL UNDERSTANDING THE EARLY YEARS INITIATIVE AND THE PRAIRIE CHILDREN . . . PRAIRIE FUTURES UNDERSTANDING THE EARLY YEARS STUDY IN SOUTHEAST SASKATCHEWAN

The Understanding the Early Years (UEY) national initiative, funded by the Government of Canada, was created in response to the growing evidence of the importance of children's first years of life. It is a research and community development project designed to enable community members to work together to address the needs of young children. The project focuses on raising community awareness of factors that can influence young children's development, and strengthening communities' capacity to use local data to inform decisions so as to enhance children's lives. The initiative assists communities in learning about their children's readiness to start school, exploring family and community factors that can influence children's development, identifying local programs and services for children and young families, and assessing local socioeconomic factors. The partnerships among parents, schools, teachers, community organizations and others interested in the wellbeing of children that are created through the process of conducting a UEY project facilitate sharing of research findings and the implementation of plans to address the needs that the project identifies.

The UEY Initiative was launched in 1999, and has supported many communities across Canada since then. PCPF,[1] located in Southeast Saskatchewan, is one of seven UEY projects in Saskatchewan. This project has been funded for participation for the 2007-10 UEY cycle, along with projects in Regina, Moose Jaw–South-Central, and Prince Albert Grand Council. Earlier UEY projects in Saskatchewan were conducted in Prince Albert (1999-2005), Saskatoon (2000-2007; co-led by SPHERU and Communities for Children), and Northeast Saskatchewan (2005-08). The SPHERU team has also assisted with research and analysis on two other UEY projects, in Moose Jaw-South Central and Northeast Saskatchewan, in addition to the present project.

[1] *"Prairie Children . . . Prairie Futures Understanding the Early Years" (PCPF UEY) is the name chosen by the Coalition for the UEY study in the geographical region of Southeast Saskatchewan.*

1.1.1 WHO IS INVOLVED?

The province of Saskatchewan has ten Regional Intersectoral Committees (RIC) whose mandate includes the formation of interagency groups to address issues affecting vulnerable children and families. When the Southeast RIC learned of the UEY initiative, members were enthusiastic about establishing such a project in this region. Holy Family Roman Catholic Separate School Division stepped forward as the sponsoring partner with the support of the RIC and a proposal for a project was submitted, which was awarded funding and launched in June 2007.

Today, the following agencies and organizations are involved in the PCPF UEY project:

- Southeast RIC and RIC Coordinator
- Seven school divisions: three separate (Roman Catholic) (Holy

Family, St. Augustine, and Christ the Teacher) and four public (South East Cornerstone, Good Spirit, Prairie Valley and Horizon)
- Three Tribal Councils (Yorkton, File Hills Qu'Appelle, and Touchwood Agency) and 23 First Nations communities;
- Saskatchewan Ministries of Education and Social Services
- Three Health Regions (Sun Country, Sunrise and Regina Qu'Appelle)
- Early Learning and Child Care representatives and Regional Early Learning and Child Care Consultants with the Ministry of Education
- Regina, Parkland, Southeast, and Weyburn and Area Early Childhood Intervention Programs
- *KidsFirst* Yorkton and Regional *KidsFirst* Community Developers
- Parkland and South East Regional Libraries
- and many other community-based organizations.

1.1.2 WHAT ARE THE STUDY OBJECTIVES?

The UEY initiative was designed to help communities discover the factors that promote or hinder children's readiness to learn and to use the insights they develop to become mobilized to take action. One of the long-term outcomes of this study, then, will be the development of a Community Action Plan that capitalizes on existing community strengths and addresses gaps in order to enhance the wellbeing of children.

With a community development approach as its foundation, the PCPF UEY project focuses on three specific areas:

1. To build knowledge of child development and parent and community factors (resources, supports, services) that support healthy child development and learning;
2. To mobilize communities to take action based on local research evidence, in order to improve the developmental outcomes, well-being and competence of the communities' children;
3. To develop and implement a Community Action Plan to foster child development in a sustainable manner.

The kindergarten year is an important milestone in child development as it marks the transition from receiving care in a home setting to a formal, structured learning environment in a school setting.

1.1.3 WHAT DOES THE UNDERSTANDING THE EARLY YEARS INITIATIVE MEASURE?

The UEY initiative was designed to deepen understanding of family and community influences on children's development from birth to six, as measured at kindergarten. The kindergarten year is an important milestone in child development as it marks the transition from receiving care in a home setting to a formal, structured learning environment in a school setting. This transition requires

multiple adaptations, to a new and wider social environment and to the demands of the educational system.

The main outcome studied in this project is children's "readiness to learn" at kindergarten age. [2] In the study context, readiness to learn is understood to be a broad and holistic concept that is very similar to the concept of healthy development. It is assessed by measuring children's physical, social, emotional, language and cognitive skills using the Early Development Instrument (EDI) (Janus & Duku, 2007; Janus & Offord, 2007).

Children are born "ready to learn," meaning that their nervous systems are equipped with the capacity to learn and develop. Neuroscience research has shown that learning begins in *utero* and continues throughout life, with the first five years being the most rapid period of brain development (Janus, 2006). How well these early years prepare children for the rest of their lives depends not only on their inherent abilities, but also on the extent to which they experience nurturing relationships and stimulating environments. By the time they begin kindergarten, differences in children's opportunities have already created significant disparities in what they know and can do, which in turn determines the degree to which they are able to benefit from the learning opportunities that school provides (Shonkoff & Phillips, 2000).

Research, including work conducted for UEY nationally, has repeatedly shown that a kindergarten teacher's assessment of a child's readiness to learn is the single strongest predictor of academic success in early grades. Subsequently, success in early grades is a strong predictor of high school completion, and measures to improve children's readiness to learn in kindergarten are protective against both dropping out before completing high school and adolescent delinquency. Research done by SPHERU and many others has shown that children who are successful in school tend to be successful in other areas of their lives, maturing into successful adults overall (Doherty, 1997).

If healthy development in the early years is necessary for successful outcomes in adulthood, such as attaining participation in the labour force or realizing individual life goals, it follows that developmental deficits stand in the way of achieving full human potential. This is why developmental measures such as readiness to learn are so important. Seen from this perspective, readiness to learn is much more than identifying developmentally vulnerable children in kindergarten. There are strong societal imperatives for ensuring that optimal human capital development is achieved. Canada's aging population will increase the productivity expectations of active labour force participants. As the labour market demand for knowledge workers increases and the demand for manual labour

[2] While widely used, the term "readiness to learn" is contested. Some argue that the term is too vague, that children are, in fact, born ready to learn, and that, as it is commonly used, it ignores the interplay between children and schools, because just as children need to be ready for school, schools also need to be ready to receive all children (Andrews & Slate, 2001; Emig, 2000; Pianta, 2002). In this report, readiness to learn is used specifically to refer to the multidimensional concept measured by the EDI. An alternate, our preferred term, "school readiness," will be used interchangeably with "readiness to learn" in this report.

declines, healthy child development may become increasingly important for understanding differences in outcomes in adulthood, and eventually whether we are losing or gaining ground as a successful and prosperous society.

But, as mentioned above, child development unfolds within the context of families, neighbourhoods and communities. This is why the UEY initiative measures factors in communities that may influence children's school readiness. Two main types of community factors are examined in this report: access to and availability of resources, and social risk. The first was assessed by surveying programs for children from birth to age six and their caregivers in the region, referred to as the "Inventory of Community Programs and Services." To measure social risk within communities, we constructed an index using socio-demographic indicators from 2006 Census data. Both these variables are described in greater detail later in the report.

At the national level, the UEY initiative produces a snapshot of children in Canada as a whole, as well as monitoring changes in kindergarten students over time. Another valuable aspect is that it provides information on children's developmental outcomes and school readiness within neighbourhoods, communities, and regions, allowing community members to compare the information collected about children in their area to provincial and national norms. In this way, educators, program-planners and policy-makers can make decisions based on local data, with the welfare of all Canadian children in mind.

Readiness to learn is much more than identifying developmentally vulnerable children in kindergarten. There are strong societal imperatives for ensuring that optimal human capital development is achieved.

2 How the Study was Conducted

In this section, we begin by describing the characteristics of the Southeast Region in which the study was carried out, followed by an explanation of how the region was divided into smaller study areas. Next we explain the three variables that were measured—readiness to learn, social risk, and resource access and availability—and the maps that were created to present the results.

2.1 THE PRAIRIE CHILDREN, PRAIRIE FUTURES REGION

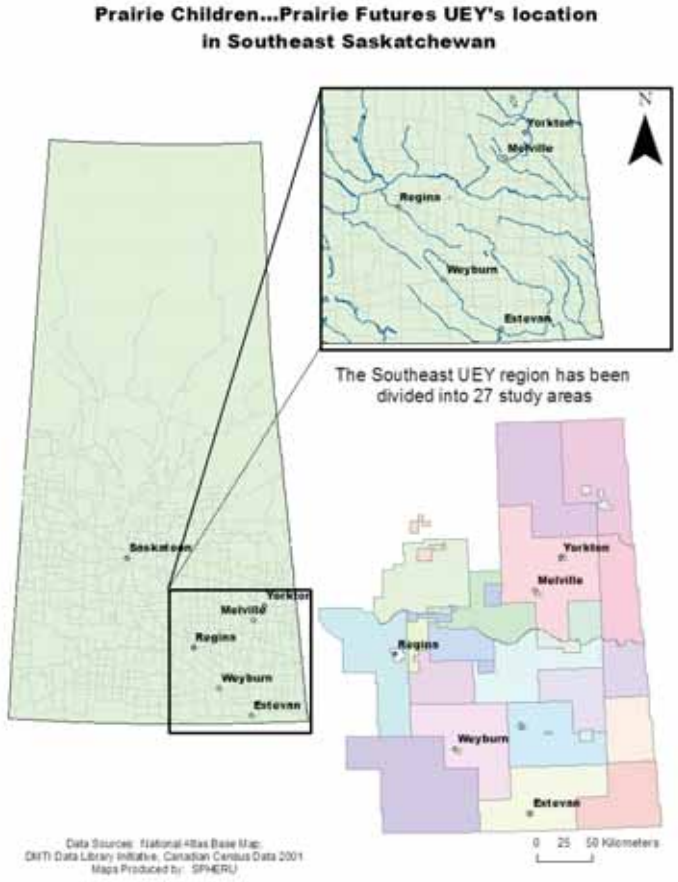
The PCPF UEY project was carried out in the Southeast Region of Saskatchewan as defined by the boundaries of the Southeast RIC (see Map 2.1). An area of 125,000 km^2, its population in 2006 was approximately 158,165, including 8,934 children four years of age and under. In the fall of 2008, 1910 children were registered in kindergarten. The largest city in the region, Yorkton, had a population of 15,038 at the time of the 2006 census.

The population is ethnically diverse, consisting of First Nations and Métis people (collectively referred to as Aboriginal), and new Canadians as well as those whose forebears, primarily European, helped settle the province in the early 20th century. The Aboriginal population in this region, and in the province as a whole, is growing more rapidly and is much younger than the non-Aboriginal population. One in five of the kindergarten students assessed for this report is Aboriginal. The 23 First Nations communities in the region belong to the governance body of Treaty Four. The strong commitment of these First Nations to their young children and families is demonstrated by the establishment of Head Start programs, child care centres, and preschool programs in the schools and the hiring of staff to assess children's development within the school system.

Geographically, the region includes rural and small urban areas, agricultural and industrial lands, with small pockets of densely populated areas scattered across expansive open spaces. The mainstay industry in Southeast Saskatchewan is agriculture, with large grain farms predominating in the southernmost area, and smaller, more diversified farms found in the more rolling land to the north. Southeast Saskatchewan is also rich in natural resources, including massive coal strip-mining operations, a strong oil industry, and highly productive potash mines.

Numerous cultural opportunities have been created in the region, from the Yorkton Short Film and Video Festival, Canada's longest running film festival, to community theatre and music festivals. Sports are a very important part of rural Saskatchewan life, with local arenas and curling rinks serving as major focal points in most small towns during the fall and winter, and swimming pools, parks and playgrounds during the summer.

Map 2.1 Map of Saskatchewan, Canada, showing the location of the Prairie Children . . . Prairie Futures UEY region



Southeast Saskatchewan has experienced many changes over the past several decades. Low grain prices and the rising costs of fuel, equipment, and chemicals have forced many farmers to sell their land and leave their community. Young people from rural areas have also increasingly moved to larger communities to further their education and search for better career opportunities, as have First Nations people. These changes have led to a decline in local services, with many communities experiencing school and hospital closures and business relocations.

Then, during the course of this study, Saskatchewan experienced an economic boom and an influx of newcomers. Real estate prices escalated, and both urban and rural communities struggled to meet their growing population's housing needs. While the province overall appeared to be relatively unaffected by the 2008 global recession, it did bring a significant slowdown in the oil and potash industries, which created a leveling-off in the Southeast Saskatchewan economy. Along with these economic fluctuations has come a host of social issues. With already-depleted local services for children and families, meeting demands in rural areas has become more challenging then ever.

Historically, rural people in Saskatchewan have worked together to face the challenges posed by distance to services and to each other. Despite the changes in communities brought about by population fluctuations, the people of the region remain resilient, with a strong volunteer base, and a sense of ownership of their region and province. This study will be valuable in assisting communities to

ensure that the best possible services and supports are available to families and children, now and in the future.

2.2 STUDY AREAS

In order to make the knowledge developed in the study as useful as possible to communities, this large and diverse region was divided into smaller study areas. Study area boundaries were determined after much discussion and deliberation among the research team and the PCPF Coalition. When defining study areas, their physical settings and similarities, such as access to services and community characteristic were taken into account, along with the following criteria, developed through this discussion: (1) Study areas must respect Census of Canada Dissemination Area (DA) boundaries; (2) Study areas must be physically contiguous (with the exception of First Nations communities, due to their particular historical, political and cultural characteristics); and (3) Study areas must have a minimum of 25-30 participants (kindergarten students), in order to protect their privacy.

In addition, existing administrative boundaries had to be taken into account. The PCPF UEY Coalition includes several EDI subcommittees established prior to the UEY project that had conducted at least two collections of EDI data in their school divisions. These committees each had previously defined study areas that had been established in consultation with other service providers, including Saskatchewan Health. In order to provide some continuity with past data collection, it was decided to use the previously defined boundaries as a starting point for the UEY study areas. Since the project involves 10 school divisions[3] (including the three Tribal Councils), it was critical to define the study areas in ways that would be meaningful for future work by ensuring a correspondence between school division and study area boundaries.

The Coalition also recognized the need to define study areas for First Nations communities in a manner congruent with the political authority of the First Nations tribal jurisdictions. The 23 First Nations communities in the region are supported by three tribal councils. Yorkton Tribal Council is located in Yorkton and includes Cote, Kahkewistahaw, Keeseekoose, Key, Ocean Man, and Sakimay First Nations. Its education department also administers Ochapowace, Cowessess, White Bear and Pheasant Rump First Nations. These communities all have schools, with the exception of Key and Pheasant Rump First Nations.

File Hills Qu'Appelle Tribal Council is located in Fort Qu'Appelle at the Treaty Four Governance Institute, and provides support for eleven First Nations bands, nine of which are included in this study: Carry the Kettle, Little Black Bear, Muscowpetung, Okanese, Pasqua, Peepeekisis, Piapot, Standing Buffalo, and Star Blanket First Nations. All of these First Nations have schools, except Little Black Bear and Star Blanket. Touchwood Agency Tribal Council is located in Punnichy and provides support to Day Star, George

[3]Only two of Horizon SD's schools are located within the Southeast Saskatchewan region and are therefore included in this project (George Gordon Education Centre and Punnichy Elementary School).

Gordon, Kawakatoose and Muskowekwan First Nations communities. Kawakatoose and Muskowekwan schools are administered under Touchwood Agency Education Department, while Day Star has no school. Children from Day Star attend Punnichy Elementary School in Horizon SD. The George Gordon Education Centre is unique in that, while it is administered by its community, it is part of Horizon SD, a public school division that falls under the Saskatchewan Ministry of Education.

For the purposes of this study, we grouped the First Nations communities into three study areas, based on the areas governed by the three tribal councils, even though these areas are not geographically contiguous. It should also be pointed out that the communities in the study area of Yorkton Tribal Council are not all members of that council; they are linked by leadership in education and therefore for the purpose of the study have been included within this tribal council.

Taking all these factors into account, the PCPF Southeast Saskatchewan region was divided into 27 study areas (see Map 2.1 and Table 2.1). Each of the four largest communities—Yorkton, Melville, Weyburn and Estevan—is treated as a separate study area, located within another, rural study area.

These areas are the focus for detailed analysis and study in this report. Further information on the boundaries of the study areas can be found in the *2008 Community Mapping Report*. For a complete listing of the communities and schools in each study area see Appendix A.

Study area	Total Population	Number of children 0-6 (% of total population)	Number of kindergarten students assessed with EDI
PCPF UEY	**158,165**	**13,130 (8.3%)**	1815
Balgonie	5965	620 (10.4%)	74
Canora	8755	535 (6.1%)	59
Carlyle	4980	410 (8.2%)	63
Carnduff	4920	440 (8.9%)	63
Esterhazy	3575	180 (5.0%)	39
Estevan	10,075	930 (9.2%)	127
File Hills Qu'Appelle TC	3070	445 (14.5%)	77
Fillmore	4505	335 (7.4%)	30
Fort Qu'Appelle	6475	520 (8.0%)	68
Grenfell	6560	475 (7.2%)	57
Indian Head	4265	320 (7.5%)	49
Kamsack	5770	370 (6.4%)	39
Kipling	3585	265 (7.4%)	39
Lampman	5555	500 (9.0%)	43
Langenburg	4940	345 (7.0%)	40
Lumsden	9785	795 (8.1%)	92
Melville	4305	305 (7.1%)	52
Moosomin	5145	485 (9.4%)	60
Radville	4390	325 (7.4%)	39
Redvers	2655	190 (7.2%)	37
Southey	5960	485 (8.1%)	52
Springside	9210	585 (6.4%)	34
Touchwood Agency TC	1955	330 (16.9%)	61
Weyburn	9160	800 (8.7%)	143
White City	4270	405 (9.5%)	89
Yorkton	15,040	1175 (7.8%)	207
Yorkton TC	3295	540 (16.4%)	82

Table 2.1 Population of study areas

2.3 VARIABLES USED IN THE STUDY

In this report, we present data on the school readiness of children attending kindergarten in each of the study areas, in relation to two types of community-level factors: social risk and the availability of and access to resources. We also present additional developmental and contextual information collected from a subgroup of children and their parents. In the next sections, we describe how these variables were measured.

2.3.1 READINESS TO LEARN

To measure kindergarten students' readiness to learn, UEY projects use the Early Development Instrument (EDI), a 104-item questionnaire developed by Dan Offord and Magdalena Janus at the Offord Centre for Child Studies at McMaster University. The EDI requires kindergarten teachers to evaluate each of their students in five areas, called domains: physical health and wellbeing; social competence; emotional maturity; language and cognitive development; and communication skills and general knowledge (Janus, 2006). Table 2.2 presents the five domains and their sub-domains and describes the characteristics of children who are 'ready to learn' within each sub-domain. It is important to note that the EDI was developed to report on the outcomes of groups of children, such as classes or communities; it is not intended as a screening or diagnostic tool or to assess an individual child's progress.

PHYSICAL HEALTH & WELLBEING	
Physical readiness for school day	Never or almost never come to school dressed inappropriately for activities, school tired, late or hungry.
Physical independence	Independent looking after their needs, have an established hand preference, are well coordinated, and do not suck a thumb/finger.
Gross and fine motor skills	Excellent ability to physically tackle the school day, with excellent or good gross and fine motor skills.
SOCIAL COMPETENCE	
Overall social competence	Excellent or good overall social development, very good ability to get along with other children and play with various children, usually cooperative and self-confident.
Responsibility and respect	Always or usually show respect for others, and for property, follow rules and take care of materials, accept responsibility for actions, show self-control.
Approaches to learning	Always or usually work neatly, independently, and solve problems, follow instructions and class routines, easily adjust to changes.
Readiness to explore new things	Curious about the surrounding world, and eager to explore new books, toys and games.
EMOTIONAL MATURITY	
Prosocial and helping behaviour	Help others who are hurt, sick or upset, offer to help spontaneously, invite bystanders to join in.
Anxious and fearful behaviour	Rarely or never display anxious behaviours like worrying or crying, happy and able to enjoy school, comfortable being left at school by caregivers.
Aggressive behaviour	Rarely or never behave aggressively; do not use aggression to solve a conflict, do not have temper tantrums, and are not mean to others.
Hyperactivity and inattention	Able to concentrate, pay attention, settle to chosen activities, wait their turn, and most of the time think before doing something.
LANGUAGE & COGNITIVE DEVELOPMENT	
Basic literacy skills	Have all the basic literacy skills: know how to handle a book, can identify some letters and attach sounds to some letters, show awareness of rhyming words, know the writing directions, and are able to write their own name.
Interest in literacy/numeracy	Show interest in books and reading, math and numbers, and have no difficulty remembering things.
Advanced literacy skills	Have at least half of the advanced literacy skills: reading simple, complex words or sentences, writing voluntarily, writing simple words or sentences.
Basic numeracy skills	Have all the basic numeracy skills: can count to 20 and recognize shapes and numbers, compare numbers, sort and classify, use one-to-one correspondence, and understand simple time concepts.
COMMUNICATION SKILLS & GENERAL KNOWLEDGE	
(no sub-domains)	Have excellent or very good communication skills; can communicate easily and effectively, participate in story-telling and imaginative play, articulate clearly, show adequate general knowledge, and are proficient in English or French.

Table 2.2 Characteristics of Children 'Ready to Learn' in EDI Domains and Sub-Domains

For this report, each kindergarten student in the region was assessed in the middle of the 2008-09 school year (i.e., February-March) by his or her teacher using the EDI.

2.3.2 SOCIAL RISK INDEX

The social, economic and demographic characteristics of communities are known to have an impact on school readiness among young children in these communities. To assess these characteristics, we developed a social risk index made up of the following six indicators taken from the 2006 Census,[4] each of which has been shown in many studies to be associated with adverse outcomes for children:

1. Single parent families (percentage of households with children aged 0-6 years headed by single parent)
2. Low education (percentage of population 15 years and over with less than Grade 12 education)
3. Transience (percentage of population that had moved at least once in the preceding year)
4. Home rental (percentage of households renting primary abode)
5. Receipt of government transfers (percentage of families receiving Employment Insurance, Canada Pension Plan, Child Tax Benefits, Social Assistance, Old Age Security, or Workers Compensation)
6. Below Low Income Cut-off (percentage of families and unattached individuals aged 15 years and over whose income fell below the low-income levels established by Statistics Canada)

[4]While the formula used to construct the SRI in this report is the same as that used in the 2008 Community Mapping Report, the numbers here are based on 2006 Census data, while the previous report used the 2001 Census data. Thus there are some differences between the SRI scores in the study areas, reflecting changes over time.

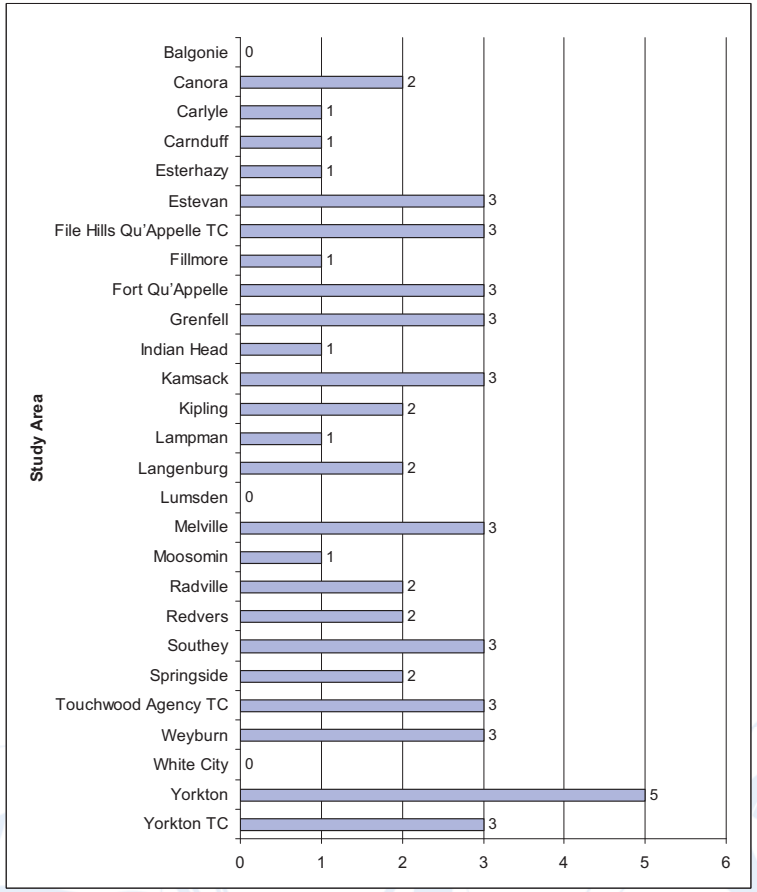


Figure 2.1 Social Risk Index by study area

The average value for each of the indicators in a study area was compared with the average for Saskatchewan as a whole and if it fell above the Saskatchewan average, a score of "1" was assigned. We then summed the scores for each study area across the six indicators to obtain the Social Risk Index (SRI) score. The SRI scores for study areas ranged from 0 (which we termed "low") to 6 (termed "high"). Figure 2.1 shows the SRI scores for the study areas. As it indicates, all but one study area received a score of 3 or below, the exception being Yorkton, with a score of 5. The most common SRI score is 3 (10 study areas), followed by 1 (7 study areas), then 2 (6 study areas); three study areas received a score of 0.

Detailed information on the components of the SRI for each study area is presented in Appendix B. As it shows, the indicator on which study areas were most likely to be above the provincial average was low education; only five study areas did not receive a point for this indicator. Second most common was receipt of government transfers, for which 17 study areas were above the provincial average. Many fewer study areas were above the average for the other indicators.

This approach to creating a social risk score has some limitations. First, study areas encompass a wide geographic area that may include communities at both ends of the SRI. This could result in an overall rating of low to moderate risk, concealing the presence of communities with very high and very low risk factors. A more accurate approach would examine risk indicators for much smaller geographical units (such as Census Dissemination Areas).

Another challenge in creating a SRI is taking into account the relative importance of the component indicators. Is the average level of educational attainment in a community, for example, as influential as the level of poverty? Relatedly, how far above or below the reference average does an indicator need to be in order to be significant? These complexities are not taken into account in our SRI: Each indicator carries the same weight and is scored as '1' if it is above the Saskatchewan average by any amount or '0' if it is the same or less. Thus, for example, Yorkton receives '1' in the category of government transfers because 13% of its population receives transfers, two percentage points above the provincial average, and Touchwood Agency Tribal Council also receives '1' in this category, with 36% of its population receiving government transfers, three times as high a percentage as Yorkton.

A third limitation stems from using the variable created by Statistics Canada called "Low Income Cut-off" (LICO) as an indicator of poverty. Since the data used to measure LICO is not collected on First Nations reserves by the Canadian Census, the three Tribal Councils in the study received a '0' for this category, when in fact, it is likely that the population living in these areas has a higher than average poverty rate.

2.3.3 RESOURCE ACCESS AND AVAILABILITY

In addition to the socio-demographic makeup of a community, children's readiness to learn may be influenced by the services and programs that have been developed to meet their needs and those of their families. However, just because services are available does not

mean that they will be used; the accessibility of the services is just as important. Barriers to accessibility include lack of transportation, inconvenient hours of operation, fees, and buildings inaccessible to people with physical handicaps.

For each study area, resource access and availability (RAA) scores were calculated to describe the extent of programming available and accessible for children and families in that area.[5] Scores were based on the information collected from the Inventory of Community Programs and Services survey and from lists compiled for other relevant resources or facilities, adjusted for accessibility. The information used was current as of October 1, 2009.

Each program enumerated in the survey was designated to one of the 27 study areas by postal code and dissemination area of program location and given a base score of 1. This base score was then adjusted to take into account the program's accessibility, based on the following factors: extended hours of operation (i.e., open after regular business hours); availability of transportation to and from the site; accessibility to people with disabilities; and whether or not there is a fee. Base scores were reduced by 0.5 for each barrier to access identified; conversely, 0.5 was added if the program had measures in place to increase access. Thus, study areas with many accessible child-centred resources scored high, while those with fewer accessible resources scored low. Scores range 3 to 77, as shown

[5] The RAA scores presented in this report differ somewhat from those in the 2008 Community Mapping Report, for two reasons: they are based on more up-to-date information and they were adjusted for accessibility, whereas the previous scores simply reflect a count of resources.

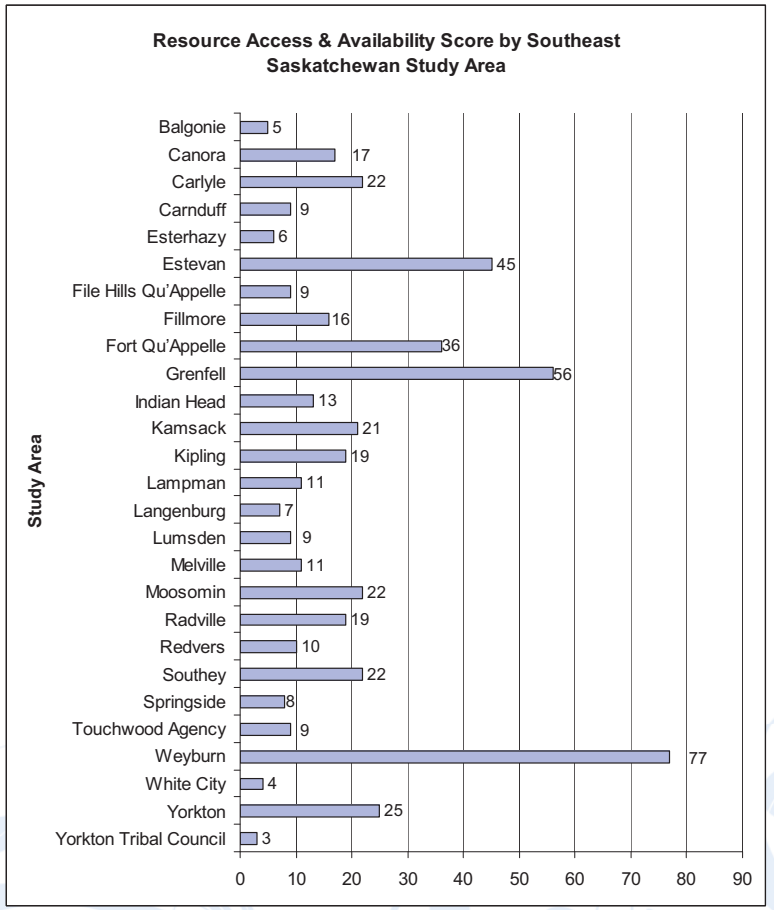


Figure 2.2 Resource Access and Availability Score by study area

in Figure 2.2; the majority of study areas scored 25 or lower, and 11 had a score of 10 or less.

A number of issues complicate this simple counting of resources. First, resources located in a given study area are not provided exclusively to residents of that area; their clientele may be quite widespread. While it is often not feasible for each small rural community to provide specific services and programs that require large numbers of users, many people in small communities travel to other nearby towns to utilize services and participate in programming. Because of the complexity involved in tracing patterns of program usage in rural areas, RAA scores are based solely on programs available within the boundaries of each study area. However, this limitation is mitigated at least in part by the fact that patterns of service use were one of the factors considered when defining the study areas.

Second, while the inventory was intended to include only programs aimed primarily at children from birth to six years of age or their parents, a few of the services and programs we included, such as recreational classes and libraries, have a broader target group. Third, accurately adjusting for the accessibility of programs and services is difficult, because barriers to access will have a differential impact depending on the resources and needs of individual families; for example, the extent to which a program fee represents a barrier will likely be dependent on families' incomes. Therefore, while we have corrected for some access barriers, these and other similar issues that we could not account for should be considered when interpreting RAA scores.

2.4 COMBINING SCHOOL READINESS, SOCIAL RISK, AND RESOURCE SCORES IN MAPS

Findings in this report are presented in the form of maps in order to provide a visual representation of the data by study area. A map is a valuable tool that can depict what is happening in communities and communicate findings in a straightforward and simple way (Policy Link, 2008). The maps were created using ArcGIS software, and make use of colour coding to simultaneously present the results for two variables (e.g., EDI score and RAA score) by study area.

In these maps, the SRI and RAA scores are simply the numbers for each study area, measured as described in the preceding sections. The scores for all the study areas in the region were divided into four quartiles; the colour of the study area indicates the group, as explained in the map key. It should be noted that for the SRI, a higher score indicates greater risk (i.e., a less positive environment), while RAA, a higher score reflects more resources (i.e., a more positive environment). The way in which EDI results are presented is more complicated and thus requires a detailed explanation.

The researchers who developed the EDI have created a set of normative data using the scores from

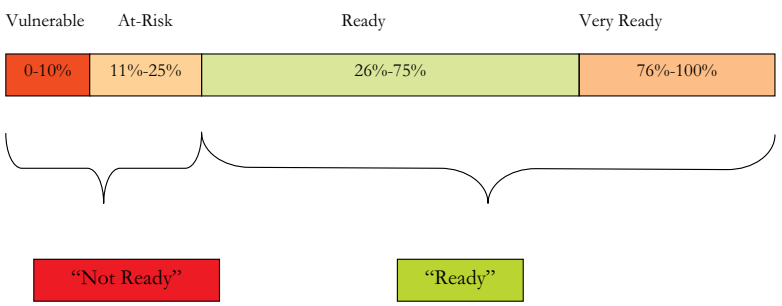


Figure 2.3 Categories of readiness to learn

176,621 kindergarten children from seven provinces. This group can be considered representative of all Canadian children. This group's scores were ordered from lowest to highest, and the top 75% of children defined as being *school ready*, while the lowest scoring 25% is considered *not ready*. Among the children who are deemed not ready, those who score in the bottom 10% are considered *vulnerable*, while children in the next 15% are considered at *risk* for poor outcomes in school (see Figure 2.3).

One way of evaluating how 'school ready' children in a particular community are, then, is to compare them to this normative group, by using the normative cut-off scores to classify children from the community being studied. For example, children in the normative group scoring 7.17 or below on the domain of emotional maturity fall into the lowest 25% and are therefore considered *not ready*. By calculating the percentage of children in a community who score 7.17 or below, we could assess whether that community differs from the normative group in terms of whether it has more or fewer children who are not ready for school with regard to emotional maturity. This is considered a better way to assess how children in a community are faring than comparing the average EDI scores, because averages do not provide information on the distribution of scores; in other words, two communities could have the same average, but in one this could be because most scores are tightly clustered around the average, while in the other, it could reflect a wide range, from very low to very high.

This report maps EDI results in terms of the percentage of children considered *vulnerable* (based on the cut-off points for the bottom 10% of the normative group) in each of the five domains listed in Table 2.2. The appropriate interpretation of vulnerability is that the child is, on average, more likely to be limited in his or her development than a child who scores above the cut-off. The percentages of vulnerable children in each study area were divided into quartiles; the size of the dot on a particular study area indicates which quartile it fell into. The maps also include the percentage of children in the normative group considered vulnerable for each domain, ranging from 9. 6%

Vulnerability in a domain is assessed in comparison to the Canadian normative group, while being challenged in a sub-domain means not achieving a minimum level of skills or behaviour.

Sub-Region	School Divisions	Study Areas
North	• Good Spirit School Division • Christ the Teacher School Division	• Canora • Kamsack • Springside • Yorkton • Melville • Langeburg • Esterhazy
Central	• Prairie Valley School Division • St. Augustine School Division	• Fort Qu'Appelle • Southey • Balgonie • Lumsden • Indian Head • White City • Grenfell • Kipling
South	• Southeast Cornerstone School Division • Holy Family SC School Division	• Radville • Weyburn • Estevan • Fillmore • Lampman • Carlyle • Redvers • Carnduff • Moosomin
First Nations	• Touchwood Agency • File Hills Qu'Appelle • Yorkton Tribal Council • Horizon SD • Punnichy Elementary School	• Touchwood Agency Tribal Council • File Hills Qu'Appelle Tribal Council • Yorkton Tribal Council

Table 2.3 Southeast Saskatchewan region's school divisions and study areas

to 12.2%. If the percentage of children in a study area scoring in the vulnerable range is higher than the norm, this indicates that the area is worse off for that domain than Canadian children in general; if fewer are considered vulnerable, the study area is doing better than the norm.

We also present the percentages of children who scored low on each sub-domain. In this context, 'low' means falling below the 'challenge cut-off' scores set by the EDI developers. These cut-offs identify children who have no skills or poor skills in the sub-domains and are described in detail in Appendix C. So vulnerability in a domain is assessed in comparison to the Canadian normative group, while being challenged in a sub-domain means not achieving a minimum level of skills or behaviour.

2.5 SCHOOL READINESS IN 2005 TO 2008

As mentioned in Section 2.2, school divisions in Southeast Saskatchewan had used the EDI to assess their kindergarten students prior to the UEY project. Following the main results section in this report, we present the data from these earlier EDI administrations, as they provide a valuable depiction of changes in school readiness over time.

Due to widely varying sample sizes for the earlier EDI data, we grouped the 27 study areas into four sub-regions—North, Central, South, and First Nations. Table 2.3 lists each region's school divisions and study areas. Unfortunately, no information was collected prior to 2009 in the First Nations sub-region, and only the South and Central sub-regions have data available for 2005.

2.6 PARENT INTERVIEWS AND DIRECT ASSESSMENTS OF CHILDREN SURVEY

A representative subgroup of families in the PCPF SE region was additionally studied using the Parent Interviews and Direct Assessments of Children Survey (PIDACS). PIDACS is another tool that UEY projects use to gather information about children's learning, social skills and behaviours, and physical health and wellbeing. Information is also collected on family, neighbourhood and community characteristics associated with child outcomes. In this way, PIDACS complements what the EDI and the SRI and RAA scores reveal by providing additional perspectives on children's development and their communities.

PIDACS has been completed in 21 UEY communities across Canada with a total of 8,834 children. This sample has been used to establish a Canadian average for each child outcome, family, and neighbourhood characteristic. The results from SE Saskatchewan, then, are compared here against the national averages when possible in order to see how the children of this region are faring compared to the general Canadian population. Because of the small number of children and parents studied, the results are not reported by study area, but by the same sub-region described above for the EDI results in earlier calendar years.

2.6.1 DIRECT ASSESSMENT OF COGNITIVE DEVELOPMENT

The direct assessments were conducted in person with the child by a trained assessor at the school and measure the child's development in three developmental areas: early literacy skills, number knowledge, and receptive language. In the PCPF SE region, 629 kindergarten students were directly assessed.

Early literacy skills are determined through an assessment tool called *Who Am I?*. Children are asked to copy five shapes and to write their name, numbers, letters, words, and one sentence. The number knowledge assessment determines children's ability to understand quantity (more versus less), to count objects, determine number sequences, and complete simple arithmetic. Children are assessed orally. Children's receptive language abilities are measured using the *Peabody Picture Vocabulary Test*, *Revised* (PPVT-R). This measure assesses the vocabulary that children can comprehend verbally. The assessor says a word to the child, and then the child must choose one out of four pictures that corresponds to the word.

All scores on the cognitive assessments are scaled to have a mean of 100 and a standard deviation of 15 for the Canadian PIDACS sample. Children who score below 85 are considered to have a low level of development in each area.

2.6.2 PARENT INTERVIEW

The parent interview was conducted via telephone or Internet with the person most knowledgeable about the child, usually the mother, on a range of topics described in detail below. In SE Saskatchewan, 537 parents or guardians were interviewed.

BEHAVIOURAL OUTCOMES

Parents were asked how they perceive their children's behaviour both within the home and in the community, focusing on three types of behaviour: physical aggression, inattention, and positive social behaviour. Physically aggressive children are often hostile and aggressive towards others, while the inattentive child is restless, finds it very difficult to concentrate, and is often hyperactive. Positive social behaviour includes helping and comforting peers and inviting others to play.

Each of these three behavioural scales is based on several questions with three possible answers for each item: 'never' (scored 0); 'sometimes' (1); or 'often' (3). Children whose average score is greater than 1.0 are considered to have a behavioural problem, with the exception of positive social behaviour where children are classified as having 'low pro-social behaviour' if they receive an average score less than 1.0.

CHILDREN'S HEALTH OUTCOMES

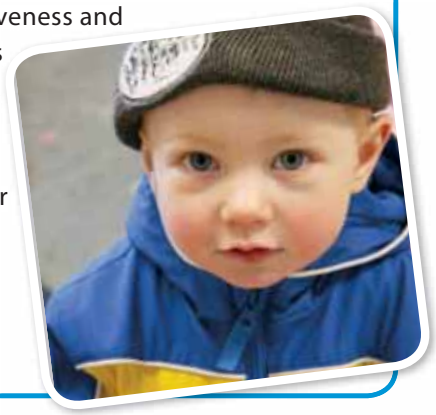
Parents were asked general questions regarding their children's physical and mental health, chronic conditions, and functional health problems. In terms of mental health, anxiety and depressive symptoms were assessed. Children with anxiety problems tend to be fearful, worried, nervous, high-strung, and tend to cry more than their peers. Children with depressive symptoms often feel unhappy or sad, and may have trouble enjoying activities.

The measures of depression and anxiety were each comprised of several questions with three possible responses for each item: 0 for never, 1 for sometimes and 3 for often. A child was categorized as having anxiety or depressive symptoms if their average score was greater than 1.0.

Chronic conditions include allergies, digestive problems, heart conditions, asthma, mental handicaps, learning disabilities, and emotional, psychological, and nervous difficulties. Functional health problems are physical, mental, or health conditions that limit the amount or kind of activity the child can engage in.

FAMILY FUNCTIONING AND MATERNAL DEPRESSION

Family functioning refers to the cohesiveness and adaptability of the family, and captures how well the family functions as a unit. Research has shown that better family functioning contributes positively to children's development, especially their behaviour (Racine & Boyle, 2002).



The parent interview assesses family functioning through 12 items that

measure familial communication, decision-making, and the ability to get along and feel accepted for who they are. Scores on this measure range from 0 to 36. A low-score threshold is set at 12; families with scores below 12 are considered to have extremely low family functioning.

Maternal depression was also assessed through the parent interview. Depression in mothers has been found to affect interactions with her children, leading to poorer social and cognitive developmental outcomes (Murray & Cooper, 1997). Mothers were asked to indicate their degree of agreement or disagreement with ten statements about their feelings and behaviours during the previous week, such as, "I felt that I could not shake off the blues, even with help from my family or friends," "I felt lonely," and "I had crying spells." Available responses range from "rarely or none of the time" to "most or all of the time". In this report, a low-score cut-off of 0.75 was used to identify mothers who reported signs of depression.

PARENTING

Three aspects of parenting were assessed by the parent interview: love and support, authority, and engagement. The love and support scale measures the extent to which parents are loving, responsive to the child's needs, and recognize the child's individuality. Parents who are loving and supportive tend to praise their children more, and are warm and expressive. Parents who score low on this measure tend to be harsh, neglectful, or detached. The authority scale measures parents' efforts to socialize their child into the family and society by providing supervision, and expecting mature behaviour

		Love and Support	
		High	*Low*
Authority	*High*	**Authoritative**	**Authoritarian**
	Low	**Permissive**	**Neglectful**

Table 2.4 Four types of parenting styles: Authoritative, Authoritarian, Permissive, and Neglectful

and demanding compliance. Parents scoring high on this scale set clear boundaries and consistently reinforce appropriate behaviour. Engagement assesses the amount of time parents engage positively with their children, including, for example, reading together or playing games. Scores range between 0 and 10.

In combination, the two parenting practices of love and support and authority have been used to define four types of parenting styles. As shown in Table 2.4, parents high in both love and support and authority are considered to use an 'authoritative' parenting style; children of these parents have been shown to have better developmental outcomes according to several studies (Chao & Willms, 2002). In contrast, parents who are loving and supportive

Parents who are loving and supportive tend to praise their children more, and are warm and expressive. Parents who score low on this measure tend to be harsh, neglectful, or detached.

but lack authority are termed 'permissive,' while those who are high on 'authority' but less loving and supportive are considered 'authoritarian.' Parents who are less loving and supportive and who do not adequately monitor their children' behaviour are said to demonstrate a 'neglectful' parenting style.

COMMUNITY ACTIVITIES AND RESOURCES

Parents were asked several questions about their children's involvement in community activities in two domains: extracurricular and literacy. Extracurricular activities include participation in sports with a coach, organized physical activities (e.g., dance, gymnastics, martial arts), unorganized physical activities (e.g., running, biking), music lessons, and community programming. Literacy activities include looking at books, magazines or comics, completing puzzles, playing with pencils and writing, and reading books.

Parents were also asked about their children's use of community resources within the following three categories: recreational resources; entertainment and cultural resources; and educational resources. Recreational resources include parks, play spaces and recreational trails, beaches, swimming pools, skating rink, recreational or community centres, and parks and campgrounds. Entertainment and cultural resources include sporting events, movies, museums, art galleries or exhibits and plays or musical performances. Educational resources include libraries or bookmobiles, book clubs and reading programs, family resource centres or drop-in programs, and educational or science centres. Children's use of these resources and involvement in activities is important for their cognitive and physical development.

CHILD CARE

Parents' use of child care was assessed by asking them: "While you and your spouse/partner are at work or studying, do you currently use child care such as daycare, babysitting, care by a relative or other caregiver, or a before and after school program?" Parents indicated whether or not they used any of these types of child care and if so, for how many hours per week.

NEIGHBOURHOOD CHARACTERISTICS

Three types of neighbourhood characteristics were measured in the parent interview: overall quality, cohesion, and safety. The neighbourhood or community is the immediate environment

in which parents and young children live and as such, plays an important role in shaping children's development. A neighbourhood has high quality if it has many other families with children, good schools and nursery schools, adequate facilities for children, such as playgrounds and pools, good health facilities, actively involved residents, and accessible public transportation. Neighbourhood cohesion refers to whether neighbours are close and support each other. In cohesive communities, neighbours help each other and get together to deal with problems when they arise; there are adults in the neighbourhood that children can look up to, parents watch out to make sure children are safe and neighbours keep their eyes open for possible trouble. Neighbourhoods with high levels of perceived safety are safe to walk alone in at night, safe for children to play outdoors during the day, and have reliable adults within the neighbourhood to make sure children are safe.

For each of these three scales, responses can range from 0 to 10, with 5 being neutral. Average ratings above 5 indicate the neighbourhood has high quality, cohesion or safety.

The social support parents receive from family and friends was also measured. In communities with high levels of social support, parents feel they have someone to turn to, people who care about their problems and wellbeing, and people surrounding them with similar interests, attitudes and concerns. Responses for social support are also rated on a 10-point scale with 5 being a neutral response. However, a higher cut-off point of 6.67 was used to define a high level of social support, since responses were skewed towards the positive.

In communities with high levels of social support, parents feel they have someone to turn to, people who care about their problems and well-being, and people surrounding them with similar interests, attitudes and concerns.

3 Findings: School Readiness, Social Risk, and Resource Access and Availability

How does the school readiness of children in the PCPF UEY region compare to that of the normative group of Canadian children? Figure 3.1 shows the percentages of children in Southeast Saskatchewan who were *ready, at risk*, and *vulnerable* within each EDI domain in 2008-09. As it reveals, in terms of the percentage who are ready for school, the region's children are performing at or slightly better than the norm of 75% in three domains: physical health and wellbeing, social competence, and emotional maturity. They are slightly below the norm in language and cognitive development and communication skills and general knowledge. However, in terms of the percentage that fall into the 'vulnerable' category, the results are slightly different: Compared to the norm of 10%, the children in this region are more likely to be considered vulnerable in the domains of physical health and wellbeing and language and cognitive development, and equally or less likely to be vulnerable in terms of social competence, emotional maturity, and general knowledge.

More informative, however, is the analysis of EDI results by study area. In the sections that follow, three series of maps are presented, depicting these results:

1. Total number of children, with SRI and resource access and availability scores;
2. EDI results for percentage of children considered vulnerable in each of the five domains, with SRI and resource access and availability scores;

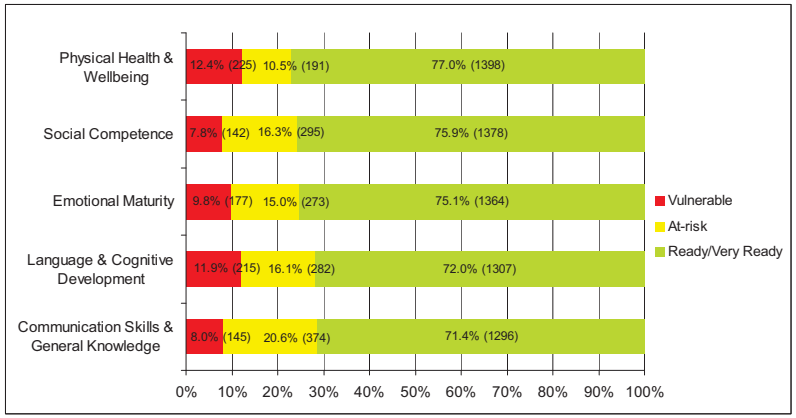


Figure 3.1 Percentages of children in Southeast Saskatchewan who are *Ready*, *At Risk*, or *Vulnerable* by each domain

3. Percentages of children considered vulnerable in one or more domains, with SRI and resource access and availability scores.

In addition to the maps, Section 3.2 includes tables that present the percentages and numbers of children who are considered vulnerable in the domain and challenged for each sub-domain; the results for the sub-domains are also presented in the form of graphs. Including the actual number of children who are vulnerable or challenged, in addition to the percentage, is important because these numbers vary considerably, related to the total number of children in each study area.

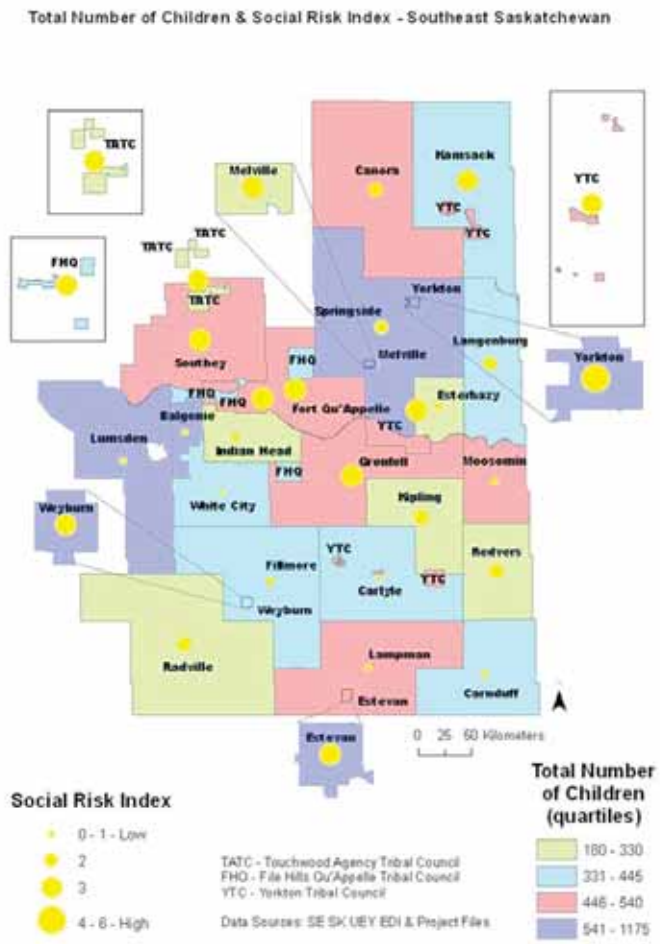
Maps of these results for the sub-domains can be found in Appendix D of this document.

3.1 NUMBER OF CHILDREN

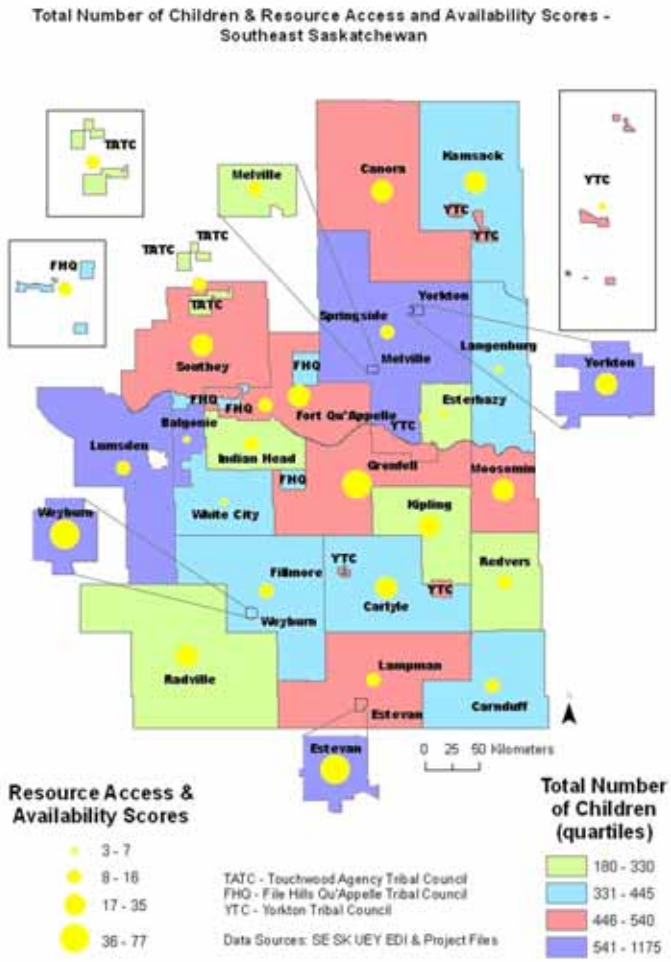
Maps 3.1 and 3.2 show the distribution of children aged 0-6 across Southeast Saskatchewan's 27 study areas with SRI and RAA scores, respectively. The total number of children varies from 180 to 1175 per study area. The larger centres (Weyburn, Yorkton, and Estevan), as expected, have the largest number of children (although the Tribal Council areas have the highest concentrations of children, as Table 2.1 shows). These areas also tend to have higher SRI scores, as well as higher RAA scores. Taken in combination, this indicates that while greater numbers of children are being exposed to the potentially harmful effects of high social risk in these more urban study areas, they are also able to access more programs and services, on the whole, than in other study areas.

3.2 SCHOOL READINESS

In the following sections, we present the results for each of the five domains of the EDI, examining the percentage of children considered vulnerable in each study area in relation to the other study areas (by dividing the areas into quartiles, presented on the maps) and in relation to the Canadian norm (by comparing the percentages in the tables). The maps also include the SRI and RAA scores for each study area.



Map 3.1



Map 3.2

3.2.1 PHYSICAL HEALTH AND WELLBEING

This domain refers to the child's physical readiness for the school day, physical independence, and gross and fine motor skills. Children scoring in the lower range on this domain can generally be characterized as having average or poor fine and gross motor skills, sometimes coming to school tired or hungry, usually clumsy, and with flagging energy levels. In contrast, those scoring in the higher range are physically ready to tackle a new day at school, generally independent, and have excellent motor skills.

Of the 27 study areas, 15 are above the norm for percentage of children considered vulnerable for the domain of physical health and wellbeing. The percentages (shown in Table 3.1) range from just slightly over the norm, for example, in Carlyle, Lumsden, and the Touchwood Agency Tribal Council, to more than twice as high, in Melville, Moosomin, and the Yorkton Tribal Council.

In the sub-domain of physical readiness for school (shown in Table 3.1 and Figure 3.2), while most study areas have fewer children who are challenged than the Canadian norm, there are some exceptions, notably Melville (11.5%) and Yorkton Tribal Council (23.2%). Even more study areas have high percentages of children considered challenged in the sub-domain of physical independence (Table 3.1 and Figure 3.3), including four in which more than one quarter of children are challenged (Kipling, Lampman, Melville and Yorkton Tribal Council). In the sub-domain of gross and fine motor skills (Table 3.1 and Figure 3.4), there were eight study areas in which more than a third of children were considered challenged. On the positive side,

in three study areas, the proportion of children who scored low was less than half the Canadian norm. Many of the study areas with a high percentage of vulnerable children in this domain also have high social risk scores (see Map 3.3). However, several study areas (e.g., Lampman, Moosomin) have higher than average percentages vulnerable and low social risk scores.

Study area	Physical health & wellbeing	Physical health and wellbeing sub-domains		
		Physical readiness	Physical independence	Gross & fine motor Skills
Canadian norm	11%	3.9%	8.9%	21.8%
Southeast Saskatchewan	12.4% (225)	4.2% (76)	13.4% (243)	27.4% (497)
Balgonie	12.2% (9)	4.1% (3)	12.2% (9)	45.2% (33)
Canora	10.2% (6)	1.7% (1)	13.6% (8)	30.5% (18)
Carlyle	11.1% (7)	4.8% (3)	7.9% (5)	46.0% (29)
Carnduff	12.7% (8)	3.2% (2)	14.3% (9)	36.5% (23)
Esterhazy	7.7% (3)	2.6% (1)	7.7% (3)	28.2% (11)
Estevan	10.2% (13)	2.4% (3)	12.6% (16)	16.5% (21)
File Hills Qu'Appelle TC	14.3% (11)	6.5% (5)	9.1% (7)	32.5% (25)
Fillmore	3.3% (1)	0.0% (0)	6.7% (2)	43.3% (13)
Fort Qu'Appelle	17.6% (12)	1.5% (1)	10.3% (7)	16.2% (11)
Grenfell	1.8% (1)	1.8% (1)	3.5% (2)	8.8% (5)
Indian Head	14.3% (7)	2.0% (1)	14.3% (7)	24.5% (12)
Kamsack	17.9% (7)	7.7% (3)	10.3% (4)	41.0% (16)
Kipling	10.3% (4)	0.0% (0)	35.9% (14)	12.8% (5)
Lampman	16.3% (7)	2.3% (1)	25.6% (11)	16.3% (7)
Langenburg	5.0% (2)	2.5% (1)	10.0% (4)	52.5% (21)
Lumsden	12.0% (11)	3.3% (3)	6.5% (6)	25.0% (23)
Melville	23.1% (12)	11.5% (6)	28.8% (15)	17.3% (9)
Moosomin	21.7% (13)	8.3% (5)	13.3% (8)	20.0% (12)
Radville	12.8% (5)	0.0% (0)	20.5% (8)	25.6% (10)
Redvers	2.7% (1)	0.0% (0)	8.1% (3)	5.4% (2)
Southey	1.9% (1)	3.8% (2)	3.8% (2)	32.7% (17)
Springside	2.9% (1)	0.0% (0)	5.9% (2)	29.4% (10)
Touchwood Agency TC	11.5% (7)	6.6% (4)	18.0% (11)	6.6% (4)
Weyburn	14% (20)	4.2% (6)	17.5% (25)	29.4% (42)
White City	3.4% (3)	0.0% (0)	4.5% (4)	39.3% (35)
Yorkton	10.1% (21)	2.4% (5)	12.6% (26)	24.6% (51)
Yorkton TC	39% (32)	23.2% (19)	30.5% (25)	39.0% (32)

Table 3.1 Percentage (number) of children considered vulnerable in physical health and wellbeing domain and challenged in sub-domains
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm.

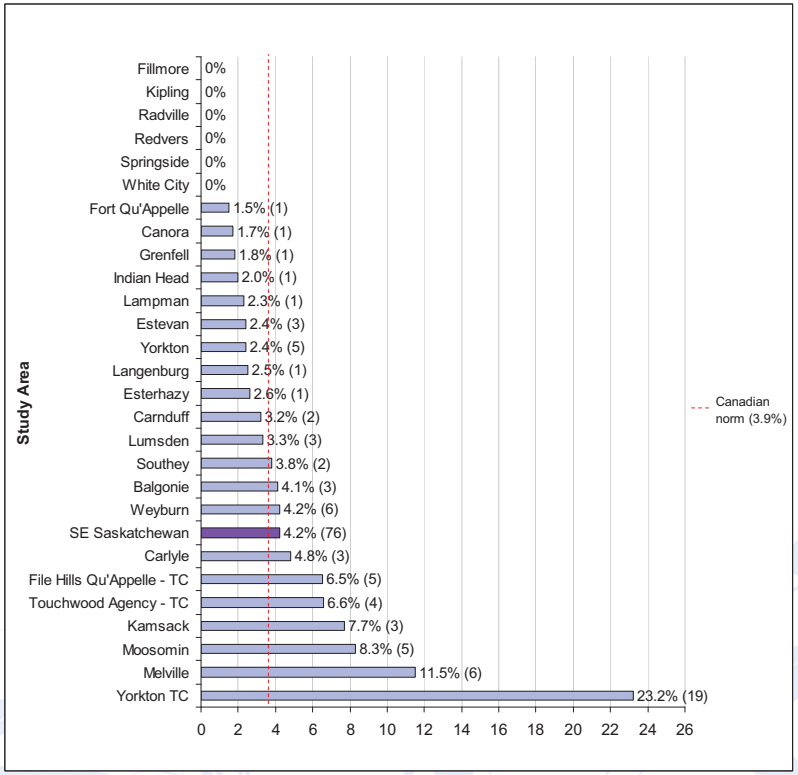


Figure 3.2 Percentage (number) of children considered challenged in terms of physical readiness for school
Note: This sub-domain assesses whether the child has arrived more than once over- or underdressed for school-related activities; too tired/sick to do school work; late; or hungry.

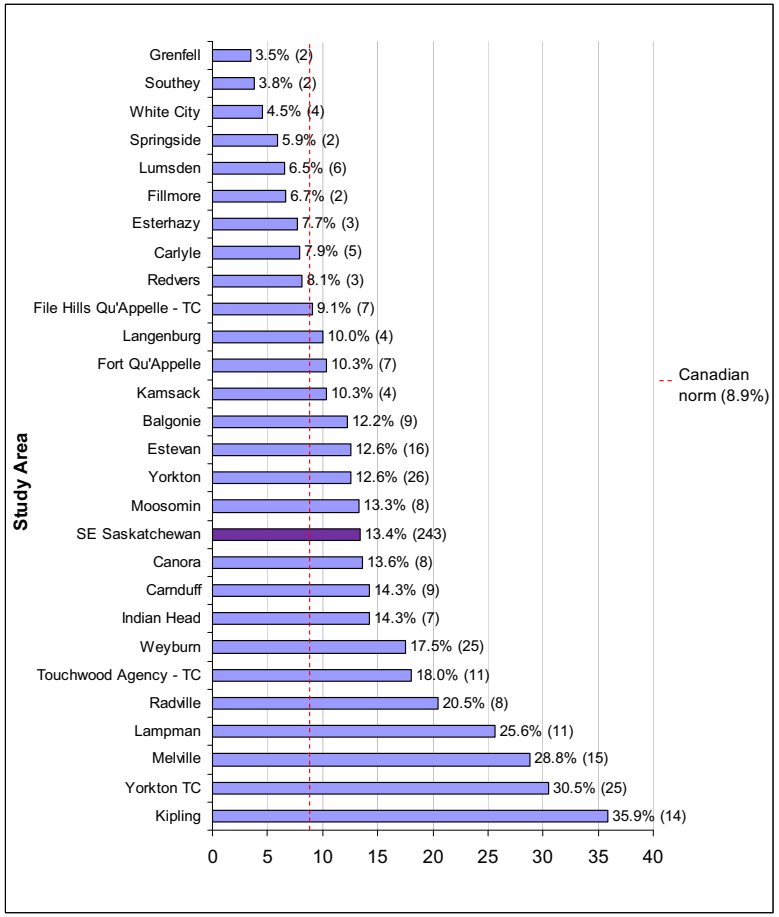


Figure 3.3 Percentage (number) of children considered challenged in terms of physical independence

Note: This sub-domain assesses whether the child is independent in washroom habits most of the time; shows an established hand preference; is well coordinated; and sucks a thumb/finger.

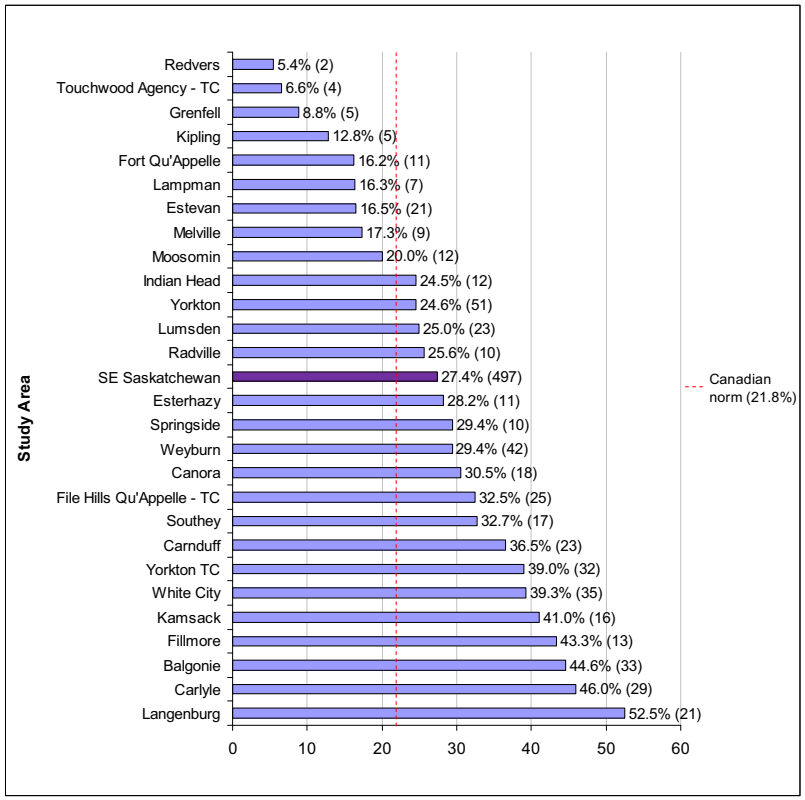
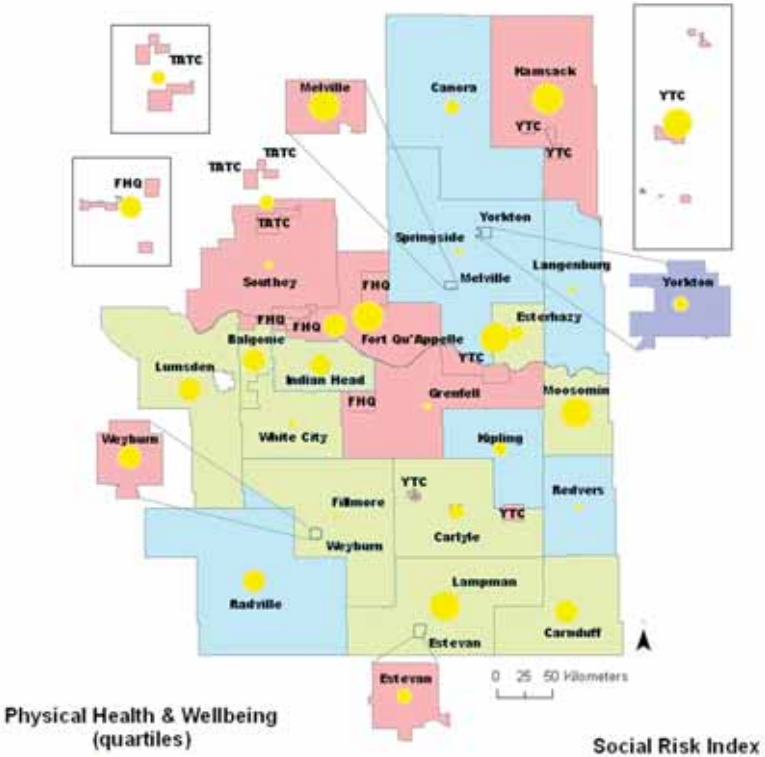


Figure 3.4 Percentage (number) of children considered challenged in terms of gross and fine motor skills

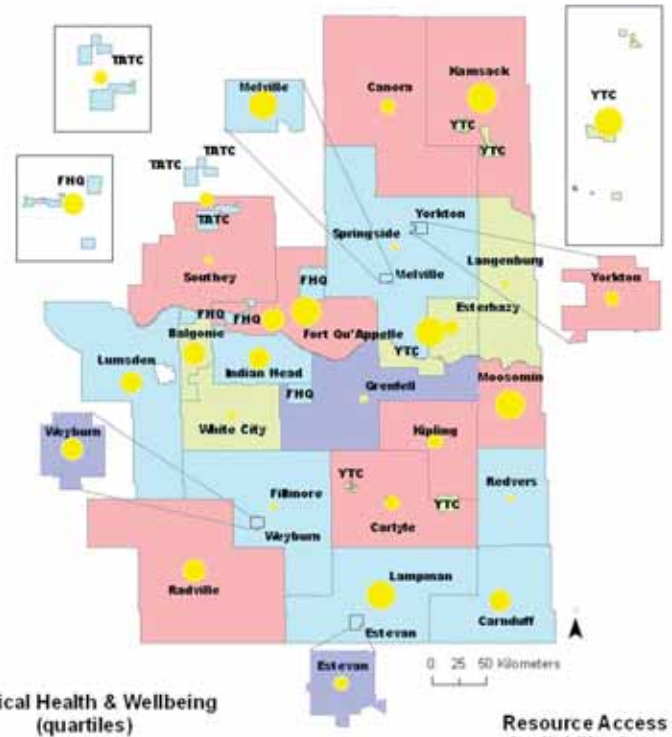
Note: This sub-domain assesses the child's proficiency at holding a pen, crayons, or brush; ability to manipulate objects; ability to climb stairs; and overall physical development.

EDI Domain 'Physical Health & Wellbeing' -
Percentage of Children Vulnerable & Social Risk Index Scores - Southeast Saskatchewan



Map 3.3

EDI Domain 'Physical Health & Wellbeing' -
Percentage of Children Vulnerable & Resource Access & Availability Scores -
Southeast Saskatchewan



Map 3.4

No connection is apparent between the percentage of vulnerable children and resource access and availability in the study areas (see Map 3.4). Some study areas (e.g., Moosomin, Kamsack) had relatively high resources as well as the highest level of percentage of children vulnerable. Other areas (e.g., Lampman, Melville, Yorkton Tribal Council) had fewer resources and a high percentage of vulnerable children.

Children scoring in the lower range on the Physical health and wellbeing domain can generally be characterized as having average or poor fine and gross motor skills, sometimes coming to school tired or hungry, usually clumsy, and with flagging energy levels.

3.2.2 SOCIAL COMPETENCE

The social competence domain encompasses overall social competence, responsibility and respect, approaches to learning and readiness to explore new things. Children scoring in the lower range in this domain can generally be characterized as having poor overall social skills, with regular serious problems in more than one area of getting along with other children, accepting responsibility for own actions, following rules and class routines, respect for adults, children and other property, with self-confidence, self-control, adjustment to change, usually unable to work independently. Those scoring in the higher range generally get along with other children, working and playing with them cooperatively; are respectful, self-confident, curious and able to follow class routines and work independently. Only eight of the study areas had a higher proportion of vulnerable children than the normative group (see Table 3.2). The highest were Radville, with 25.6% and Yorkton Tribal Council, with 22%.

	Social competence	Social competence sub-domains			
Study area		Overall social competence	Responsibility & respect	Approaches to learning	Explores new things
Canadian norm	9.6%	8.4%	4.7%	8.1%	3.2%
Southeast Saskatchewan	7.8% (142)	8.0% (145)	3.9% (70)	7.8% (142)	2.4% (43)
Balgonie	9.5% (7)	10.8% (8)	5.4% (4)	8.1% (6)	4.1% (3)
Canora	3.4% (2)	8.5% (5)	0.0% (0)	6.8% (4)	0.0% (0)
Carlyle	12.7% (8)	7.9% (5)	9.5% (6)	12.7% (8)	1.6% (1)
Carnduff	15.9% (10)	7.9% (5)	3.2% (2)	9.5% (6)	0.0% (0)
Esterhazy	0.0% (0)	5.1% (2)	0.0% (0)	0.0% (0)	0.0% (0)
Estevan	5.5% (7)	5.5% (7)	1.6% (2)	3.1% (4)	7.1% (9)
File Hills Qu'Appelle TC	7.8% (6)	10.4% (8)	3.9% (3)	14.3% (11)	3.9% (3)
Fillmore	3.3% (1)	10.0% (3)	0.0% (0)	3.3% (1)	0.0% (0)
Fort Qu'Appelle	1.5% (1)	2.9% (2)	1.5% (1)	2.9% (2)	1.5% (1)
Grenfell	5.3% (3)	3.5% (2)	1.8% (1)	12.3% (7)	0.0% (0)
Indian Head	2.0% (1)	2.0% (1)	0.0% (0)	2.0% (1)	0.0% (0)
Kamsack	10.3% (4)	20.5% (8)	5.1% (2)	5.1% (2)	5.1% (2)
Kipling	5.1% (2)	7.7% (3)	2.6% (1)	2.6% (1)	0.0% (0)
Lampman	14% (6)	9.3% (4)	2.3% (1)	14.0% (6)	7.0% (3)
Langenburg	5.0% (2)	10.0% (4)	2.5% (1)	5.0% (2)	0.0% (0)
Lumsden	5.4% (5)	9.8% (9)	6.5% (6)	5.4% (5)	1.1% (1)
Melville	7.7% (4)	7.7% (4)	3.8% (2)	9.6% (5)	0.0% (0)
Moosomin	13.3% (6)	15.0% (9)	6.7% (4)	13.3% (8)	0.0% (0)
Radville	25.6% (10)	15.4% (6)	10.3% (4)	20.5% (8)	2.6% (1)
Redvers	10.8% (4)	5.4% (2)	5.4% (2)	8.1% (3)	2.7% (1)
Southey	1.9% (1)	3.8% (2)	0.0% (0)	0.0% (0)	0.0% (0)
Springside	2.9% (1)	2.9% (1)	0.0% (0)	2.9% (1)	0.0% (0)
Touchwood Agency TC	9.8% (6)	8.2% (5)	6.6% (4)	11.5% (7)	11.5% (7)
Weyburn	7% (10)	10.5% (15)	2.1% (3)	5.6% (8)	0.7% (1)
White City	3.4% (3)	5.6% (5)	5.6% (5)	9.0% (8)	1.1% (1)
Yorkton	5.8% (12)	5.3% (11)	3.9% (8)	5.3% (11)	1.9% (4)
Yorkton TC	22% (18)	11.0% (9)	9.8% (8)	20.7% (17)	6.1% (5)

Table 3.2 Percentage (number) of children considered vulnerable in social competence domain and challenged in sub-domains
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm.

In the sub-domain of overall social competence, shown in Table 3.2 and Figure 3.5, there were nine study areas in which at least one in ten children scored low, the highest being Kamsack, where one in five children was challenged. In the sub-domain of responsibility and respect (Table 3.2 and Figure 3.6), higher than normal proportions of children with low scores were found in ten study areas; on the positive side, twelve areas had less than half as many children considered challenged than the norm. In the 'approaches to learning' sub-domain (Table 3.2 and Figure 3.7), 11 study areas had a higher proportion of children considered challenged than the norm; in the Yorkton Tribal Council and Radville study areas, more than one in five children scored low. In eight other study areas, however, the percentage challenged was less than half the Canadian norm. Finally, in the sub-domain called 'readiness to explore new things,' (Table 3.2 and Figure 3.8) seven study areas had above normal percentages of children considered challenged, with Touchwood Agency Tribal Council the highest at 11.5%. In contrast, there were 17 study areas in which the percentage of children scoring low was less than half the norm.

Map 3.5 shows that low social risk scores do not appear related to poorer performance on the social competence domain. The majority of study areas in the top quartile of percentage of children vulnerable also have low SRI scores. Study areas with the highest RAA scores have fewer vulnerable children than the norm (Map 3.6); areas with moderate resources scores varied considerably in terms of the percentage of vulnerable children.

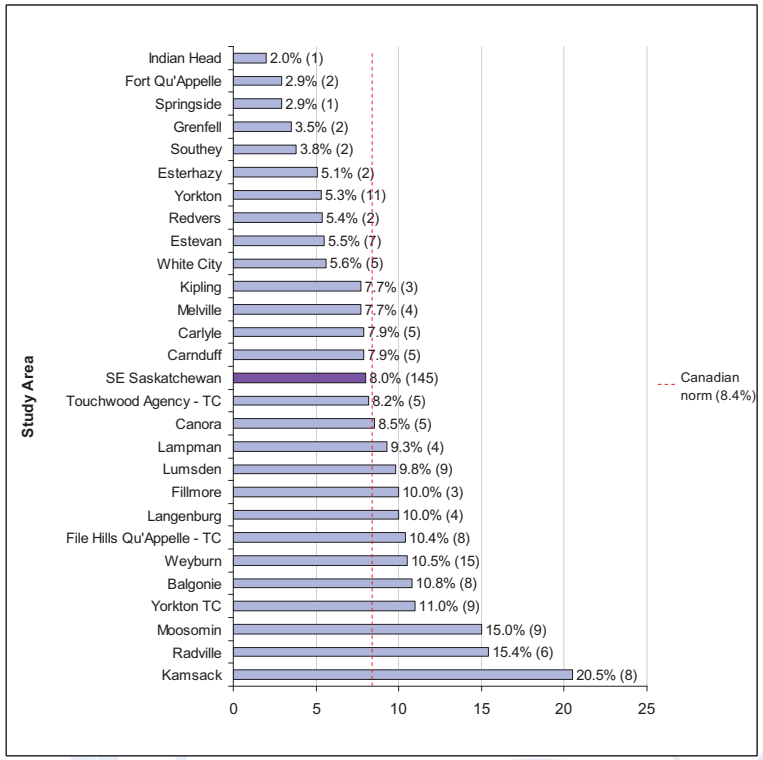


Figure 3.5 Percentage (number) of children considered challenged in terms of overall social competence
Note: This sub-domain assesses the child's overall social/emotional development and ability to get along with peers, and whether the child plays and works cooperatively with other children at the level appropriate for his/her age; is able to play with various children; and shows self-confidence.

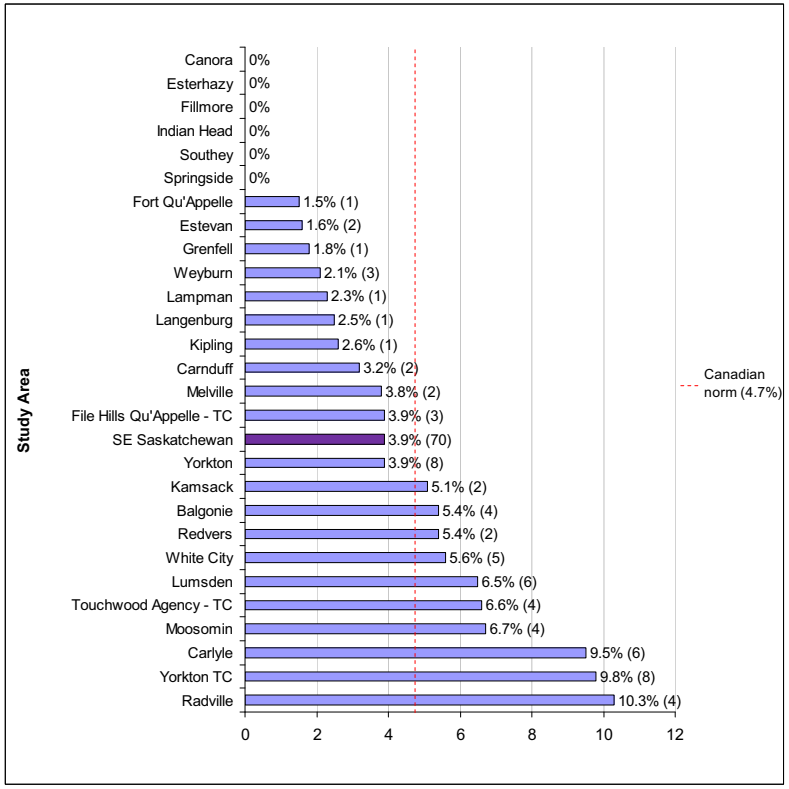


Figure 3.6 Percentage (number) of children considered challenged in terms of responsibility and respect

Note: This sub-domain assesses whether the child respects the property of others; follows rules and instructions; demonstrates self-control; demonstrates respect for adults; demonstrates respect for other children; accepts responsibility for actions; takes care of school materials; and shows tolerance to someone who made a mistake.

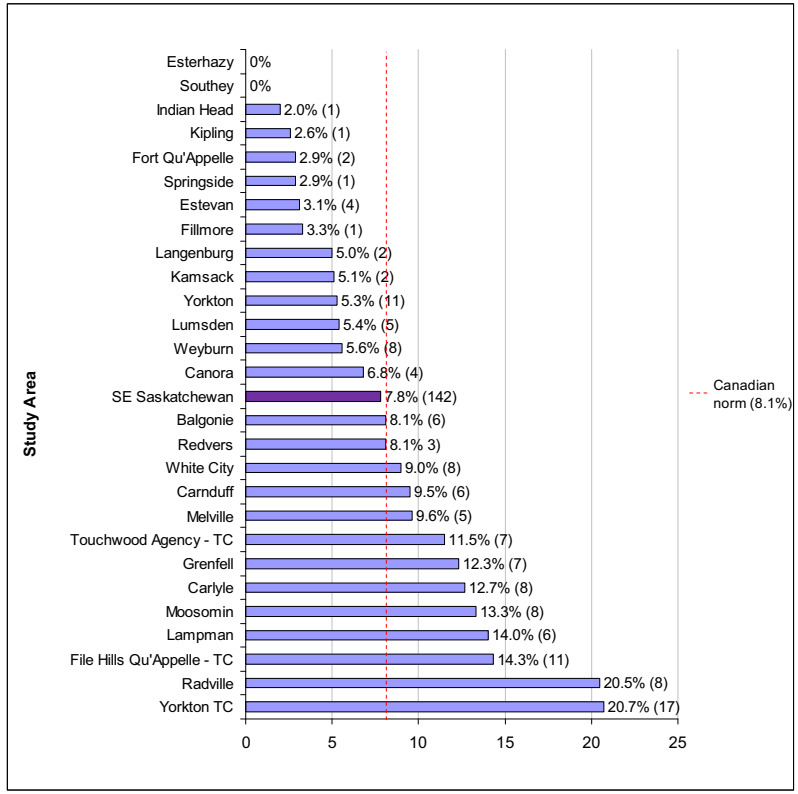


Figure 3.7 Percentage (number) of children considered challenged in terms of approaches to learning

Note: This sub-domain assesses whether the child listens attentively; follows directions; completes work on time; works independently; works neatly and carefully; is able to solve day-to-day problems by him/herself; is able to follow one-step instructions; is able to follow class routines without reminders; and is able to adjust to changes in routines.

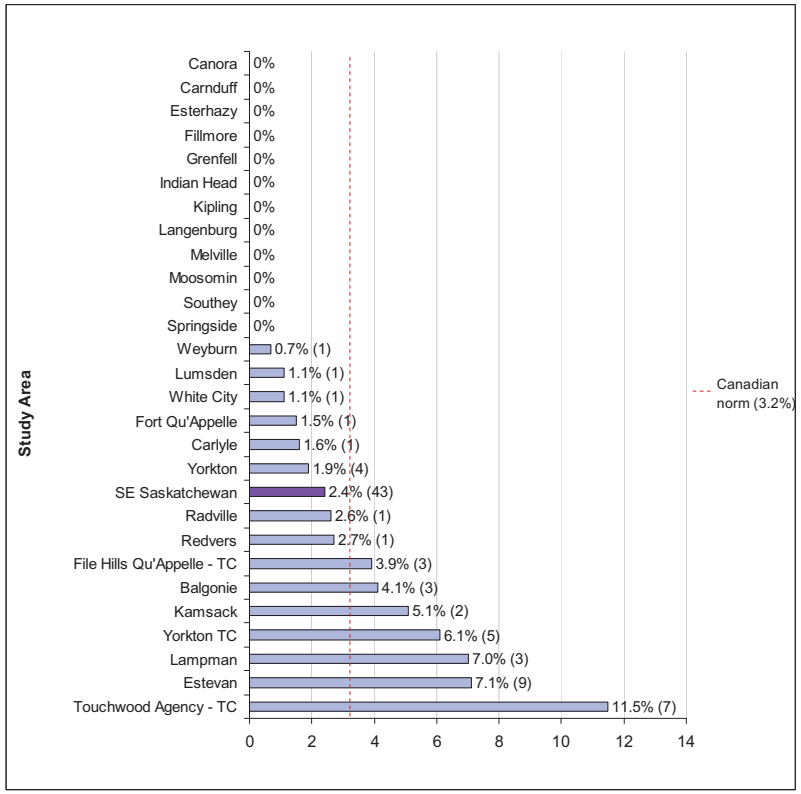
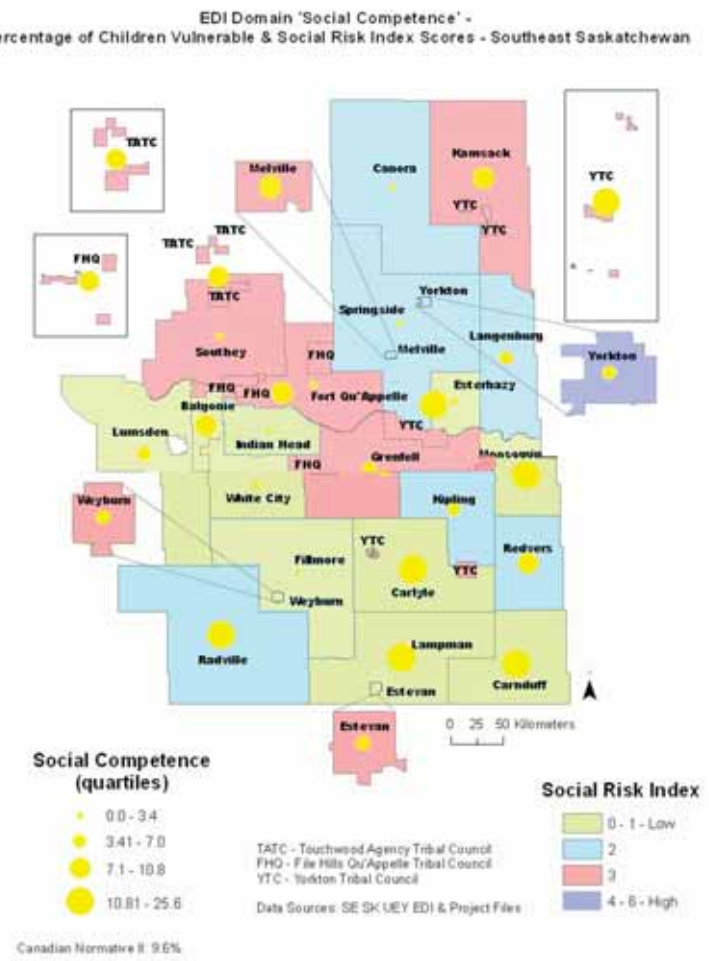
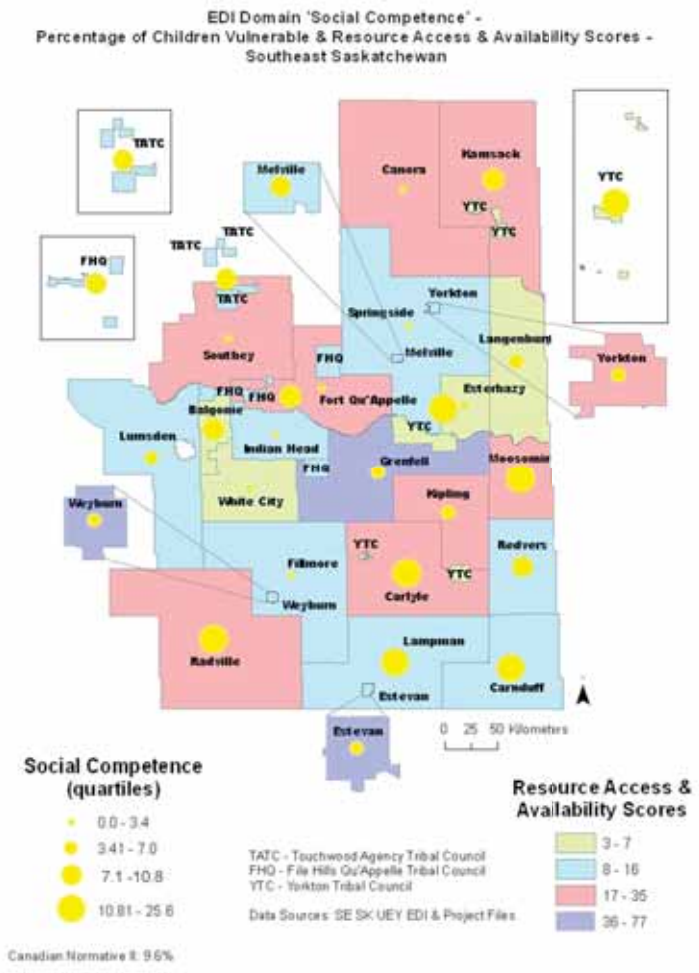


Figure 3.8 Percentage (number) of children considered challenged in terms of readiness to explore new things

Note: This sub-domain assesses whether the child is curious about the world; is eager to play with a new toy or game; and is eager to play with/read a new book.



Map 3.5



Map 3.6

3.2.3 EMOTIONAL MATURITY

This domain includes both positive (prosocial/helping) behaviour, and three areas of negative behaviour, reflecting anxiety and fear,

		Emotional maturity sub-domains			
Study area	Emotional maturity	Prosocial & helping behaviour	Anxious & fearful behaviour	Aggressive behaviour	Hyperactivity & inattention
Canadian norm	10.0%	33.5%	2.1%	7.8%	13.1%
Southeast Saskatchewan	9.8% (177)	33.8% (614)	1.7% (31)	5.5% (99)	12.6% (229)
Balgonie	8.1% (6)	39.2% (29)	0.0% (0)	8.1% (6)	9.5% (7)
Canora	6.8% (4)	11.9% (7)	1.7% (1)	15.3% (9)	15.3% (9)
Carlyle	12.7% (8)	50.8% (32)	0.0% (0)	4.8% (3)	12.7% (8)
Carnduff	11.1% (7)	25.4% (16)	0.0% (0)	7.9% (5)	12.7% (8)
Esterhazy	7.7% (3)	35.9% (14)	0.0% (0)	0.0% (0)	2.6% (1)
Estevan	7.1% (9)	14.2% (18)	0.8% (1)	6.3% (8)	7.1% (9)
File Hills Qu'Appelle TC	15.6% (12)	39.0% (30)	3.9% (3)	6.5% (5)	16.9% (13)
Fillmore	0.0% (0)	16.7% (5)	0.0% (0)	3.3% (1)	3.3% (1)
Fort Qu'Appelle	5.9% (4)	42.6% (29)	2.9% (2)	1.5% (1)	10.3% (7)
Grenfell	7% (4)	24.6% (14)	0.0% (0)	7.0% (4)	15.8% (9)
Indian Head	2% (1)	18.4% (9)	0.0% (0)	0.0% (0)	6.1% (3)
Kamsack	23.1% (9)	74.4% (29)	5.1% (2)	10.3% (4)	17.9% (7)
Kipling	7.7% (3)	30.8% (12)	0.0% (0)	5.1% (2)	5.1% (2)
Lampman	18.6% (8)	37.2% (16)	2.3% (1)	9.3% (4)	16.3% (7)
Langenburg	2.5% (1)	30.0% (12)	0.0% (0)	0.0% (0)	7.5% (3)
Lumsden	10.9% (10)	23.9% (22)	4.3% (4)	3.3% (3)	12.0% (11)
Melville	7.7% (4)	40.4% (21)	0.0% (0)	3.8% (2)	13.5% (7)
Moosomin	18.3% (11)	30.0% (18)	3.3% (2)	5.0% (3)	23.3% (14)
Radville	20.5% (8)	38.5% (15)	2.6% (1)	10.3% (4)	25.6% (10)
Redvers	8.1% (3)	51.4% (19)	0.0% (0)	5.4% (2)	21.6% (8)
Southey	3.8% (2)	11.5% (6)	0.0% (0)	1.9% (1)	7.7% (4)
Springside	0.0% (0)	35.3% (12)	0.0% (0)	0.0% (0)	5.9% (2)
Touchwood Agency TC	11.5% (7)	34.4% (21)	3.3% (2)	8.2% (5)	13.1% (8)
Weyburn	7% (10)	39.2% (56)	1.4% (2)	7.0% (10)	12.6% (18)
White City	5.6% (5)	37.1% (33)	1.1% (1)	1.1% (1)	9.0% (8)
Yorkton	6.8% (14)	41.5% (86)	2.4% (5)	2.9% (6)	7.2% (15)
Yorkton TC	29.3% (24)	40.2% (33)	4.9% (4)	12.2% (10)	36.6% (30)

Table 3.3 Percentage (number) of children considered vulnerable in emotional maturity domain and challenged in sub-domains
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm.

aggression, and hyperactivity and inattention. Children scoring in the lower range on this domain can generally be characterized as having regular problems managing aggressive behaviour, being prone to disobedience and/or easily distractible, inattentive, impulsive, and usually unable to show helping behaviour towards other children; they may appear nervous or shy and cry or be upset when left by a caregiver. On the other hand, children scoring at the higher end almost never show aggressive, anxious or impulsive behaviour; they are able to pay attention and sit still and are helpful and thoughtful.

Ten study areas had higher than normal percentages of vulnerable children in this domain, with the highest being Yorkton Tribal Council 29.3%, Kamsack 23.1%, and Radville 20.5% (see Table 3.3). On the other hand, in five study areas, the percentage considered vulnerable was less than half the norm.

In the sub-domain of prosocial and helping behaviour (Table 3.3 and Figure 3.9), one in three children in the Canadian normative group is considered challenged—the highest of any of the sub-domains—but 16 study areas had even higher percentages than the norm; only in four study areas were the percentages of children scoring low less than half the norm. Results were better for the sub-domain of anxious and fearful behaviour (Table 3.3 and Figure 3.10), in which 10 study areas had higher than normal percentages of children challenged; even in the highest study area, Kamsack, this reflects just one child in twenty. Eight study areas had normal or above normal percentages of children considered challenged in terms of aggressive behaviour (Table 3.3 and Figure 3.11), while in 11 study areas, the

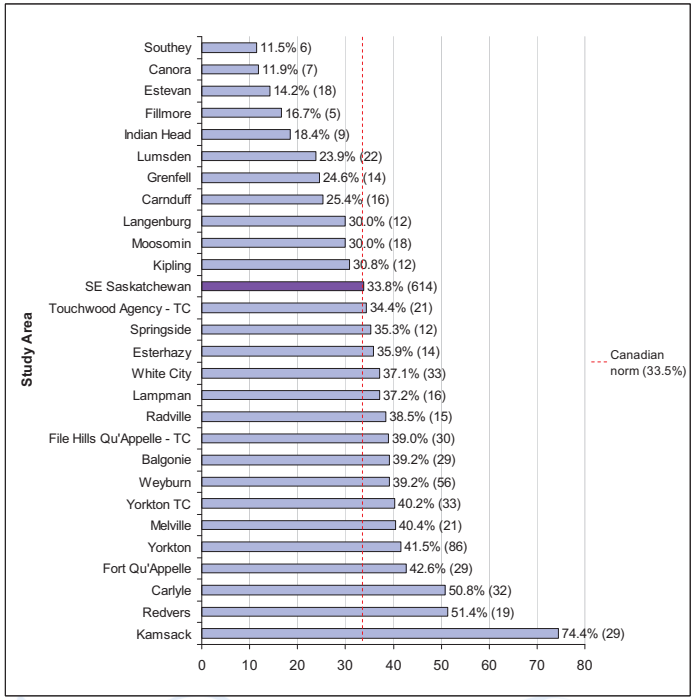


Figure 3.9 Percentage (number) of children considered challenged in terms of prosocial and helping behaviour

Note: This sub-domain assesses whether the child will try to help someone who has been hurt; volunteers to help clear up a mess someone else has made; if there is a quarrel or dispute will try to stop it; offers to help other children who have difficulty with a task; comforts a child who is crying or upset; spontaneously helps to pick up objects which another child has dropped; will invite bystanders to join in a game; and helps other children who are feeling sick.

percentage was less than half the norm. Finally, in the sub-domain of hyperactivity and inattention (Table 3.3 and Figure 3.12), there were 10 study areas in which more children scored low than normal, with especially high proportions in Redvers, Moosomin, Radville, and

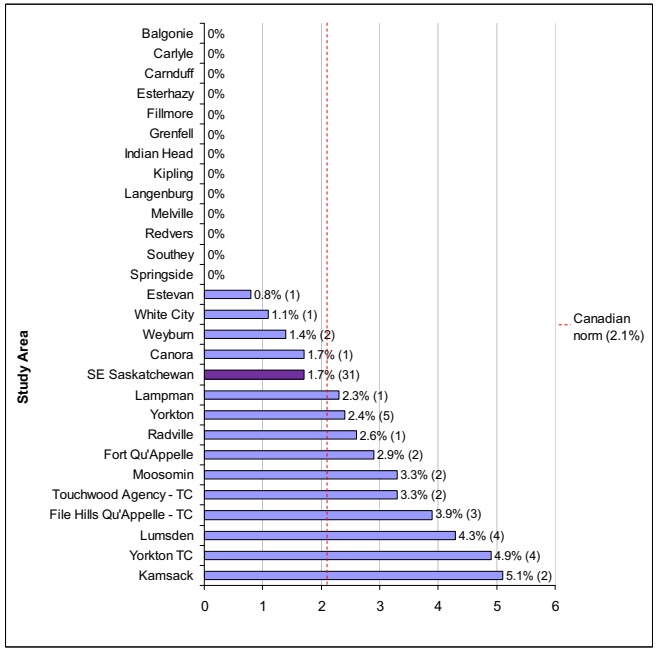


Figure 3.10 Percentage (number) of children considered challenged in terms of anxious and fearful behaviour

Note: This sub-domain assesses whether the child is upset when left by parent/guardian; seems to be unhappy, sad, or depressed; appears fearful or anxious; appears worried; cries a lot; is nervous, high-strung, or tense; is incapable of making decisions; and is shy.

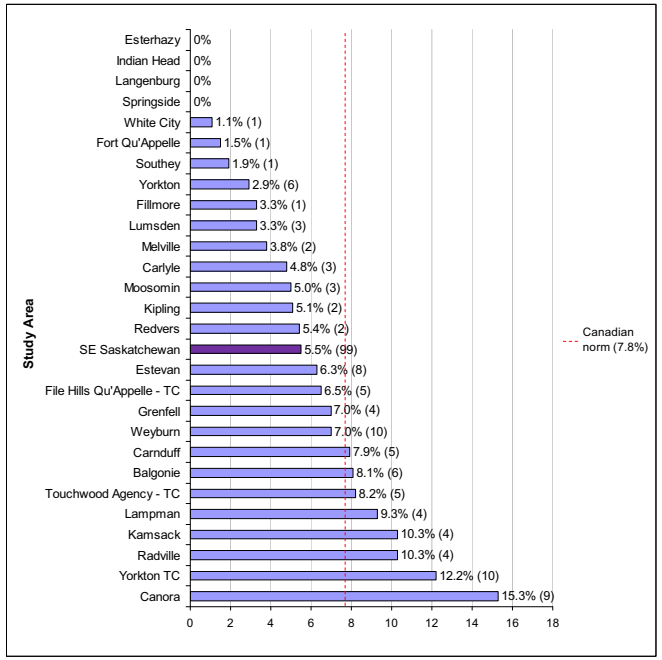


Figure 3.11 Percentage (number) of children considered challenged in terms of aggressive behaviour

Note: This sub-domain assesses whether the child gets into physical fights; bullies or is mean to others; kicks, bites, hits other children or adults; takes things that do not belong to him/her; laughs at other children's discomfort; is disobedient; and has temper tantrums.

Yorkton Tribal Council; on the positive side, five study areas had less than half as many children with low scores, compared to the norm. Map 3.7 does not reveal any pattern between social risk and emotional maturity. According to Map 3.8, study areas with the highest RAA scores have below average percentages of children vulnerable for emotional maturity, but as in the case of social competence, study areas with lower resource scores had widely varying percentages of vulnerable children.

3.2.4 LANGUAGE AND COGNITIVE DEVELOPMENT

This domain covers basic language and number skills, as well as interest in numbers and words and more advanced reading and

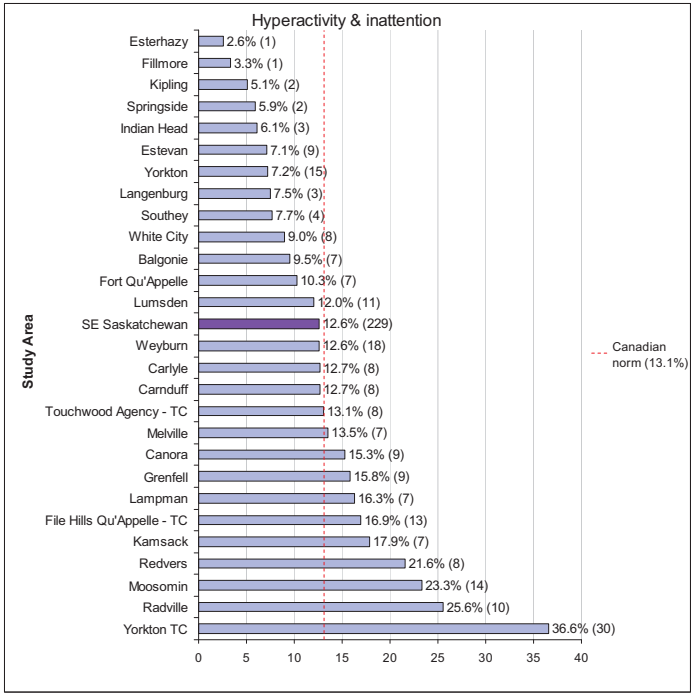
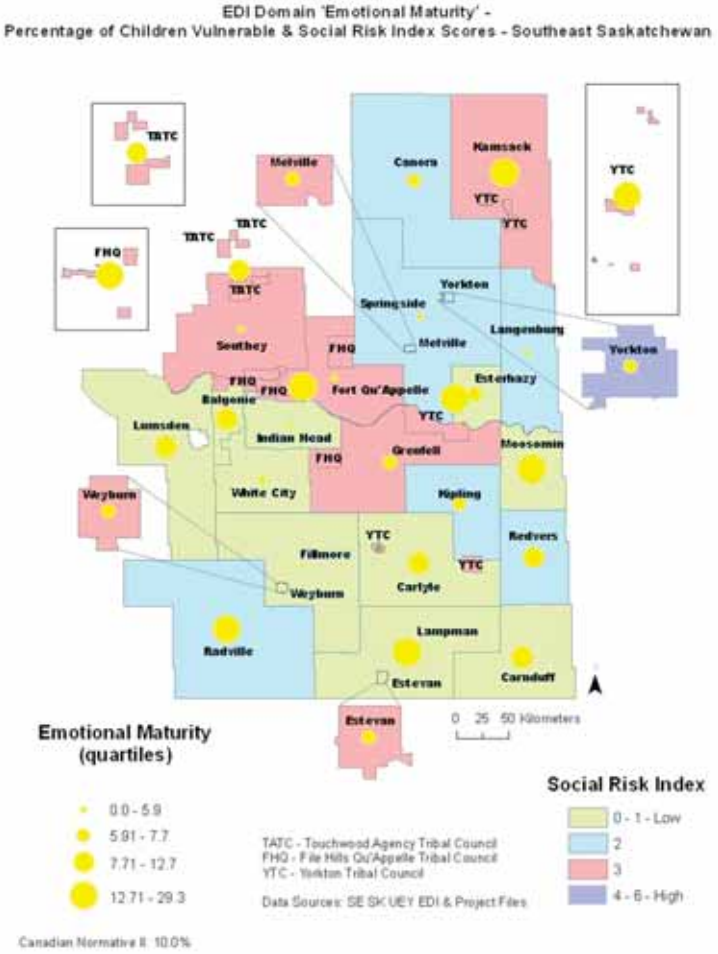
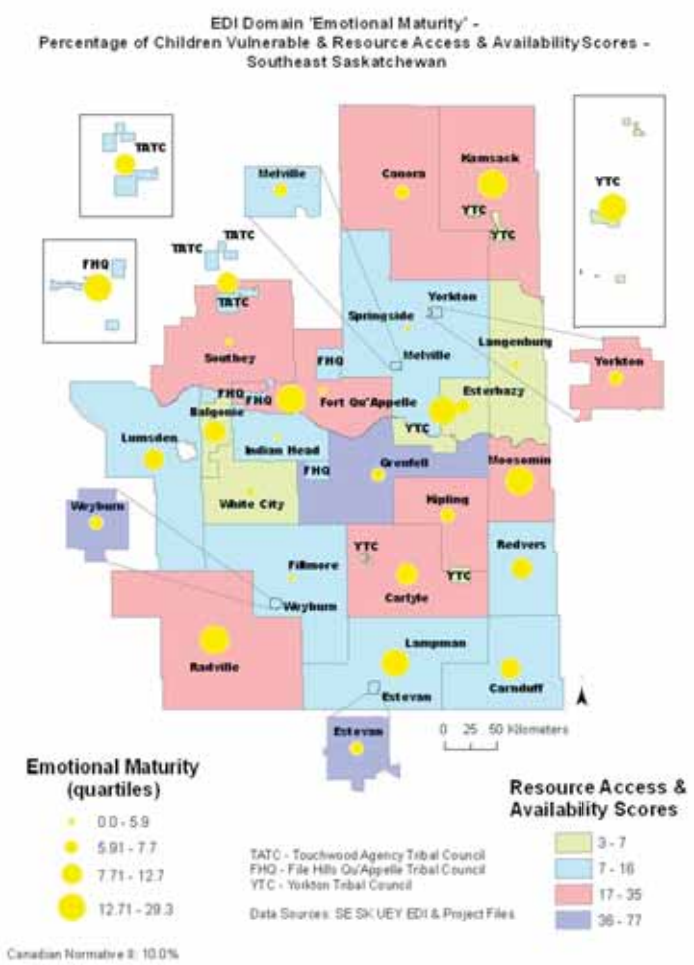


Figure 3.12 Percentage (number) of children considered challenged in terms of hyperactivity and inattention

Note: This sub-domain assesses whether the child is unable to sit still; is distractible and has trouble sticking to any activity; fidgets; is impulsive, acts without thinking; has difficulty awaiting turn in games or groups; cannot settle to anything for more than a few moments; and is inattentive.



Map 3.7



Map 3.8

writing skills. Children scoring in the lower range on this domain can generally be characterized as having problems in both reading/writing and numeracy, unable to read and write simple words; uninterested in trying, and often unable to attach sounds to letters, having difficulty remembering things, counting to 20, recognizing and comparing numbers, and usually not interested in numbers. Children scoring in the higher range on this domain can generally be characterized as being interested in books, reading and writing, and rudimentary math, capable of reading and writing simple sentences and complex words, and able to count and recognize numbers and geometric shapes.

For this domain, 15 of the study areas are above the Canadian norm for percentage of children considered vulnerable (see Table 3.4). The highest are Carlyle (28.6%), Yorkton Tribal Council (28%), Lampman (23.3%), Kamsack and Radville (both 23.1%), and Touchwood Agency Tribal Council (21.3%). In contrast, five study areas had less than half the normal percentage, with proportions under 5%. It is somewhat surprising that in six study areas, fewer children were challenged in the sub-domain of advanced literacy than basic literacy, since the skills included in basic literacy are generally seen as prerequisites for those falling under 'advanced' literacy.

In the sub-domain of basic literacy (Table 3.4 and Figure 3.13), 15 study areas had more children considered challenged than the norm of 11%; in six study areas—Carlyle, Kamsack, Lampman, Langenburg, Radville, and Yorkton Tribal Council—more than one in four children scored low. In contrast, in five study areas very few children were considered challenged—less than half the norm, and as low as 2.6% in Esterhazy.

Southeast Saskatchewan	11.8% (215)	13.6% (246)	13.2% (240)	24% (435)	22.3% (405)
Balgonie	10.8% (8)	10.8% (8)	18.9% (14)	21.6% (16)	20.3% (15)
Canora	8.5% (5)	10.2% (6)	6.8% (4)	22.0% (13)	11.9% (7)
Carlyle	28.6% (18)	33.3% (21)	19.0% (12)	36.5% (23)	44.4% (28)
Carnduff	12.7% (8)	9.5% (6)	12.7% (8)	38.1% (24)	25.4% (16)
Esterhazy	2.6% (1)	2.6% (1)	5.1% (2)	7.7% (3)	10.3% (4)
Estevan	13.4% (17)	17.3% (22)	11.8% (15)	27.6% (35)	22.0% (28)
File Hills Qu'Appelle TC	18.2% (14)	18.2% (14)	19.5% (15)	31.2% (24)	29.9% (23)
Fillmore	3.3% (1)	3.3% (1)	6.7% (2)	13.3% (4)	6.7% (2)
Fort Qu'Appelle	13.2% (9)	13.2% (9)	14.7% (10)	14.7% (10)	39.7% (27)
Grenfell	3.5% (2)	8.8% (5)	8.8% (5)	1.8% (1)	15.8% (9)
Indian Head	12.2% (6)	10.2% (5)	10.2% (5)	24.5% (12)	24.5% (12)
Kamsack	23.1% (9)	28.2% (11)	20.5% (8)	66.7% (26)	12.8% (5)
Kipling	15.4% (6)	12.8% (5)	41.0% (16)	10.3% (4)	23.1% (9)
Lampman	23.3% (10)	27.9% (12)	14.0% (6)	18.6% (8)	46.5% (20)
Langenburg	7.5% (3)	22.5% (9)	5.0% (2)	17.5% (7)	22.5% (9)
Lumsden	14.1% (13)	12.0% (11)	27.2% (25)	21.7% (20)	19.6% (18)
Melville	5.8% (3)	11.5% (6)	5.8% (3)	7.7% (4)	19.2% (10)
Moosomin	13.3% (8)	13.3% (8)	18.3% (11)	36.7% (22)	10.0% (6)
Radville	23.1% (9)	30.8% (12)	12.8% (5)	51.3% (20)	20.5% (8)
Redvers	8.1% (3)	5.4% (2)	8.1% (3)	2.7% (1)	37.8% (14)
Southey	5.8% (3)	9.6% (5)	1.9% (1)	13.5% (7)	13.5% (7)
Springside	8.8% (3)	20.6% (7)	20.6% (7)	38.2% (13)	29.4% (10)
Touchwood Agency TC	21.3% (13)	21.3% (13)	27.9% (17)	31.1% (19)	41.0% (25)
Weyburn	3.5% (5)	3.5% (5)	1.4% (2)	16.1% (23)	9.8% (14)
White City	2.2% (2)	3.4% (3)	4.5% (4)	15.7% (14)	11.2% (10)
Yorkton	6.3% (13)	8.7% (18)	8.7% (18)	17.9% (37)	15.9% (33)
Yorkton TC	28% (23)	25.6% (21)	24.4% (20)	54.9% (45)	43.9% (36)

Table 3.4 Percentage (number) of children considered vulnerable in language and cognitive development domain and challenged in sub-domains
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm.

Ten study areas had a higher than normal percentage of 'challenged' children in the sub-domain 'interest in literacy/numeracy' (Table 3.4 and Figure 3.14), reaching a high of 41% in Kipling. In eight study areas, on the other hand, the percentage of children considered challenged was less than half the norm, with the lowest being Weyburn, with 1.4%.

In the sub-domain of advanced literacy (Table 3.4 and Figure 3.15), 14 study areas had above normal percentages of 'challenged' children. More than half the children in Radville and Yorkton Tribal Council and two thirds in Kamsack fell into this category. The number of study areas doing poorly in the sub-domain of basic numeracy (Table 3.4 and Figure 3.16) is even higher, with 19 having above normal percentages of 'challenged' children. In 8 of these, more than one in

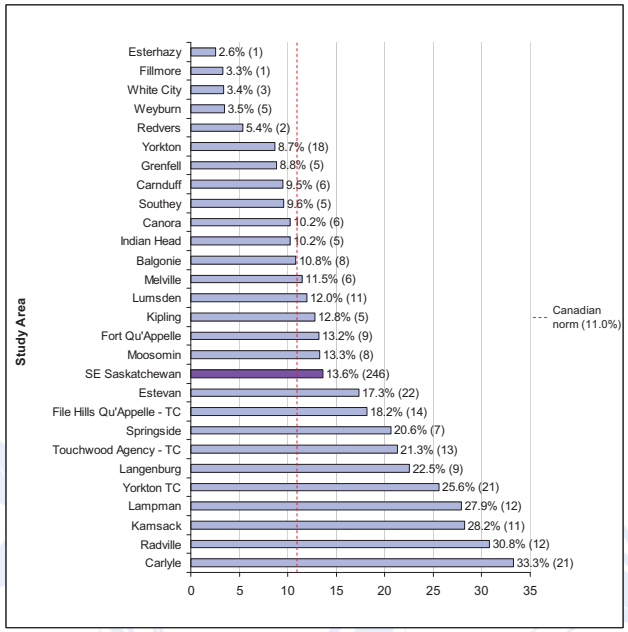


Figure 3.13 Percentage (number) of children considered challenged in terms of basic literacy
Note: This sub-domain assesses whether the child knows how to handle a book; is able to identify at least 10 letters of the alphabet; is able to attach sounds to letters; shows awareness of rhyming words; is able to participate in group reading activities; is experimenting with writing tools; is aware of writing directions in English (left to right, top to bottom); and is able to write his/her own name.

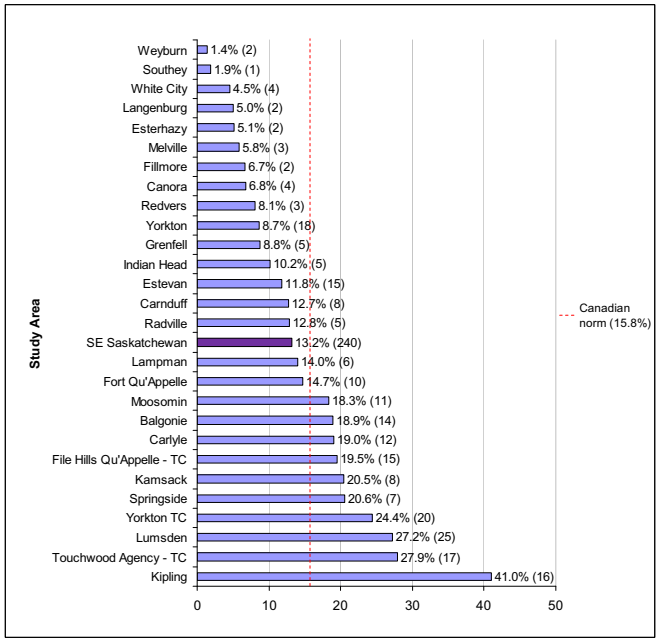


Figure 3.14 Percentage (number) of children considered challenged in terms of interest in literacy/numeracy

Note: This sub-domain assesses whether the child is generally interested in books; is interested in reading; is able to remember things easily; is interested in mathematics; and is interested in games involving numbers.

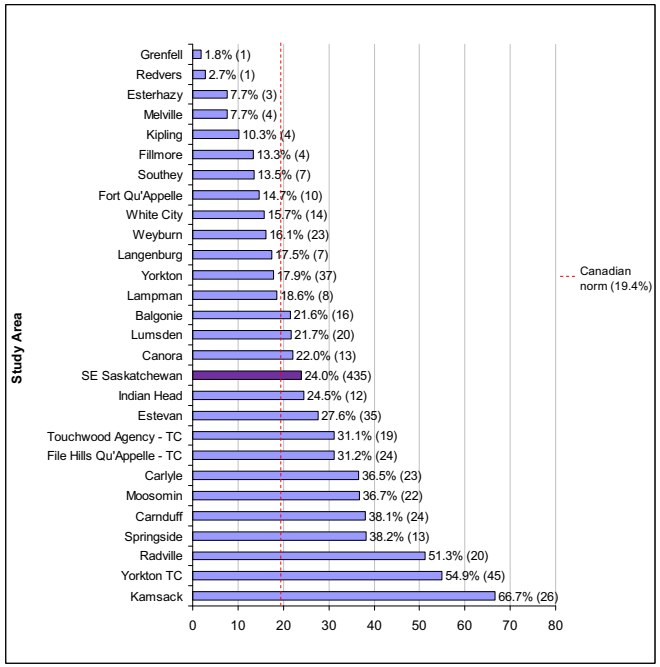


Figure 3.15 Percentage (number) of children considered challenged in terms of advanced literacy

Note: This sub-domain assesses whether the child is able to read simple words; is able to read complex words; is able to read simple sentences; is able to write simple words; is able to write simple sentences; and is interested in writing voluntarily.

four children scored low. It is somewhat surprising that in six study areas, fewer children were challenged in the sub-domain of advanced literacy than basic literacy, since the skills included in basic literacy are generally seen as prerequisites for those falling under 'advanced' literacy.

As Map 3.9 reveals, many of the study areas with a high percentage of vulnerable children in this domain also had high SRI scores (e.g., Kamsack, Yorkton Tribal Council, Touchwood Tribal Council). However, as with other domains, several study areas (e.g., Lampman, Carlyle, Radville) show higher than average percentages vulnerable while also reporting relatively low social risk scores.

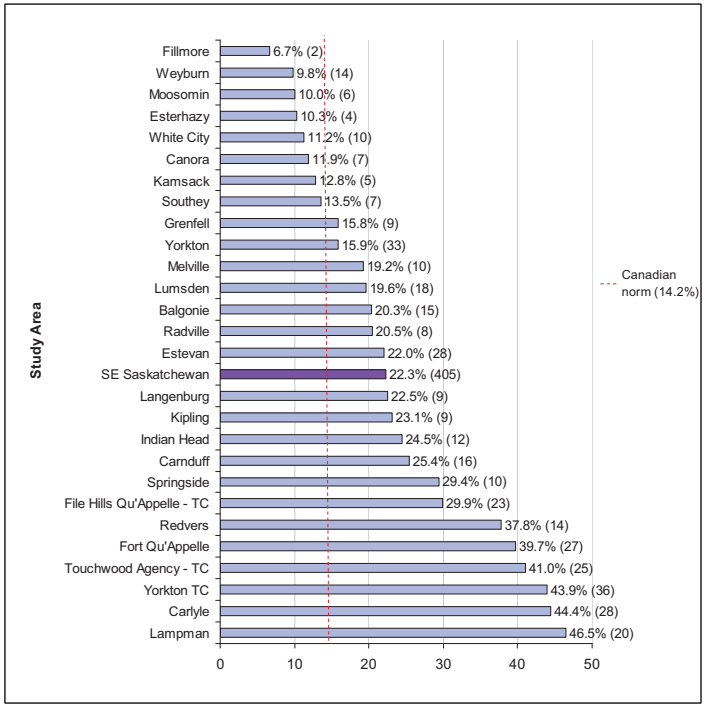
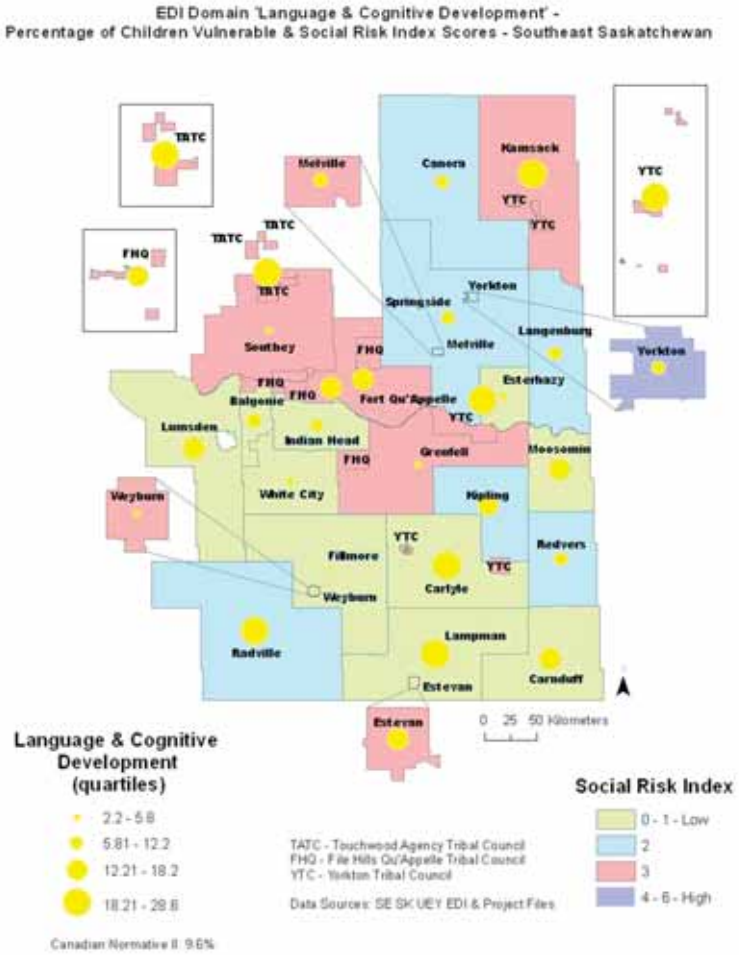
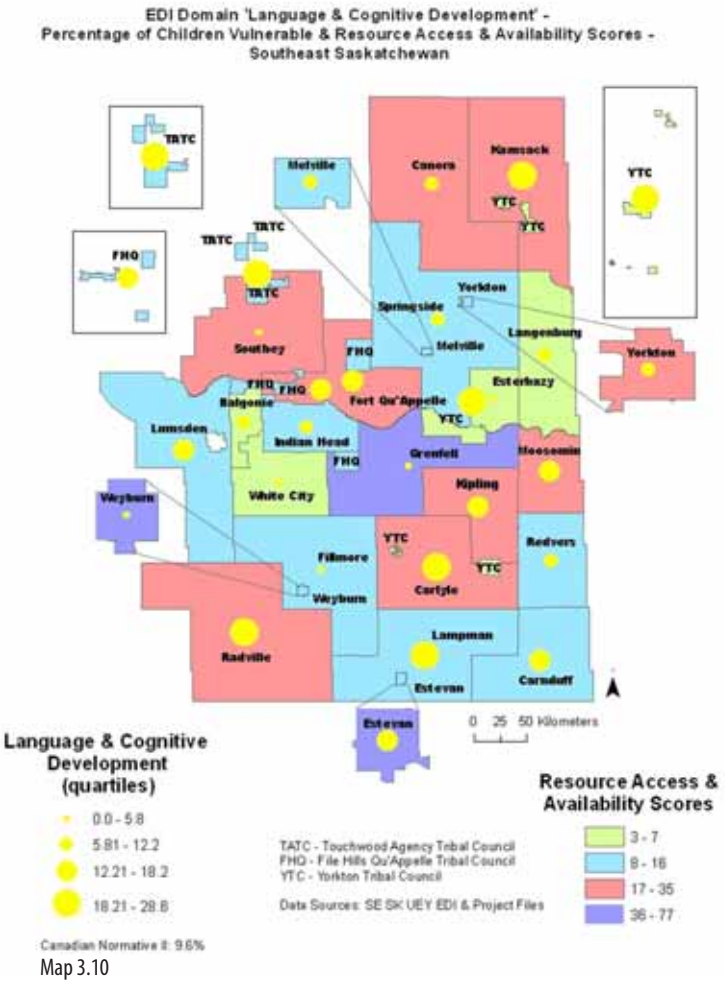


Figure 3.16 Percentage (number) of children considered challenged in terms of basic numeracy

Note: This sub-domain assesses whether the child is able to sort and classify objects by a common characteristic; is able to use one-to-one correspondence; is able to count to 20; is able to recognize numbers 1-10; is able to say which number is bigger of the two; is able to recognize geometric shapes (e.g., triangle, circle, square); and understands simple time concepts (e.g., today, summer, bedtime).



Map 3.9



Map 3.10

In term of RAA scores (Map 3.10), most of the study areas with the highest levels of children considered vulnerable fell into the middle two categories, indicating neither high nor low levels of resources.

3.2.5 COMMUNICATIONS SKILLS AND GENERAL KNOWLEDGE

This domain refers to children's ability to communicate needs and ideas effectively and their interest in the surrounding world. Children scoring in the lower range on this domain can generally be characterized as having poor communication skills and articulation, limited command of English or French, having difficulties in talking to others, understanding and being understood, and lacking in general knowledge. Those who score high in the domain have excellent communication skills, can tell a story and communicate with both children and adults, have no problem with articulation, and take part in imaginative play.

Study Area	
Canadian norm	12.2%
Southeast Saskatchewan	8.0% (145)
Balgonie	9.5% (7)
Canora	3.4% (2)
Carlyle	7.9% (5)
Carnduff	3.2% (2)
Esterhazy	2.6% (1)
Estevan	8.7% (11)
File Hills Qu'Appelle TC	10.4% (8)
Fillmore	10.0% (3)
Fort Qu'Appelle	10.3% (7)
Grenfell	5.3% (3)
Indian Head	2.0% (1)
Kamsack	15.4% (6)
Kipling	2.6% (1)
Lampman	7.0% (3)
Langenburg	12.5% (5)
Lumsden	8.7% (8)
Melville	13.5% (7)
Moosomin	11.7% (7)
Radville	10.3% (4)
Redvers	2.7% (1)
Southey	0.0% (0)
Springside	11.8% (4)
Touchwood Agency TC	13.1% (8)
Weyburn	8.4% (12)
White City	9.0% (8)
Yorkton	6.3% (13)
Yorkton TC	9.8% (8)

Table 3.5 Percentage (number) of children considered vulnerable in communication skills and general knowledge domain
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm. This domain has no sub-domains. It assesses the child's ability to listen; tell a story; take part in imaginative play; communicate his/her own needs in a way understandable to adults

Only four study areas were

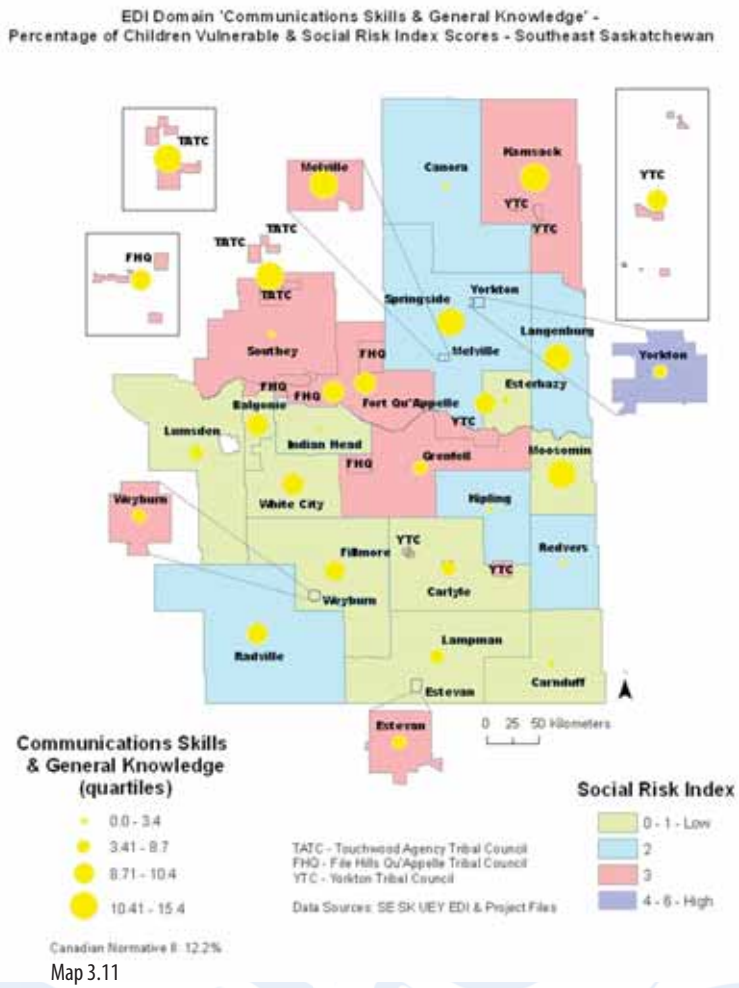
above the norm in terms of the percentage of children considered vulnerable and the highest percentage, in Kamsack, was just 15.4% (see Table 3.5). On the other hand, eight study areas had less than half as many vulnerable children than as the norm.

As in other domains, study areas with higher percentages of vulnerable children have a range of social risk scores, falling into every group except the highest quartile (see Map 3.11). The study areas of Springside, Langenburg, and Moosomin had relatively high percentages of children vulnerable (in the top quartile for this region) but relatively low social risk, while the Melville, Kamsack and Touchwood Agency Tribal Council areas had both relatively high percentages of vulnerable children and high SRI scores.

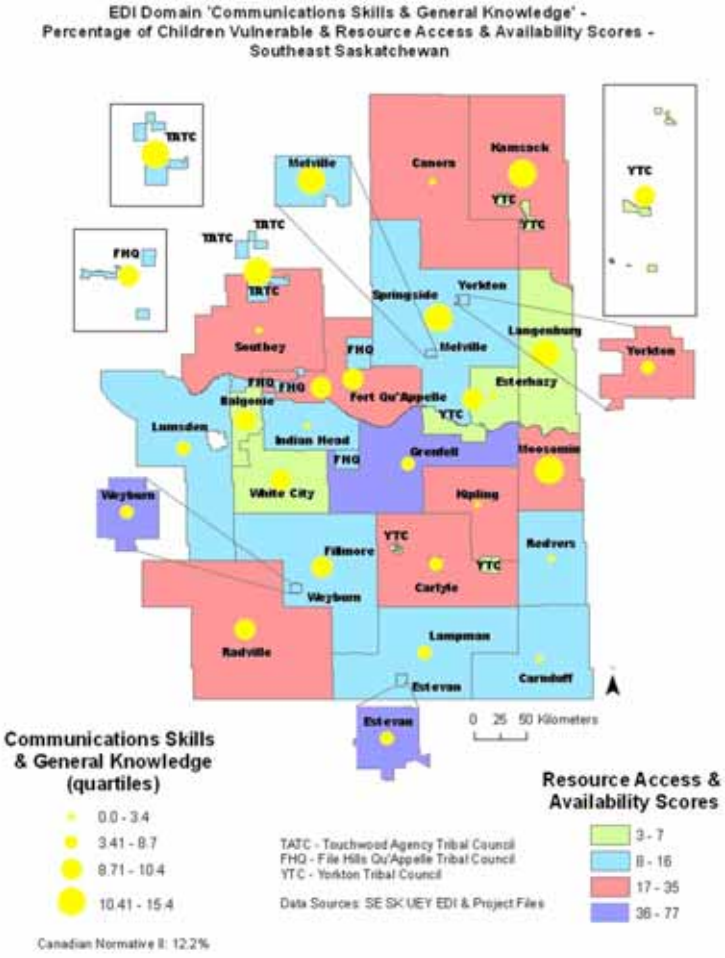
In terms of resource access and availability, Map 3.12 shows that the three study areas with the highest levels of resources, Weyburn, Grenfell, and Estevan, all had below normal percentages of children considered vulnerable in this domain. On the other hand, the study areas with the lowest levels of resources had varying percentages of vulnerable children (from 2.6% to 12.5%, based on Table 3.5). Overall, there was little correspondence between percentage vulnerable and resources.

3.3 CHILDREN VULNERABLE IN ONE OR MORE DOMAIN

In addition to looking at each domain separately, as in the preceding sections, it is useful to consider the percentage of children who are



Map 3.11



Map 3.12

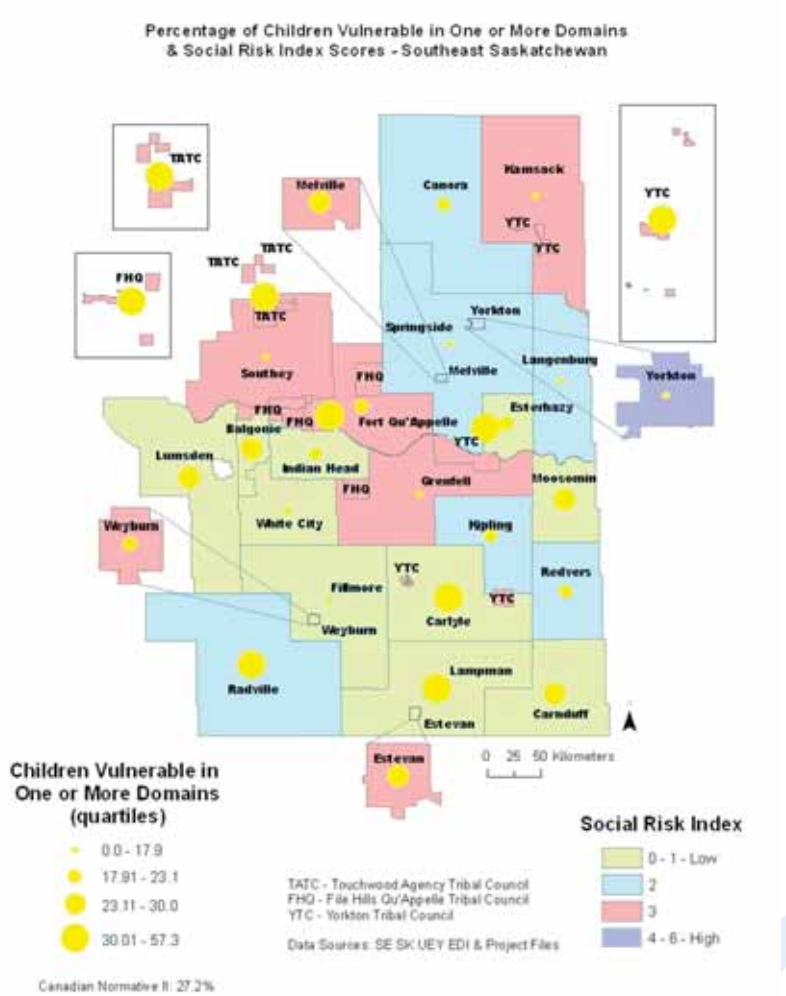
vulnerable in at least one domain. The two measures presented here—the percent vulnerable in one or more domains, and in two or more domains—are indicators of a higher level of overall risk in a community.

Maps 3.13 and 3.14 and Table 3.6 show that the study areas varied considerably in terms of the percentage of children considered vulnerable in one or more domains. Nine study areas, including all three Tribal Councils, had a higher percentage of children in this category than the norm of 27%, with more than four in ten vulnerable children in the study areas of Radville, Kamsack, and Yorkton Tribal Council. The social risk scores of these study areas ranged from low to moderately high, as did their resource access and availability scores.

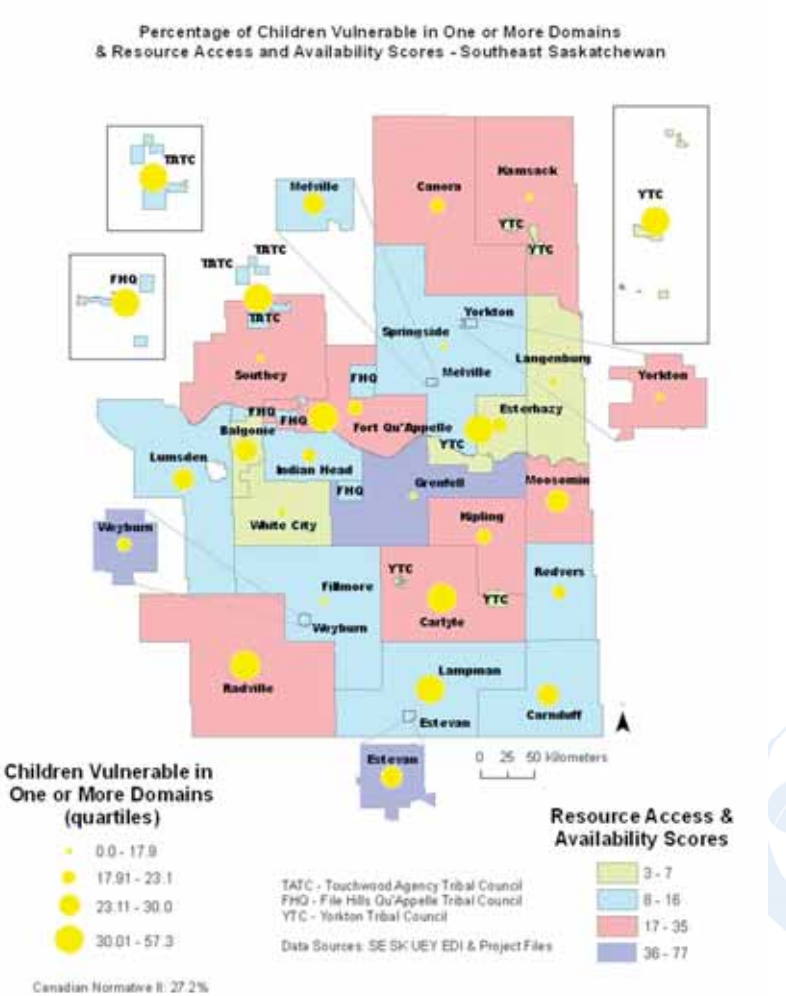
	Vulnerable in one or more domains	Vulnerable in two or more domains
Canadian norm	27.2%	13.6%
Southeast Saskatchewan	25.4% (461)	12.5% (227)
Balgonie	24.3% (18)	13.5% (10)
Canora	18.6% (11)	8.5% (5)
Carlyle	36.5% (23)	19.0% (12)
Carnduff	23.8% (15)	11.1% (7)
Esterhazy	20.5% (8)	0.0% (0)
Estevan	23.6% (30)	12.6% (16)
File Hills Qu'Appelle TC	33.8% (26)	15.6% (12)
Fillmore	16.7% (5)	3.3% (1)
Fort Qu'Appelle	22.1% (15)	16.2% (11)
Grenfell	14.0% (8)	8.8% (5)
Indian Head	18.4% (9)	8.2% (4)
Kamsack	43.6% (17)	28.2% (11)
Kipling	23.1% (9)	7.7% (3)
Lampman	39.5% (17)	20.9% (9)
Langenburg	17.5% (7)	7.5% (3)
Lumsden	28.3% (26)	13.0% (12)
Melville	26.9% (14)	15.4% (8)
Moosomin	30.0% (18)	18.3% (11)
Radville	41.0% (16)	23.1% (9)
Redvers	18.9% (7)	5.4% (2)
Southey	9.6% (5)	3.8% (2)
Springside	17.6% (6)	5.9% (2)
Touchwood Agency TC	36.1% (22)	16.4% (10)
Weyburn	21.0% (30)	10.5% (15)
White City	16.9% (15)	5.6% (5)
Yorkton	17.9% (37)	8.2% (17)
Yorkton TC	57.3% (47)	30.5% (25)

Table 3.6 Percentage (number) of children considered vulnerable in more than one and more than two domains

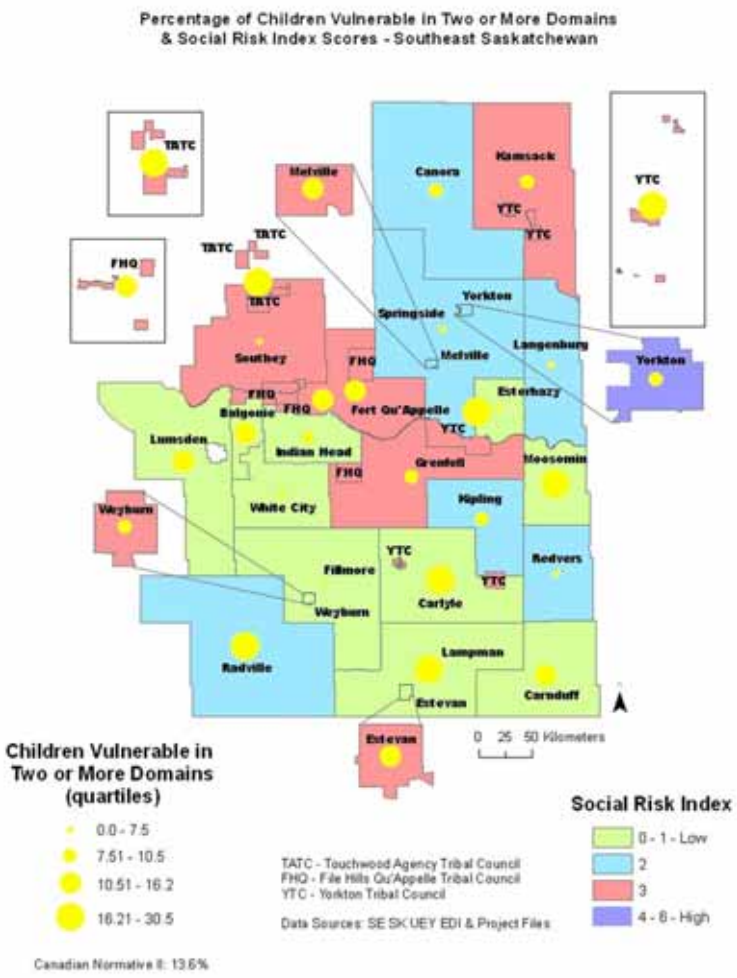
Note: Yellow cells indicate at least one percentage point above the Canadian norm; green cells indicate half or less of the norm.



Map 3.13



Map 3.14



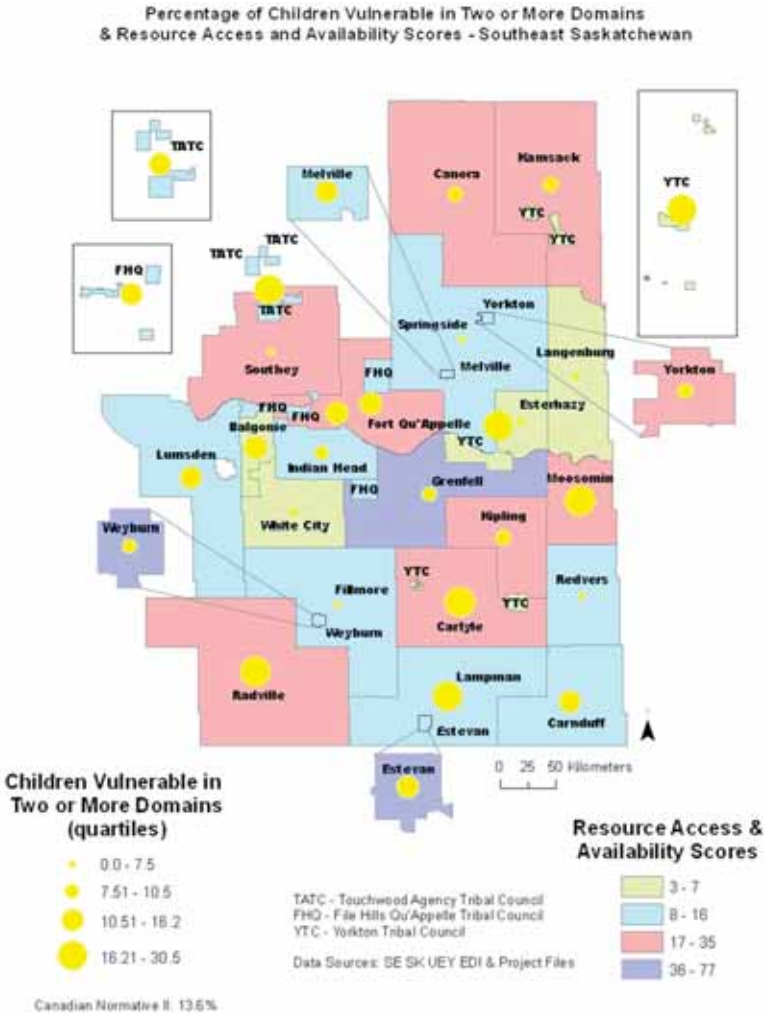
Map 3.15

In seven study areas, on the other hand, less than 18% of children were vulnerable in one or more domains. The SRI and RAA scores of these areas ranged from low to high.

Children considered vulnerable in two or domains face even greater developmental limitations. According to Table 3.6, ten study areas have a higher than normal percentage of children in this category, including four with more than 20% (Kamsack, Lampman, Radville, and Yorkton Tribal Council). Maps 3.15 and 3.16 present the percentages of children whose EDI scores place them in the vulnerable category in two or more of the EDI domains in the Southeast Region, along with SRI and RAA scores.

No pattern can be seen connecting the percentage of children considered vulnerable in two or more EDI domains and the SRI score of a study area. In Yorkton, the study area with the highest social risk score, only 8.2% of children fall into this category, well below the norm of 13.6% (see Table 3.6). The nine study areas with higher than normal percentages of vulnerable children have SRI scores ranging across the bottom three quartiles.

Similarly, there is no correspondence between percent vulnerable in two or more domains and availability of and access to resources. While the three study areas with the highest levels of resources have slightly below normal percentages of vulnerable children, in those with the lowest levels of resources, the percentages range from 0 (Esterhazy) to 30.5 (Yorkton Tribal Council).



Map 3.16

3.4 SCHOOL READINESS FROM 2005 TO 2009

As explained in the second section of this report, school divisions in the PCPF region, with the exception of the Tribal Councils, had administered the EDI to assess kindergarten students' school readiness two or three times prior to the UEY project, in 2005, 2007 and 2008. Here we present the results from these years, compared to the 2009 findings.

Overall, the North sub-region saw a decreasing proportion of its children considered vulnerable over this time period in four out of five domains, while the Central sub-region experienced a decline in three out of five from 2007 to 2009 (in 2005, the Central sub-region had no children considered vulnerable in four out of five domains). In the South sub-region, on the other hand, the proportion of vulnerable children increased quite markedly in four out of five domains. In each domain, the percentage of children considered vulnerable in the three tribal councils (the First Nations sub-region) in 2009 was higher than in any other region across all the years.

Figure 3.17 shows that from 2005 to 2009, the South sub-region experienced an increase in the proportion of children considered vulnerable in the physical health and wellbeing domain, while the North sub-region experienced a decrease. The percentage of children considered vulnerable within the Central sub-region remained quite consistent over time and was below the Canadian average of 11.0% across all years.

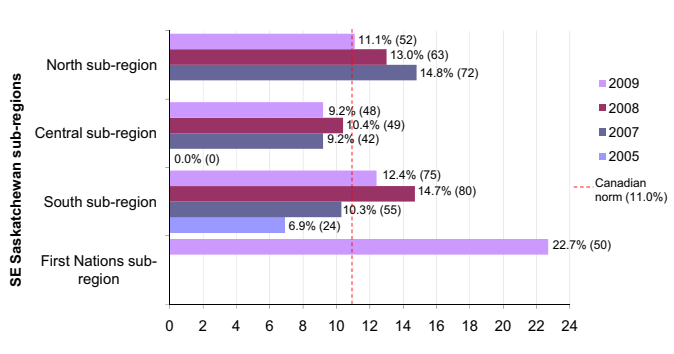


Figure 3.17 Percentage of children considered vulnerable in the physical health and wellbeing domain from 2005 to 2009

For a majority of sub-regions and across most years, the percentage of children considered vulnerable in the social competence domain was below the Canadian average of 9.6% (see Figure 3.18). Both the North and Central sub-regions experienced a decline in the percentage of children with low scores on this domain from 2007 to 2009. In contrast, the percentage of children considered vulnerable grew each year within the South sub-region, from 3.2% in 2005 to 10.6% in 2009.

In the emotional maturity domain, the Central sub-region had lower percentages of children considered vulnerable than the national norm of 10% in all years (see Figure 3.19), with the proportion declining slightly between 2007 and 2009. The proportion of vulnerable children in the North sub-region decreased markedly (from 13.6% in 2007 to 7.5% in 2009), while the proportion in the South sub-region has been increasing (from 3.5% in 2005 to 10.6% in 2009).

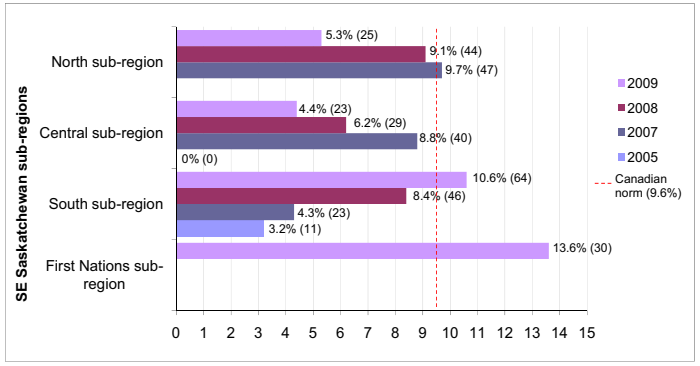


Figure 3.18 Percentage of children considered vulnerable in the social competence domain from 2005 to 2009

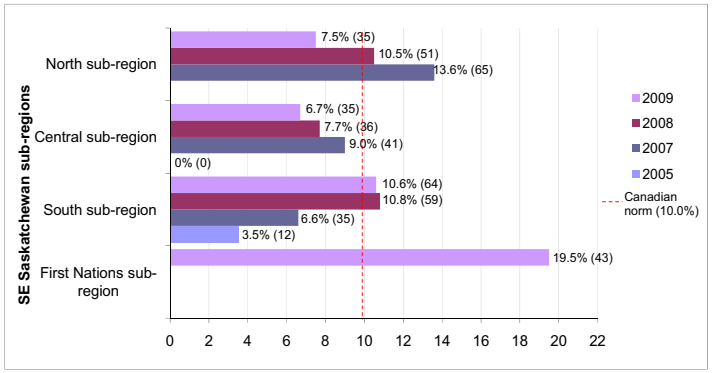


Figure 3.19 Percentage of children considered vulnerable in the emotional maturity domain from 2005 to 2009

Within the language and cognitive development domain, trends over time are quite different between the regions (see Figure 3.20): the Central sub-region remained quite consistent, the North sub-region experienced a decline from 14.8% in 2007 to 7.9% in 2009, and the

percentage in the South sub-region increased from 7.2% in 2005 to 13.1% in 2009.

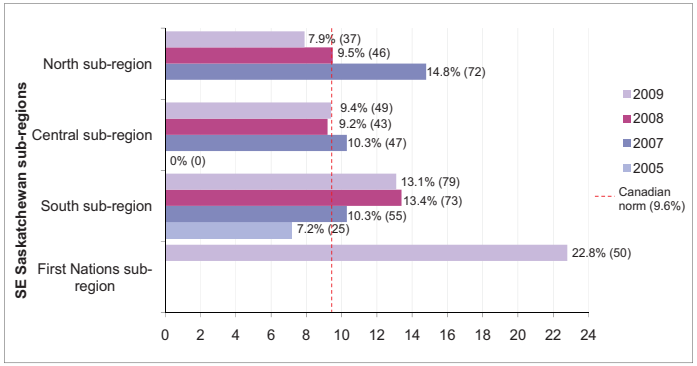


Figure 3.20 Percentage of children considered vulnerable in the language and cognitive development domain from 2005 to 2009

Finally, in the communication skills and general knowledge domain, the children of Southeast Saskatchewan performed quite well across all years, with the percentages of vulnerable children lower than the national norm of 12.2% (see Figure 3.21). The only region showing a clear pattern over time is the Central sub-region, which experienced a slight decrease in the proportion of children considered 'vulnerable.'

Figures 3.22 and 3.23 show the percentages of children vulnerable in one or more, and two or more domains, respectively. The patterns over time are generally consistent with those found for the domains: the percentages have decreased in the North sub-region, remained fairly constant in the Central sub-region (with the exception of 2005, which was unusually low), and increased in the South sub-region.

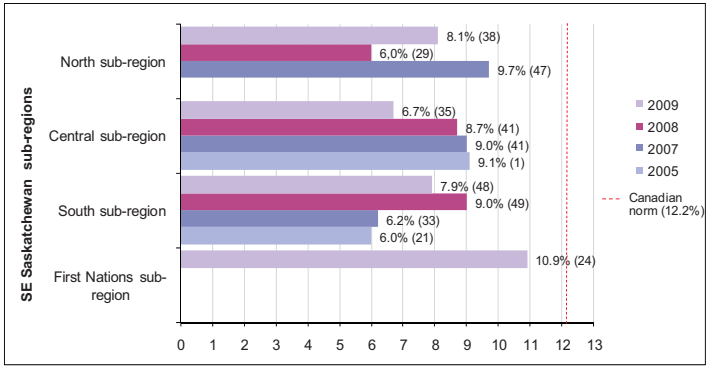


Figure 3.21 Percentage of children considered vulnerable in the communication skills and general knowledge domain from 2005 to 2009

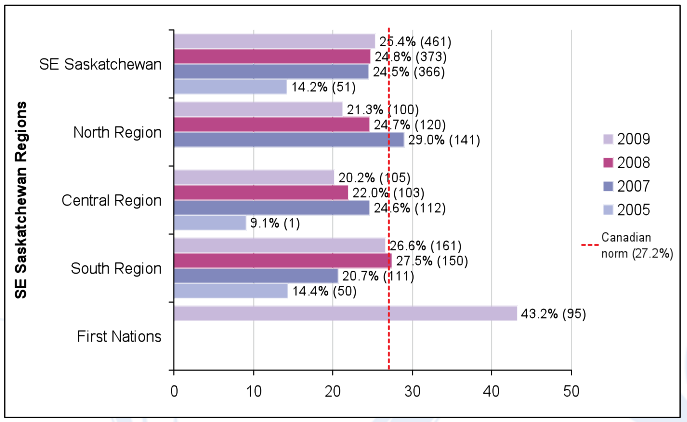


Figure 3.22 Percentage of children considered vulnerable in one or more domains from 2005 to 2009

Higher percentages of children in the First Nations sub-region were vulnerable in 2009 than in any of the other sub-regions at any time.

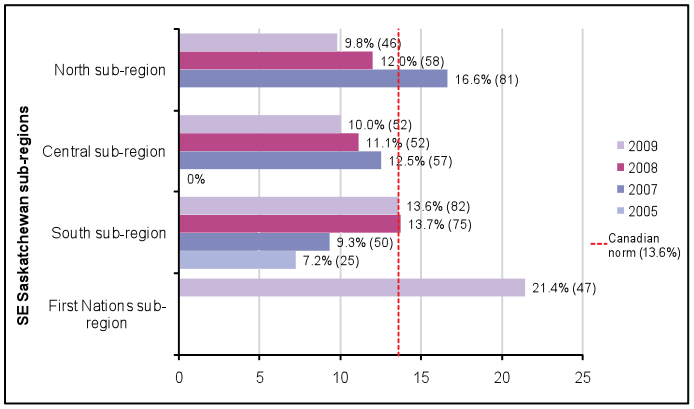


Figure 3.23 Percentage of children considered vulnerable on two or more domains from 2005 to 2009

With the exception of the First Nations and the North sub-region in 2007, the percentages of children vulnerable in at least one domain were below the national norm.

3.5 PARENT INTERVIEWS AND DIRECT ASSESSMENT OF CHILDREN (PIDACS)

This section presents the results from PIDACS for SE Saskatchewan children. First, we describe the characteristics of the children and families who participated in these portions of the UEY study. Next, we show how children are doing in terms of their learning, social skills and behaviours, and physical health and wellbeing. Then we explore the family, neighbourhood and community characteristics of SE Saskatchewan based on the parent interviews. Information will be presented both for the entire SE Saskatchewan area and for each sub-region. The standard for comparison, when appropriate, is the Canadian PIDACS sample norms.

3.5.1 CHARACTERISTICS OF THE FAMILIES PARTICIPATING IN PIDACS

Table 3.7 presents key socioeconomic, familial and cultural characteristics of the families who participated in PIDACS. Overall, a majority of these families have incomes above $30,000 a year (82.9%), a minority of mothers (6.1%) and fathers (12.6%) have not completed secondary education, and many mothers (79.7%) and a vast majority of fathers (96.5%) had had employment within the past 12 months. A low proportion of the families are headed by a lone parent (11.9%) and most families consist of 2-5 individuals (91.4). Very few children of immigrants are found within this sample; approximately 16% of families are of Aboriginal ancestry. In the First Nations sub-region all families are Aboriginal.

Marked differences are found between sub-regions on each of these factors, mostly between the First Nations sub-region and the others. The First Nations sub-region has a higher percentage of families with an income less than $30,000, parents who have not completed high school and who were not employed in the past 12 months, lone-parent families, and families with six or more members. However, it should be noted here and throughout the rest of this section that the number of families in the First Nations sub-region who participated in PIDACS was much smaller than in the other sub-regions so many of the findings are based on just a few individuals.

Children Assessed	SE Saskatchewan	North sub-region	Central sub-region	South sub-region	First Nations sub-region
Total number of children	651	175	213	222	41
Parent interview completed	525	142	176	186	21
Direct assessment completed	629	170	203	218	39
Family Socioeconomic Status					
Family income: < $30,000/year	17.1% (70)	21.4% (23)	16.7% (22)	10.3% (15)	53.8% (9)
Family income: > $30,000/year	82.9% (340)	78.6% (86)	83.3% (112)	89.7% (134)	46.2% (7)
Mother's Education – Did not complete secondary	6.1% (31)	7.8% (11)	4.7% (8)	4.5% (8)	28.6% (6)
Father's Education– Did not complete secondary	12.6% (59)	13.0% (17)	8.3% (13)	10.9% (18)	68.8% (11)
Mother's Employment (past 12 months)	79.7% (405)	76.4% (107)	84.5% (142)	79.5% (144)	28.6% (6)
Father's Employment (past 12 months)	96.5% (468)	96.2% (126)	94.8% (148)	99.4% (163)	87.5% (14)
Family Structure					
Lone Parents	11.9% (63)	10.4% (15)	11.3% (20)	13.1% (24)	16.6% (3)
Family size					
2-3	50.1% (256)	49.0% (69)	51.4% (89)	53.4% (95)	17.4% (3)
4-5	41.3% (211)	42.1% (59)	41.0% (71)	40.8% (73)	41.3% (8)
6+	8.6% (44)	9.30% (13)	7.6% (13)	5.8% (10)	41.3% (8)
# of siblings					
None	7.3% (37)	9.2% (13)	5.3% (9)	7.6% (13)	8.3% (2)
One	44.6% (228)	41.6% (58)	48.9% (84)	46.0% (81)	17.4% (3)
Two	31.7% (162)	30.2% (42)	32.2% (56)	32.3% (57)	33.0% (7)
Three	12.4% (63)	15.8% (22)	10.8% (19)	9.9% (17)	24.8% (5)
Four or more	3.9% (20)	3.2% (4)	2.8% (5)	4.3% (8)	16.5% (3)
Family cultural context					
Aboriginal status	16.0% (84)	16.1% (23)	19.0% (33)	3.8% (7)	100% (21)
Immigrant Status	1.0% (5)	1.9% (3)	0.9% (2)	0.5% (1)	0% (0)

Table 3.7 Characteristics of the families participating in PIDACS

3.5.2 DIRECT ASSESSMENT OF COGNITIVE DEVELOPMENT

Figure 3.24 depicts the percentages of children with low scores on literacy skills, number knowledge, and receptive language. The proportion of children with low scores on the three measures of cognitive development was substantially higher than the Canadian norm of 15%. The number of children in the First Nations sub-region with low scores was especially high: 43.6% had low literacy skills, 53.4% had low number knowledge, and 74.4% had low receptive language. In contrast, the South sub-region was doing

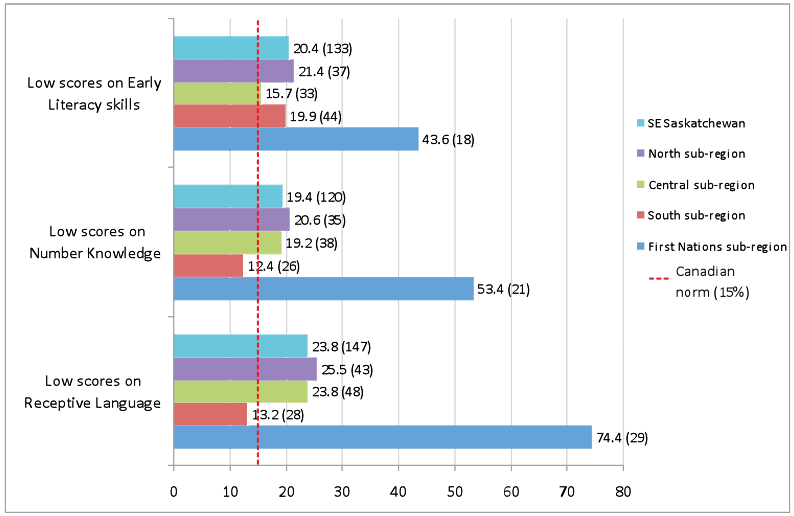


Figure 3.24 Percentage (number) of children with low scores on early literacy skills, number knowledge, and receptive language

comparatively well in the areas of number knowledge (12.4%) and receptive language (13.2%). Among non-First Nations sub-regions, the proportion of children with low early literacy skills ranged from 15.7% to 21.4%. Within the North, Central, and South sub-regions, approximately 12.4% to 20.6% of children had low number knowledge scores, and 15.7% to 21.4% had low receptive language skills scores.

3.5.3 BEHAVIOURAL OUTCOMES

Figure 3.25 indicates that the proportion of children identified as physical aggressive in SE Saskatchewan was similar to the Canadian norm. Not counting the First Nations sub-region (because the

percentage there was based on a very small number of students), across sub-regions the proportion of children who displayed physically aggressive behaviour ranged from 4.7% (in Central) to 6.1% (in North). The proportion of children who had problems with inattention were lower in SE Saskatchewan (10.1%) than the Canadian norm (13%), with the exception of the First Nations sub-region, which was considerably higher (31.4%). The lowest rates of inattention problems were found within the North (6.2%) and South (9.7%) sub-regions. Children in SE Saskatchewan were slightly less likely than the Canadian average to be lacking in pro-social behaviour (12.2% vs. 13%). The South sub-region was doing the best in this area (9.7%), while the North and First Nations sub-regions were doing more poorly

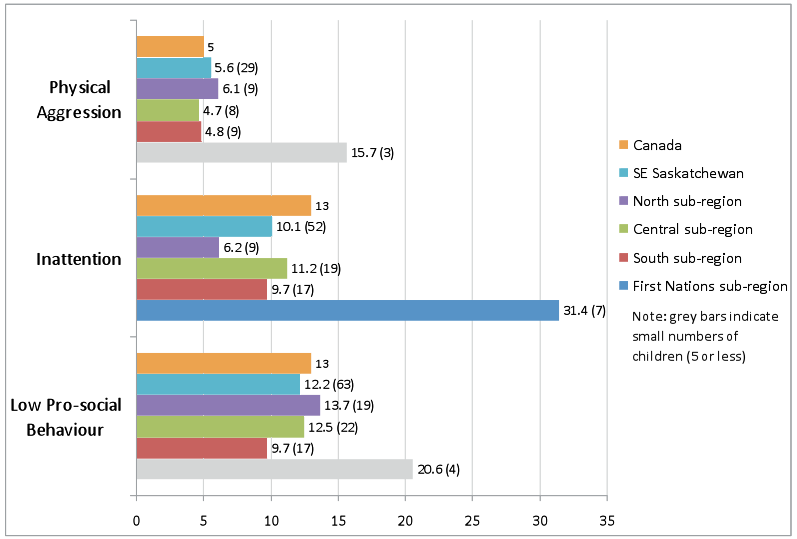


Figure 3.25 Percentage (number) of children with behavioural problems

(13.7% and 20.6%, respectively, although again the First Nations sub-region had a small number of children).

3.5.4 CHILDREN'S HEALTH

Within SE Saskatchewan, the proportion of children who experienced functional health problems was quite consistent across sub-regions, ranging from 8.5% to 8.9% (see Figure 3.26). The Central and South sub-regions of SE Saskatchewan had the most children with at least one chronic condition: 19.1% and 15.1%, respectively. The highest proportions of children with two or more chronic conditions were found in the North (7.2%) and South sub-regions (6.6%).

Figure 3.27 illustrates the levels of anxiety and depressive symptoms experienced by children within the sub-regions. Anxiety problems were more than twice as common (10.0%) as experiences with depression (4.4%). The percentages of children with anxiety were

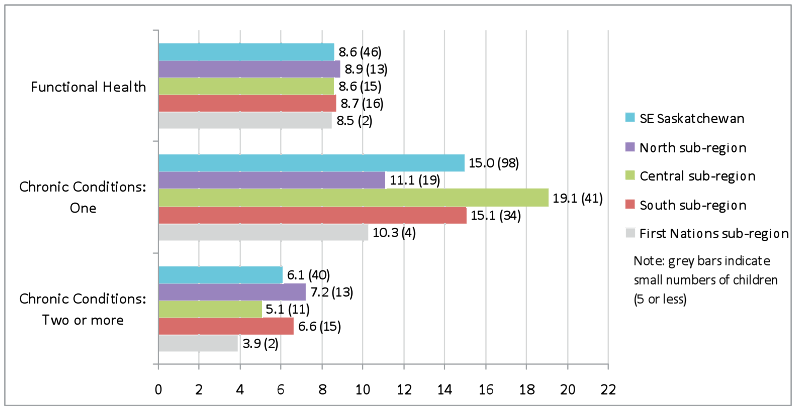


Figure 3.26 Percentage (number) of children with physical health problems

higher within SE Saskatchewan (ranging from 10.0% to 13.7% across sub-regions) than the national norm of 8.0%, with the exception of the South sub-region (4.7%). Approximately 3.4% to 5.4% of children showed symptoms of depression, similar to the Canadian norm of 4.0%.

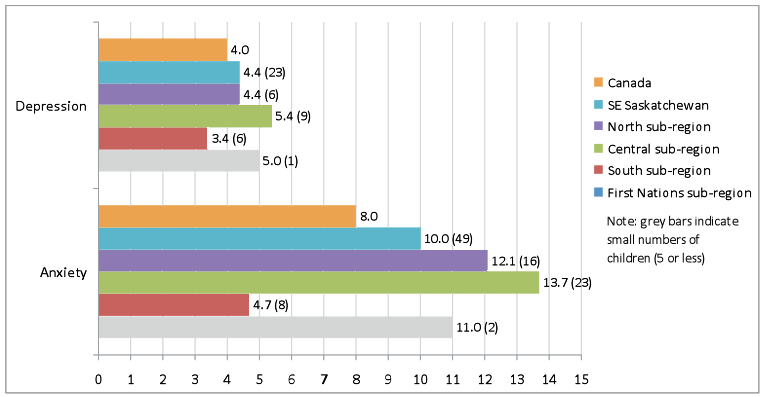


Figure 3.27 Percentage (number) of children with mental health problems

3.5.5 FAMILY FUNCTIONING AND MATERNAL DEPRESSION

Figure 3.28 depicts the percentages of poor family functioning and maternal depression in each SE Saskatchewan sub-region. With the exception of the First Nations sub-region, which was based on a very small number of families, the North sub-region in SE Saskatchewan had the highest percentages of families with poor functioning (12.1%). The remaining sub-regions were comparable to or below the national average. Maternal depression ranged from 10.2% to 11.8% in the North, Central, and South sub-regions, while no mothers met the criteria for depression in the First Nations sub-region.

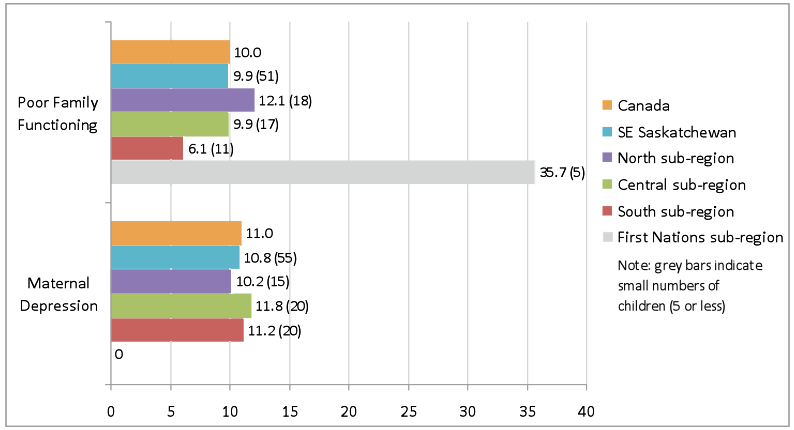


Figure 3.28 Percentage (number) of families with poor functioning and maternal depression

3.5.6 PARENTING

Figure 3.29 indicates that the mean scores for parental love and support were generally consistent across the North (7.2), Central (7.3) and South (7.1) sub-regions, while the mean score in the First Nations sub-region (8.02) was higher than all other regions and the Canadian average (7.4). Across all SE Saskatchewan sub-regions, mean scores for parental authority were very similar (ranging from 4.5 to 4.7) and substantially lower than the national average of 7.9. Mean parental engagement scores were also lower than the Canadian norm (4.9), ranging from 4.3 to 4.6.

Figure 3.30 shows that parents in SE Saskatchewan were more likely to use permissive or, in particular, neglectful parenting styles and less likely to practice authoritative and authoritarian parenting

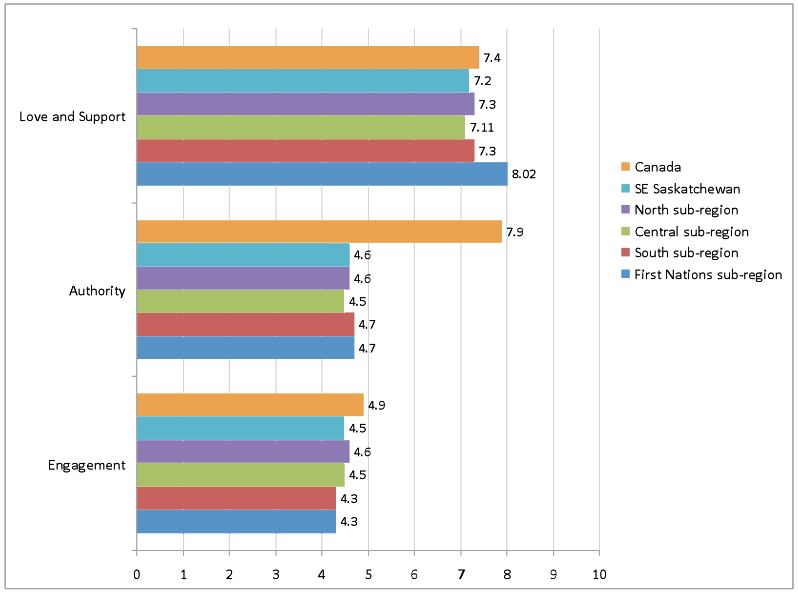


Figure 3.29 Average scores for parenting practices

styles than the Canadian norm. However, a substantial amount of variation in parenting practices was found across the sub-regions. The North (52.7%) and First Nations (50%) sub-regions had the highest proportion of authoritative parenting (but still less than the Canadian norm of 56%); the First Nations (35.7%) and Central sub-regions (11.6%) had the highest proportions of permissive parenting; and the Central (25%) and South (23.5%) sub-regions had higher percentages of authoritarian parenting. The likelihood of neglectful parenting was quite consistent across regions, ranging from 16.7% to 17.4% in the North, Central and South sub-regions; in all sub-regions, it was higher than the Canadian norm.

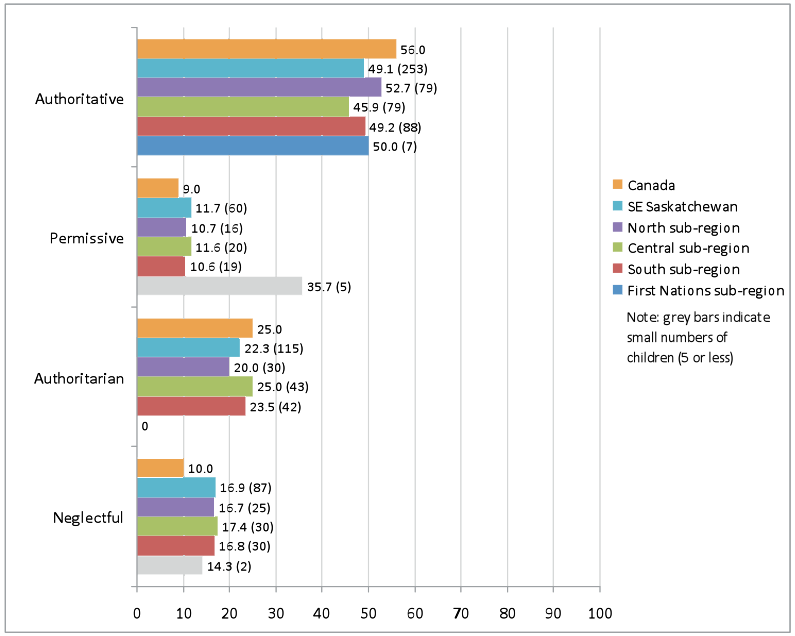


Figure 3.30 Percentages (number) of parents practicing each type of parenting style

3.5.7 COMMUNITY ACTIVITIES AND RESOURCES

Overall, children in engaged in literacy activities (such as looking at books, writing or doing puzzles) more frequently than extracurricular activities (taking part in organized or unorganized physical activities, music lessons, or community programming)—although it should be noted that relatively high participation was found for both types of activities (see Figures 3.31 and 3.32). Figure 3.31 shows that a majority of children engaged in extracurricular activities a few times a week (81.3%) with percentages ranging from 71.6% to 82.9% depending

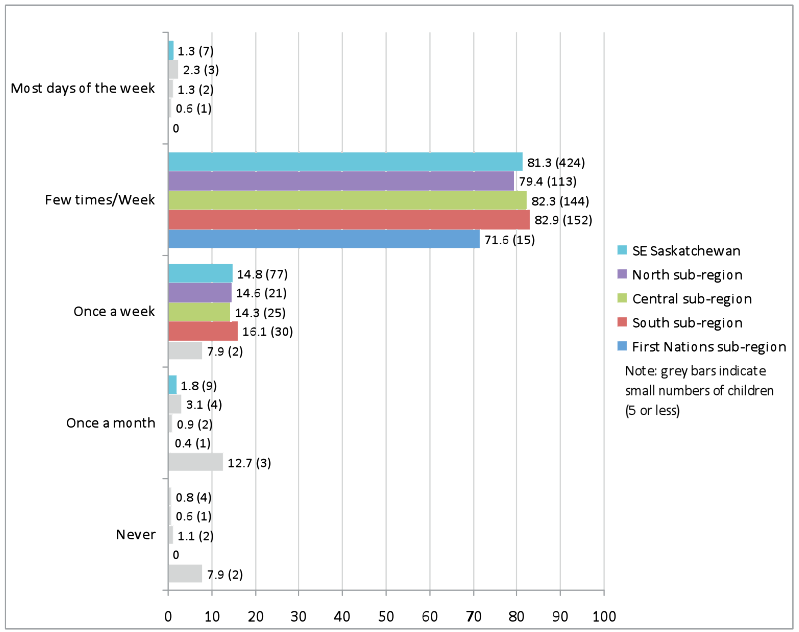


Figure 3.31 Frequency of children's participation in extracurricular activities

on the sub-region. Very few children participated in extracurricular activities only once a month or never.

Figure 3.32 shows that many children engaged in literacy activities most days of the week (69.5%) with proportions varying from 67.6% to 71.9% across sub-regions. The remaining children tended to participate in literacy activities a few times a week (27.5%). Very few children in engaged in literacy activities once a week or less (less than 3%). At the same time, however, the more detailed report on the SE

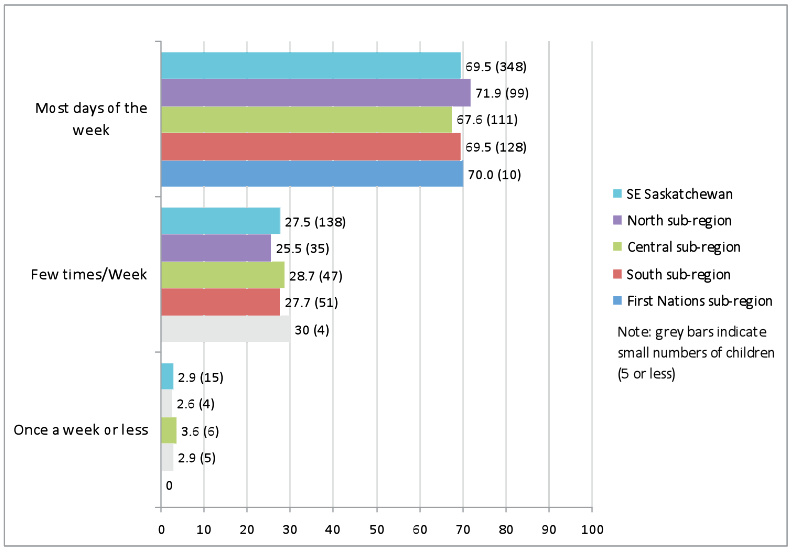


Figure 3.32 Frequency of children's engagement in literacy activities

PIDACS showed that kindergarten children in this region were less likely than Canadian children in general to read or try to read at least once a day.

Figures 3.33-3.35 illustrate how community resources were being used within SE Saskatchewan sub-regions. Overall, SE Saskatchewan children used recreational resources (parks, rinks, community centres, etc.) most frequently, followed by entertainment and cultural resources (sporting events, movies, museums, etc.) and, lastly, educational resources (libraries, reading programs, family resource centres, etc.).

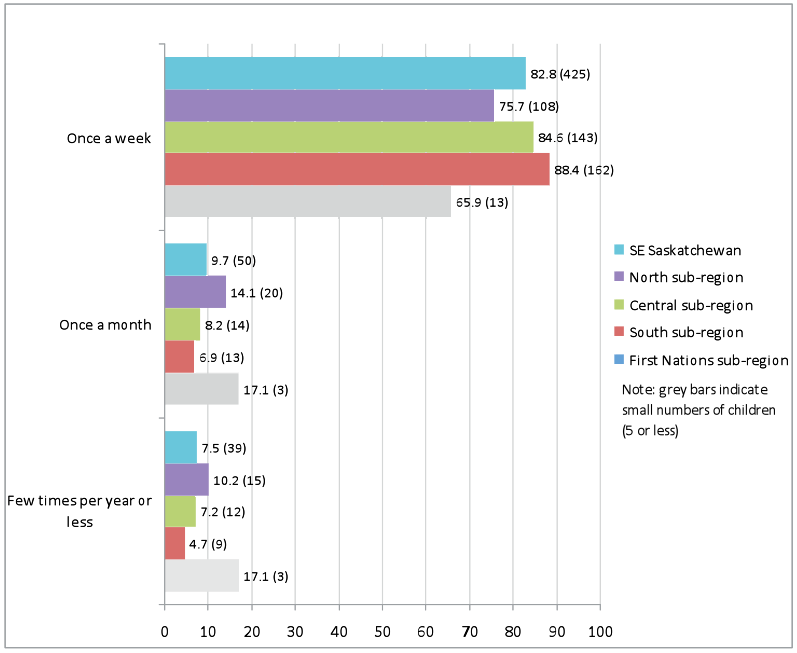


Figure 3.33 Frequency of children's use of recreational resources

Figure 3.33 depicts the use of recreational resources within SE Saskatchewan. Recreational resources were used by most children once a week and no sub-regions had children who never participated. The South and Central sub-regions' children used recreational resources the most frequently: 88.4% and 84.6%, respectively, participated at least once a week. In contrast, children from the North and First Nations sub-regions used recreational resources the least frequently. Approximately 14.1% of North sub-region's children used recreational resources once a month and 10.2% utilized such resources a few times a year or less.

Figure 3.34 shows the patterns of usage for entertainment and cultural resources within SE Saskatchewan. Most children used such resources a few times per year, ranging from 34.1% to 63.5% across sub-regions. Frequencies of "never" using Entertainment and cultural resources were quite low across all study areas. The frequency of use once a week and once a month show some variability between study areas with the proportion of children who used entertainment and

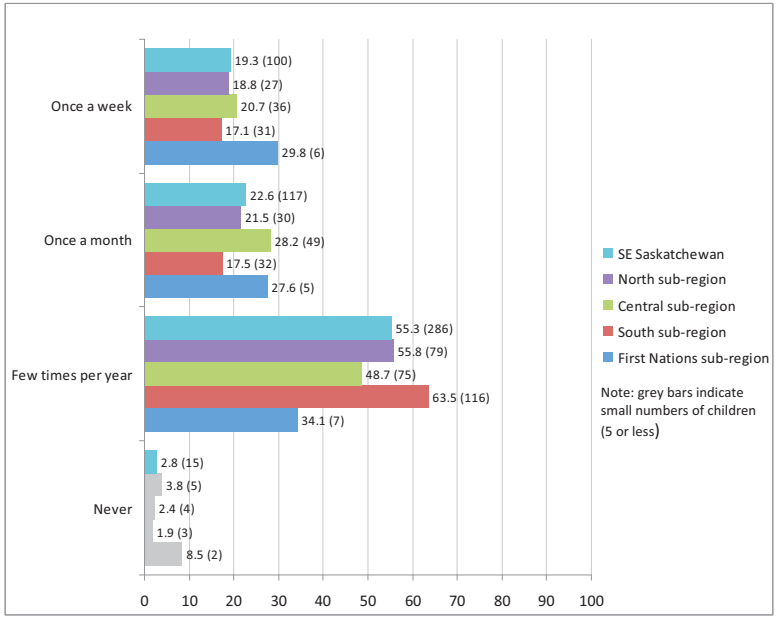


Figure 3.34 Frequency of children's use of entertainment and cultural resources

cultural resources once a week ranging from 17.1% to 29.8%, and use of such resources once a month varying from 17.5% to 28.2%. Based on Figure 3.35, children in SE Saskatchewan used educational resources relatively infrequently, particularly in the North and First Nations sub-regions where 34.3% and 31.4% of children, respectively, never utilized educational resources. Overall, 26.4% of children in SE Saskatchewan never used educational resources and 43.2% used these resources a few times per year. Only 9.2% of children used educational resources once a month and 20.7% once a week.

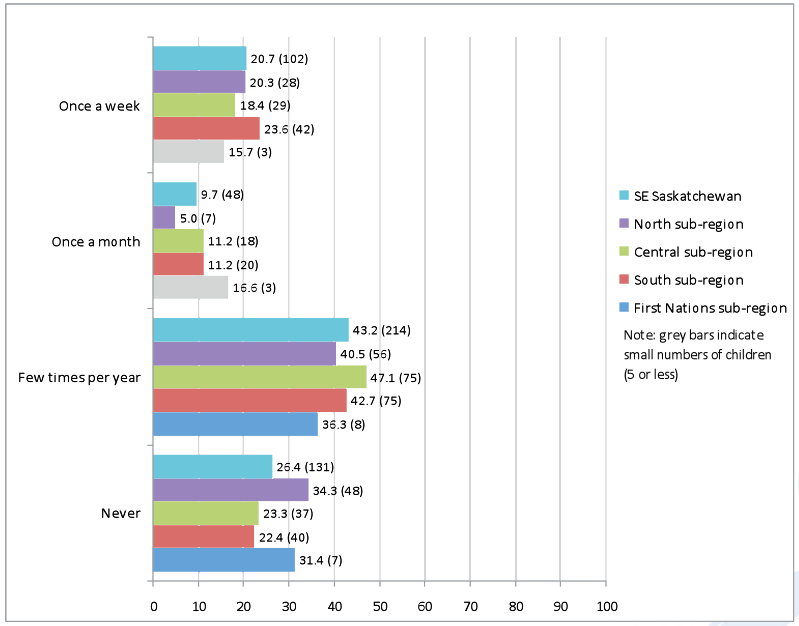


Figure 3.35 Frequency of children's use of educational resources

The South sub-region's children used educational resources most frequently, with 23.6% indicating a use of once a week.

3.5.8 CHILD CARE

Overall, most SE Saskatchewan parents (70.7%) used some form of child care arrangements (Figure 3.36). The average total number of hours children spent in child care per week in SE Saskatchewan was 12.51 hours.

As shown in Figure 3.37, most families used only one type of child care (54.8%), with the percentages varying from 43.1% to 60.5% across sub-regions. Relatively few parents used three or more types of child care (12.5%).

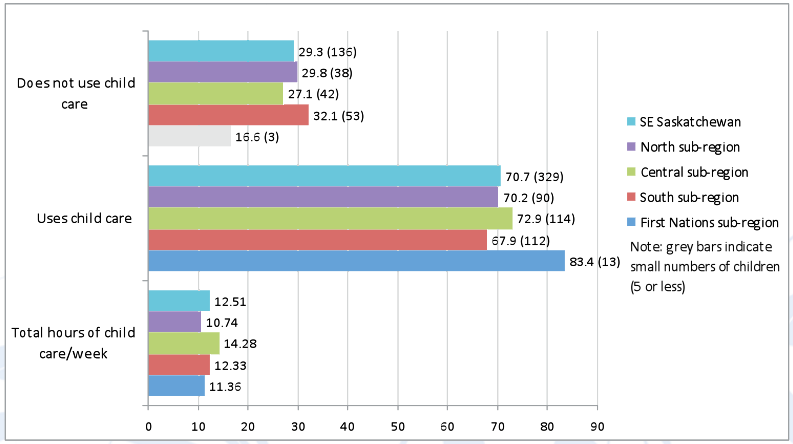


Figure 3.36 Use of child care arrangements and average total hours of child care per week

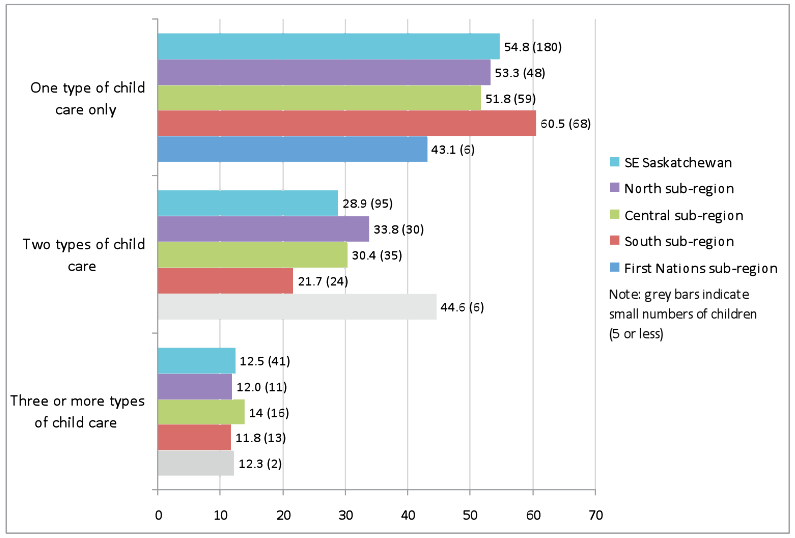


Figure 3.37 Number of types of child care arrangements used

Figure 3.38 shows the types of child care arrangements used by SE Saskatchewan parents. Overall, children were most likely to receive care in someone else's home by a non-relative (55.0%), followed by care in someone else's home by a relative (37.8%) and in their own home by a relative (24.7%). Child care provided at home by a non-relative (12.8%), at a child care centre (12.6%), in a before- or after-school program (5.2%), and "other" arrangements (6.5%) were used least frequently. Notably, children in the First Nations sub-region received child care from relatives, whether at their own home (81.6%) or at someone else's home (56.9%), substantially more than all sub-regions; very few, if any, children in the First Nations sub-region received care from non-relatives or within a program setting.

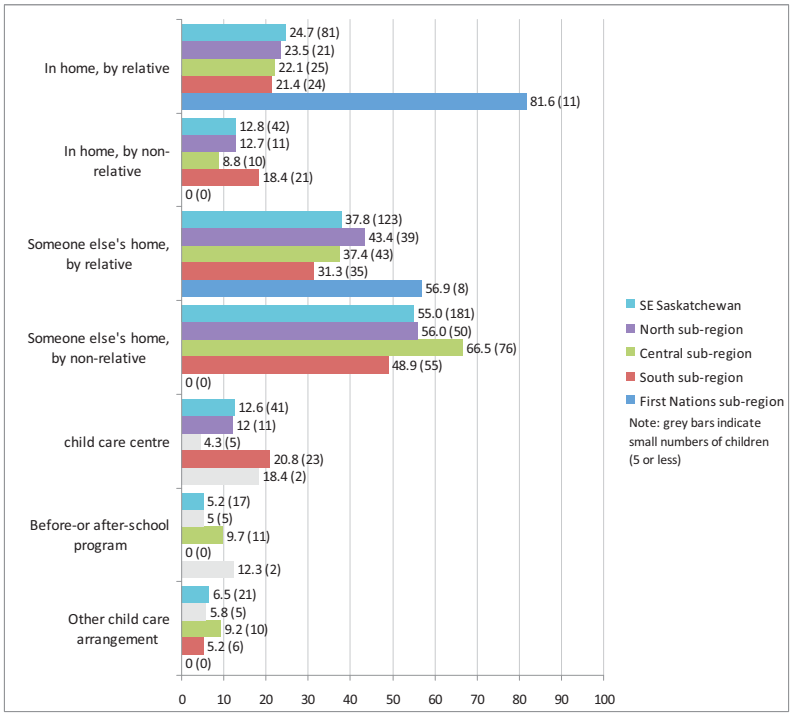


Figure 3.38 Types of child care arrangements used

3.5.9 NEIGHBOURHOOD CHARACTERISTICS AND SOCIAL SUPPORT

Figure 3.39 highlights the neighbourhood characteristics within the SE Saskatchewan sub-regions. With the exception of the First Nations sub-regions, most sub-regions were generally at or above the Canadian norm in terms of safety, cohesion, and social support. The North, Central and South sub-regions rated their neighbourhoods as having

higher safety than the national average. Similarly, these sub-regions also perceived their neighbourhoods as having high levels of cohesion. With respect to social support, percentages were generally comparable to the Canadian norm (81%) ranging from 77.7% to 81.0%. Compared to the Canadian norm of 77%, SE Saskatchewan had much lower percentages of perceived high quality neighbourhoods with the lowest percentages found in the Central (40.7%) and First Nations sub-regions (21.4%, but this should be interpreted with caution due to small numbers). Across all neighbourhood characteristics, the First Nations sub-region had lower percentages than the national norms.

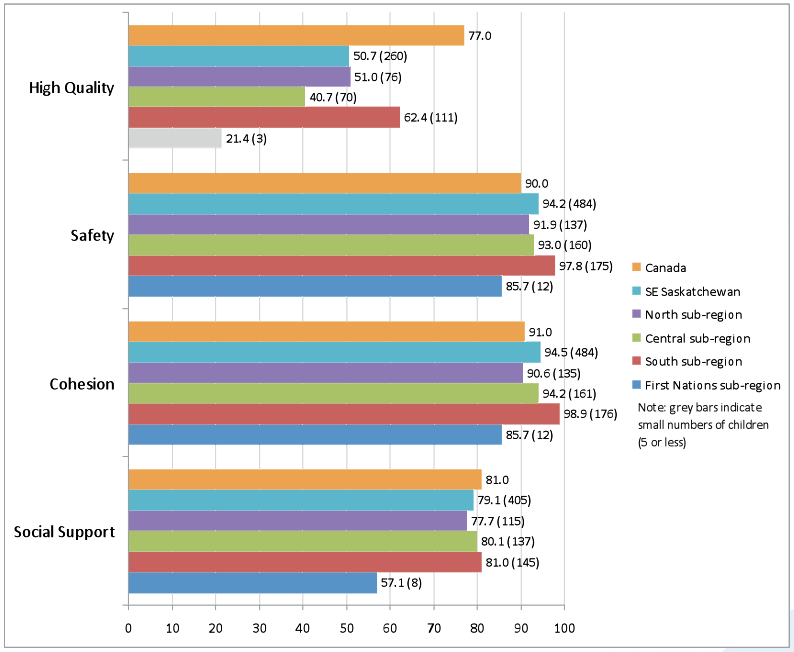


Figure 3.39 Percentage (number) reporting high levels of neighbourhood quality, safety, cohesion and social support

4 Conclusions and Topics for Community Discussion

4.1 SUMMARY OF KEY FINDINGS

- Compared to the Canadian norm, kindergarten students in the Southeast Saskatchewan region are more likely to be considered vulnerable in the domains of physical health and wellbeing and language and cognitive development, and equally or less likely to be vulnerable in terms of social competence, emotional maturity, and communication skills and general knowledge.
- Overall, one in four, or 461 children in the region are vulnerable in at least one domain, and half of these children, or 227, are vulnerable in two or more domains.
- In two domains—physical health and wellbeing and language and cognitive development—15 of 27 study areas have above normal percentages of children considered vulnerable, followed by 10 study areas with above normal percentages in the domain of emotional maturity, 8 for social competence, and 4 for communication skills and general knowledge.
- The percentage of children considered vulnerable in a domain varies greatly across study areas: from 1.8% to 39% for physical health and wellbeing; from 0% to 25.6% for social competence; from 0% to 29.3% for emotional maturity; from 2.6% to 28.6% for language and cognitive development; and from 0% to 15.4% for communication skills and general knowledge. The proportions considered challenged in sub-domains vary even more, from 0 to almost 75%. This indicates significant disparities within the region.
- The percentage of children considered vulnerable in at least one domain ranges across study areas from 9.6 to 57.3%. Of particular concern are the 10 study areas in which more than one in four children is considered vulnerable in at least one domain.
- Ten study areas have a higher than normal percentage of children considered vulnerable in two or more domains, with the proportion in this category ranging from 0 to 30.5%.
- Six study areas (Canora, Esterhazy, Fillmore, Southey, Springside, and White City) were below the norm in terms of the percentage of children considered vulnerable for all five EDI domains, while two study areas, Kamsack and Touchwood Agency Tribal Council, were above the norm in all five domains.
- Overall, study areas with higher social risk did not have more children considered vulnerable, nor was greater access to and availability of resources associated with lower levels of vulnerability.
- Over the past several years, the study areas in the North sub-region and, to a lesser extent, the Central sub-region have seen a decrease in the proportion of children considered vulnerable, while in the study areas in the South, there has been a general increase in vulnerability. Children in the First Nations study areas, assessed only in 2009, were considerably more likely to be considered vulnerable in each domain and in one or more domains, compared to the other sub-regions.

- Based on direct assessment, kindergarten children in Southeast Saskatchewan tended to score lower than the Canadian average on measures of receptive vocabulary, number knowledge, and literacy skills. This is consistent with the findings from the EDI in the domain of language and cognitive development. While children's scores in the South sub-region were somewhat higher in these areas, children's scores in the First Nations sub-region were significantly lower than the Canadian average.
- The prevalence of children with behavioural problems was comparable to the Canadian PIDACS average, with the exception of the First Nations sub-region, where there was a higher likelihood children being inattentive.
- In terms of the prevalence of physical health problems, children in the region are very similar to the Canadian average, with little difference across sub-regions; the same is true for symptoms of depression, but children in all sub-regions except the South are somewhat more likely than the norm to experience anxiety.
- Families in this region are comparable to the Canadian average in terms of overall functioning and prevalence of maternal depression, but they are considerably more likely to practice a 'neglectful' parenting style and less likely to use an 'authoritative' style, which is associated with better developmental outcomes for children.
- A majority of families use child care at least part-time, most often in someone else's home by a non-relative, but the type of care varies across sub-regions; families in the First Nations sub-region were much more likely to have their children cared for in their home by a relative, while the South was the sub-region most likely to use a child care centre or care in the home by a non-relative.
- Parents in the region are as or slightly more likely than parents in other parts of Canada to believe that their communities or neighbourhoods are safe and cohesive and to report good levels of social support; but they are less likely to perceive their communities to be of high quality overall. However, in the First Nations sub-region, all aspects of the community and social support were rated lower than the national average.

Overall, one in four, or 461 children in the region are vulnerable in at least one domain, and half of these children, or 227, are vulnerable in two or more domains.

4.2 USING THIS INFORMATION TO IMPROVE CHILDREN'S OUTCOMES

Many studies have found higher social risk to be related to poorer health and development in young children, but this was not the case in the present project. The Yorkton study area, despite having the highest social risk score of all study areas, had below normal percentages of children considered vulnerable in all five EDI domains. Carlyle, Carnduff, Lampman, and Moosomin, on the other hand, all scored 1 for social risk, but had above normal percentages of vulnerable children in four out of five domains. The fact that income

data was not available for the Tribal Council areas must be noted, as these areas would most likely have had higher social risk scores were income taken into account; in addition, while none of the Tribal Council areas were above the provincial average for the SRI indicators of 'transience' and 'home rentals,' they may have problems with housing quality and overcrowding that are not captured by the information available to create the SRI.

The lack of association between social risk and vulnerability makes it more difficult to understand why children are doing better in some study areas than others. It may be instructive to look at areas like Yorkton, Grenfell, and Southey, where results are better than would be expected, given the level of social risk.

Similarly, the connection between resources, as measured by the RAA scores, and vulnerability, is not straightforward. Four study areas had considerably higher RAA scores than other areas—Estevan, Fort Qu'Appelle, Grenfell, and Weyburn—and, in most cases, the children in these areas were less likely to be considered vulnerable than in the region as a whole. However, the study areas with the best performance overall tended to have lower RAA scores. This likely reflects the fact that high RAA scores can indicate a variety of realities. For example, larger population centres on the whole have higher RAA scores, but also more diverse populations and the potential for greater social risk; prosperous, cohesive communities may also be able to provide more resources, and are healthier places to live not just because of their services and programs, but because of the nature of the community. On the other hand, some resources may be developed by communities in response to the social and health problems they face, in which case a higher RAA score could be related to higher vulnerability, at least initially. While the overall RAA score does not provide an adequate explanation, it may be that particular types of services and programs in these study areas are supporting children's development. The RAA scores include a wide range of services and programs; especially when looking at ways to improve development within sub-domains, it would be more helpful for communities to consider the resources that relate specifically to

the skills and abilities in which their children need improvement (e.g., access to libraries is more relevant to the sub-domain of basic literacy than sports and recreation programs).

The changes in vulnerability over time observed in the different regions also merit further investigation. In some cases, shifts in the population might account for at least part of the changes, if, for example, a sub-region had experienced an influx of families for whom English is not the first language.

The results from PIDACS suggest some additional areas to consider for intervention, including parenting style, daily reading and the use of educational resources, and neighbourhood quality and within First Nations communities, safety, cohesiveness, and social support.
It is hoped that through careful examination of the information contained in this report, those concerned with children's wellbeing in the Southeast Saskatchewan Region will be able to apply their knowledge of their own communities and their diverse skills and perspectives to create policies, programs, and environments that equitably support optimal health and development in the early years.

Through careful examination of the information contained in this report, those concerned with children's wellbeing in the Southeast Saskatchewan Region will be able to apply their knowledge of their own communities and their diverse skills and perspectives to create policies, programs, and environments that equitably support optimal health and development in the early years.

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Appendix A: Communities, schools, prekindergartens and population (total and 0-6) in each study area

Study Area	Communities	Schools	Total Population	Children 0-6 (% of pop)
Balgonie	Balgonie Edenwold Pilot Butte	Balgonie Edenwold Pilot Butte	5965	620 (10.4%)
Canora	Canora Preeceville Sturgis Invermay Verigin Buchanan Rama Lintlaw Endeavour	Canora+ Preeceville Sturgis Invermay	8755	535 (6.1%)
Carlyle	Carlyle Arcola Stoughton Manor Forget Heward Kenossee Lake Kisbey	Carlyle+ Arcola Stoughton Manor	4980	410 (8.2%)
Carnduff	Carnduff Oxbow Carievale Gainsborough Shorthoaks Alida Glen Ewen	Carnduff Oxbow Carievale	4920	440 (8.9%)
Esterhazy	Esterhazy* Stockholm Atwater Bangor Dubuc	P.J. Gillen Macdonald	3575	180 (5.0%)
Estevan	Estevan	St. Mary's+ Sacred Heart Hillcrest Spruce Ridge Westview++ Pleasantdale	10,075	930 (9.2%)
File Hills Qu'Appelle Tribal Council	Little Black Bear Star Blanket Okanese Peepeekisis Carry the Kettle Piapot Muscowpetung Pasqua Standing Buffalo	Okanese+ Peepeekisis+ Carry the Kettle+ Piapot+ Muscowpetung+ Pasqua+ Standing Buffalo+	3070	445 (14.5%)
Fillmore	Fillmore Yellow Grass Midale Macoun Trossachs Lang Halbrite McTaggart Creelman Griffin Wauchope Osage	"33" Central Lang Yellow Grass Midale Macoun	4505	335 (7.4%)

Study Area	Communities	Schools	Total Population	Children 0-6 (% of pop)
Fort Qu'Appelle	Fort Qu'Appelle Balcarres Neudorf Killaly Lemberg Abernathy Lebret	Fort Qu'Appelle++ Balcarres+ North Valley	6475	520 (8.0%)
Grenfell	Grenfell Wolseley Broadview Whitewood Montmartre Glenavon Windthorst Kendal	Grenfell+ Dr. Isman Broadview Whitewood+ Montmartre	6560	475 (7.2%)
Indian Head	Indian Head Qu'Appelle McLean Sintaluta	Indian Head+ James Hamblin McLean	4265	320 (7.5%)
Kamsack	Kamsack Pelly Norquay Togo Stenen Hyas Arran	Victoria+ Fort Livingstone Norquay	5770	370 (6.4%)
Kipling	Kipling Kennedy Langbank Wawota	Kipling Wawota	3585	265 (7.4%)
Lampman	Lampman Bienfait Frobisher Alameda North Portal Roche Percee Benson Tourquay	Lampman Weldon Alameda	5555	500 (9.0%)
Langenburg	Langenburg Calder Churchbridge* Tantallon Gerald Yarbo MacNutt Spy Hill	Hoffman+ Calder Churchbridge	4940	345 (7.0%)
Lumsden	Lumsden Regina Beach Bethune Pense Grand Coulee Milestone Findlater Craven Wilcox	Lumsden Elementary+ Arm River Colony South Shore Clive Draycott Stewart Nicks+ Pense+ Milestone St. Augustine	9785	795 (8.1%)
Melville	Melville	Davison+ Miller St. Henry's+	4305	305 (7.1%)
Moosomin	Moosomin Rocanville Wapella Welwyn Fleming	McLeod+ Rocanville Wapella	5145	485 (8.1%)

Study Area	Communities	Schools	Total Population	Children 0-6 (% of pop)
Radville	Radville Gladmar Ogema Pangman Oungre Lake Alma Minton Ceylon Goodwater Tribune	St. Olivier Gladmar Ogema Lyndale Pangman	4390	325 (7.4%)
Redvers	Redvers Bellgarde Maryfield Antler Fairlight	Redvers Ecole de Bellgarde Maryfield	2655	190 (7.2%)
Southey	Southey Cupar Kelliher Lipton Silton Earl Grey Markinch Dysart Lestock	Robert Southey Cupar Kelliher Lipton	5960	485 (8.1%)
Springside	Springside Saltcoats Theodore Grayson Insinger Stornoway Waldron Goodeve Bredenbury Duff Rhein Fenwood Sheo	Springside Saltcoats St. Theodore Grayson	9210	585 (6.4%)
Touchwood Agency Tribal Council	Day Star Kawacatoose Muskowekwan Gordon	Kawacatoose+ George Gordon+ Muskowekwan+ Punnichy+	1955	330 (16.9%)
Weyburn	Weyburn	St. Dominic+ Assiniboia Park Queen Elizabeth Souris Haig++	9160	800 (8.7%)
White City	White City Sedley Vibank Odessa Francis	White City Sedley Vibank Lajord	4270	405 (9.5%)
Yorkton	Yorkton	St. Alphonsus+ St. Mary's+ St. Michaels's St. Paul's Columbia++ Dr. Brass+ M. C. Knoll Yorkdale Central	15,040	1175 (7.8%)
Yorkton Tribal Council	Ocean Man Pheasant Rump White Bear Sakimay Kahkewistahaw Cowessess Ochapowace The Keys Keeseekoose Cote	Ocean Man+ White Bear+ Sakimay+ Kahkewistahaw+ Cowessess+ Keeseekoose+ Cote+ Kakisiwew+	3295	540 (16.4%)

\+ School with one prekindergarten
++ School with two prekindergartens
* Community with a prekindergarten not based at a school

Appendix B: Social Risk Index components for Prairie Children... Prairie Futures Understanding the Early Years study areas

Study Area	Single Parent Families	Low Education	Transience	Home Rental	Receipt of government transfers	Below LICO	Total SRI Score
Saskatchewan	16.6	30.2	14.3	25.6	11.0	19.0	n/a
PCPF UEY Region	11.8	34.8	10.4	17.5	12.0	15.0	n/a
Balgonie	10.4	19.7	10.0	3.2	5.0	7.0	0
Canora	7.0	44.6	7.1	14.2	19.0	10.0	2
Carlyle	11.3	37.8	13.7	15.0	11.0	15.0	1
Carnduff	6.6	36.7	11.2	15.9	8.0	5.0	1
Esterhazy	12.2	37.6	11.2	18.5	11.0	0.0	1
Estevan	12.5	33.6	15.1	28.8	8.0	11.0	3
File Hills Qu'Appelle TC	42.0	51.1	13.4	16.6	35.0	n/a	3
Fillmore	8.8	29.1	5.6	12.5	12.0	9.0	1
Fort Qu'Appelle	13.5	30.9	12.6	15.8	15.0	21.0	3
Grenfell	10.1	40.1	8.5	17.2	21.0	32.0	3
Indian Head	8.1	29.0	7.9	14.4	12.0	13.0	1
Kamsack	9.5	44.1	7.5	12.7	20.0	33.0	3
Kipling	9.8	37.0	7.9	11.8	13.0	12.0	2
Lampman	6.8	34.6	8.0	13.2	7.0	6.0	1
Langenburg	5.6	36.5	5.4	11.8	12.0	11.0	2
Lumsden	9.0	23.2	9.1	9.8	9.0	7.0	0
Melville	11.6	37.6	12.3	22.5	15.0	33.0	3
Moosomin	7.4	32.2	8.7	21.0	11.0	19.0	1
Radville	5.9	34.7	7.9	13.8	15.0	12.0	2
Redvers	5.6	43.0	8.8	14.4	13.0	0.0	2
Southey	7.6	39.5	5.3	10.3	15.0	24.0	3
Springside	8.2	36.2	7.0	10.4	15.0	16.0	2
Touchwood Agency TC	42.9	59.5	9.6	6.6	36.0	n/a	3
Weyburn	14.4	31.1	15.5	31.3	9.0	18.0	3
White City	7.5	25.8	9.4	6.2	8.0	0.0	0
Yorkton	16.6	31.7	14.4	32.8	13.0	25.0	5
Yorkton TC	42.0	52.9	14.1	7.0	32.0	n/a	3

Note: Shaded cells indicate that these numbers are above the provincial average.

Appendix C: Detailed description of challenge cut-offs for EDI sub-domains

Domain/sub-domain	Challenge cut-off	Children below challenge cut-off on this subscale . . .	% below cut-off in normative sample
Physical Health and Wellbeing			
Physical readiness for school day Being dressed appropriately Coming to school on time, not hungry or tired	6.249	vary from those who have experienced all four conditions at least sometimes, to those who have always experienced them	3.9
Physical independence Independence Handedness Coordination	9.999	vary from those who have not developed one of the three skills (independence, handedness, coordination) and/or suck a thumb, to those who have not developed any of the skills and suck a thumb	8.9
Gross and fine motor skills Holding pen, crayons or brush Manipulating objects Climbing stairs Level of energy throughthe school day Overall physical development	6.499	vary from those who have a good ability to perform up to two of the five skills and average ability to perform the other three, to those who have poor abilities in all five	21.8
Social Competence			
Overall social competence Overall social/emotional development Gets along with peers Cooperative Plays with various children Demonstrates self-confidence	4.999	vary from those who rate as average on the first two items and only sometimes demonstrate the behaviours described in the last three items, to those who rate as very poor on the first two items and never show any of the three behaviours	8.4
Responsibility and respect Follows rules Respects property Demonstrates self-control Demonstrates respect for adults Demonstrates respect for other children Accepts responsibility for actions Takes care of materials Shows tolerance to someone who made a mistake	4.999	vary from those who never show one of the behaviours, and the remaining seven sometimes, to those who never show any of the behaviours	4.7
Approaches to learning Listens attentively Follows directions Completes work on time Works independently Works neatly and carefully Able to solve problems by him/herself Able to follow simple instructions Able to follow class routines Able to adjust to changes in routines	4.999	vary from those who never demonstrate one of the behaviours/skills but show all the remaining eight sometimes, to those who never show any of the nine behaviours/skills	8.1
Readiness to explore new things Curiosity about the world Eager to play with a new toy Eager to play a new game Eager to play with/read a new book	4.999	vary from those who never show one of the behaviours and sometimes show the remaining three, to those who never show any of the four behaviours	3.2
Emotional Maturity			
Prosocial and helping behaviour Help someone who has been hurt Clear somebody else's mess Try to stop a quarrel Offers help with a task Comforts a child who is upset Spontaneously helps Invite bystanders to join in Help children who are feeling sick	4.999	vary from those who never show one of the behaviours and sometimes show the remaining seven, to those who never show any of the eight behaviours.	33.5
Anxious and fearful behaviour Upset when left at school Seems unhappy or sad Fearful or anxious Worried Cries a lot Nervous or tense Incapable of making decisions Excessively shy	4.999	vary from those who often show one of the behaviours and only sometimes show the remaining seven, to those who never show any of the eight behaviours.	2.1
Aggressive behaviour Gets into physical fights Bullies or is mean Kicks, bites or hits others Takes things that do not belong to him/her Laughs at others Is disobedient Has temper tantrums	7.139	vary from those who sometimes show most of the seven behaviours, to those who often show all of them	7.8

Domain/sub-domain	Challenge cut-off	Children below challenge cut-off on this subscale . . .	% below cut-off in normative sample
Hyperactivity and inattention Restless Distractible Fidgets Impulsive Difficulty awaiting turns Can't settle to anything Inattentive	5.709	Vary from those who sometimes show all seven behaviours, to those who often show all of them	13.1
Language and Cognitive Development			
Basic literacy Know how to handle a book Identify some letters Attach sounds to letters Show awareness of rhyming words Participate in group reading activities Experiment with writing Aware of writing directions Able to write own name	7.499	Do not have three or more of the eight skills	11.0
Interest in literacy/numeracy and memory Interest in books Interest in reading Remember things easily Interest in mathematics Interest in games involving numbers	7.999	Do not have two or more of the five skills	15.8
Advanced literacy Read simple words Read complex words Read sentences Write voluntarily Write simple words Write simple sentences	3.329	Have only one or none of the six skills	19.4
Basic numeracy Sort and classify Use one-to-one correspondence Count to 20 Recognize numbers 1-10 Compare numbers Recognize geometric shapes Understand simple time concepts	8.569	Do not have two or more of the seven skills	14.2

Appendix D: Mapping Report Overview Central

Results for 2008/2009 EDI according to Study Areas in Central Region

Note: see legend at the bottom of this chart

Study Area # of Kindergarten Children		Lumsden (99)	Balgonie (77)	White City (94)	Grenfell (63)	Kipling (40)	Southey (56)	Indian Head (50)	Fort Qu'Appelle (74)
SRI Score		0	0	0	3	2	3	1	3
Indicators with Highest Risk		0	0	0	2 - 40.1% 5 - 21.0% 6 - 32.0%	2 - 37.0% 5 - 13.0%	2 - 39.5% 5 -15.0% 6 - 24.0%	5 - 12.0%	2 - 30.9% 5 - 15.0% 6 - 21.0%
RAA Score		9	5	4	56	19	22	13	36
Physical Health and Wellbeing	Physical Readiness	3.3% (3)	4.1% (3)	**0.0%** **(0)**	**1.8%** **(1)**	**0.0%** **(0)**	3.8% (2)	2.0% (1)	**1.5%** **(1)**
	Physical Independence	6.5% (6)	**12.2%** **(9)**	4.5% (4)	**3.5%** **(2)**	**35.9%** **(14)**	**3.8%** **(2)**	**14.3%** **(7)**	**10.3%** **(7)**
	Gross and fine motor skills	**25.0%** **(23)**	**45.2%** **(33)**	**39.3%** **(35)**	**8.8%** **(5)**	12.8% (5)	**32.7%** **(17)**	**24.5%** **(12)**	16.2% (11)
Social Competence	Overall Social Competence	**9.8%** **(9)**	**10.8%** **(8)**	5.6% (5)	**3.5%** **(2)**	7.7% (3)	**3.8%** **(2)**	**2.0%** **(1)**	2.9% (2)
	Responsibility and Respect	**6.5%** **(6)**	5.4% (4)	5.6% (5)	**1.8%** **(1)**	2.6% (1)	**0.0%** **(0)**	**0.0%** **(0)**	1.5% (1)
	Approaches to Learning	5.4% (5)	8.1% (6)	9.0% (8)	**12.3%** **(7)**	**2.6%** **(1)**	**0.0%** **(0)**	**2.0%** **(1)**	2.9% (2)
	Explores new things	**1.1%** **(1)**	4.1% (3)	**1.1%** **(1)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	1.5% (1)
Emotional Maturity	Prosocial and helping behaviour	23.9% (22)	**39.2%** **(29)**	**37.1%** **(33)**	24.6% (14)	30.8% (12)	**11.5%** **(6)**	18.4% (9)	**42.6%** **(29)**
	Anxious and fearful behaviour	4.3% (4)	**0.0%** **(0)**	1.1% (1)	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	2.9% (2)
	Aggressive Behaviour	3.3% (3)	8.1% (6)	**1.1%** **(1)**	7.0% (4)	5.1% (2)	**1.9%** **(1)**	**0.0%** **(0)**	**1.5%** **(1)**
	Hyperactivity and inattention	12.0% (11)	9.5% (7)	9.0% (8)	**15.8%** **(9)**	**5.1%** **(2)**	7.7% (4)	**6.1%** **(3)**	10.3% (7)

Language and Cognitive Development	Basic Literacy	**12.0% (11)**	10.8% (8)	**3.4% (3)**	8.8% (5)	**12.8% (5)**	9.6% (5)	10.2% (5)	**13.2% (9)**
	Interest in literacy/numeracy	**27.2% (25)**	**18.9% (14)**	**4.5% (4)**	8.8% (5)	**41.0% (16)**	**1.9% (1)**	10.2% (5)	14.7% (10)
	Advanced literacy	**21.7% (20)**	**21.6% (16)**	15.7% (14)	**1.8% (1)**	10.3% (4)	13.5% (7)	**24.5% (12)**	14.7% (10)
	Basic numeracy	**19.6% (18)**	**20.3% (15)**	11.2% (10)	**15.8% (9)**	23.1% (9)	13.5% (7)	**24.5% (12)**	**39.7% (27)**
Communication skills and general knowledge		8.7% (8)	9.5% (7)	9.0% (8)	**5.3% (3)**	**2.6% (1)**	**0.0% (0)**	**2.0% (1)**	10.3% (7)
Multiple Challenge Index	Low in one or more domains	**28.3% (26)**	24.3% (18)	16.9% (15)	14.0% (8)	23.1% (9)	**9.6% (5)**	18.4% (9)	22.1% (15)
	Low in two or more domains	13.0% (12)	13.5% (10)	**5.6% (5)**	8.8% (5)	7.7% (3)	**3.8% (2)**	8.2% (4)	**16.2% (11)**

SRI – Social Risk Index
Indicators:
1 – single parent
2 – low education
3 – mobility
4 – home rental
5 – government transfer payments
6 – low income

RAA – Resource Access and Availability Score
Green coloured numbers indicate Strength
Blue coloured numbers indicate Challenge

Appendix D: Mapping Report Overview First Nations

Results for 2008/2009 EDI according to Study Areas in First Nations Note: see legend at the bottom of this chart

Study Area # of kindergarten children		Touchwood Agency (73)	File Hills Qu'Appelle (90)	Yorkton Tribal Council (82)
SRI Score		3	3	3
Indicators with Highest Risk		1 – 42.9% 2 – 59.5% 5 – 36% 6 – n/a	1 – 42.0% 2 – 51.1% 5 – 35.0% 6 – n/a	1 – 42.0% 2 – 52.9% 5 – 32.0% 6 – n/a
RAA Score		9	9	3
Physical Health and Wellbeing	Physical Readiness	**6.6% (4)**	**6.5% (5)**	**23.2% (19)**
	Physical Independence	**18.0% (11)**	9.1% (7)	**30.5% (25)**
	Gross and fine motor skills	**6.6% (4)**	**32.5% (25)**	**39.0% (32)**
Social Competence	Overall Social Competence	8.2% (5)	**10.4% (8)**	**11.0% (9)**
	Responsibility and Respect	**6.6% (4)**	3.9% (3)	**9.8% (8)**
	Approaches to Learning	**11.5% (7)**	**14.3% (11)**	**20.7% (17)**
	Explores new things	**11.5% (7)**	3.9% (3)	**6.1% (5)**
Emotional Maturity	Prosocial and helping behaviour	34.4% (21)	**39.0% (30)**	**40.2% (33)**
	Anxious and fearful behaviour	**3.3% (2)**	**3.9% (3)**	**4.9% (4)**
	Aggressive Behaviour	8.2% (5)	6.5% (5)	**12.2% (10)**
	Hyperactivity and inattention	13.1% (8)	**16.9% (13)**	**36.6% (30)**

Language and Cognitive Development	Basic Literacy	**21.3% (13)**	**18.2% (14)**	**25.6% (21)**
	Interest in literacy/numeracy	**27.9 (17)**	**19.5% (15)**	**24.4% (20)**
	Advanced literacy	**31.1% (19)**	**31.2% (24)**	**54.9% (45)**
	Basic numeracy	**41.0% (25)**	**29.9% (23)**	**32.9% (36)**
Communication skills and general knowledge		13.1% (8)	10.4% (8)	9.8% (8)
Multiple Challenge Index	Low in one or more domains	**36.1% (22)**	**33.8% (26)**	**57.3% (47)**
	Low in two or more domains	**16.4% (10)**	**15.6% (12)**	**30.5% (25)**

SRI – Social Risk Index
Indicators:
1 – single parent
2 – education
3 – mobility
4 – home ownership
5 – government transfer payments
6 – low income

RAA – Resource Access and Availability Score
Green coloured numbers indicate Strength
Blue coloured numbers indicate Challenge

Appendix D: Mapping Report Overview North

Results for 2008/2009 EDI according to Study Areas in the North Region

Note: see legend at the bottom of this chart

Study Area # of kindergarten children		Melville (58)	Yorkton (219)	Springside (36)	Esterhazy (42)	Langenburg (42)	Canora (62)	Kamsack (45)
SRI Score		3	6	2	1	2	2	3
Indicators with Highest Risk		2 – 37.6% 5 – 15.0% 6 – 24.0%	2–31.7%; 3 – 14.4% 4- 32.8%; 5 – 13.0% 6 – 25.0%	2 – 26.3% 5 – 15.0%	2 – 37.6%	2 – 36.5% 5 – 12.0%	2 – 44.6% 5 – 19.0%	2 – 44.0% 5 – 20.0% 6 – 33.0%
RAA Score		11	25	8	6	7	17	21
Physical Health and Wellbeing	Physical Readiness	**11.5%** **(6)**	2.4% (5)	**0.0%** **(0)**	2.6% (1)	2.5% (1)	**1.7%** **(1)**	**7.7%** **(3)**
	Physical Independence	**28.8%** **(15)**	**12.6%** **(26)**	5.9% (2)	7.7% (3)	**10.0%** **(4)**	**13.6%** **(8)**	**10.3%** **(4)**
	Gross and fine motor skills	17.3% (9)	**24.6%** **(51)**	**29.4%** **(10)**	**28.2%** **(11)**	**52.5%** **(21)**	**30.5%** **(18)**	**41.0%** **(16)**
Social Competence	Overall Social Competence	7.7 (4)	5.3% (11)	**2.9%** **(1)**	5.1% (2)	**10.0%** **(4)**	8.5% (5)	**20.5%** **(8)**
	Responsibility and Respect	3.8% (2)	3.9% (8)	**0.0%** **(0)**	**0.0%** **(0)**	**2.5%** **(1)**	**0.0%** **(0)**	5.1% (2)
	Approaches to Learning	**9.6%** **(5)**	5.3% (11)	**2.9%** **(1)**	**0.0%** **(0)**	5.0% (2)	6.8% (4)	5.1% (2)
	Explores new things	**0.0%** **(0)**	1.9% (4)	**0.0%** **(1)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**5.1%** **(2)**
Emotional Maturity	Prosocial and helping behaviour	**40.4%** **(21)**	**41.5%** **(86)**	**35.3%** **(12)**	**35.9%** **(14)**	30.0% (12)	**11.9%** **(7)**	**74.4%** **(29)**
	Anxious and fearful behaviour	**0.0%** **(0)**	2.4% (5)	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	1.7% (1)	**5.1%** **(2)**
	Aggressive Behaviour	**3.8%** **(2)**	**2.9%** **(6)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**15.3%** **(9)**	**10.3%** **(4)**
	Hyperactivity and inattention	13.5% (7)	7.2% (15)	**5.9%** **(2)**	**2.6%** **(1)**	7.5% (3)	**15.3%** **(9)**	**17.9%** **(7)**

Language and Cognitive Development	Basic Literacy	11.5% (6)	8.7% (18)	**20.6% (7)**	**2.6% (1)**	**22.5% (9)**	10.2% (6)	**28.2% (11)**
	Interest in literacy/numeracy	**5.8% (3)**	8.7% (18)	**20.6% (7)**	**5.1% (2)**	5.0% (2)	**6.8% (4)**	**20.5% (8)**
	Advanced literacy	**7.7% (4)**	17.9% (37)	**38.2% (13)**	**7.7% (3)**	17.5% (7)	**22.0% (13)**	**66.7% (26)**
	Basic numeracy	**19.2% (10)**	**15.9% (33)**	**29.4% (10)**	10.3% (4)	**22.5% (9)**	11.9% (7)	12.8% (5)
Communication skills and general knowledge		**13.5% (7)**	6.3% (13)	11.8% (4)	2.6% (1)	12.5% (5)	3.4% (2)	**15.4% (6)**
Multiple Challenge Index	Low in one or more domains	26.9% (14)	17.9% (37)	17.6% (6)	20.5% (8)	17.5% (7)	18.6% (11)	**43.6% (17)**
	Low in two or more domains	**15.4% (8)**	8.2% (17)	5.9% (2)	0.0% (0)	7.5% (3)	8.5% (5)	**28.2% (11)**

SRI – Social Risk Index
Indicators:
1 – single parent
2 – education
3 – mobility
4 – home ownership
5 – government transfer payments
6 – low income

RAA – Resource Access and Availability Score
Green coloured numbers indicate Strength
Blue coloured numbers indicate Challenge

Appendix D: Mapping Report Overview South

Results for 2008/2009 EDI according to Study Areas in the South Region Note: see legend at the bottom of this chart

Study Area # of Kindergarten Children		Radville (42)	Estevan (131)	Lampman (47)	Carnduff (67)	Weyburn (153)	Fillmore (33)	Carlyle (69)	Redvers (40)	Kipling (40)	Moosomin (64)
SRI Score		2	3	1	1	3	2	1	2	2	1
Indicators with Highest Risk		2 – 34.7% 5 – 15.0%	2 – 33.6% 3 – 15.1% 4 – 28.8%	2 – 36.5% 5 – 12%	2 – 36.7%	2 – 31.1% 3 – 15.5% 4 – 31.3%	5 – 12.0%	2 – 37.8%	2 – 43.0% 5 – 13.0%	2 – 37.0% 5 – 13.0%	2 – 32.2%
RAA Score		19	45	11	9	77	16	22	10	19	22
Physical Health and Wellbeing	Physical Readiness	**0.0%** **(0)**	2.4% (3)	2.3% (1)	3.2% (2)	4.2% (6)	**0.0%** **(0)**	4.8% (3)	**0.0%** **(0)**	**0.0%** **(0)**	**8.3%** **(5)**
	Physical Independence	**20.5%** **(8)**	**12.6%** **(16)**	**25.6%** **(11)**	**14.3%** **(9)**	**17.5%** **(25)**	6.7% (2)	7.9% (5)	8.1% (3)	**35.9%** **(14)**	**13.3%** **(8)**
	Gross and fine motor skills	**25.6%** **(10)**	**16.5%** **(21)**		**36.5%** **(23)**	**29.4%** **(42)**	**43.3%** **(13)**	**46.0%** **(29)**	5.4% (2)	12.8% (5)	20.0% (12)
Social Competence	Overall Social Competence	**15.4%** **(6)**	5.5% (7)	9.3% (4)	7.9% (5)	**10.5%** **(15)**	**10.0%** **(3)**	7.9% (5)	5.4% (2)	7.7% (3)	**15.0%** **(9)**
	Responsibility and Respect	**10.3%** **(4)**	**1.6%** **(2)**	**2.3%** **(1)**	3.2% (2)	**2.1%** **(3)**	**0.0%** **(0)**	**9.5%** **(6)**	5.4% (2)	2.6% (1)	**6.7%** **(4)**
	Approaches to Learning	**20.5%** **(8)**	**3.1%** **(4)**	**14.0%** **(6)**	**9.5%** **(6)**	5.6% (8)	**3.3%** **(1)**	**12.7%** **(8)**	8.1% (3)	**2.6%** **(1)**	**13.3%** **(8)**
	Explores new things	2.6% (1)	**7.1%** **(9)**	**7.0%** **(3)**	**0.0%** **(0)**	**0.7%** **(1)**	**0.0%** **(0)**	**1.6%** **(1)**	2.7% (1)	**0.0%** **(0)**	**0.0%** **(0)**
Emotional Maturity	Prosocial and helping behaviour	**38.5%** **(15)**	**14.2%** **(18)**	**37.2%** **(16)**	25.4% (16)	**39.2%** **(56)**	**16.7%** **(5)**	**50.8%** **(32)**	**51.4%** **(19)**	30.8% (12)	30.0% (18)
	Anxious and fearful behaviour	2.6% (1)	**0.8%** **(1)**	2.3% (1)	**0.0%** **(0)**	1.4% (2)	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**0.0%** **(0)**	**3.3%** **(2)**
	Aggressive Behaviour	**10.3%** **(4)**	6.3% (8)	**9.3%** **(4)**	7.9% (5)	7.0% (10)	**3.3%** **(1)**	4.8% (3)	5.4% (2)	5.1% (2)	5.0% (3)
	Hyperactivity and inattention	**25.6%** **(10)**	7.1% (9)	**16.3%** **(7)**	12.7% (8)	12.6% (18)	**3.3%** **(1)**	12.7% (8)	**21.6%** **(8)**	**5.1%** **(2)**	**23.3%** **(14)**

Language and Cognitive Development	Basic Literacy	**30.8% (12)**	**17.3% (22)**	**27.9% (12)**	9.5% (6)	**3.5% (5)**	**3.3% (1)**	**33.3% (21)**	**5.4% (2)**	**12.8% (5)**	**13.3% (8)**
	Interest in literacy/numeracy	12.8% (5)	11.8% (15)	14.0% (6)	12.7% (8)	**1.4% (2)**	**6.7% (2)**	**19.0% (12)**	8.1% (3)	**41.0% (16)**	**18.3% (11)**
	Advanced literacy	**51.3% (20)**	**27.6% (35)**	18.6% (8)	**38.1% (24)**	16.1% (23)	13.3% (4)	**36.5% (23)**	**2.7% (1)**	10.3% (4)	**36.7% (22)**
	Basic numeracy	**20.5% (8)**	**22.0% (28)**	**46.5% (20)**	**25.4% (16)**	9.8% (14)	**6.7% (2)**	**44.4% (28)**	**37.8% (14)**	**23.1% (9)**	10.0% (6)
Communication skills and general knowledge		10.3% (4)	8.7% (11)	7.0% (3)	**3.2% (2)**	8.4% (12)	10.0% (3)	7.9% (5)	**2.7% (1)**	**2.6% (1)**	11.7% (7)
Multiple Challenge Index	Low in one or more domains	**41.0% (16)**	23.6% (30)	**39.5% (17)**	23.8% (15)	21.0% (30)	16.7% (5)	**36.5% (23)**	18.9% (7)	23.1% (9)	**30.0% (18)**
	Low in two or more domains	**23.1% (9)**	11.1% (7)	20.9% (9)	11.1% (7)	10.5% (15)	**3.3% (1)**	**19.0% (12)**	**5.4% (2)**	7.7% (3)	**18.3% (11)**

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