

THE QUEBEC SURVEY OF CHILD DEVELOPMENT IN KINDERGARTEN

Estrie Region



Summary of the Survey

Early childhood is a pivotal period in development. The experiences of children—positive and negative—affect the development of motor, cognitive, social, and language skills. Studies have shown that vulnerability in kindergarten is associated with past social adjustment and school success.¹ Indeed, nearly half of the vulnerable children in kindergarten will have lower-than-average school performance in the fourth grade.

The *Québec Survey of Child Development in Kindergarten* (QSCDK)²—conducted in 2012, 2017, and 2022 by the Institut de la statistique du Québec (ISQ) in all English- and French-language public and private schools in the province (excluding students with special needs or learning difficulties)—measures the development of groups of children. As part of this study, teachers filled out a questionnaire consisting of 103 questions that had been validated and used in other provinces and countries for each of their students.³ It should be pointed out that this questionnaire was based on observable behaviours related to developmental norms and was not designed to evaluate the educational program or teacher or school performance.

5 Domains Assessed

The questionnaire made it possible to assess the proportion of vulnerable children in the following five domains:

Domain	Topics of Interest
Physical health and well-being	General physical development, motor skills, diet and dress, cleanliness, punctuality, alertness
Social competence	Social skills; self-confidence; sense of responsibility; respect of peers, adults, rules, and routines; work habits and autonomy; curiosity
Emotional maturity	Prosocial behaviour and mutual help, fear and anxiety, aggressive behaviour, hyperactivity and inattention, expression of emotions
Cognitive and language development	Interest and skills in reading, writing, and mathematics; adequate language use
Communication skills and general knowledge	Ability to communicate so as to make themselves understood, capacity to understand others, clear articulation, general knowledge



We should keep in mind that not all children considered vulnerable in kindergarten will present difficulties throughout primary school.

Children are considered vulnerable when their score in a domain of development is equal to or lower than the threshold established in Quebec in 2012 (10th percentile of the distribution of results in the first cycle of the survey).

These children are:

- facing a challenge because their mastery of certain aptitudes or skills falls short.
- less well equipped to take full advantage of what school can offer.
- more likely to experience difficulties in school.

Information and mobilization activities will also be provided starting in fall 2023.

Findings for the Estrie Region



In the Estrie health and social services region, **316 kindergarten teachers** completed the questionnaire for **4,676 children** in **146 schools** between February and April 2022, yielding a **93%** response rate. This represents a response rate of 94.5%. The following table shows the proportions of vulnerable children by area, in at least one area of development.

In 2022, the population of kindergarten-age children (five years old) in Estrie was about **30,2%** and 5% of them—around **1,460 children**—presented with a vulnerability in at least one domain of development. This is higher than the province number. The children were particularly vulnerable in the following domains:

- **Physical health and well-being (11,6%)**
- **Social skills (11,8%)**
- **Emotional maturity (12,9%)**
- **Cognitive and language development (13,3%)**

Proportion of Vulnerable Children by Developmental Domain

Domain	ESTRIE				QUEBEC				ESTRIE (2022)	
	2012	2017	2022	Change	2012	2017	2022	Change	Boys	Girls
Physical health and well-being	9,8	11,4	11,6 (+)	Increase (n.s.)	9,5	10,6	10,3	Decrease (n.s.)	14,3 (+)	8,8 (+)
Emotional maturity	10,1	13,3 (+)	12,9 (+)	Decrease (n.s.)	9,7	11,5	11,7	Increase (n.s.)	18,2	7,4 (+)
Social skills	9,7	12,6 (+)	11,8 (+)	Decrease (n.s.)	9	10,2	10,6	Increase (s)	15,5	7,9 (+)
Cognitive and language development	10,7	13,2 (+)	13,3 (+)	Increase (n.s.)	10	11,1	12,1	Increase (s)	15	11,5 (+)
Communication skills and general knowledge	10	11,4	9,8 (-)	Decrease (s)	10,8	11,1	11,5	Increase (s)	11,8 (+)	7,8
At least 1 domain	26,8	29,4 (+)	30,2 (+)	Increase (n.s.)	25,6	27,7	28,7	Increase (s)	36,6	23,5 (+)

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).

Increase (n.s.): Significant difference between the two cycles 2017 and 2022 (threshold of 0.05 for Estrie and 0.01 for Quebec)

Between 2017 and 2022, three of the five domains of development witnessed a drop in the proportion of vulnerable children, while two were increasing. These variations are not statistically significant, however, for four of the five domains. Moreover, there were more vulnerable boys than girls across the board. Out of the 1,460 children in Estrie that were vulnerable in at least one domain, nearly 900 were boys and 560 girls.



The Most Vulnerable Subgroups

Both in Estrie and the province, the proportion of children vulnerable in at least one domain is greater in certain subgroups: boys, children under the age of 6 years, children who do not have French as their mother tongue, children born outside of Canada, children who live in underprivileged areas, and children who did not regularly attend day care before starting school.



Percentage of Children Vulnerable in at least One Domain (2022)



CHARACTERISTICS	ESTRIE		QUEBEC
	Number of vulnerable children	% of vulnerable children	% of vulnerable children
Population breakdown	1 460	30,2 (+)	28,7
By sex			
Boys	900	36,6	35,6
Girls	560	23,5 (+)	21,6
By age			
Under 6 years of age	820	34,4	32,7
6 years or older	650	26,1	24,7
By spoken languages			
At least French	1 330	29,2 (◇)	27,1
English but not French	80	44,9	37,5
Neither French nor English	50	51,7 (◇)	38,4
By place of birth			
Canada	1 370	29,6 (◇)	28
Outside of Canada	80	42,3	37,3
According to physical and social deprivation			
Privileged	410	22,8	23,8
Average	540	30,7	28,8
Underprivileged	430	39,4 (◇)	34,8
Regular day-care attendance before starting school			
Yes	1 020	27	25,8
No	230	40,8	40,9

(+): Figure significantly higher than in the rest of Quebec (threshold of 0.05).
 (◇) : Figure significantly higher than in the province of Quebec (threshold of 0.05).

Some situations in Estrie are especially troubling. The differences revealed by the table are often greater in Estrie than in the province. For example, vulnerability is almost twice as common among children whose mother tongue is neither English nor French than among those whose mother tongue is at least French, whereas this ratio is 1.4 in Quebec.

In addition, there was a statistically significant increase in vulnerability among girls between 2017 and 2022 (from 20.6% to 23.5%). A nonsignificant increase was also observed among children living in moderately disadvantaged areas (from 28.8% to 30.7 %).



Redaction

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References

- 1 SIMARD, Micha, Amélie LAVOIE et Nathalie AUDET (2022). *Enquête québécoise sur le développement des enfants à la maternelle 2022*, Québec, Institut de la statistique du Québec.
- 2 Gouvernement du Québec. *Enquête québécoise sur le développement des enfants à la maternelle* <http://www.eqdem.stat.gouv.qc.ca/> [Online.] [Accessed September 19, 2023].
- 3 Instrument de mesure du développement de la petite enfance, © 2000, McMaster University, Hamilton, Ontario, Canada. http://www.eqdem.stat.gouv.qc.ca/enquete_2017/documentation/guide-imdpe-eqdem2017.pdf/ [Online.] [Accessed September 19, 2023].

