Éducation Québec

Direction de l'accès à l'information et des plaintes

Québec, le 16 mars 2022

PAR COURRIEL

Objet : **Demande d'accès aux documents administratifs**
Notre dossier : 16310/21-423

Monsieur,

Nous donnons suite à votre demande d'accès visant à obtenir le document suivant:

- Document provenant de Statistique Canada « évaluation linguistique PISA 2009;
- « Évaluation linguistique PISA 2012 »

Vous trouverez ci-annexé le document reçu de Statistique Canada concernant le PISA 2009. Le seul document détenu par le Ministère au sujet du PISA 2012 vous a été transmis par courriel le 6 décembre 2021.

Conformément à l'article 51 de la *Loi sur l'accès aux documents des organismes publics et sur la protection des renseignements personnels*, RLRQ, c. A-2.1, nous vous informons que vous pouvez demander la révision de cette décision auprès de la Commission d'accès à l'information. Vous trouverez ci-joint une note explicative à cet effet.

Veuillez agréer, Monsieur, nos salutations distinguées.

La responsable de l'accès aux documents,

Originale signée

Ingrid Barakatt

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PISA 2009 Canadian student non-response bias analysis

Submitted to the PISA technical expert group
March 15, 2010-03-15

1. Background

This report was prepared for the PISA 2009 technical expert group in response to Canada not meeting the PISA student response rate requirements. Canada's student response rate was 79.52% which fell below the required 80% demanded by the PISA technical standards.

Quebec was the only province that did not meet the required response rate and this was primarily a result of the requirement in Quebec to obtain written parental consent for student participation. Quebec's overall student participation rate of 70.93% was driven by a response rate of 70.32% in stratum 19 (large French-language schools), which is the largest stratum in Quebec.

Consequently this student non-response bias analysis is being undertaken only for the province of Quebec.

2. Methodology

Two variables associated with PISA achievement are being used for the analysis: a measure of socioeconomic environment and scores on Quebec's standardized language assessment test implemented to students in grades 10.

Measure of socioeconomic environment index (IMSE)

The socioeconomic environment index links students to the characteristics of their environment using population groupings based on the student's postal code. This variable is continuous with values ranging from 0 to 56.2 with higher values representing a more disadvantaged socioeconomic environment. This variable is available for all Quebec students. More information on the variable is available at: http://www.mels.gouv.qc.ca/stat/Bulletin/bulletin_26an.pdf

Score on provincial language assessment

In Quebec, standardized testing is conducted for students in grade 10. Consequently, analysis using this variable is only available for approximately 59% of the PISA sample. The language assessment was conducted English for students in the English school sector and French for students in the French school sector. The variable is continuous ranging from 0 to 100 with higher scores indicating high performance on the provincial language assessment.

Due to the confidential nature of the data, analyses was conducted by the Quebec government and provided to the Canadian National Centre. Descriptive analysis was conducted by examining the quartile distribution and comparing the means using a t-test. Analysis was conducted using unweighted data. Additionally the national centre prepared overall weighted estimates based on the student population at the stratum level.

Multivariate logistic regression analyses was undertaken using unweighted data and included response status as the dependent variable with stratum, public/private school type, gender, socioeconomic status and grade as independent variables. Note that a multilevel logistic regression, including school membership as a random effect, was not undertaken at this stage.

All analysis was undertaken comparing students who participated (code 0,1) and students who did not participate (code 2,3). Ineligible students and students out-of-score (code 4,5,6) are excluded from this analysis.

3. Results

a. Socio-economic environment

Students who participated in PISA lived in more slightly more favourable socioeconomic environments than did non-participating students. As shown in table 1 a higher proportion of responding students were in the lowest quartile on the socio-economic environment scale while a higher proportion of students were in the highest quartile. Similar proportions of responding and non-responding students were in the middle two quartiles. When data was weighted by the overall student population in each stratum the difference was less pronounced. For results by school language sector and stratum please refer to Appendix Table A.1. While a similar pattern was observed across stratum it should be noted that the pronounced differences between responding and non responding students in stratum 14, 15 and 17 are driven by the low number of non-responding students in these stratum.

Table 1 Distribution of students across overall quartiles on the socio-economic environment scale

	Q1 (= < 4.3)	Q2 (>4.3 to <=9.6)	Q3 (>9.6 to <=16.6)	Q4 (>=16.6)
All students-unweighted				
responding	26.6	26.4	24.2	22.9
non-responding	24.5	25.1	25.4	24.9
All students-weighted				
responding	28.6	24.7	22.0	24.7
non-responding	27.1	24.0	22.6	26.4

Table 2 shows the mean score on the socio-economic environment scale for non-responding and responding PISA. Responding students had a lower mean value on the socio-economic environment scale indicating that they came from more favourable socioeconomic environments. This difference was statistically significant for all students based on unweighted student counts but was not large (11.29 versus 12.02). When examined by stratum, the difference between responding and non-responding students was statistically significant in stratum 15 and 16.

When data is weighted by stratum size, the difference between responding and non-responding students was less pronounced and this result was driven largely by stratum 18 which has the largest student population. It should be noted that that no significant difference existed between non-responding and responding students in stratum 18.

For more information on the standard deviation, median and quartile on the socio-economic environment scale by stratum please refer to Appendix table A.2.

Table 2 Mean score on the socio-economic environment scale for non-responding and responding students to the PISA assessment

	Responding students	Non-responding students	t-test Pr > |t|
All students-unweighted	11.29	12.02	0.005
All students-weighted	11.54	12.04	
All students attending English schools	10.60	11.89	0.007
All students attending French schools	11.66	12.10	0.1598
Stratum 14 (English, school size lt 35)	29.33	28.92	0.8485
Stratum 15 (English, school size 18-34)	10.35	21.47	0.0001
Stratum 16 (English, school size 35+)	10.32	11.50	0.0148
Stratum 17 (French, school size le 35)	18.60	26.26	0.399
Stratum 18 plus superstrata 45 (French, school size 35+)	11.57	12.08	0.096

Lastly a logistic regression analysis was undertaken modeling the probability of not responding to the PISA assessment. In addition to including the socio-economic environment index as an independent variable, gender strata and public/private school status were included in the model. The full results of the logistic regression analysis, and a description of the variables used in the model are presented in Appendix Table A.3. Table 3 below shows the coefficient (B), standard error of B, Wald statistic and the estimated odds ratio (exp(B))

Table 3: Partial results from a logistic regression modeling the probability of PISA non-response including the socio-economic environment index (imse2), gender strata, and Public/private school status as independent variables.

Analyse des estimations de la vraisemblance maximum							
Paramètre		DF	B	standard error	Khi 2 de Wald	Pr > Khi 2	Exp(B)
Intercept		1	-0.8759	0.0743	139.0050	<.0001	0.416
strate	1	1	-1.0276	0.5071	4.1059	0.0427	0.358
strate	2	1	-0.6143	0.2439	6.3420	0.0118	0.541
strate	3	1	0.0428	0.0573	0.5588	0.4547	1.044
strate	4	1	-1.9385	0.7325	7.0039	0.0081	0.144
imse2		1	0.00162	0.00283	0.3271	0.5674	1.002
Sexe	F	1	-0.2180	0.0537	16.5000	<.0001	0.804
public		1	0.6471	0.0715	81.7948	<.0001	1.910

As shown in Table 3 and Appendix Table A3, when strata, gender and private/public school status were included in the model, socio-economic environment was not significantly related to responding to the PISA assessment.

b. Provincial language assessment test

Responding students had higher scores on the provincial language assessment test compared to non-responding students. As shown in Table 4 a higher proportion of responding students were in the highest quartile of performance on the language assessment while a higher proportion of non-responding students were in the lowest quartile of performance. When data was weighted by the overall student population of each stratum the difference between responding and non-responding students become slightly more pronounced.

For results by school language sector and stratum please refer to Appendix table A.4. While a similar pattern was observed across stratum is should be noted that the pronounced differences between responding and non responding students in stratum 14, 15 and 17 are driven by the low number of non-responding students in these stratum.

Table A.4 Distribution of students across quartile of the language assessment test. Quebec grade 10 students only.

	Q1	Q2	Q3	Q4
All students-unweighted				
responding	20.2	26.4	22.7	30.7
non-responding	27.6	24.8	21.3	26.2
All students-weighted				
responding	23.0	28.5	20.3	28.2
non-responding	30.5	26.5	19.4	23.6

Table 5 shows the mean score on the provincial language assessment test for non-responding and responding PISA students. Responding students had a higher mean score on the language assessment test compared to non-responding students. This difference was statistically significant for all students based on unweighted student counts but differed by 2.3 points on a 100 point scale (74.93 versus 72.58 for responding and non-responding students respectively). When examined by stratum, the difference between responding and non-responding students was statistically significant in stratum16 and 18.

When data is weighted by stratum size, the difference between responding and non-responding students was roughly the same magnitude as observed with the unweighted analysis. For more information on the standard deviation, median and quartile on the socio-economic environment scale by stratum please refer to Appendix table A.5.

Table 5 Mean score on the provincial language assessment for non-responding and responding students to the PISA assessment. Grade 10 students only.

	Responding students	Non-responding students	t-test Pr > |t|
All students-unweighted	74.93	72.58	0.0001
All students-weighted	74.07	71.75	
All students attending English schools	76.94	74.01	0.0001
All students attending French schools	73.71	71.58	0.0001
Stratum 14 (English, school size lt 35)	69.39	65.33	0.6429
Stratum 15 (English, school size 18-34)	76.62	69.83	0.0745
Stratum 16 (English, school size 35+)	77.07	74.11	0.0001
Stratum 17 (French, school size le 35)	79.94	64.00	n\a - only 1 non-responding student in this strata
Stratum 18 plus superstrata 45 (French, school size 35+)	73.64	71.59	.00001

Lastly a logistic regression analysis was undertaken modeling the probability of not responding to the PISA assessment. In addition to including the language assessment as a independent variable, socio-economic environment index, gender, strata and Public/private school status were included in the model. The full results of the logistic regression analysis, and a description of the variables used in the model are presented in Appendix Table A.6. Table 6 below shows the coefficient (B), standard error of B, Wald statistic and the estimated odds ratio (exp(B))

The results of the logistic regression analysis show that scores on the provincial language assessment remain statistically related to PISA participation status.

Table 5: Partial results from a logistic regression modeling the probability of PISA non-response including the provincial language assessment score (scorelang2), socio-economic environment index (imse2), gender strata, and Public/private school status as independent variables.

Analyse des estimations de la vraisemblance maximum

Paramètre		DF	B	Standard Error	Khi 2 de Wald	Pr > Khi 2	exp(B
Intercept		1	0.5392	0.2880	3.5057	0.0612	1.715
strate	1	1	-0.8145	0.6520	1.5606	0.2116	0.443
strate	2	1	-1.0244	0.4450	5.2996	0.0213	0.359
strate	3	1	0.2360	0.0753	9.8316	0.0017	1.266
strate	4	1	-1.7086	1.0348	2.7263	0.0987	0.181
imse2		1	-0.00728	0.00447	2.6486	0.1036	0.993
scorelang2		1	-0.0193	0.00366	27.8539	<.0001	0.981
Sexe	F	1	-0.0541	0.0745	0.5284	0.4673	0.947
public		1	0.3622	0.0887	16.6550	<.0001	1.436

4. Summary

As a result of not meeting the PISA 2009 student response rate standard of 80%, a student non-response bias analysis was undertaken in Canada. This non-bias analyses was undertaken for Quebec students only as this was the only province where student response rates were below the international standard.

Two measures related to student achievement were used for this analysis: a measure of the student's socioeconomic environment which is available for the entire PISA sample and scores in the provincial language test assessment which are available only for students in grade 10 (representing approximately 59% of the student sample).

Results from the analysis showed that non-responding students came from slightly less favourable socioeconomic environments and while the mean values on the index of socioeconomic environment differed significantly between responding and non responding students, the magnitude of the difference was not large (11.29 versus 12.02). Results from a logistic regression analysis revealed that socioeconomic environment was not statistically related to non-response when gender, private/public school status and stratum were included in the model.

Results from the provincial language assessment test were examined for grade 10 students only, representing approximately 59% of the student sample. Results showed that responding students had slightly higher score on the provincial language assessment than non-responding students (74.93 versus 72.58 respectively on a 100 point scale). This difference was significant and performance on the provincial language assessment test remained significant when logistic regression analyses was done including stratum, socio-economic environment, gender, private/public school status and stratum in the model.

APPENDIX TABLES

Table A.1 Distribution of students across quartiles on the socio-economic environment scale

	Q1 (= < 4.3)	Q2 (>4.3 to <=9.6)	Q3 (>9.6 to <=16.6)	Q4 (>=16.6)
All students-unweighted				
responding	26.6	26.4	24.2	22.9
non-responding	24.5	25.1	25.4	24.9
All students-weighted				
responding	28.6	24.7	22.0	24.7
non-responding	27.1	24.0	22.6	26.4
All students attending English schools				
responding	34.2	24.4	20.8	20.6
non-responding	30.6	23.8	20.8	24.8
All students attending French schools				
responding	22.4	27.5	26.0	24.1
non-responding	21.3	25.8	27.9	25.0
Stratum 14 (English, school size lt 35)				
responding	5.3	0.0	15.8	79.0
non-responding	0.0	0.0	0.0	100.0
Stratum 15 (English, school size 18-34)				
responding	28.8	34.3	21.9	15.1
non-responding	8.7	21.7	13.0	56.5
Stratum 16 (English, school size 35+)				
responding	35.0	24.2	20.8	20.0
non-responding	31.5	24.0	21.2	23.4
Stratum 17 (French, school size le 35)				
responding	9.1	24.2	18.2	48.5
non-responding	0.0	0.0	0.0	100.0
Stratum 18 plus superstrata 45 (French, school size 35+)				
responding	22.6	27.5	26.1	23.8
non-responding	21.3	25.9	27.9	24.9

Note that quartile points were based on the distribution of the total sample

Table A.2 Mean score, standard deviation, median and quartiles on the socio-economic environment scale

	Average score	Standard deviation	Q1	median	Q3
All Quebec Students unweighted					
responding	11.3	9.73	4.2	9.0	15.8
non-responding	12.0	10.06	4.5	9.6	16.5
All students attending English schools					
responding	76.9	9.3	72.0	78.0	84.0
non-responding	74.0	12.2	68.0	76.0	82.0
All students attending French schools					
responding	73.7	10.0	67.0	74.0	81.0
non-responding	71.6	11.0	65.0	72.0	79.0
Stratum 14 (English, school size lt 35)					
responding	29.3	15.69	20.0	23.6	50.0
non-responding	27.9	7.64	21.1	26.9	35.8
Stratum 15 (English, school size 18-34)					
responding	10.3	10.83	4.0	7.4	10.5
non-responding	21.5	13.35	9.1	18.3	35.1
Stratum 16 (English, school size 35+)					
responding	10.3	10.06	3.1	7.4	14.5
non-responding	11.5	10.74	3.6	8.3	15.8
Stratum 17 (French, school size le 35)					
responding	18.6	12.29	6.6	15.9	28.6
non-responding	23.3	12.90	17.1	26.3	35.4
Stratum 18 plus superstrata 45 (French, school size 35+)					
responding	11.6	9.22	4.8	9.6	16.1
non-responding	12.1	9.52	5.1	9.9	16.5

Table A.3

Logisitic regression modeling student non-response to PISA as the dependent variable and strata, school status (private or public school), gender and the index of socioeconomic environment as independent variables.

Please note the following:

Strat=1 represents Stratum 14 (English, school size lt 35)
Strat=2 represents Stratum 15 (English, school size 18-34)
Strat=3 represents Stratum 16 (English, school size 35+)
Strat=4 represents Stratum 17 (French, school size le 35)
Strat=5 represents Stratum 18 plus superstrata 45 (French, school size 35+)

Sexe-gender F=females, G=male

IMSE2=socioeconomic environment index

Public is a dummy coded variable for school sector 1=public schools 0=private schools

Biais échant. Qc PISA2009, étape 1

The LOGISTIC Procedure

Informations sur le modèle	
Data Set	WORK.BASENS04
Response Variable	refus
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	6029
Number of Observations Used	6007

Profil de réponse		
Valeur ordonnée	refus	Fréquence totale

Profil de réponse

Valeur ordonnée	refus	Fréquence totale
1	0	3679
2	1	2328

Probability modeled is refus=1.

Note: 22 observations were deleted due to missing values for the response or explanatory variables.

Informations sur le niveau de classe

Classe	Valeur	Variables de création			
strate	**1**	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0
	4	0	0	0	1
	5	0	0	0	0
Sexe	**F**	1			
	G	0			

État de convergence du modèle

Convergence criterion (GCONV=1E-8) satisfied.

Statistiques d'ajustement du modèle

Critère	Coordonnée à l'origine uniquement	Coordonnée à l'origine et covariables
AIC	8023.010	7887.113

Statistiques d'ajustement du modèle

Critère	Coordonnée à l'origine uniquement	Coordonnée à l'origine et covariables
SC	8029.710	7940.719
-2 Log L	8021.010	7871.113

R-Square	0.0246	Max-rescaled R-Square	0.0334

Test de l'hypothèse nulle globale : BETA=0

Test	Khi 2	DF	Pr > Khi 2
Likelihood Ratio	149.8967	7	<.0001
Score	140.3077	7	<.0001
Wald	131.1902	7	<.0001

Analyse des effets Type 3

Effet	DF	Khi 2 de Wald	Pr > Khi 2
strate	4	18.3506	0.0011
imse2	1	0.3271	0.5674
Sexe	1	16.5000	<.0001
public	1	81.7948	<.0001

Analyse des estimations de la vraisemblance maximum

Paramètre		DF	Estimation	Erreur std	Khi 2 de Wald	Pr > Khi 2	Exp(Est)
Intercept		1	-0.8759	0.0743	139.0050	<.0001	0.416
strate	1	1	-1.0276	0.5071	4.1059	0.0427	0.358
strate	2	1	-0.6143	0.2439	6.3420	0.0118	0.541

Analyse des estimations de la vraisemblance maximum

Paramètre		DF	Estimation	Erreur std	Khi 2 de Wald	Pr > Khi 2	Exp(Est)
strate	3	1	0.0428	0.0573	0.5588	0.4547	1.044
strate	4	1	-1.9385	0.7325	7.0039	0.0081	0.144
imse2		1	0.00162	0.00283	0.3271	0.5674	1.002
Sexe	F	1	-0.2180	0.0537	16.5000	<.0001	0.804
public		1	0.6471	0.0715	81.7948	<.0001	1.910

Estimations des rapports de cotes

Effet	Point Estimate	95% Limites de confiance de Wald	
strate 1 vs 5	0.358	0.132	0.967
strate 2 vs 5	0.541	0.335	0.873
strate 3 vs 5	1.044	0.933	1.168
strate 4 vs 5	0.144	0.034	0.605
imse2	1.002	0.996	1.007
Sexe F vs G	0.804	0.724	0.893
public	1.910	1.660	2.197

Association des probabilités prédites et des réponses observées

Percent Concordant	56.0	Somers' D	0.157
Percent Discordant	40.3	Gamma	0.163
Percent Tied	3.7	Tau-a	0.075
Pairs	8564712	c	0.578

Table A.4 Distribution of students across quartile of the language assessment test. Quebec grade 10 students only.

	Q1	Q2	Q3	Q4
All students-unweighted				
responding	20.2	26.4	22.7	30.7
non-responding	27.6	24.8	21.3	26.2
All students-weighted				
responding	23.0	28.5	20.3	28.2
non-responding	30.5	26.5	19.4	23.6
All students attending English schools				
responding	13.9	21.3	28.2	36.7
non-responding	21.8	21.2	25.3	31.7
All students attending French schools				
responding	24.1	29.5	19.4	27.1
non-responding	31.7	27.3	18.6	22.4
Stratum 14 (English, school size lt 35)				
responding	38.5	23.1	0.0	38.5
non-responding	66.7	33.3	0.0	0.0
Stratum 15 (English, school size 18-34)				
responding	13.5	32.4	18.9	35.1
non-responding	33.3	33.3	33.3	0.0
Stratum 16 (English, school size 35+)				
responding	13.5	20.8	29.0	36.7
non-responding	21.4	21.0	25.3	32.3
Stratum 17 (French, school size le 35)				
responding	11.8	23.5	5.6	58.8
non-responding	100.0	0.0	0.0	0.0
Stratum 18 plus superstrata 45 (French, school size 35+)				
responding	23.2	29.5	19.5	26.7
non-responding	31.6	27.4	18.6	22.4

Table A.5 Mean score, standard deviation, median and quartiles on the provincial language assessment. Grade 10 students only.

	Average score	Standard deviation	Q1	median	Q3
All Quebec Students unweighted					
responding	74.9	9.89	68.0	75.0	82.0
non-responding	72.6	11.55	66.0	74.0	81.0
All students attending English schools					
responding	10.6	10.45	3.1	7.5	14.6
non-responding	11.9	10.99	3.8	8.6	16.6
All students attending French schools					
responding	11.7	9.30	4.8	9.6	16.2
non-responding	12.1	9.53	5.1	9.9	16.5
Stratum 14 (English, school size lt 35)					
responding	69.4	14.24	60.0	71.0	81.0
non-responding	65.3	5.51	60.0	65.0	71.0
Stratum 15 (English, school size 18-34)					
responding	76.6	8.55	71.0	76.0	81.0
non-responding	69.8	7.47	63.0	70.5	76.0
Stratum 16 (English, school size 35+)					
responding	77.1	9.19	72.0	78.0	84.0
non-responding	74.1	12.30	68.0	76.0	82.0
Stratum 17 (French, school size le 35)					
responding	79.9	9.70	72.0	82.0	87.0
non-responding	64.0	0.00	64.0	64.0	64.0
Stratum 18 plus superstrata 45 (French, school size 35+)					
responding	73.6	10.03	67.0	74.0	81.0
non-responding	71.6	10.95	65.0	72.0	79.0

Table A.6

Results from logistic regression modeling student non-response to PISA as the dependent variable and strata, school status (private or public school), gender, index of socioeconomic environment and provincial language assessment test score as independent variables.

Please note the following:

Strat=1 represents Stratum 14 (English, school size lt 35)
Strat=2 represents Stratum 15 (English, school size 18-34)
Strat=3 represents Stratum 16 (English, school size 35+)
Strat=4 represents Stratum 17 (French, school size le 35)
Strat=5 represents Stratum 18 plus superstrata 45 (French, school size 35+)

Sexe-gender F=females, G=male

IMSE2=socioeconomic environment index
Scorelang2=provincial test language assessment score

Public is a dummy coded variable for school sector 1=public schools 0=private schools

Biais échant. Qc PISA2009, étape 1

The LOGISTIC Procedure

Informations sur le modèle	
Data Set	WORK.BASENS04
Response Variable	refus
Number of Response Levels	2
Model	binary logit
Optimization Technique	Fisher's scoring

Number of Observations Read	6029
Number of Observations Used	3498

Profil de réponse

Valeur ordonnée	refus	Fréquence totale
1	0	2297
2	1	1201

Probability modeled is refus=1.

Note: 2531 observations were deleted due to missing values for the response or explanatory variables.

Informations sur le niveau de classe

Classe	Valeur	Variables de création			
strate	**1**	1	0	0	0
	2	0	1	0	0
	3	0	0	1	0

Informations sur le niveau de classe

Classe	Valeur	Variables de création			
	4	0	0	0	1
	5	0	0	0	0
Sexe	F	1			
	G	0			

État de convergence du modèle

Convergence criterion (GCONV=1E-8) satisfied.

Statistiques d'ajustement du modèle

Critère	Coordonnée à l'origine uniquement	Coordonnée à l'origine et covariables
AIC	4502.005	4431.322
SC	4508.165	4486.762
-2 Log L	4500.005	4413.322

R-Square	0.0245	Max-rescaled R-Square	0.0338

Test de l'hypothèse nulle globale : BETA=0

Test	Khi 2	DF	Pr > Khi 2
Likelihood Ratio	86.6828	8	<.0001
Score	82.4229	8	<.0001
Wald	77.5718	8	<.0001

Analyse des effets Type 3

Effet	DF	Khi 2 de Wald	Pr > Khi 2
strate	4	20.9987	0.0003
imse2	1	2.6486	0.1036
scorelang2	1	27.8539	<.0001
Sexe	1	0.5284	0.4673
public	1	16.6550	<.0001

Analyse des estimations de la vraisemblance maximum

Paramètre		DF	Estimation	Erreur std	Khi 2 de Wald	Pr > Khi 2	Exp(Est)
Intercept		1	0.5392	0.2880	3.5057	0.0612	1.715
strate	1	1	-0.8145	0.6520	1.5606	0.2116	0.443
strate	2	1	-1.0244	0.4450	5.2996	0.0213	0.359
strate	3	1	0.2360	0.0753	9.8316	0.0017	1.266
strate	4	1	-1.7086	1.0348	2.7263	0.0987	0.181
imse2		1	-0.00728	0.00447	2.6486	0.1036	0.993
scorelang2		1	-0.0193	0.00366	27.8539	<.0001	0.981
Sexe	F	1	-0.0541	0.0745	0.5284	0.4673	0.947
public		1	0.3622	0.0887	16.6550	<.0001	1.436

Estimations des rapports de cotes

Effet	Point Estimate	95% Limites de confiance de Wald	
strate 1 vs 5	0.443	0.123	1.589
strate 2 vs 5	0.359	0.150	0.859
strate 3 vs 5	1.266	1.093	1.467
strate 4 vs 5	0.181	0.024	1.377

Estimations des rapports de cotes			
Effet	**Point Estimate**	**95% Limites de confiance de Wald**	
imse2	0.993	0.984	1.001
scorelang2	0.981	0.974	0.988
Sexe F vs G	0.947	0.819	1.096
public	1.436	1.207	1.709

Association des probabilités prédites et des réponses observées			
Percent Concordant	57.8	**Somers' D**	0.165
Percent Discordant	41.3	**Gamma**	0.166
Percent Tied	0.8	**Tau-a**	0.074
Pairs	2758697	**c**	0.582

Avis de recours

À la suite d'une décision rendue en vertu de la Loi sur l'accès aux documents des organismes publics et sur la protection des renseignements personnels (la Loi).

Révision par la Commission d'accès à l'information

a) *Pouvoir* :

L'article 135 de la Loi prévoit qu'une personne dont la demande écrite a été refusée en tout ou en partie par le responsable de l'accès aux documents ou de la protection des renseignements personnels peut demander à la Commission d'accès à l'information de réviser cette décision. La demande de révision doit être faite par écrit; elle peut exposer brièvement les raisons pour lesquelles la décision devrait être révisée (art. 137).

L'adresse de la Commission d'accès à l'information est la suivante :

Québec	525, boul René-Lévesque Est Bureau 2.36 Québec (Québec) G1R 5S9	Tél. : 418 528-7741 Numéro sans frais 1 888 528-7741	Téléc. : 418 529-3102
Montréal	2045, rue Stanley Bureau 900 Montréal (Québec) H3A 2V4	Tél. : 514 873-4196 Numéro sans frais 1 888 528-7741	Téléc. : 514 844-6170

b) *Motifs* :

Les motifs relatifs à la révision peuvent porter sur la décision, sur le délai de traitement de la demande, sur le mode d'accès à un document ou à un renseignement, sur les frais exigibles ou sur l'application de l'article 9 (notes personnelles inscrites sur un document, esquisses, ébauches, brouillons, notes préparatoires ou autres documents de même nature qui ne sont pas considérés comme des documents d'un organisme public).

c) *Délais* :

Les demandes de révision doivent être adressées à la Commission d'accès à l'information dans les 30 jours suivant la date de la décision ou de l'expiration du délai accordé au responsable pour répondre à une demande (art. 135).

La Loi prévoit spécifiquement que la Commission d'accès à l'information peut, pour motif raisonnable, relever le requérant du défaut de respecter le délai de 30 jours (art. 135).