

Comparison of mental health services utilization in minority vs majority official language populations in Canada

Chassidy Puchala, MSc, Anne Leis, PhD,
Hyun Lim, PhD & Raymond Tempier, MD,FRCP
University of Saskatchewan

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Remerciement

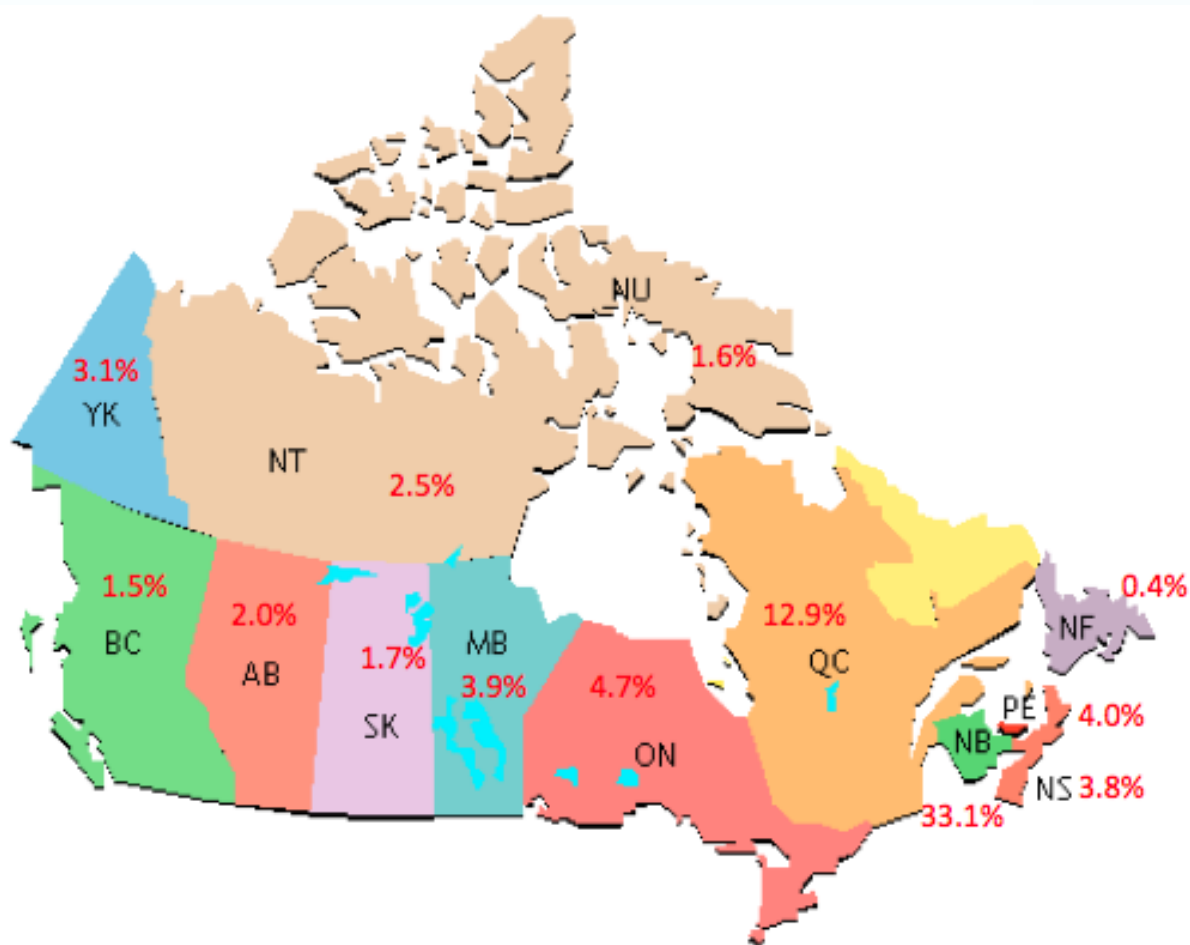
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Outline

- Introduction
 - Current issue
 - Objectives
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 - Sample and variable selection
 - Statistical Analyses
- Key findings
- Discussion, implications, limitations, future research

Official Language Minority Communities (OLMC) in Canada



*Source: Consultative Committee for English-speaking minority communities. Building on the Foundations – Working Toward Better Health Outcomes and Improved Vitality of Quebec’s English-speaking Communities. Quebec, 2005.

Official language minority communities, mental health problems, and mental health service use

- Language is a key determinant of health and service use, and becomes an issue among language minority groups;
- It is important to gain a better understanding of the extent of the problem among Francophone and Anglophone minority groups in Canada
- Little research has examined mental health service use among Official Language Minority Communities in Canada

Objectives

Objective 1:

To determine whether disparities exist in mental health service use between minority and majority Canadian Francophone and Anglophone communities both within and outside of Quebec.

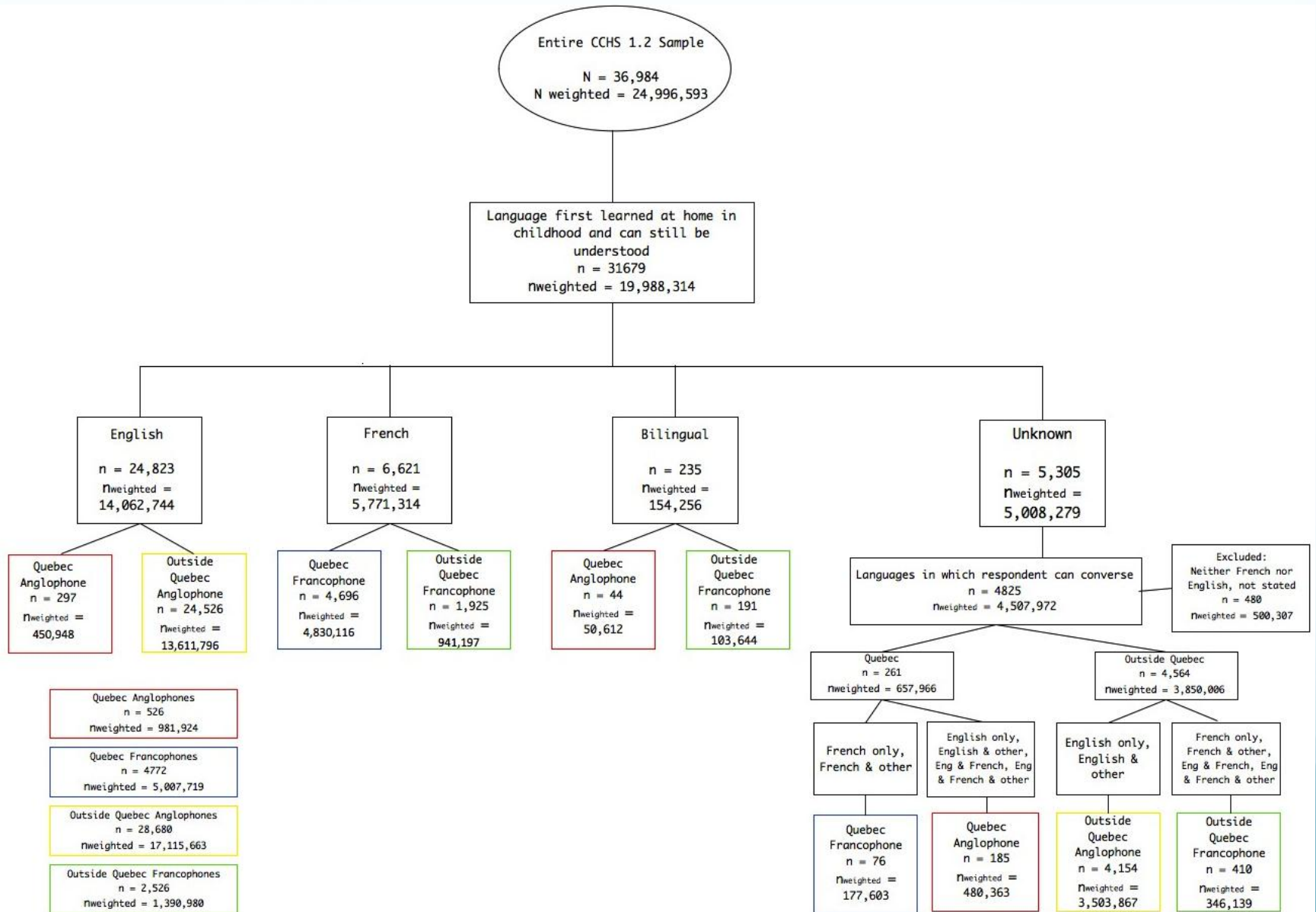
Objective 2:

To determine whether Official Language Minority Status is a determinant of mental health service use in Canada.

Methods

- Cross-sectional Survey
- Canadian Community Health Survey (Mental Health and Well-being) 1.2
- Cross-sectional design
- 36,984 respondents

Selection of samples



Independent Variable

- Linguistic minority status:

	Quebec	Outside Quebec
Francophone	Majority	Minority
Anglophone	Minority	Majority

Dependent Variables

Mental health service use variables

Lifetime: Seen the professional within their lifetime for mental health reasons

12-month: Seen the professional within the past 12-months for mental health reasons

Non-mutually exclusive

Use of any service

Use of any service

Family Practitioner

Family Practitioner

Psychiatrist

Psychiatrist

Mental health professional (MHP) (psychologist, counselor, social worker, nurse)

Mental health professional (MHP) (psychologist, counselor, social worker, nurse)

Other doctor, non-psychiatrist

Other doctor, non-psychiatrist

Mutually exclusive

No consultation

No consultation

Family Practitioner only

Family Practitioner only

Mental health Professional &/or psychiatrist only

MHP &/or psychiatrist only

Family practitioner &/or other doctor with MHP &/or psychiatrist

Family practitioner &/or other doctor with MHP &/or psychiatrist

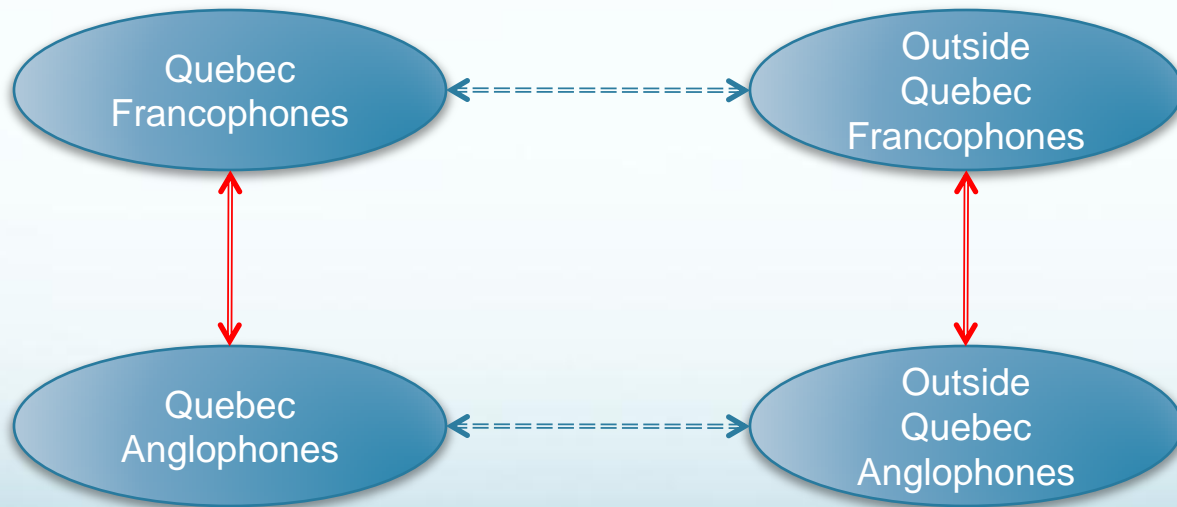
'Other physician non-psychiatrist' with or without FP only

'Other physician non-psychiatrist' with or without FP only

Statistical Analyses

Objective 1 : Do the prevalences of mental health service use differ between minority and majority official language groups?

- Series of chi-square analyses:



Statistical Analyses

- **Objective 2:** To determine whether Official Language Minority Status is a determinant of mental health service use in Canada.
- **Logistic regression analyses**
 - **Dependent variable:**
 - Use of any mental health service within the past 12-months (Family practitioner, other physician, psychiatrist, psychologist, nurse, social worker, counsellor)
 - **Independent variables:**
 - Minority status (linguistic minority versus linguistic majority)
 - Language use (english or french)
 - Minority status x Language use
 - **Covariates:**
 - Age, sex immigrant status

Results

Key Demographics

	Outside Quebec Francophones n= 2,526 ¹		Outside Quebec Anglophones n = 28,680 ²		Quebec Anglophones n = 526 ³		Quebec Francophones n = 4,772 ⁴	
	%	SE*	%	SE*	%	SE*	%	SE*
Sex (male)	49.88	1.329	53.14	2.607	53.14	2.607	48.39	.519
Age								
15 to 24	14.08	.963	19.53	2.001	19.53	2.001	15.16	.397
25 to 44	36.23	1.187	39.20	2.747	39.20	2.747	36.52	.533
45 to 64	33.43	1.293	28.71	2.737	28.71	2.737	33.02	.537
65+	16.26	.763	12.56	1.451	12.56	1.451	15.30	.320
Visible Minority	11.95	1.035	33.95	3.025	33.95	3.025	4.27	.541
Immigrant	21.79	1.299	46.72	2.930	46.72	2.930	5.825	.616
Marital status								
Married	64.87	1.190	59.14	2.928	59.14	2.928	60.90	.955
Widow, divorced, separated	13.76	.780	12.20	1.593	12.20	1.593	13.83	.5847
Single	21.37	1.101	28.66	2.691	28.66	2.691	25.27	.803
Rural	25.33	1.419	7.64	1.222	7.64	1.222	20.56	1.206
Highest level of education								
< Secondary	27.4	1.216	22.71	2.658	22.71	2.658	30.58	.932
Secondary	16.22	1.038	14.96	2.194	14.96	2.194	16.32	.821
Some post-secondary	8.60	.8508	7.311	1.704	7.311	1.704	6.79	.474
Completed post-secondary	47.78	1.466	55.02	3.030	55.02	3.030	46.31	1.005
Stable employment	53.91	1.423	50.63	3.378	50.63	3.378	49.77	1.036
Low income adequacy***	10.72	.882	13.98	2.169	13.98	2.169	11.64	.628

•Standard error

• ** $p < .05$

• ***Individuals whose have low income adequacy based on the following household criteria: < \$15,000 if 1 or 2 people; \$20,000 if 3 or 4 people; < \$30,000 if 5+ people.

•¹ weighted n = 1,390,980

•² weighted n = 17,115,663

•³ weighted n = 981,924

•⁴ weighted n = 5,007,719

Présence of mental health issues in Quebec: Francophones versus Anglophones

	Quebec Anglophones n = 526 ¹		Quebec Francophones n = 4772 ²		Differen ce (%)	95% CI of difference		
	%	SE**	%	SE**		%	SE**	%
Lifetime								
<i>Non-mutually exclusive</i>								
MDE	12.09	2.243	15.08	.730	2.99	12.09	2.243	15.08
Anxiety Disorder	10.50	1.710	11.39	.696	0.89	10.50	1.710	11.39
12 month								
<i>Non-mutually exclusive</i>								
MDE	3.15	.809	5.13	.438	1.98	3.15	.809	5.13
Anxiety disorder	3.19	.778	4.17	.427	0.98	3.19	.778	4.17
Alcohol/substance dependence	3.76	1.098	2.59	.259	-1.17	3.76	1.098	2.59
<i>Mutually exclusive</i>								
No mental illness	91.54	1.717	90.20	.598	1.34	91.54	1.717	90.20
MDE only	2.78	.790	3.28	.374	0.50	2.78	.790	3.28
Anxiety Disorder only	2.51	.717	2.66	.365	0.15	2.51	.717	2.66
ASD only	2.57	1.084	1.84	.221	-0.73	2.57	1.084	1.84
MDE and an Anxiety Disorder	.22	.109	1.07	.186	0.85	.22	.109	1.07
ASD and any disorder	—	—	—	—	—	—	—	—

* $p < .05$; ** Standard error

*** Data could not be released due to confidentiality (cell sizes less than 5)

¹ weighted n = 981,924

² weighted n = 5,007,719

Présence of mental health issues in outside Quebec: Francophones versus Anglophones

	Outside Quebec Francophones		Outside Quebec Anglophones		Diff (%)	95% CI of difference		
	weighted n= 1,390,980 ¹	SE**	weighted n = 17,115,663 ²	SE**		Lower	Upper	p-value
Lifetime								
<i>Non-mutually exclusive</i>								
MDE	13.19	.866	11.39	.266	-1.80	-3.6	0.0	0.037*
Anxiety Disorder	12.54	1.002	11.70	2.666	-0.84	-6.4	4.7	.4102
12 month								
<i>Non-mutually exclusive</i>								
MDE	4.60	.450	4.78	.175	0.18	-0.8	1.1	.6950
Anxiety disorder	4.40	.520	5.11	.187	0.71	-0.4	1.8	.2205
Alcohol/substance dependence	2.56	.577	3.31	.136	0.75	-0.4	1.9	.2786
<i>Mutually exclusive</i>								
No mental illness	90.27	.840	89.18	.256	1.10	-0.6	2.8	.2172
MDE only	3.02	.339	2.73	.139	-0.29	-1.0	0.4	.3997
Anxiety Disorder only	3.04	.456	3.23	.145	0.19	-0.7	1.1	.6689
ASD only	1.98	.535	2.45	.118	0.48	-0.6	1.6	.4923
MDE and an Anxiety Disorder	.83	.189	.13	.099	-0.70	-1.1	-0.3	.0651
ASD and any disorder	.62	.184	.79	.066	0.17	-0.2	0.6	.4100

* $p < .05$; ** Standard error

¹ n = 2,526

² n = 28,680

Lifetime prevalences of mental health service use (%)

	Outside Quebec Francophones n = 2,526 ¹	Outside Quebec Anglophones n = 28,680 ²	Quebec Anglophones n = 526 ³	Quebec Francophones n = 4772 ⁴
Lifetime				
<i>Non-mutually exclusive</i>				
Use of any MH service	22.41	21.82	20.62	27.34
Family Practitioner	15.11	15.08	12.26	14.32
Psychiatrist	9.02	8.411	5.52	6.83
Other physician	1.42	1.25	2.00	1.32
MHP	12.89	12.41	11.48	18.84
<i>Mutually exclusive</i>				
No service use	77.59	78.18	79.38	72.66
FP only	4.67	5.16	4.36	5.45
MHP and/or psychiatrist only	7.20	6.62	8.46	12.79
FP and/or other doctor & MHP and/or psychiatrist	10.33	9.71	6.51	8.70
Other doctor 'non-psychiatrist' with or without FP	.21	.344	-	-

* $p < .05$

** Standard error

*** No results available due to confidentiality (cell sizes less than 5).

¹ weighted n = 981,924; ² weighted n = 17,115,664; ³ weighted n = 981,924; ⁴ weighted n = 5,007,7

12-month prevalences of mental health service use (%)

	Outside Quebec Francophones n = 2,526 ¹	Outside Quebec Anglophones n = 28,680 ²	Quebec Anglophones n = 526 ³	Quebec Francophones n = 4772 ⁴
12 month				
<i>Non-mutually exclusive</i>				
No service use	7.99	8.24	4.91	9.25
Family Practitioner	4.67	5.63	3.27	5.13
Psychiatrist	2.22	2.21	.77	1.35
Other physician	.44	.32		
MHP	3.84	3.79	3.13	5.96
<i>Mutually exclusive</i>				
No service use	92.01	91.76	95.09	90.75
FP only	2.5	2.98	1.39	2.48
MHP and/or psychiatrist only	3.26	2.50	1.61	4.01
FP and/or other doctor & MHP and/or psychiatrist	2.10	2.60	1.84	2.65
Other doctor 'non- psychiatrist' with or without FP***	.12	.16	-	-

* $p < .05$

** Standard error

*** No results available due to confidentiality (cell sizes less than 5).

¹ weighted n = 1,390,980; ² weighted n = 17,115,663; ³ weighted n = 981,924; ⁴ weighted n = 5,007,719

Key Findings

Mental health service use comparisons **Outside Quebec**

- No sig differences found between minority Francophones and majority Anglophones for any lifetime or 12-month mental health service use category
- Similarly, no sig differences exist in mental health service use among minority Francophones and majority Anglophones who have had a mental illness within the past 12-months

Key Findings

Mental health service use comparisons in **Quebec**

- Francophones used more mental health services, overall, than minority Anglophones within the past 12-months (9.3% versus 4.9%, $p = .04$) and lifetime (27.3% versus 20.6%, $p = .02$)
- Francophones received significantly more services from Mental Health Professionals compared to minority Anglophones within the past 12-months (5.9% versus 3.13%, $p = .03$) and lifetime (18% versus 11%, $p = .02$)
- No significant differences were found for mental health service use among Francophones and Anglophones with a mental illness present in the past 12-months

Key Findings

Mental health service use comparisons **Quebec versus outside Quebec**

- Both minority Francophones and Anglophones outside Quebec had a significantly higher lifetime prevalence of consultation with a Psychiatrist compared to Francophones and minority Anglophones within Quebec, respectively.
 - Francophones: outside Quebec 9.02% versus Quebec 6.8%
 - Anglophones: outside Quebec 8.41% versus Quebec 5.5%

Key Findings

Mental health service use outcomes **Quebec versus outside Quebec**

- Within their lifetime, Quebec Francophones used more services from Mental Health Professionals than outside Quebec Francophones (18.84% versus 12.89%, $p < .001$)
- No other sig differences were found

Key Findings

Primary Mental health service use **Quebec versus outside Quebec**

Among individuals with a mental illness:

- No significant differences exist in mental health service use among those with any mental illness within the past 12-months

Key Findings

Is there an association between official language minority-majority status and mental health service use?

Factor	OR	SE	CI for OR		<i>p</i> -value
			Lower	Upper	
Linguistic Minority Status (Minority = 0)	1.235	.1349	.996	1.5313	.053
Language (Anglophone = 0)	1.083	.0797	.9376	1.2519	.277
Age	.9892	.0013	.9867	.9918	.000*
Sex (male = 0)	2.13	.1133	1.9255	2.3715	.000*
Immigrant status (immigrant = 0)	1.8358	.1625	1.5426	2.1847	.000*

**p* < .05

Discussion

Finding: Similar prevalence of mental disorders between official language minority and majority groups both within and outside Quebec

- Contrasts previous work among linguistic minorities:
 - Individuals with poor language proficiency had higher prevalence of depression in some cases but lower in other. A lower prevalence of anxiety was found among those with poor language proficiency.
- Minority status, in general:
 - Inconsistent association
 - “healthy immigrant effect”

Discussion

Finding: Variations were observed in mental health service use within Quebec

- 'Use of any mental health service' and consultation with a Mental health professional was higher among Francophones than Anglophones in Quebec; 12-month and lifetime usage of a 'MHP and/or psychiatrist
- Differences potentially attributed to the large # of Anglophone immigrants

Discussion

Is official language minority-majority status associated with the use of mental health services within the past 12-months?

- After controlling for age, sex, and immigrant status, official language minority status was not significantly associated with the use of mental health services in the past 12-months
- Conclusion: official language minority-majority status is not a significant predictor of mental health service use, in general

Discussion

Is official language minority-majority status associated with the use of mental health services within the past 12-months?

- Univariate comparisons of mental health service use between Francophones within and outside Quebec, and Anglophones within and outside of Quebec show differences in specific categories of service use between regions
 - Individuals outside of Quebec consulted a psychiatrist more → cannot be explain by official language minority status
- Organization of mental health services may be different in Quebec vs other provinces

Limitations

- Cross-sectional study design
- Results are based on self-report data, which could introduce several types of bias (i.e., recall, social desirability bias).
- Classification of minority-majority Francophone and Anglophone groups
- Geographical classification of Anglophones and Francophones.
- Data are 10 years old and do not reflect more recent changes

Areas for Future Research

- Additional knowledge may be gained by conducting the analysis at a provincial level → “English Canada” and “French Quebec” are not homogeneous groups (Bergeron, 2007).
- Focused, small-scale analyses

Areas for Future Research

- Longitudinal analysis would allow researchers to better understand mental health and mental health service use of OLMC over time.
- Dichotomous outcomes → does not allow for flexibility in responses.
 - Qualitative and quantitative findings would allow researchers to triangulate research

Conclusions

- This study is the first to examine mental health service use among Canada's Official Language Minority Communities.
- Results indicate that very few differences exist between official language minority and majority groups
- This knowledge remains extremely important to many key stakeholders, including patients, health care providers, administrators, and the health care system

References

1. Johnson ML, Doucet P. A Sharper View: Evaluating the Vitality of Official Language Minority Communities. Minister of Public Works and Government Services Canada, 2006
2. Bowen S. Language barriers in access to health care. Ottawa: Health Canada; 2001.
1. Tempier, R., Kovess-Masféty, V., Vasiliadis, HM., Gilbert, F., Demyttenaere, K., Lepine, JP., Gasquet, I., Mosier, K., Lesage, A., Puchala, C., & Lepnurm, M. (in press). Comparing mental health of Francophone populations in Canada, France and Belgium: 12 month prevalence rates of common mental disorders (part I), 10 pages. Canadian Journal of Psychiatry.
2. Tempier, R., Kovess-Masféty, V., Vasiliadis, HM., Gilbert, F., Demyttenaere, K., Lepine, JP., Gasquet, I., Lepnurm, M., Lesage, A., Puchala, C., & Mosier, K. (in press). Comparing mental health of Francophones in Canada, France and Belgium: 12-month and lifetime rates of mental health service utilisation (Part 2), 15 pages. Canadian Journal of Psychiatry.
3. PHAC (2008). What makes Canadians health or unhealthy? Available at: <http://www.phac-aspc.gc.ca/phsp/determinants/determinants-eng.php#culture> [Accessed March 15, 2009].
4. PHAC (2008). Towards a Common Understanding: Clarifying the Core Concepts of Population Health. Available at: http://www.phac-aspc.gc.ca/ph-sp/docs/common-commune/appendix_c-eng.php [Accessed March 15, 2009].
5. PHAC (2008). What determines health? Available at: <http://www.phac-aspc.gc.ca/ph-sp/determinants/index-eng.php> [Accessed March 12, 2009]
8. Andersen RM. National health surveys and the behavioral model of health services use. Medical care. 2008;46(7): 647- 653.
9. Andersen RM. Revisiting the behavioural model and access to medical care: Does it matter? Journal of health and social behaviour. 1995;36: 1-10.
10. Gravel R, Beland Y. The Canadian Community Health Survey: mental health and well-being. Can J Psychiatry. 2005;50:573–9.
11. Statistics Canada. Canadian Community Health Survey - Mental Health and Well-being (CCHS). 2003 [Accessed Sept 9 2009]. Available from: <http://www.statcan.gc.ca/>.