ARE MONTREAL ENGLISH SPEAKERS LIKELIER TO DISENGAGE FROM TREATMENT FOR PSYCHOSIS?

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OBJECTIVES

- To provide a brief overview of historical and current perspectives on language in Montreal.
- To discuss early intervention approaches to treatment of psychosis.
- To investigate the impact of language status on service disengagement in EIP.

DISCLOSURES

- Canadian Institutes of Health Research (CIHR)
- Fonds de recherche du Québec-Santé (FRQS)

MONTREAL

St. Lawrence Iroquoians

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Jacques Cartier (1535)

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MONTREAL (1642)

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Iroquois Wars & Le Grande Paix (1701)
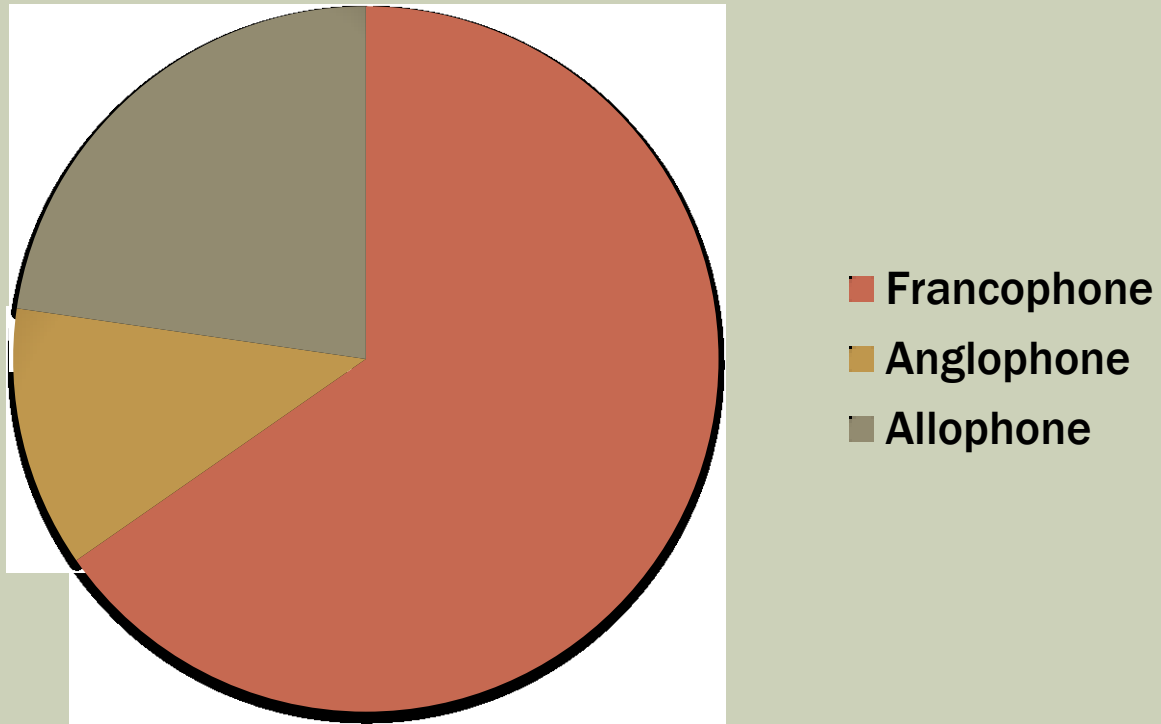
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Seven Years' War (1760)

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Rebellions of 1837
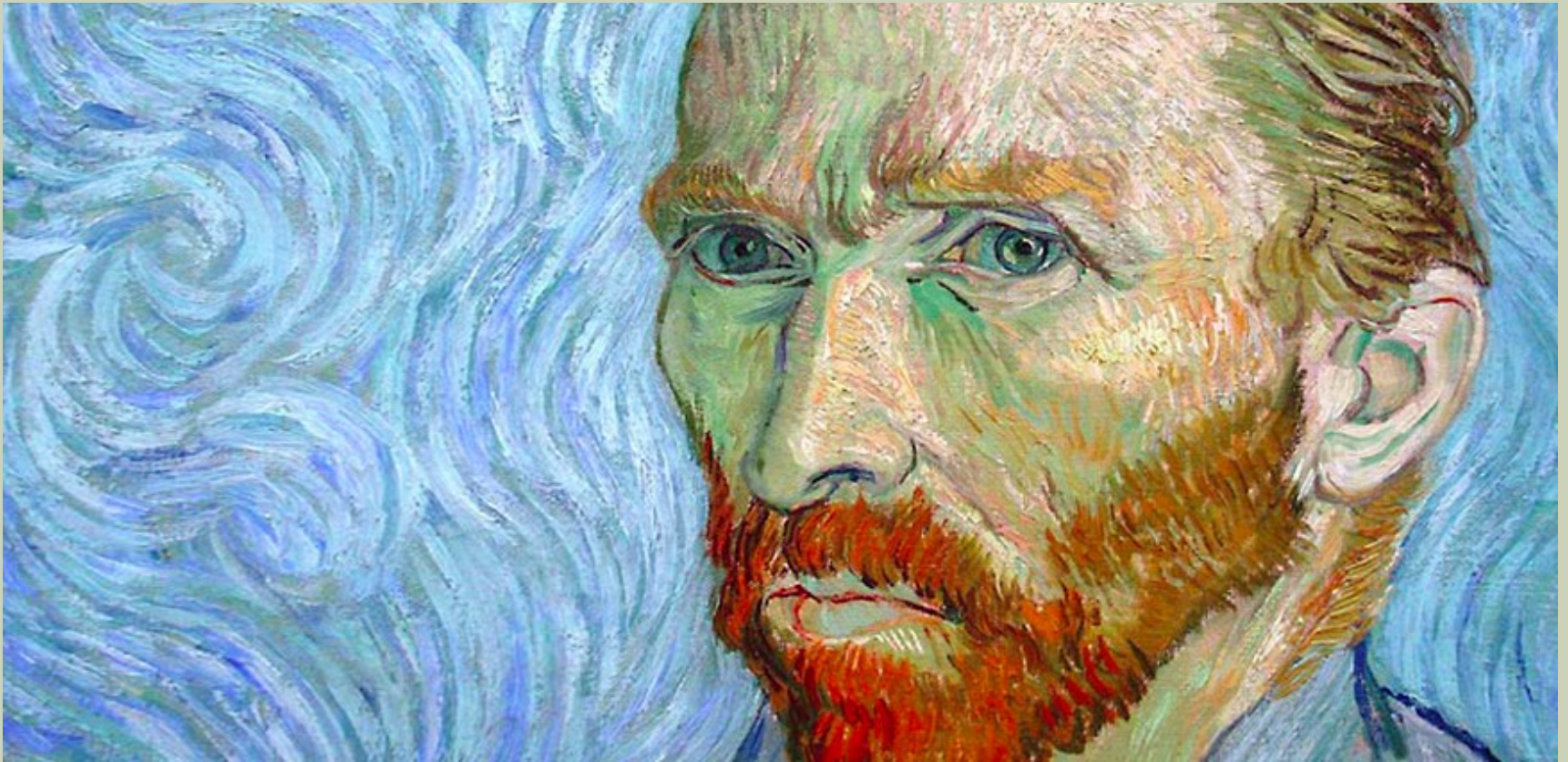
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Montreal Riots (1849)

1831 (British majority)

1865 (Francophone majority)

MONTREAL TODAY

Mother Tongue (2011)

Legend:
- Francophone
- Anglophone
- Allophone

PSYCHOSIS

EARLY INTERVENTION FOR PSYCHOSIS

- Intervening early to change the course of the illness
- Minimize relapse and maximize recovery potential in first 2-5 years (critical period)
- Rapid access & phase-specific treatment
- Service engagement

PEPP-MONTREAL

- Clinical, research and teaching program
- 2-year program
- Includes
  - 14-35-year-olds
  - Dx: affective or non-affective psychosis (not substance-induced psychosis)
  - <1 month of anti-psychotic treatment
  - IQ >70
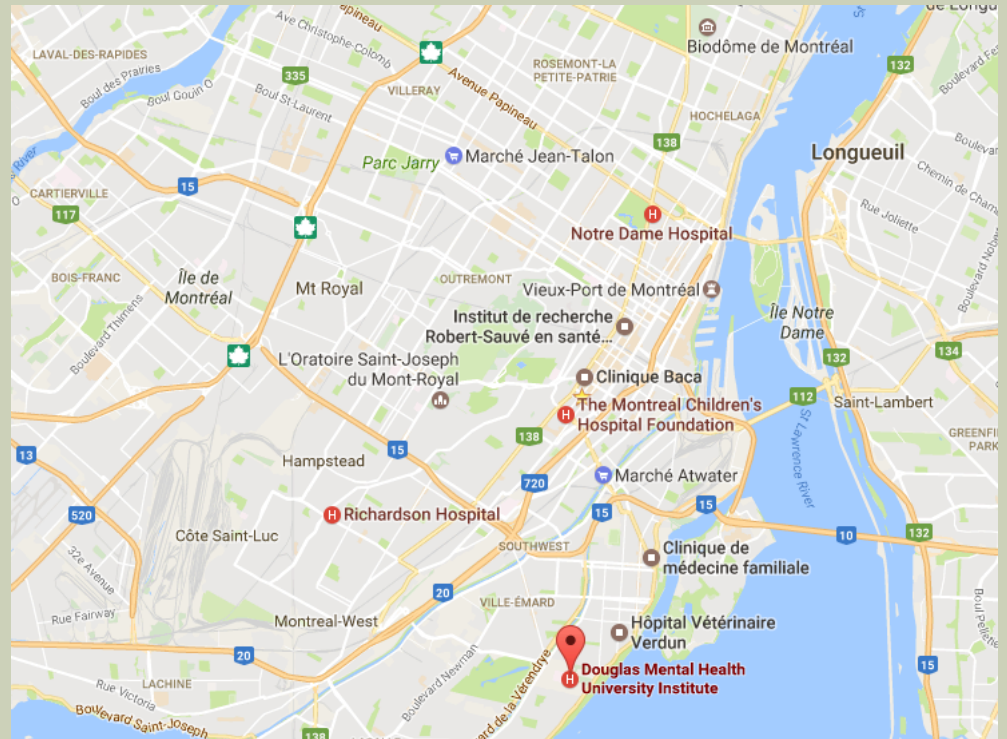 - No organic brain damage
  - No pervasive developmental disorder
  - No epilepsy

PEPP-MONTREAL

- Catchment area
  - South West Montreal
  - 400,000 people
  - Incidence sample

OUR OBJECTIVE

- To determine if official linguistic minority groups are likelier to disengage
- To compare rates and predictors of disengagement between English- and French-speakers

METHODS

- All clients who consented and completed 2 years of treatment prior to November 2016
- N = 492 -> 460 with **preferred language** data
- Covariates included:
  - age
  - sex
  - education level
  - substance abuse
  - immigrant status
  - visible minority status
  - family contact
  - SDI, MDI
  - medication non-adherence,

ANALYSIS

- Group comparisons (Chi-squared, one-way ANOVAs)
- Kaplan-Meier time-to-event curves
- Cox Proportional Hazards Regression
  - Univariate analysis
  - Multivariate model

SOCIODEMOGRAPHICS

	English (n=201)	French (n=259)	p
Age	23.2 (4.5)	23.8 (4.6)	0.193
Gender			0.917
Male	142 (70.6)	185 (71.4)	
Female	59 (29.4)	74 (28.6)	
Education Level			0.091
Completed HS	135 (68.9)	154 (60.9)	
Did Not Complete HS	61 (31.1)	99 (39.1)	
Substance Abuse			0.645
No	82 (42.3)	108 (43.5)	
Yes	112 (57.7)	139 (56.0)	
SDI	71.9 (23.0)	77.4 (17.6)	0.006
MDI	55.5 (31.8)	66.3 (28.1)	<0.001

SOCIODEMOGRAPHICS

	English (n=201)	French (n=259)	p
Immigrant Status			**<0.001**
3rd Generation	65 (38.5)	128 (58.4)	
1st Generation	48 (28.4)	58 (26.5)	
2nd Generation	56 (33.1)	33 (15.1)	
Visible Minority			**0.001**
White	117 (59.7)	182 (71.9)	
Black	24 (12.2)	26 (10.3)	
Asian	28 (14.3)	11 (4.3)	
Other	27 (13.8)	34 (13.4)	
Family Contact			0.810
Yes	165 (82.1)	210 (81.1)	
No	36 (17.9)	49 (18.9)	
Med Non-Adherence			0.902
No	154 (81.1)	205 (81.7)	
Yes	36 (18.9)	46 (18.3)	

GROUP DIFFERENCES

- **Immigrant Status**
  - Lower proportion of 3rd generation immigrants in English-speaking group (38.5% vs. 58.4%)
  - Higher proportion of 2nd generation immigrants in English-speaking group (33.1% vs. 15.1%)
- **Visible Minority Status**
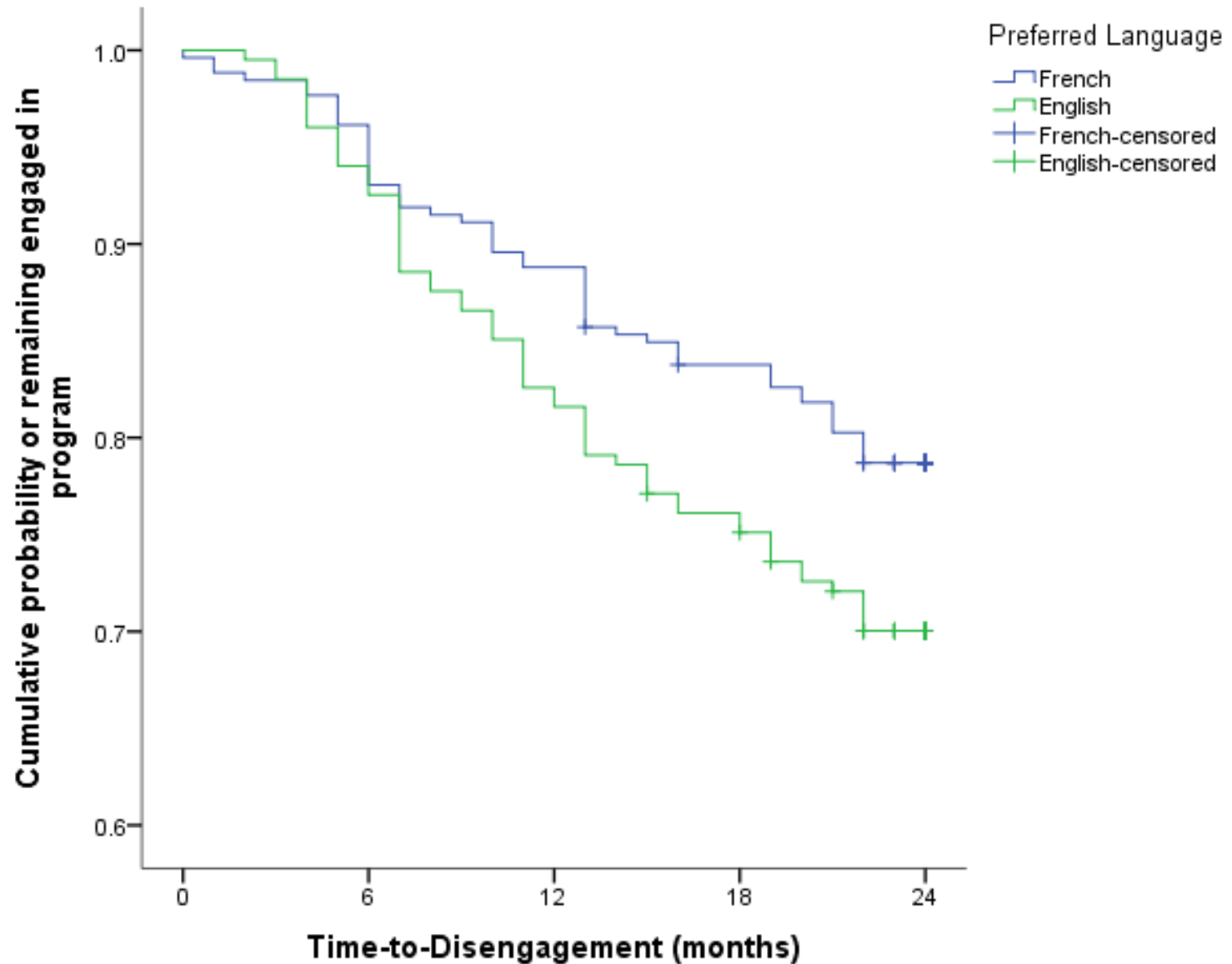 - Higher proportion of Asians in English-speaking group (14.3% vs. 4.3%)
- **SDI & MDI**
  - English-speakers have higher socioeconomic standing

SERVICE DISENGAGEMENT

	English (n=201)	French (n=259)	p
Disengagement No Yes	 141 (70.1) 60 (29.9)	 204 (78.8) 55 (21.2)	0.031
Time-to-Disengagement	11.0 (5.8)	11.4 (6.5)	0.725

Time-to-Disengagement Curves

Preferred Language
- French
- English
- French-censored
- English-censored

Cumulative probability or remaining engaged in program (y-axis)

Time-to-Disengagement (months) (x-axis)

UNIVARIATE LOGISTIC REGRESSIONS

Variable	N	HR	95% CI	p
Preferred Language	460	1.49	1.032 – 2.146	**0.033**

Immigration
   3rd Gen
   1st Gen
   2nd Gen
	
	193
	106
	89
		
		1.06
		1.08
			
			0.635 – 1.765
			0.613 – 1.917
				
				0.961
				0.826
				0.782

Visible Minority
   White
   Black
   Asian
   Other
	
	299
	50
	39
	61
		
		0.96
		1.41
		1.02
			
			0.551 – 1.676
			0.698 – 2.854
			0.459 – 2.273
				
				0.584
				0.888
				0.338
				0.959

Family Contact	460	1.54	1.004 – 2.353	**0.048**
Med Non-Adherence	441	4.32	2.879 – 6.469	**<0.001**

UNIVARIATE LOGISTIC REGRESSIONS

Variable	N	HR	95% CI	p
Age	460	1.01	0.969 – 1.049	0.692
Gender	460	0.98	0.655 – 1.460	0.914
Education	449	0.86	0.577 – 1.276	0.451
Substance Abuse	442	0.98	0.891 – 1.081	0.701
SDI	434	1.00	0.992 – 1.011	0.803
MDI	434	1.00	0.996 – 1.009	0.463

MULTIVARIATE REGRESSION

Variable	HR	95% CI	p
Preferred Language	1.52	1.017-2.258	**0.041**
Family Contact	1.08	0.665-1.757	0.754
Med Non-Adherence	4.29	2.839-6.495	**<0.001**

SUMMARY OF FINDINGS

- English-speakers are more likely to disengage from our EIP as compared to French-speakers
- Between English- and French-speakers there are group differences in regards to immigration status, visible minority status, SDI, MDI
- In the multivariate model, only preferred language and medication non-adherence are significant predictors of disengagement

DISCUSSION
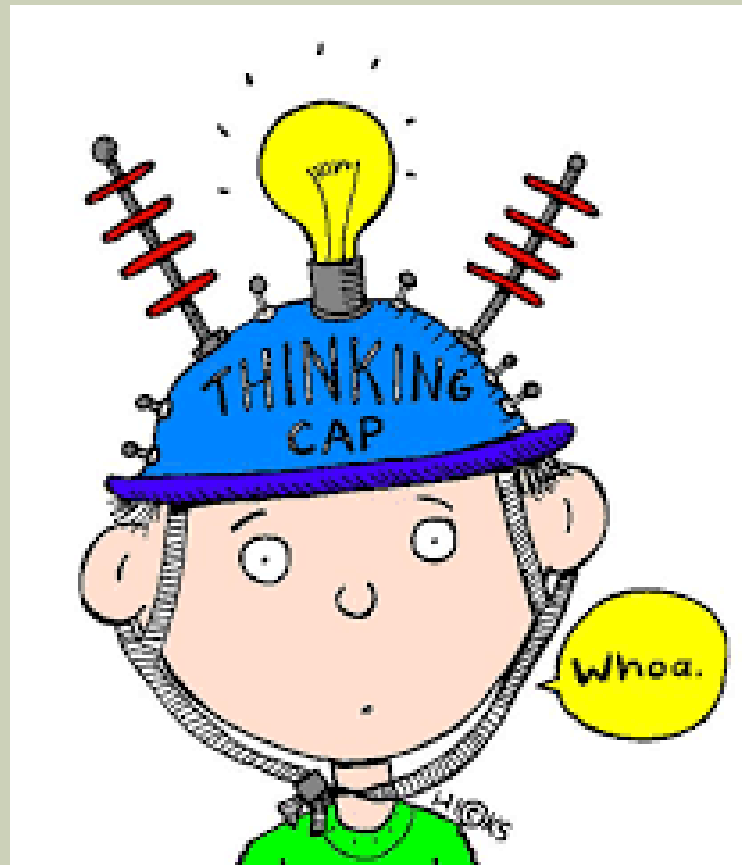
PEPP-MONTREAL CLINICIANS

Preferred Language	Psychiatrists	Screening Clinicians	Case Managers	Other Services
English	3	2	5	1
French	0	1	3	1
Fluently Bilingual	5	2	6	2
Total	8	5	14	4

BASELINE GROUP DIFFERENCES

- **Immigrant Status**
  - More 2nd generation immigrants and fewer 3rd generation immigrants in English-speaking group
  - But..immigrant status alone does not predict disengagement
- **Visible Minority Status**
  - More Asians in English-speaking group
  - But…visible minority status alone does not predict disengagement
- **SDI & MDI**
  - But English-speakers better off
- **High-risk subgroup?**
  - Intersection between language/immigrant/visible minority status
- **Role of medication non-adherence**
  - No difference in rates of medication non-adherence between groups

BEYOND PEPP

- Montreal?
- Quebec?
- Canada?
- Policy level?

YOUR THOUGHTS?

CONCLUSION

- Based on preliminary data, English-speakers are more likely to disengage from a Montreal-based EIP

- While there are baseline sociodemographic differences between groups, these do not sufficiently explain the main finding

- The reason for this finding remains unclear and warrants further exploration