## Disparities in mental health and its determinants among Quebec high school students by language of instruction

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The survey

## The Quebec Secondary School Youth Health Survey (QSSYS) 2016-2017

- Survey conducted by the Institut de la statistique du Québec (ISQ), at the request of the Ministère de la Santé et des Services sociaux (MSSS)
- Objectives of the survey:
- To draw up a portrait of the lifestyle, physical and mental health, and social adjustment of secondary school students in Quebec in 2016-2017
- To collect information on the socio-demographic, economic and educational characteristics of secondary school students in order to study the links between these characteristics and physical and mental health status or lifestyle habits
- $2^{\mathrm{e}}$ survey cycle ( ${ }^{\mathrm{er}}$ cycle in 2010-2011)


## The Quebec Secondary School Youth Health Survey (QSSYS) 2016-2017

- Population targeted by the survey:
- All young people in secondary school in Quebec (secondary 1-5)
- Public and private schools
- French and English schools
- Sampling done by socio-health region
- Three-level sampling plan, :

1. School - with a probability proportional to their size
2. Classes - according to the 5 levels
3. Students -2 versions of the questionnaire

## The Quebec Secondary School Youth Health Survey (QSSYS) 2016-2017

- More than 62,000 young Quebecers participated in 2,900 classes (465 schools)
- Self-administered questionnaire of about 30 minutes, on a tablet computer
- Questionnaire completed during a class period
- 91\% response rate

Report on disparities in mental health and its determinants among young people in secondary school, by language of instruction

## Objective

- Comparing selected indicators of mental health and its determinants according to the language of instruction of Quebec high school students and documenting the differences


## Language variable

- No 'standard' language variable
- Language of instruction (FR or EN)
- Absence of the variables mother tongue and language spoken most often at home
- English-speaking pupils can attend a French-speaking school and vice versa

Tableau 1 Répartition des élèves du secondaire selon la langue d'enseignement selon l'EQSJS

|  | EQSJS 2016-2017 |  |
| :--- | :---: | :---: |
|  | Nombre d'élèves de la <br> population visée $n$ | Proportion \% |
| Langue d'enseignement |  |  |
| Français | 349937 | 90,2 |
| Anglais | 38169 | 9,8 |
| Total | 388106 | 100,0 |

## Topics covered

- Mental and physical health
- The determinants of mental health
- Lifestyle habits (sleep, weight status, perception of body appearance)
- Risk behaviours (tobacco use, alcohol use, drug use and sexual behaviour)
- Social adaptation (social environment, self-esteem and social skills, risk of dropping out of school, violence)


## Statistical analysis

## Statistical analysis

- Estimation method
- The risk difference and relative risk measure the difference between young people whose language of instruction is English vs. French
- Uses 95\% confidence intervals

Results

## Mental health

- Young people in secondary education whose language of instruction is English:
- Less likely to have been diagnosed with ADHD (16\% vs. 24\%)
- Less likely to have taken medication to calm down or concentrate in the 2 weeks prior to the survey ( $38 \%$ vs. $59 \%$ )
- More likely to have been diagnosed with depression (10\% vs. 6\%)
- More likely to suffer from eating disorders (3\% vs. 2\%)


## Mental health

- No significant difference between young people whose language of instruction is English vs. French for the following indicators:
- Young people diagnosed with an anxiety disorder
- Young people with a high level of psychological distress


## Physical health

- Young people in secondary education whose language of instruction is English:
- More people do not perceive themselves to be in good health (6\% vs. $4 \%)$


## Lifestyle habits

- Young people in secondary education whose language of instruction is English:
- More likely to not meet sleep recommendations (51\% vs. 32\%)
- Recommendations:
- 9-11 hours for young people aged 6 to 13
- 8-10 hours for 14-17 year olds
- 7-9 hours for 18-25 year olds


## Lifestyle habits

- No significant difference between young people whose language of instruction is English vs. French for the following indicators:
- Physical activity for recreation and transport
- Weight status (obese, overweight)
- Perception of body appearance (dissatisfaction with their body shape)


## Risk behaviours

- Young people in secondary education whose language of instruction is English:
- Less likely to have used e-cigarettes in the past 30 days ( $23 \%$ vs. $30 \%$ )
- Less likely to report heavy drinking (5 or more drinks on one occasion in the past 12 months) (35\% vs. 27\%)


## Risk behaviours

- No significant difference between young people whose language of instruction is English vs. French for the following indicators:
- Proportion who have ever drunk alcohol (in their lifetime or in the past 12 months)
- Proportion who have ever used drugs (in their lifetime or in the last 12 months)
- Proportion who have ever used cannabis (in their lifetime or in the past 12 months)
- Proportion of young people who reported being poly-substance users


## Sexual behaviour

- No significant difference between young people whose language of instruction is English vs. French for the following indicator:
- Proportion of young people who did not use a condom at last consensual vaginal sex (proportion $40 \%$ in both groups)


## Social support

- Young people in secondary education whose language of instruction is English:
- More likely to report low support in their family environment (3\% vs. 2\%)
- Less likely to report low support in their community environment (13\% vs. 17\%)
- No significant difference between young people whose language of instruction is English vs. French for the following indicator:
- Low support in the school environment


## Self-esteem and social skills

- Young people in secondary education whose language of instruction is English:
- More likely to have a low level of overall self-efficacy (28\% vs. 21\%)
- No significant difference between young people whose language of instruction is English vs. French for the following indicator:
- Proportion with low self-esteem


## Risk of dropping out of school

- Young people in secondary education whose language of instruction is English:
- Less likely to be at high risk of dropping out of school (12\% vs. 18\%)
- No significant difference between young people whose language of instruction is English vs. French for the following indicator:
- Academic delay (repeated at least one grade)


## Violence

- Young people in secondary education whose language of instruction is English:
- More likely to have been bullied at school or on the way to school (50\% vs. 30\%)
- More likely to be assaulted by gang members at school or on the way to school (5\% vs. 4\%)
- More likely to have been cyberbullied (9\% vs. 6\%).
- Fewer in romantic relationships have inflicted psychological, physical or sexual violence on their partner ( $19 \%$ vs. $25 \%$ )


## Violence

- No significant difference between young people whose language of instruction is English vs. French for the following indicator:
- Proportion of young people who have engaged in at least one direct aggressive behaviour
- Proportion of young people who have engaged in at least one indirect aggressive behaviour


## Conclusion

## Main findings

- Overall, it is not possible to say that the mental health of young people whose language of instruction is French or English is better.
- 8 indicators stand out unfavourably for young people whose language of instruction is English
- 7 indicators stand out unfavourably for young people whose language of instruction is French


## Main findings

- Both groups (young people whose language of instruction is French and young people whose language of instruction is English) show vulnerabilities in the following areas:
- Social support
- Mental health disorders
- Violence


## Main findings

- For some themes, there is more vulnerability for one of the two language groups:
- Among young people whose language of instruction is English, more vulnerability for indicators related to
- To sleep
- To the perception of health
- Violence at school or on the way to school
- Largest differences for this indicator
- Young people studying in English are more likely to be victims
- In line with the results of the 2010-2011 survey cycle


## Main findings

- Among young people whose language of instruction is French, more vulnerability for indicators related to
- To drop out of school
- To risky behaviour


## Conclusion

- No one-sided conclusion about the presence (or not) of a gap in mental health between the two groups
- The results highlight important mental health concerns for students in both language groups
- The main drivers of young people's mental health are the same regardless of language group:
- Social support from family, friends and school
- Encouragement of self-esteem and school perseverance
- Healthy and safe living environment


## Questions



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