

## At-a-glance

# An update on positive mental health among youth in Canada

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### Abstract

The Positive Mental Health Surveillance Indicator Framework (PMHSIF) provides estimates of positive mental health outcomes and associated risk and protective factors for youth aged 12 to 17 years in Canada. This study explored the relationship between sociodemographic factors and psychological and social well-being among youth in Canada using data from the Canadian Student Tobacco, Alcohol and Drugs Survey 2016–2017. Grade and province were significantly associated with psychological and social well-being.

**Keywords:** *positive mental health, youth, public health, Canada*

### Introduction

In 2017, the Public Health Agency of Canada (PHAC) released the Positive Mental Health Surveillance Indicator Framework (PMHSIF) for youth, which identified five positive mental health (PMH) outcomes: self-rated mental health, happiness, life satisfaction, and psychological and social well-being.<sup>1</sup> The PMHSIF-Youth aims to address a gap in PMH surveillance, provide a snapshot of the state of PMH and inform mental health policy and programming in Canada.<sup>2</sup> This At-a-glance article includes updated positive mental health estimates and associated individual, familial, community and societal determinants for youth aged 12 to 17 years in Canada. Well-being is a crucial component of positive mental health, and as such is an important concept to promote.<sup>3</sup> To get a more complete picture of youth well-being in Canada, we also examined relationships between socio-demographic factors and three elements of psychological and social well-being: autonomy, competence and relatedness.

### Methods

We explored the relationships between sex, grade and province and autonomy, competence and relatedness using the

Canadian Student Tobacco, Alcohol and Drugs Survey (CSTADS) 2016–2017. Due to the complex survey design, estimates were weighted with the survey sampling weight and variance was estimated using the bootstrap method. We conducted three adjusted logistic regression models. All statistical analyses were executed using SAS Enterprise Guide version 7.1 (SAS Institute Inc., Cary, NC, USA).

#### *Psychological well-being—CSTADS 2016–2017*

##### **Autonomy**

Youth were asked to circle the response that best represented how they felt and how they thought others perceived them in the past week. The following six statements were included: 1) “I feel free to express myself at home”; 2) “I feel free to express myself with my friends”; 3) “I feel I have a choice about when and how to do my schoolwork”; 4) “I feel I have a choice about which activities to do with my friends”; 5) “I feel free to express myself at school”; and 6) “I feel like I have a choice about when and how to do my household chores.”

##### **Competence**

Youth were asked to circle the response that best represented how they felt and how they thought others perceived them

### Highlights

- The Quick Stats table presents recent estimates of positive mental health outcomes and determinants among youth in Canada.
- Over three-quarters of youth have high relatedness (81.8%), a high level of happiness (79.3%), high competence (78.4%) and high self-rated mental health (75.9%).
- The majority of youth reported high autonomy (73.0%) and life satisfaction (61.0%).
- Students in middle school (Grades 7–8) were more likely to have higher psychological and social well-being compared to students in high school (Grades 9–12).

in the past week. The following six statements were included: 1) “I feel I do things well at school”; 2) “I feel my teachers think I am good at things”; 3) “I feel I do things well at home”; 4) “I feel my parents think that I am good at things”; 5) “I feel I do things well when I am with my friends”; and 6) “I feel my friends think I am good at things.”

#### *Social well-being—CSTADS 2016–2017*

##### **Relatedness**

Youth were asked to circle the response that best represented how they felt and how they thought others perceived them in the past week. The following six statements were included: 1) “My teachers like me and care about me”; 2) “I like to spend time with my parents”; 3) “My parents like me and care about me”; 4) “I like to be with my teachers”; 5) “My friends like me and care about me”; and 6) “I like to spend time with my friends.”

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Response options for autonomy, competence and relatedness questions were: “really false for me,” “sort of false for me,” “sort of true for me,” and “really true for me.” High autonomy, competence and relatedness were defined as having a mean score of 3 (response category “sort of true for me”) or 4 (response category “really true for me”) on a scale of 1 to 4.

## Results

### Main findings

Updated prevalence estimates can be found in Table 1. Of all youth in Canada, 75.9% reported high self-rated mental health and 61.0% reported high life satisfaction in 2017. In 2015, 79.3% of youth reported high happiness. In 2016/17, 73.0% of youths reported high autonomy, 78.4% reported high competence and 81.8% reported high relatedness. Due to significant changes that were made to the Canadian Community Health Survey (CCHS) methodology in 2015,<sup>4</sup> estimates presented in the previous edition (2017) of the youth PMHSIF,<sup>1</sup> which includes data from CCHS 2014, should not be compared to the numbers in this edition (2019).

### Sociodemographic determinants and PMH outcomes

The odds ratios (ORs) for autonomy, competence and relatedness adjusted for sex, grade and province are displayed in Table 2.

#### Autonomy

The odds of Grade 12 students having high autonomy were 12% (adjusted odds ratio [aOR] = 1.12, 95% confidence interval [CI]: 1.07–1.17) greater than Grade 10 students. Similarly, the odds of Grade 7 students having high autonomy were 7% (aOR = 1.07, 95% CI: 1.01–1.14) greater than the odds of Grade 10 students having high autonomy. Youth in Quebec were approximately two times (aOR = 1.98, 95% CI: 1.92–2.04) more likely to report high autonomy compared to youth in Newfoundland and Labrador. Additional odds ratios for other provinces can be seen in Table 2.

#### Competence

Students in Grades 7 to 9 were more likely to have high competence compared to students in Grade 10, whereas students in Grade 11 were less likely. There was no significant difference in likelihood of

competence for students in Grade 12. In comparison to youth in Newfoundland and Labrador, youth in Prince Edward Island, Ontario, British Columbia, Alberta, Nova Scotia, Manitoba, Saskatchewan and Quebec were more likely to have high competence. For instance, the odds of high competence for youth in Prince Edward Island were 1.40 times higher (aOR = 1.40, 95% CI: 1.35–1.46) compared to youth in Newfoundland and Labrador. Additional odds ratios for other provinces are provided in Table 2.

#### Relatedness

Males were less likely to report high relatedness compared to females (aOR = 0.83, 95% CI: 0.81–0.85). Overall, youth in Grades 7 to 9 and Grade 12 were more likely to report high relatedness compared to the Grade 10 reference group. However, the odds of Grade 7 and 8 students having high relatedness were greater than the other grades (Table 2). There was no significant difference in likelihood of relatedness for students in Grade 11. Similar to provincial differences observed with high autonomy and competence, the odds of high relatedness were greater for Quebec, Ontario, Prince Edward Island, British Columbia, Alberta, Manitoba, Nova Scotia and Saskatchewan compared to Newfoundland and Labrador (Table 2).

## Conclusion

The PMHSIF-Youth is an evidence-based resource that provides information on the state of PMH among youth in Canada. Overall, the majority of youth in Canada have high positive mental health. Our findings also show that students in Grades 7 and 8 had significantly higher odds of competence and relatedness compared to high school students. Interestingly, we observed provincial differences in the odds of psychological and social well-being outcomes. Compared to other provinces, the association for autonomy and relatedness was strongest among youth in Quebec. However, youth in Quebec had the weakest association for competence compared to other provinces. The findings reported in this At-a-glance have the potential to inform mental health promotion initiatives, particularly among specific grades and provinces.

## Conflicts of interest

The authors have no conflicts of interest to disclose.

## Authors' contributions and statement

MV, EP, TL and MB drafted the At-a-glance. MV analyzed the prevalence estimates for the positive mental health outcomes and indicators, and conducted the logistic regression model analyses. All co-authors interpreted the data and reviewed or revised the At-a-glance.

The content and views expressed herein are those of the authors and do not necessarily reflect those of the Government of Canada.

## References

1. Centre for Chronic Disease Prevention. Positive Mental Health Surveillance Indicator Framework: quick stats, youth (12 to 17 years of age), Canada, 2017 edition. Health Promot Chronic Dis Prev Can. 2017;37(4):131-2.
2. Orpana H, Vachon J, Dykxhoorn J, et al. Monitoring positive mental health and its determinants in Canada: the development of the Positive Mental Health Surveillance Indicator Framework. Health Promot Chronic Dis Prev Can. 2016;36(1):1-10.
3. Canadian Institute for Health Information (CIHI). Improving the health of Canadians: exploring positive mental health. Ottawa (ON): CIHI; 2009.
4. Statistics Canada. Canadian Community Health Survey – Annual Component (CCHS) [Internet]. Ottawa (ON): Government of Canada; 2018 [cited 2019 Jul 3]. Available from: <http://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=329241>

TABLE 1

## POSITIVE MENTAL HEALTH SURVEILLANCE INDICATOR FRAMEWORK

### QUICK STATS, YOUTH (12 TO 17 YEARS OF AGE), CANADA, 2019 EDITION

INDICATOR GROUP	INDICATOR MEASURE(S)	LATEST DATA	DATA SOURCE (YEAR)
<b>POSITIVE MENTAL HEALTH OUTCOMES</b>			
Self-rated mental health	% of population who self-rate their mental health as being “excellent” or “very good”	75.9%	CCHS (2017)
Happiness	% of population who report being usually “happy and interested in life”	79.3%	CCHS (2015)
Life satisfaction	% of population who report they are “very satisfied” with their life in general	61.0%	CCHS (2017)
	Mean life satisfaction rating (0–10 scale) among Grade 6–10 students	7.3	HBSC (2013–2014)
Psychological well-being	% of Grade 7–12 students who have high autonomy	73.0%	CSTADS (2016–2017)
	% of Grade 7–12 students who have high competence	78.4%	CSTADS (2016–2017)
Social well-being	% of Grade 7–12 students who have high relatedness	81.8%	CSTADS (2016–2017)
<b>INDIVIDUAL DETERMINANTS</b>			
Resilience	In development		
Coping	% of population aged 15–17 years who report a high level of coping	43.3%	CCHS – Mental Health (2012)
Nurturing childhood environment	% of Grade 6–10 students who report having dinner together with their family five or more times per week	69.8%	HBSC (2013–2014)
	% of Grade 6–10 students who report their family is willing to help them make decisions	74.2%	HBSC (2013–2014)
Control and self-efficacy	% of population aged 15–17 years who report a high level of perceived control over life chances	45.0%	GSS Social Networks (2008)
Violence	% of Grade 6–10 students who report they were in a physical fight at least once in the past 12 months	28.3%	HBSC (2013–2014)
	% of Grade 7–12 students who report they have been bullied by other students in the past 30 days	23.5%	CSTADS (2016–2017)
	% of Grade 7–12 students who report they have bullied other students in the past 30 days	13.2%	CSTADS (2016–2017)
Health status	% of population who self-rate their health as “excellent” or “very good”	75.6%	CCHS (2017)
	% of population with no or mild disability	70.7%	CCHS (2015)
Physical activity	% of population who meet physical activity recommendations by accumulating at least 60 minutes of moderate-to-vigorous physical activity per day	30.9%	CHMS (2016–2017)
Substance use	% of Grade 9 and 10 students who report they have had 5 or more drinks (4 or more for girls) on one occasion, once a month or more in the past year	17.7%	HBSC (2013–2014)
	% of Grade 6–10 students who report drinking alcohol every week or more	6.5%	HBSC (2013–2014)
	% of Grade 7–12 students who have used marijuana or cannabis in the past 12 months	16.7%	CSTADS (2016–2017)
Spirituality	% of population aged 15–17 years who report that religious or spiritual beliefs are “very important” or “somewhat important” in their daily life	45.7%	CCHS – Mental Health (2012)

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INDICATOR GROUP	INDICATOR MEASURE(S)	LATEST DATA	DATA SOURCE (YEAR)
<b>FAMILY DETERMINANTS</b>			
Family relationships	% of Grade 6–10 students who report it is “very easy” or “easy” to talk to their parents about things that really bother them	83.2%	HBSC (2013–2014)
	% of Grade 6–10 students who have high levels of communication in their family	58.3%	HBSC (2013–2014)
Parenting style	% of Grade 6–10 students who report their parents trust them	77.3%	HBSC (2013–2014)
	% of Grade 6–10 students who report their parents expect too much from them	28.7%	HBSC (2013–2014)
Family health status and substance use by family members	% of population aged 15–17 years with a family member who has problems with their emotions, mental health or use of alcohol or drugs	29.4%	CCHS – Mental Health (2012)
	% of population aged 15–17 years with a family member who has problems with their emotions, mental health or use of alcohol or drugs who report that their life is affected “a lot” or “some” by their family member’s problems	26.5%	CCHS – Mental Health (2012)
Household composition	% of population living in a lone-parent household	18.7%	CCHS (2017)
	% of population living in a two-parent household	71.1%	CCHS (2017)
Household income	% of population under the age of 18 years who live below low-income cut-offs after tax	8.5%	CIS (2014)
<b>COMMUNITY DETERMINANTS</b>			
Community involvement	% of Grade 6–10 students who are involved in at least one club or organization	88.9%	HBSC (2013–2014)
Social networks	% of Grade 6–10 students who report they can count on their friends when things go wrong	74.3%	HBSC (2013–2014)
	% of Grade 6–10 students who have friends to share joys and sorrows with	79.2%	HBSC (2013–2014)
Social support	% of population aged 15–17 years with a high level of perceived social support	95.4%	CCHS – Mental Health (2012)
School environment	% of Grade 6–10 students who report they feel they belong at their school	63.2%	HBSC (2013–2014)
Neighbourhood social environment	% of Grade 6–10 students who report they trust the people in the area where they live	60.2%	HBSC (2013–2014)
	% of population aged 15–17 years who report that their neighbourhood is a place where neighbours help each other	90.4%	GSS Victimization (2014)
	% of population aged 15–17 years who report that social disorder in their neighbourhood is “a very big problem” or “a fairly big problem”	6.3%	GSS Victimization (2014)
Neighbourhood built environment	% of Grade 6–10 students who report there are places such as recreation centres, parks and shopping centres to spend free time in the area where they live	74.2%	HBSC (2013–2014)
<b>SOCIETY DETERMINANTS</b>			
Inequality	In development		
Discrimination and stigma	% of population who experienced unfair treatment at least once in the past year based on characteristics such as gender, race, age or appearance	39.1%	CCHS (2013) Discrimination Rapid Response

**Abbreviations:** CCHS, Canadian Community Health Survey; CHMS, Canadian Health Measures Survey; CIS, Canadian Income Survey; CSTADS, Canadian Student Tobacco, Alcohol and Drugs Survey; GSS, General Social Survey; HBSC, Health Behaviour in School-Aged Children.

**Note:** “In development” refers to measures that are under development either because a data source is currently not available or because more research has to be done to identify a promising measure and data source.

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**TABLE 2**  
Adjusted odds ratios of three positive mental health outcomes for youth, Canada, 2016–2017

Variable	Autonomy	Competence	Relatedness
	aOR (95% CI)	aOR (95% CI)	aOR (95% CI)
<b>Sex</b>			
Females	Ref	Ref	Ref
Males	0.98 (0.96–1.00)	1.02 (1.00–1.04)	0.83 (0.81–0.85)
<b>Grade</b>			
Grade 7	1.07 (1.01–1.14)	1.72 (1.64–1.81)	1.98 (1.88–2.09)
Grade 8	0.94 (0.89–0.99)	1.24 (1.19–1.30)	1.43 (1.37–1.49)
Grade 9	0.96 (0.92–1.01)	1.09 (1.05–1.14)	1.08 (1.03–1.13)
Grade 10	Ref	Ref	Ref
Grade 11	1.00 (0.95–1.05)	0.96 (0.93–0.99)	1.02 (0.98–1.06)
Grade 12	1.12 (1.07–1.17)	1.01 (0.95–1.06)	1.12 (1.07–1.17)
<b>Province</b>			
British Columbia	1.35 (1.31–1.40)	1.31 (1.26–1.37)	1.36 (1.30–1.43)
Alberta	1.27 (1.24–1.31)	1.29 (1.24–1.34)	1.27 (1.22–1.32)
Saskatchewan	1.25 (1.19–1.32)	1.18 (1.11–1.24)	1.07 (1.00–1.13)
Manitoba	1.37 (1.31–1.43)	1.24 (1.18–1.31)	1.19 (1.12–1.26)
Ontario	1.32 (1.28–1.35)	1.33 (1.28–1.37)	1.38 (1.33–1.43)
Quebec	1.98 (1.92–2.04)	1.05 (1.01–1.08)	1.54 (1.48–1.59)
Nova Scotia	1.15 (1.11–1.19)	1.25 (1.21–1.29)	1.16 (1.11–1.22)
Prince Edward Island	1.32 (1.28–1.36)	1.40 (1.35–1.46)	1.37 (1.32–1.43)
Newfoundland and Labrador	Ref	Ref	Ref

**Data source:** Canadian Student Tobacco, Alcohol and Drugs Survey 2016–2017.

**Abbreviations:** aOR, adjusted odds ratio; CI, confidence interval; Ref, reference group.

**Note:** Logistic models adjusted for sex, grade and province.