

Appendix 1. Description of potential risk factors

Potential risk factor	Data collected in cycle(s)	Item(s)	Response choices	Recorded
Age at baseline	1-20	Date of birth, Date of survey	-	-
Sex	1-20	Are you a boy or a girl?	Male, female	-
Mother university-educated	13,17	How much education has your mother/father had?	Did not finish high school, high school graduate, vocational, technical school, CEGEP, completed university, other, don't know	no, yes (1-2 parent(s) university-educated), missing
French-speaking	1-20	What language do you speak most often at home?	English, French, English and French, other	French, other
Born in Canada	1-20	Were you born...?	In Canada, outside Canada	-
Depressive symptoms	1-20	During the past three months how often have you: (i) felt too tired to do things (ii) had trouble going to sleep or staying asleep (iii) felt unhappy, sad or depressed (iv) felt hopeless about the future (v) felt nervous or tense (vi) worried too much about things	never, rarely, sometimes, often	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 4)
Family stress	1-20	During the past 3 months, have you been worried or stressed by: (i) your parents separating or divorcing; (ii) your relationship with your father; (iii) your relationship with your mother; (iv) your relationship with your brother(s)/sister(s) (v) your new family (parents remarried)	not at all/not applicable, a little bit, quite a bit, a whole lot	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 4)
Other stress	1-20	During the past 3 months, have you been worried or stressed by: (i) breaking up with your boyfriend/girlfriend; (ii) your relationship with your friends; (iii) a health problem (such as acne or asthma); (iv) sex; (v) school work	not at all/not applicable, a little bit, quite a bit, a whole lot	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 4)
Lives with one parent only	1-20	Do you live with your: biologic mother, biologic father, step-mother, step-father	no, yes (for each person)	no, yes (lives with one parent only)
Used alcohol	1-20	During the past 3 months, how often did you drink alcohol (beer, wine, hard liquor)	never, a bit to try, once or a couple of times a month, once or a couple of times a week, every day	no, yes (a bit to try or more)
Smoked cigarette	1-20	Check the box that describes you best	I have never smoked a cigarette, even just a puff; I have smoked cigarettes, but not at all in the past 12 months; I smoked cigarettes once or a couple of times in the past 12 months; I smoke cigarettes once or a couple of times each month; I smoke cigarettes once or a couple of times each week; I smoke cigarettes every day	no (I have never smoked a cigarette, even just a puff; I have smoked cigarettes, but not at all in the past 12 months), yes (I smoked cigarettes once or a couple of times in the past 12 months; I smoke cigarettes once or a couple of times each month; I smoke cigarettes once or a couple of times each week; I smoke cigarettes every day)
Used other tobacco products	1-20	During the past 3 months, how often did you: (i) smoke a cigar or cigarillo; (ii) use chewing tobacco or snuff	never, a bit to try, once or a couple of times a month, once or a couple of times a week, every day	no (never), yes (a bit to try or more)
Parent(s) smoke	1-20	Does your mother/father currently smoke cigarettes?	no, yes (for each parent)	no, yes (1-2 parents smoke)
Sibling(s) smoke	1-20	You have ___sisters/___brothers who smoke cigarettes.	0,1,2,3,4,5,6+	no, yes (≥ 1 sibling smokes)
Friend(s) smoke	1-20	How many of the people whom you usually hang out with smoke	none, a few, about half,	no (none), yes (a few,

		cigarettes?	more than half, most or all	about half, more than half, most or all
Participated in team sports	1-20	Since September of this school year, did you belong to any of the following intramural or extramural school sports teams (teams that were not part of your regular gym class)...? (list of 13 different teams). Now think about sports teams and lessons outside of school. In the past 3 months, did you belong to a...? (list of 12 different teams)	no, yes (for each team or lesson)	no, yes (≥ 1 team)
MVPA	1-20	Think about the physical activities that you did last week from Monday to Sunday outside your regular school gym class. For each activity that you did for 5 minutes or more at one time, mark an "X" to show the day(s) on which you did that activity (list of 29 different activities).	no, yes for each activity, Monday to Sunday. 21 of 29 activities were designated moderate (i.e., 3-6 METs) and 6 of 29 activities were designated vigorous (i.e., >6 METs).	Each activity was summed to create a continuous score (possible range 0-189)
BMI	1	Height and weight were measured by trained and certified technicians. If there was a discrepancy between the two measures (i.e., > 0.5 cm for height or > 0.5 lbs for weight) a third measure was taken. The mean was calculated (if there were three measures, the two closest measures were used). Body mass index (BMI) was calculated as weight (kg) / height ² (m).	-	-
Worry about weight	1-20	During the past 3 months, have you been worried or stressed about your weight?	not at all/not applicable, a little bit, quite a bit, a whole lot.	no (not at all), yes (a little bit or more)
TV hours/wk	1-20	On weekdays, I usually watch ____ hour(s) of television a day; On weekends, I usually watch ____ hour(s) of television a day.	no. hours TV/weekday, no. hours TV/weekend	no. hours TV/week
Computer hours/wk	1-20	On weekdays, I usually play video or computer games ____ hour(s) a day; On weekends, I usually play video or computer games ____ hour(s) a day.	no. hours computer per weekday, no. hours computer per weekend	no. hours computer/week
Impulsivity	14,18	How true are each of the following statements for you: (i) I often do things without stopping to think (ii) I am an impulsive person (iii) I often talk quickly, before thinking things out (iv) I often get involved in things I later wish I could get out of (v) I need to use a lot of self-control to keep out of trouble (vi) I often get into trouble because I do things without thinking (vii) I get carried away by new and exciting ideas, but I don't think of the possible problems	not at all true, a little true, somewhat true, quite true, very true	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 5)
Novelty-seeking	14,18	How true are each of the following statements for you: (i) I often try new things just for fun or thrills, even if most people think it is a waste of time (ii) When nothing new is happening, I usually start looking for something that is exciting (iii) I can usually get people to believe me, even when what I'm saying isn't quite true (iv) I often do things based on how I feel at the moment (v) I sometimes get so excited that I lose control of myself (vi) I like it when people can do whatever they want, without strict rules and regulations (vii) I often follow my instincts, without thinking through all the details (viii) I can do a good job of "stretching the truth" when I'm talking to people (ix) I change my interests a lot, because my attention often shifts	not at all true, a little true, somewhat true, pretty true, very true	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 5)
Self-esteem	12	Indicate the response which best describes your situation. (i) I think I am someone who has something valuable to offer, at least as much as other people do (ii) I think I have a certain number of good qualities (iii) Everything considered, I tend to think I'm a failure (iv) I think I am capable of doing things as well as other people my age (v) There's little reason to be proud of myself; (vi) I have a positive attitude towards myself; (vii) I find it difficult to accept myself as I am; (viii) Sometimes I think I'm really useless; (ix) I've thought of myself as a good-for-nothing on occasion	not at all true, a little true, very true	Responses to each item were summed and divided by the number of items responded to, to create a continuous score (range 1 to 3)

Appendix 2. Number of missing values for each of the potential risk factors 1999-2012 (n=878)

	n	%
Age at baseline	0	0
Male sex	0	0
Mother university-educated*	104	11.8
French-speaking	0	0
Born in Canada	0	0
Depressive symptoms	20	2.3
Family stress	22	2.5
Other stress	20	2.3
Lives with one parent only	20	2.3
Used alcohol	21	2.4
Smoked cigarette	20	2.3
Used other tobacco products	25	2.8
Parent(s) smoke	28	3.2
Sibling(s) smoke	20	2.3
Friend(s) smoke	20	2.3
Participated in a team sport	20	2.3
MVPA	24	2.7
BMI	60	6.8
Worry about weight	22	2.5
TV hours/wk	24	2.7
Computer hours/wk	20	2.3
Impulsivity	164	18.7
Novelty-seeking	162	18.5
Self-esteem	143	16.3
No. years since cannabis use initiation	0	0
Age at cannabis use initiation	0	0

* Participants with missing data on mother university-educated were included in analyses.

Note: Analyses were done on complete data only.

Appendix 3: Description of derivation of sample

