

Understanding & Promoting Well-being in Middle Childhood: MDI Trends & Data Dashboard

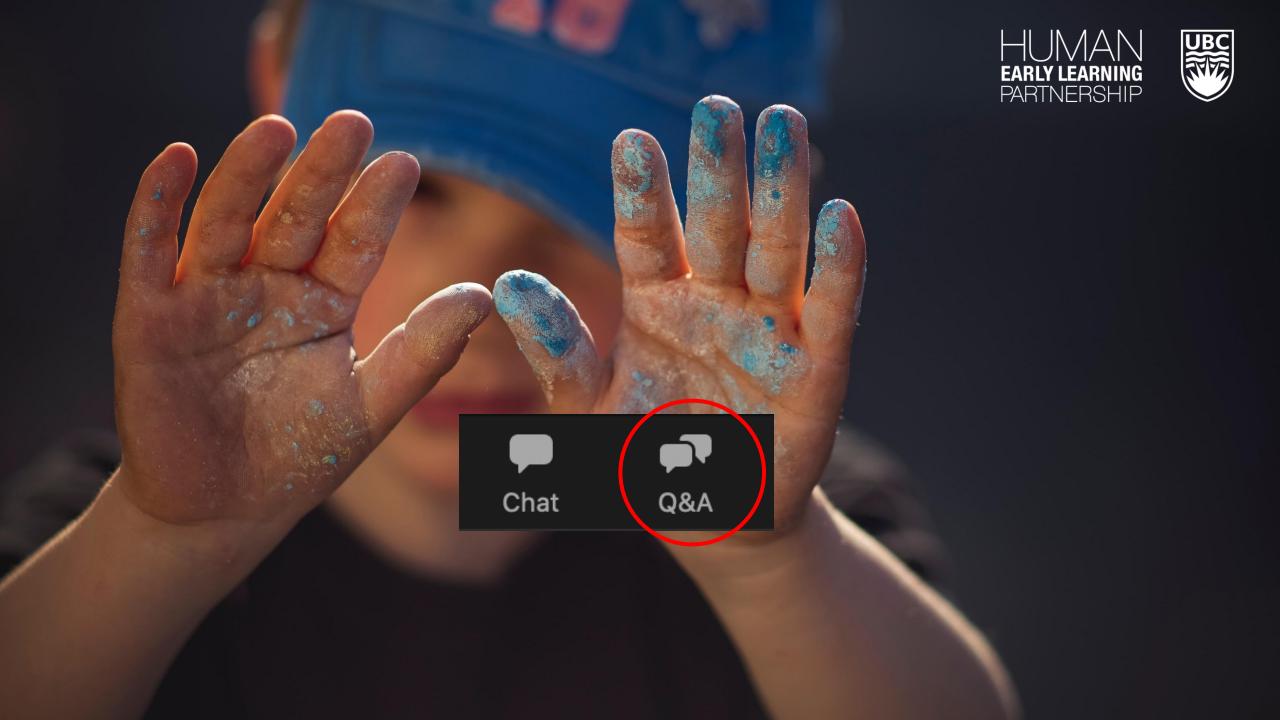








Our work takes place on the traditional, ancestral, unceded territory of the xwməθkwəýəm (Musqueam) people



Aboriginal
Steering
Committee

Established in 2003





Child Development Monitoring System











TDi CHEQ

EDi

MDi

YDi

Toddler
Development
Instrument

12 - 24 months

Parent & caregiver questionnaire

EARLY EXPERIENCES
& CONTEXTS

Childhood Experiences Questionnaire

Start of Kindergarten

Parent & caregiver questionnaire

EARLY EXPERIENCES & CONTEXTS

Early
Development
Instrument

Mid-Kindergarten

Teacher questionnaire

SKILLS & COMPETENCES

Middle Years
Development
Instrument

Grades 4 - 8

Student questionnaire

WELL-BEING & ASSETS

Youth
Development
Instrument

Grade 11

Student questionnaire

WELL-BEING & ASSETS

Outline

- MDI Background, Overview, Participation
- MDI Data Trends Over Time
- Spotlight on Gender
- New MDI Questions
- Q&A
- MDI Data Dashboard
- Data in Action







MDI Dimensions

Measures areas of development strongly linked to well-being



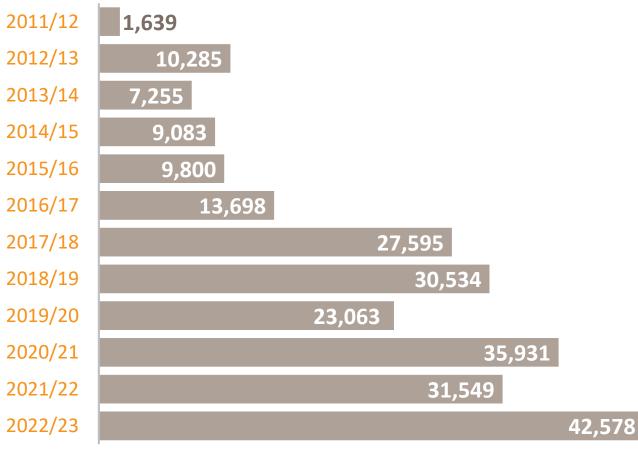


USE OF

OUT-OF-SCHOOL TIME



MDI Participation 2009/2010 – 2022/2023



2022/23 Grade 4: 6,765 Grade 5: 12,415 Grade 6: 6,428

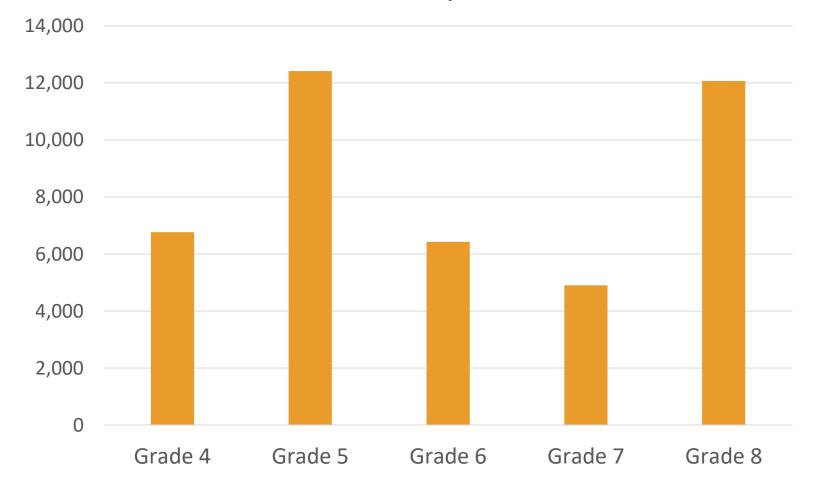
Grade 7: 4,901 Grade 8: 12,069

Total overall (all years & grades): 279,469



MDI Participation, 2022/23





Project Level
Participation Rate:
42,578/53,251 = **80**%

School District Range: **60%-93%**



2022/2023 BC Districts

SD#	School District Name			
005	Southeast Kootenay			
006	Rocky Mountain			
010	Arrow Lakes			
019	Revelstoke			
020	Kootenay-Columbia			
022	Vernon			
023	Central Okanagan			
028	Quesnel			
033	Chilliwack			
034	Abbotsford			
035	Langley			
037	Delta			
038	Richmond			
039	Vancouver			
040	New Westminster			
041	Burnaby			
042	Maple Ridge-Pitt Meadows			
043	Coquitlam			

CD #	Cabaal District Name		
SD#	School District Name		
044	North Vancouver		
046	Sunshine Coast		
047	Powell River		
048	Sea to Sky		
049	Central Coast		
051	Boundary		
052	Prince Rupert		
053	Okanagan Similkameen		
059	Peace River South		
060	Peace River North		
061	Greater Victoria		
067	Okanagan Skaha		
070	Pacific Rim		
071	Comox Valley		
082	Coast Mountains		
091	Nechako Lakes		
093	Conseil scolaire francophone		





Well-being Index



The Well-Being Index

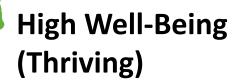
Optimism
Self-Esteem
Happiness
Absence of Sadness
General Health

Low Well-Being

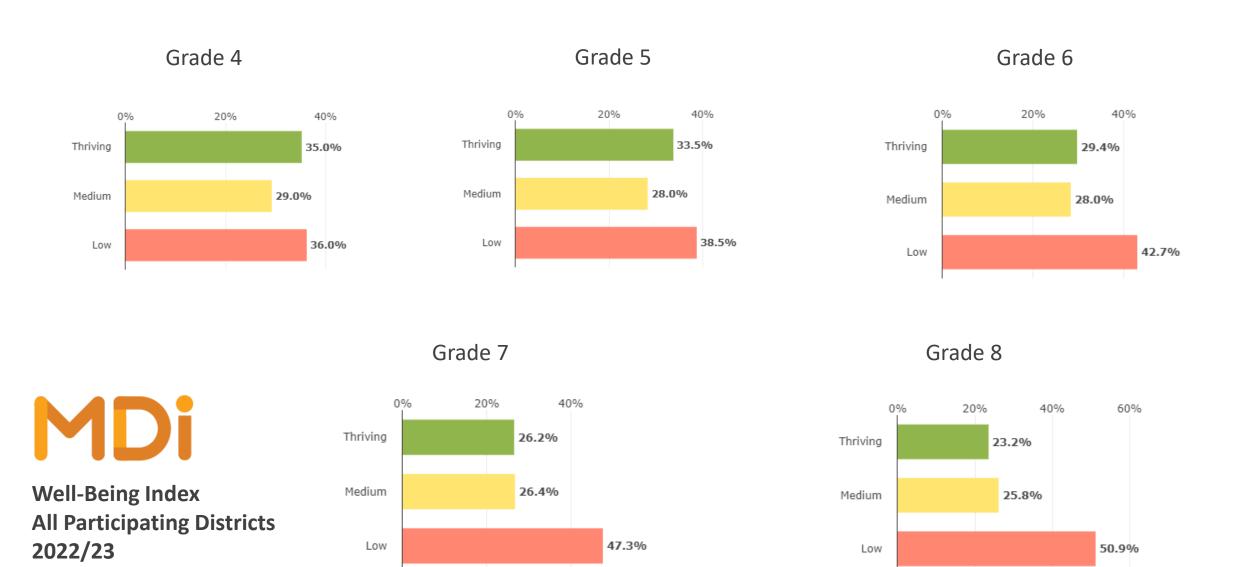
Children who are reporting negative responses on at least 1 measure of well-being.

Medium to High Well-Being

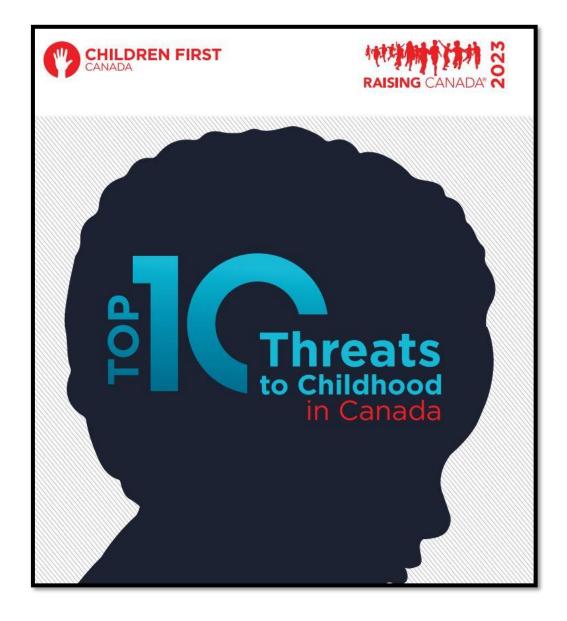
Children who are reporting no negative responses, and fewer than 4 positive responses.



Children who are reporting positive responses on at least 4 of the 5 measures of well-being.



There was an overall decline in % of children thriving at each grade level from grades 4 to 8.

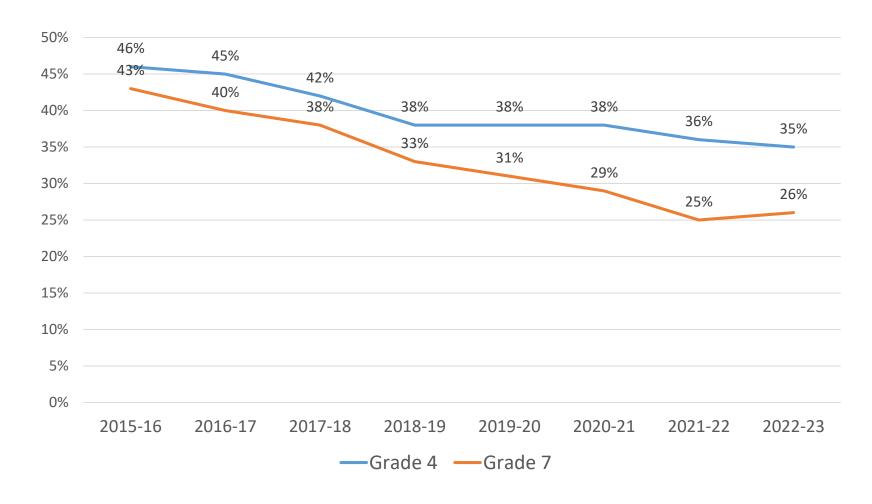


#2: Poor Mental Health

"The most recent data released by Statistics Canada revealed that in 2018, **62**% of youth aged 15 to 24 had excellent or very good mental health. But that number markedly decreased in the spring of 2020 to **40**% in the same age category.

Subsequent research examining changes in youth mental health has shown that depression, particularly among girls, worsened during the pandemic."

MDI Well-being Index Percent *Thriving*, Grades 4 & 7 Over Time, All BC Participating Districts



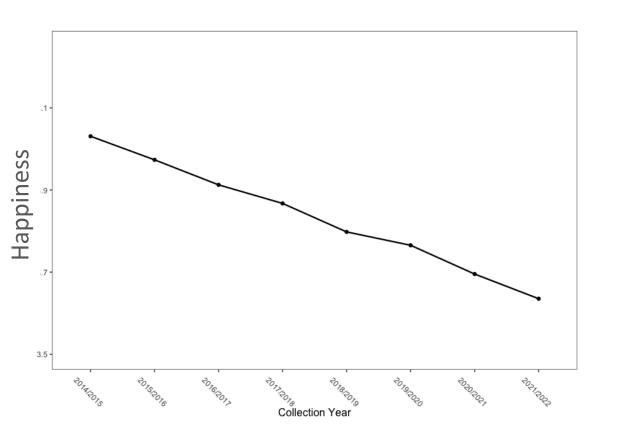


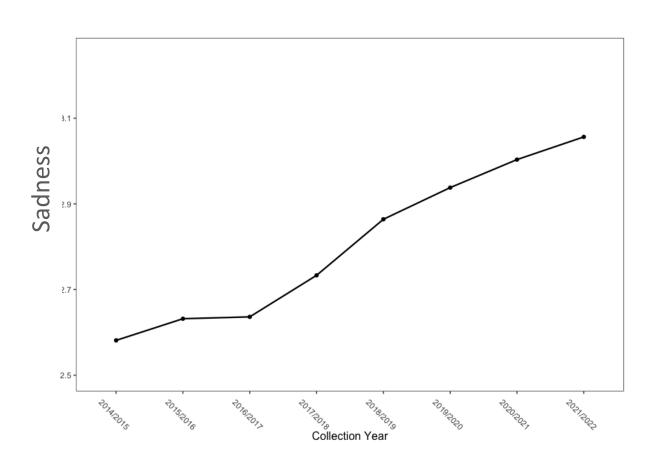
Well-being Index

Component Measure Analysis: Happiness & Sadness



MDI, Grade 7, All BC Participating Districts, Over Time Happiness & Sadness

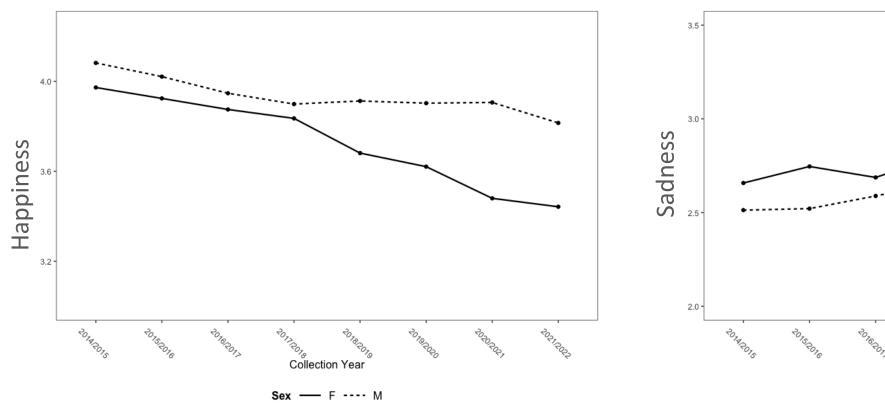


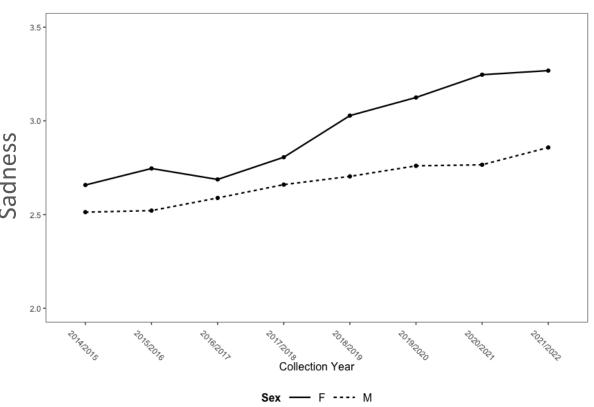


Over time, rates of "happiness" have declined while rates of "sadness" have increased.



MDI, Grade 7, All BC Participating Districts, Over Time Happiness & Sadness by Sex (school registration)

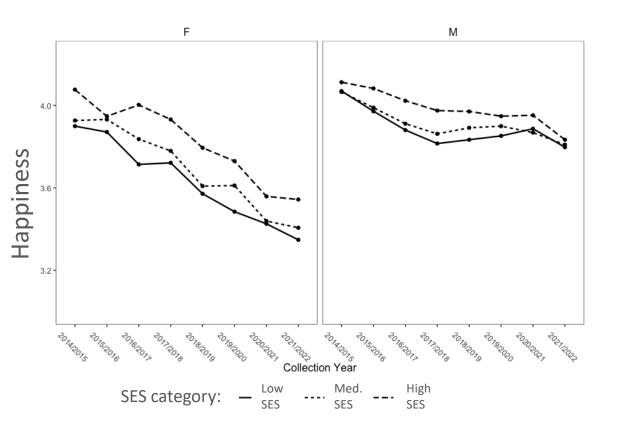


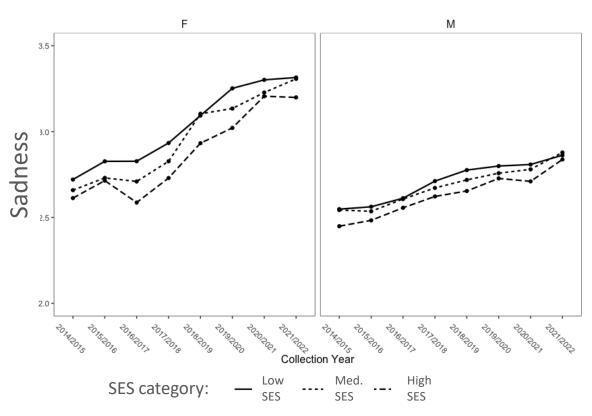


Girls reported lower rates of "happiness" and higher rates of "sadness" than boys.



MDI, Grade 7, All BC Participating Districts, Over Time Happiness & Sadness by Sex and SES (low, medium, high)



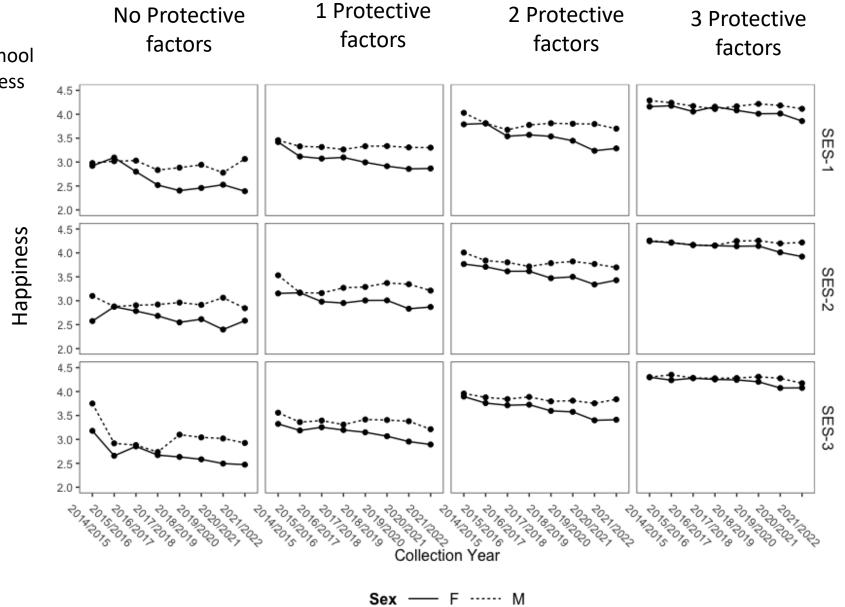


After considering sex differences, children in lower SES neighbourhoods reported lower levels of "happiness" and higher rates of "sadness".





- Peer belonging
- Adult support in school
- School connectedness



Stepwise relationship between additional protective factors reported by children and increases in happiness, reducing the effect of SES on happiness.



Assets Index



The Assets Index



ADULT RELATIONSHIPS

Adults at School
Adults in the Neighbourhood
Adults at Home



PEER RELATIONSHIPS

Peer Belonging Friendship Intimacy



NUTRITION AND SLEEP

Eating Breakfast
Meals with Adults at Home
Frequency of Good Sleep

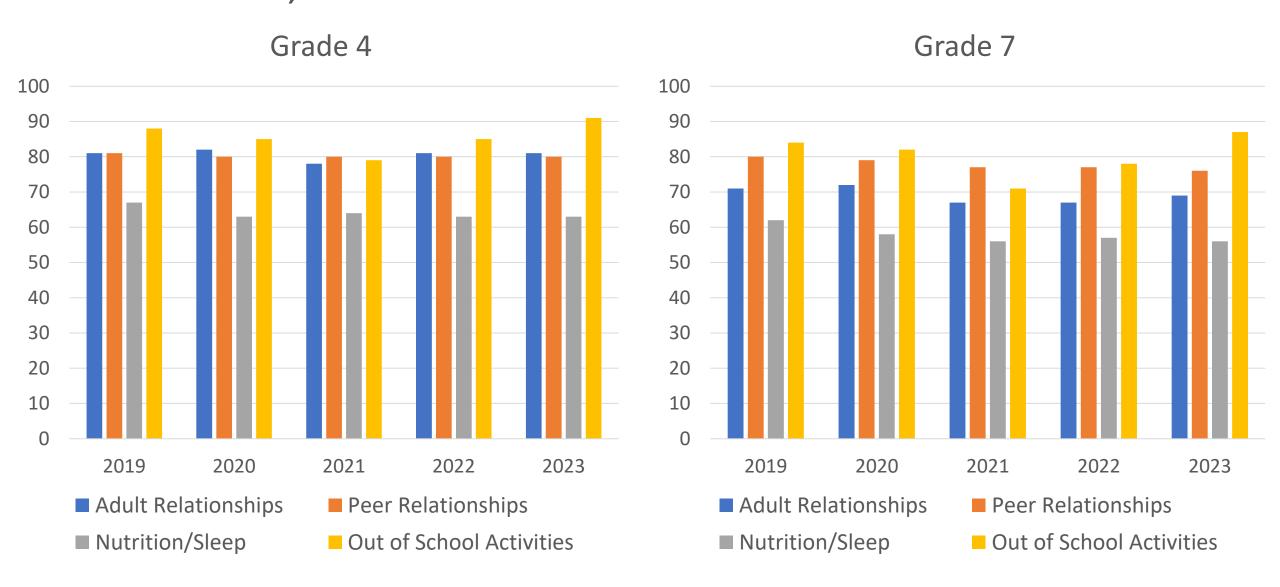


OUT OF SCHOOL ACTIVITIES

Organized Activities



MDI Assets Index, All BC Participating Districts, Grades 4 & 7 Asset Index, Over Time



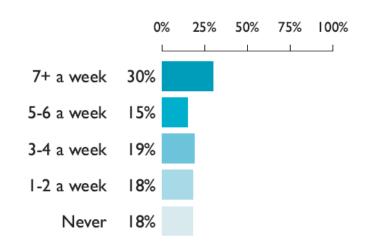
Any Organized Activity, Days Per Week, Grade 8

OUT-OF-SCHOOL ACTIVITIES

Children were asked, "In a normal week, outside of school hours, how often do you spend time doing the following activities?":

ANY ORGANIZED ACTIVITY

Children who participated in any out-of-school activity that was structured and supervised by an adult (e.g., educational lessons, youth organizations, music or art lessons and sports practice). Data are reported as the number of times a child participated in any organized activity whether it's the same or different activities in a week.







What does the research say?

- Children with gender-nonconforming identities sometimes don't feel safe and accepted in the community.
- Higher rates of bullying, less connection to school, and more absenteeism than cisgender peers.
- YDi 2022/23 (grade 11 students): 4% of youth self-identified as "non-binary" and 2% self-identified "in another way".
- More research is needed.

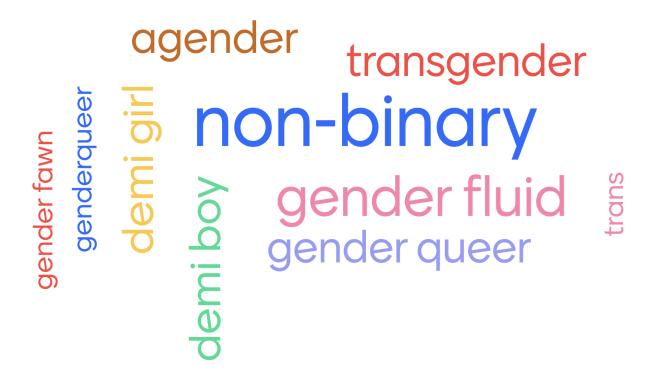
MDI Self Reported Gender, 2022/23

26,984 children in grades 6,7 and 8 completed the MDI

4% of those students identified their gender "in another way"



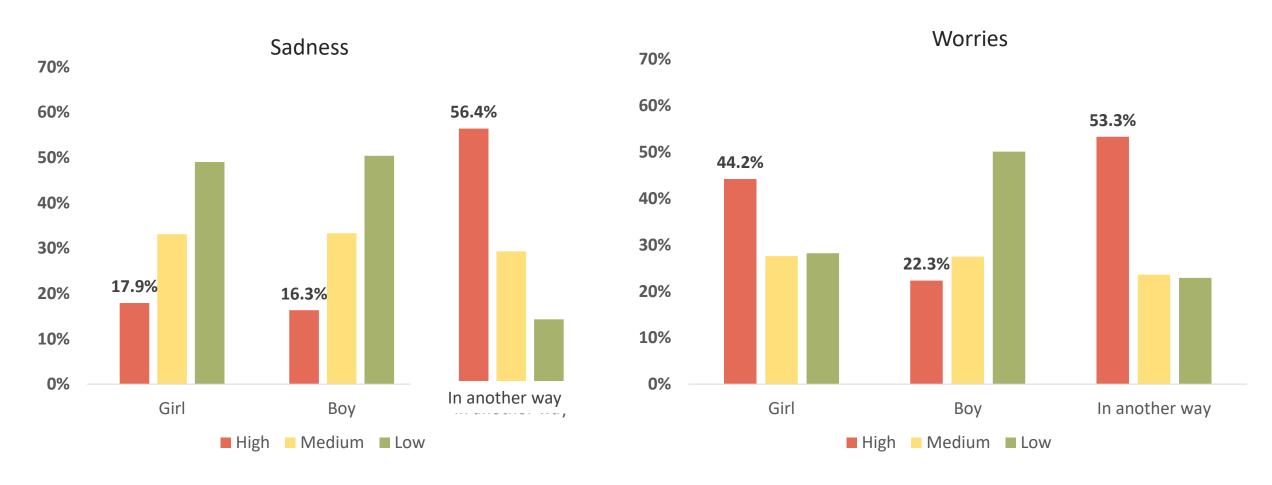
How do children describe their gender identity?





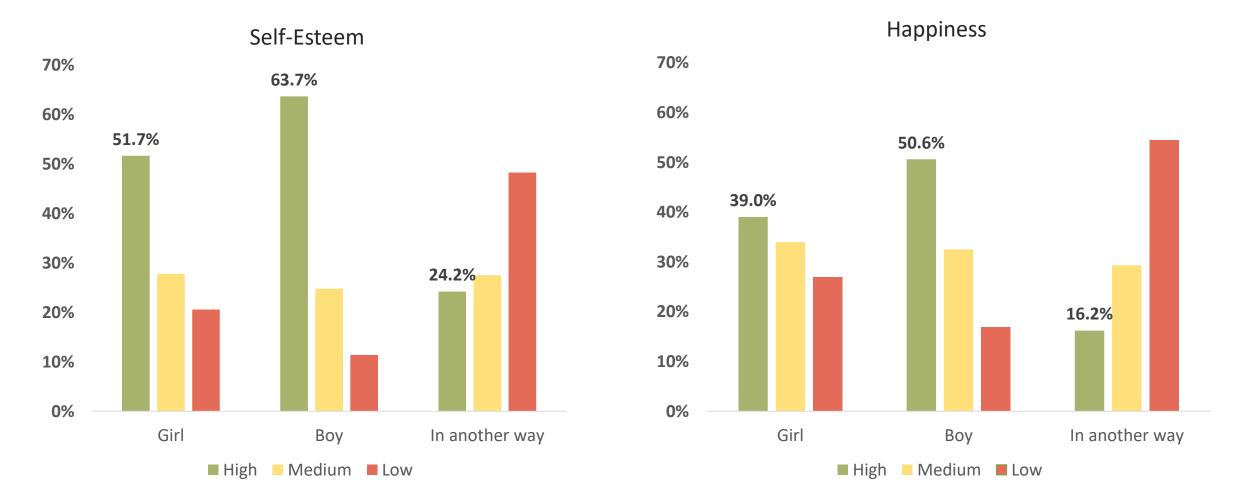
MDI 2022/23, Grades 6-8, Worries & Sadness

Students who self-identified in another way reported higher levels of sadness and worries than self-identified boys and girls.



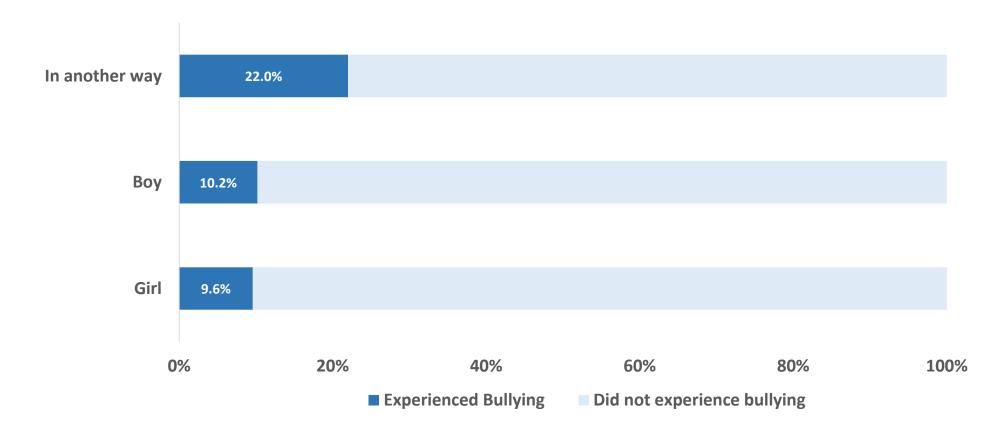
MDI 2022/23, Grades 6-8, Self-Esteem & Happiness

Students who self-identified in another way reported lower rates of self-esteem and happiness than self-identified boys and girls.

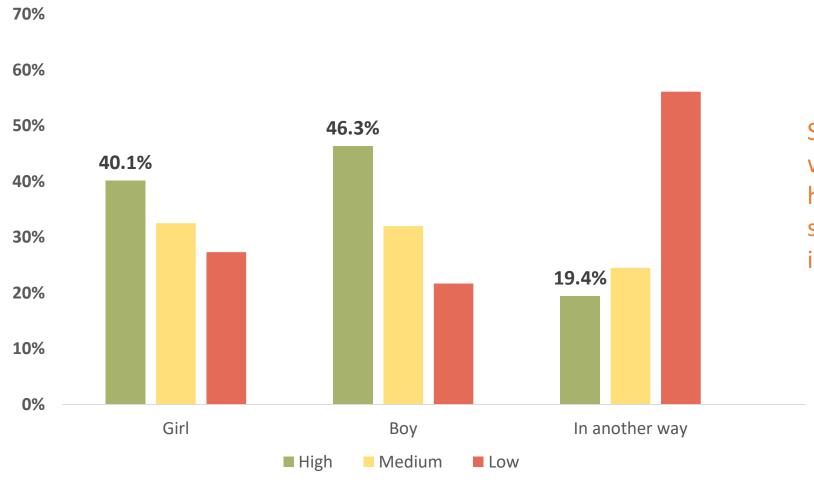


MDI 2022/23, Grades 6-8, Bullying

Children who self-identified in another way were twice as likely to report experiencing bullying at school.



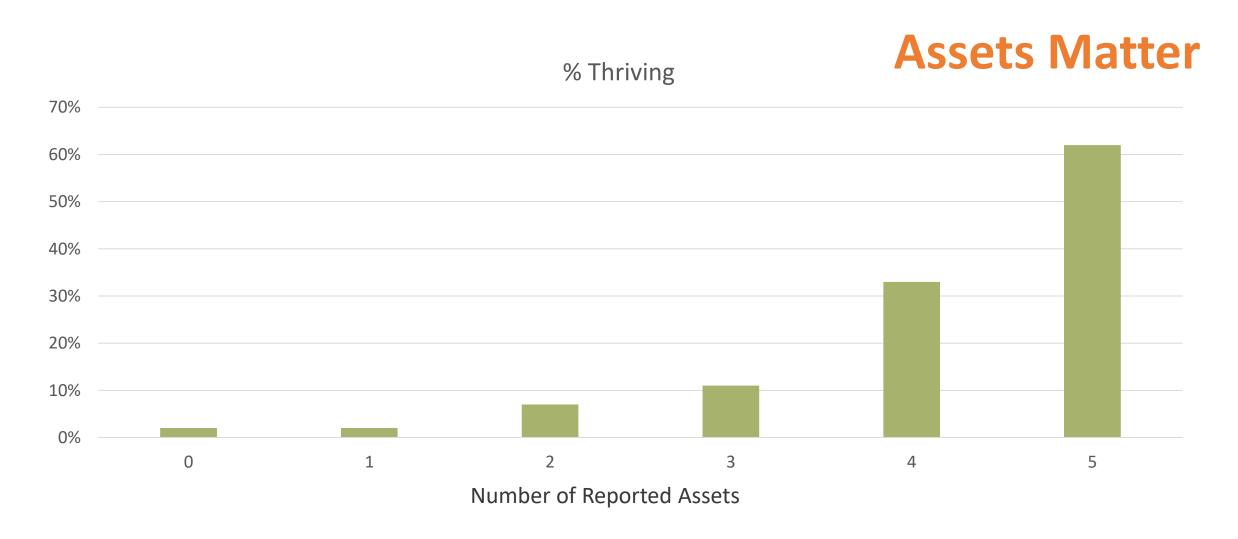
MDI 2022/23, Grades 6-8, School Belonging



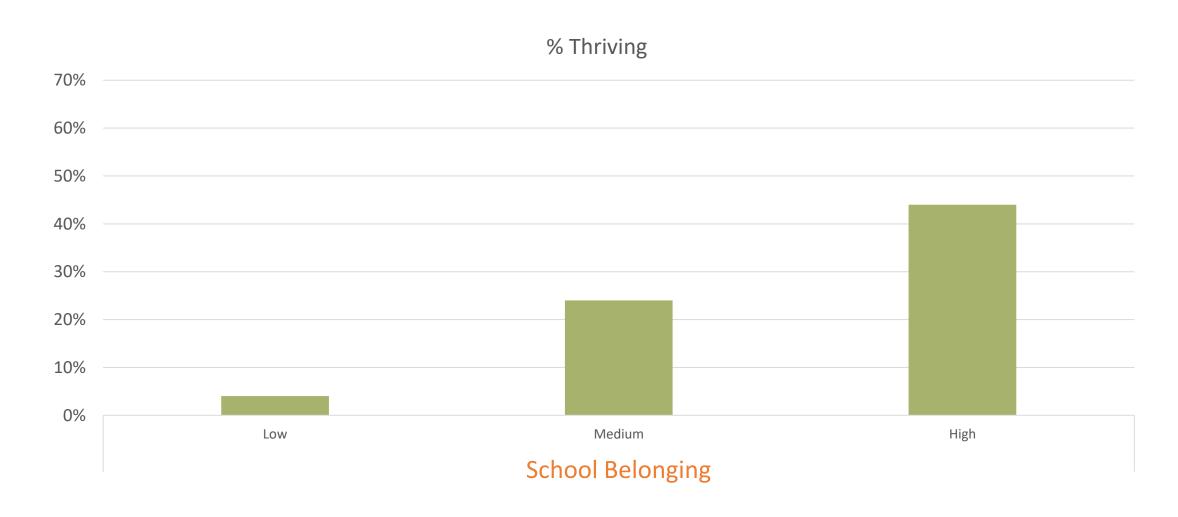
Self-identified boys and girls were twice as likely to report high levels of belonging at school than students who self-identify in another way.

School Belonging

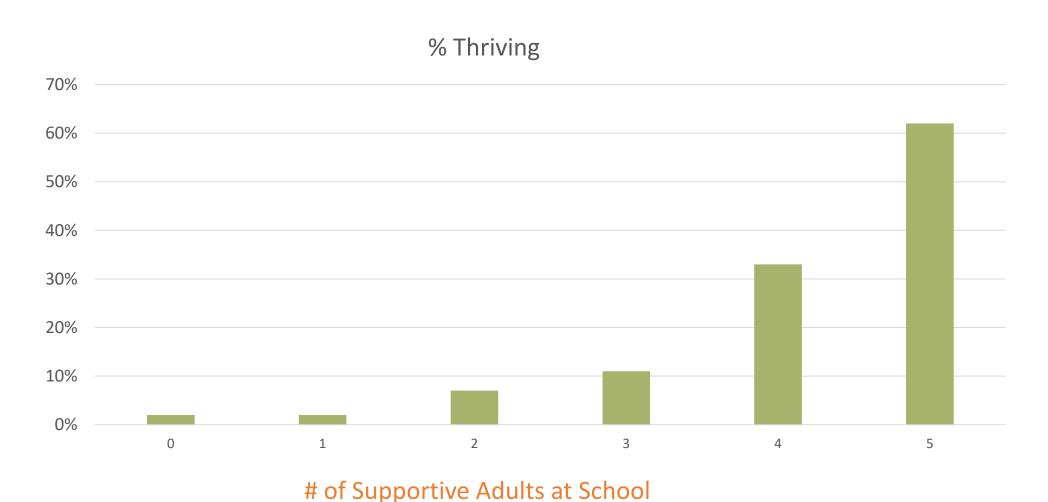
MDI 2022/23, Grades 6-8, Assets by Well-being Children Identifying Gender "In Another Way"



MDI 2022/23, Grades 6-8, Well-being by School Belonging Children Identifying Gender "In Another Way"



MDI 2022/23, Grades 6-8, Well-being by # of Adults at School Children Identifying Gender "In Another Way"



Sexual Orientation and Gender Identity (SOGI)

- SOGI 123 is a set of tools and resources for creating a safe, welcoming and inclusive environment for all BC students regardless of sexual orientation or gender identity.
- Introduced in 2016 in BC schools
- Safe, inclusive and accepting schools benefit ALL children.







Eco Anxiety

Climate change is happening globally
Constant negative environmental information
Existential threat, uncertainty about the future

Children need to know!

...and they need to feel empowered to climate action

Gunariti, H., Wang, Y., Watkins, E., Capetola, T., Henderson-Wilson, C., & Patrick, R., (2022). Hope, coping and eco-anxiety: Young people's mental health in a climate-impacted Australia. *International Journal of Environmental Research and Public Health*, 19, 5528.

Climate & Environmental Concern Questions

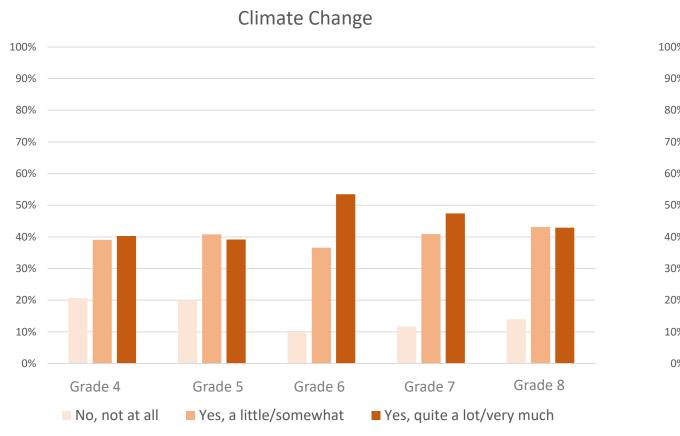
79. Are you concerned about the following environmental issues?

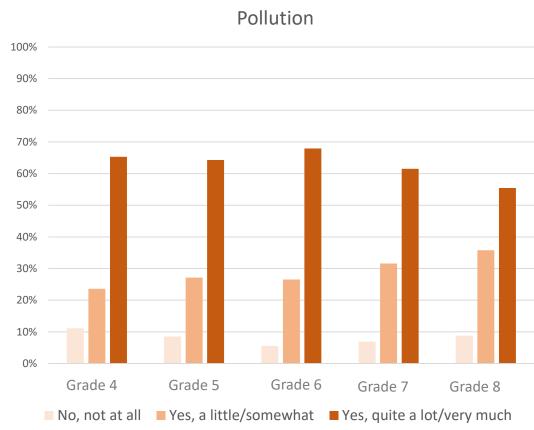
a) Climate change (for example, global warming)	No, not at all	Yes, a little	Yes, somewhat	Yes, quite a bit	Yes, very much
b) Species extinction (when an entire type of animal dies out)	No, not at all	Yes, a little	Yes, somewhat	Yes, quite a bit	Yes, very much
c) Deforestation (cutting down too much forest)	No, not at all	Yes, a little	Yes, somewhat	Yes, quite a bit	Yes, very much
d) Pollution (for example, garbage, ocean plastic)	No, not at all	Yes, a little	Yes, somewhat	Yes, quite a bit	Yes, very much



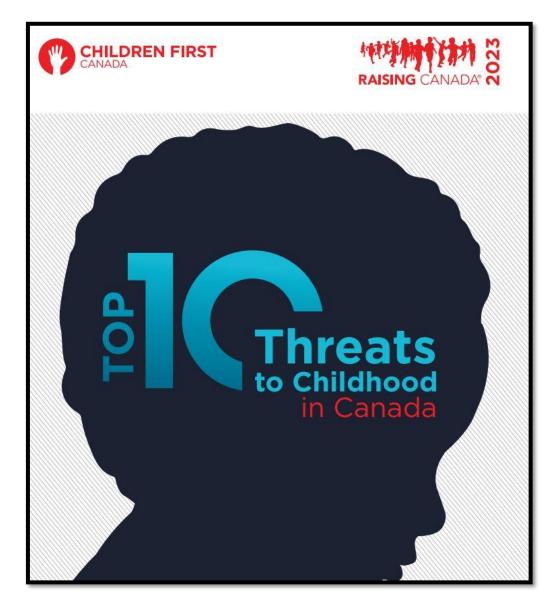


Climate Concerns





Children in all grades expressed mostly high levels of concern for climate change and pollution in particular.



#10: Climate Change

Half of Canadian youth (48%) aged 16-25 expressed feeling high levels of anxiety about air pollution and climate change, while three-quarters (73%) expressed fear for their future.



- Physical Activity
- Sleep
- Screen Time & Social Media



24 Hour Movement Guidelines

A healthy 24 hours includes:

SWEAT

Moderate to vigorous physical activity

An accumulation of at least 60 minutes per day of moderate to vigorous physical activity involving a variety of aerobic activities. Vigorous physical activities, and muscle and

bone strengthening activities should each be incorporated at least 3 days per week;

STEP

Light physical activity

Several hours of a variety of structured and unstructured light physical activities;

SLEEP

Sleep

Uninterrupted 9 to 11 hours of sleep per night for those aged 5–13 years and 8 to 10 hours per night for those aged 14–17 years, with consistent bed and wake-up times;

SEDENTARY BEHAVIOUR

SEDENTARY BEHAVIOUR

No more than 2 hours per day of recreational screen time.

Limited sitting for extend periods.



Children & Youth 5-17 Years

Guidelines encourage kids to Sweat, Step, Sleep and Sit the right amounts each day.



MDI 2022/23, Grade 5, Physical Activity

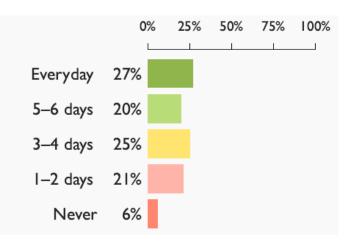


Physical activity is any activity that increases your heart rate and makes you out of breath some of the time. Physical activity can be done in sports, school activities, playing with friends, or walking to school. Some examples of physical activity are running, fast walking, skating, biking, dancing, skateboarding, swimming, soccer, and basketball.

Let's try to add up all the time you spend in physical activity each day:

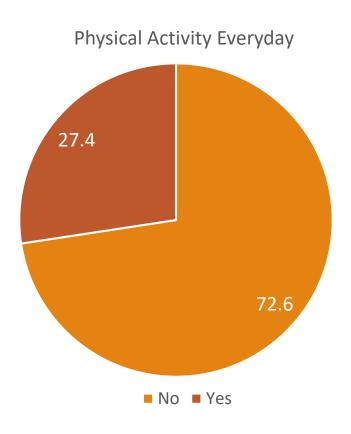
PHYSICAL ACTIVITY

Children are asked, "In a normal week, how many days are you physically active for a total of at least 60 mins or one hour per day?"

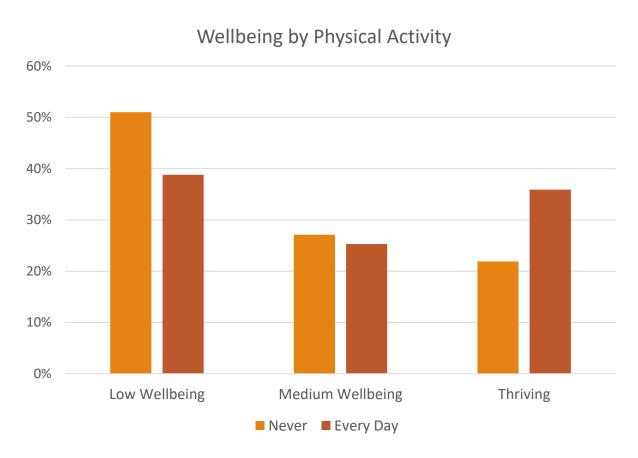




MDI 2022/23, Grades 6-8, Physical Activity



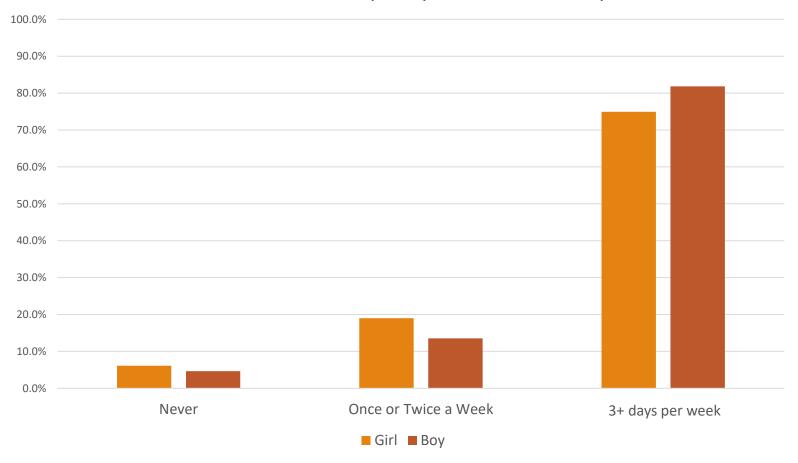
1/4 of children in grades 6-8 reported that they met the recommended 1+ hours/day of vigorous physical activity everyday



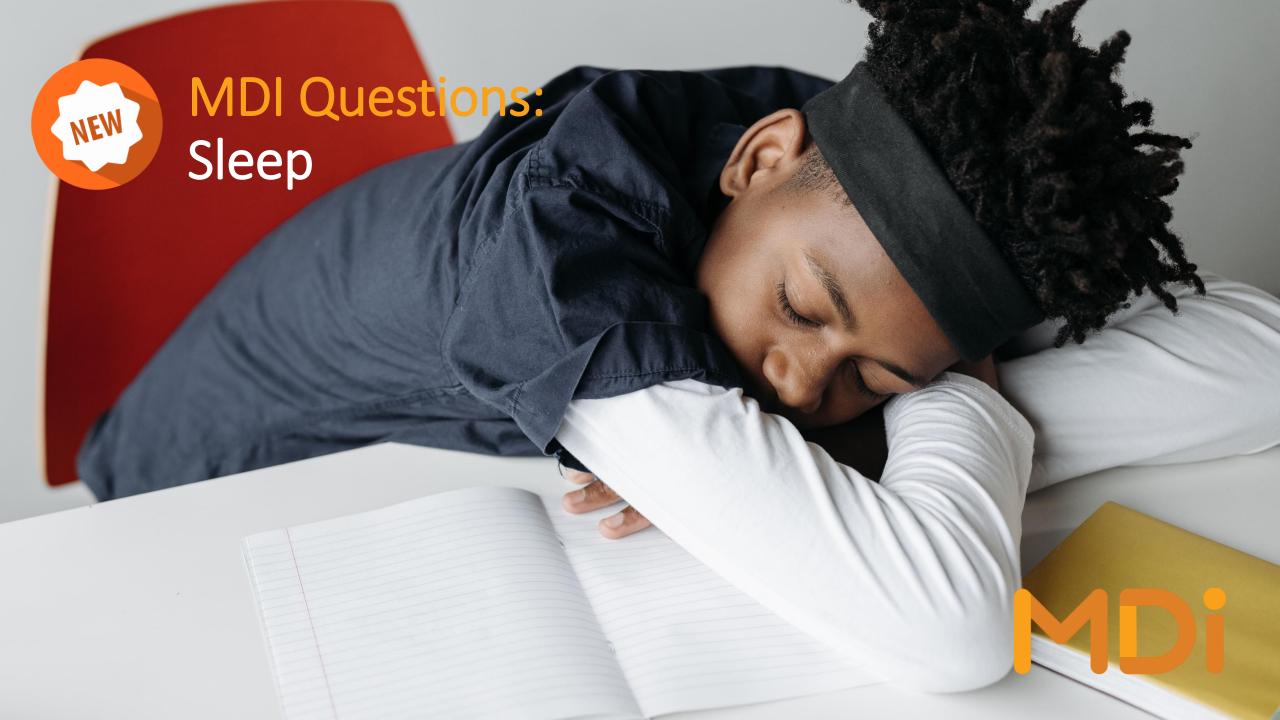
Children who reported being physically active everyday were more likely to report higher well-being.

MDI 2022/23, Grades 6-8, Physical Activity





Boys reported engaging in physical activity 3+ days per week slightly more than girls.



Wake up Time





WHAT TIME DO YOU USUALLY WAKE UP DURING THE WEEKDAYS?

Before 6 am	8%
6 am-7 am	37%
7 am-8 am	41%
After 8 am	13%



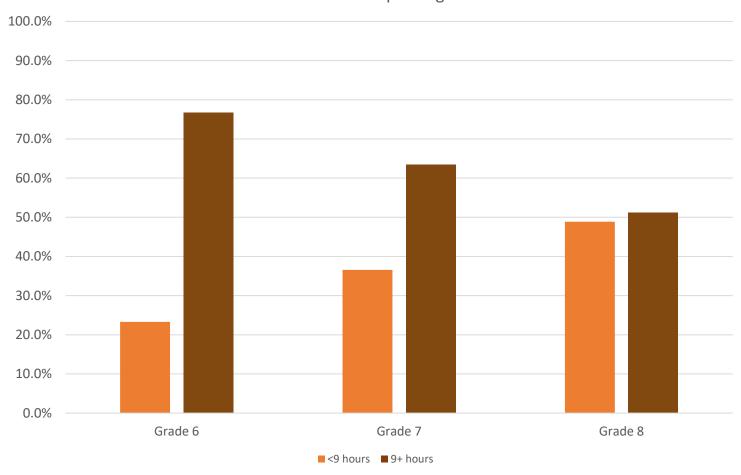
WHAT TIME DO YOU USUALLY GO TO BED DURING THE WEEKDAYS?

Before 9 pm	5%
9 pm-10 pm	26%
10 pm-11 pm	31%
11 pm-12 am	20%
After 12 am	17%



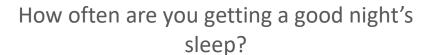
MDI 2022/23, Grades 6-8, # Hours Sleep/Night

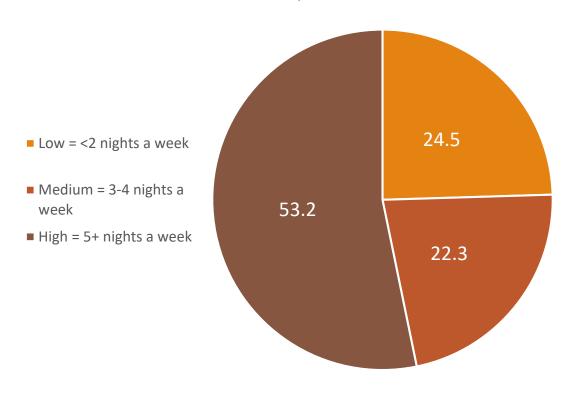




Younger children are more likely to meet the recommended 9-11 hours of sleep per night than older children.

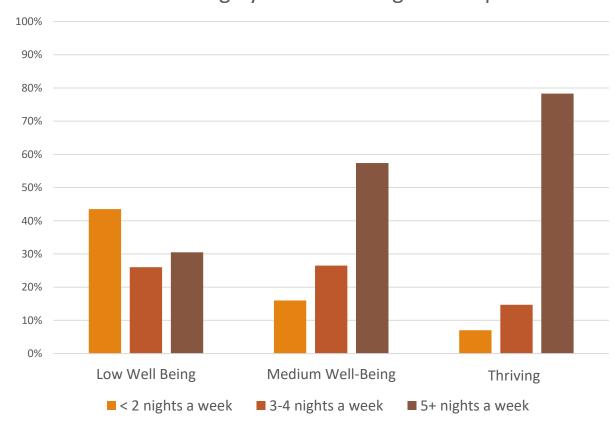
MDI 2022/23, Grades 6-8, Sleep





Just over half of children in grades 6-8 reported that they get a "good night's sleep" 5+ days/week.

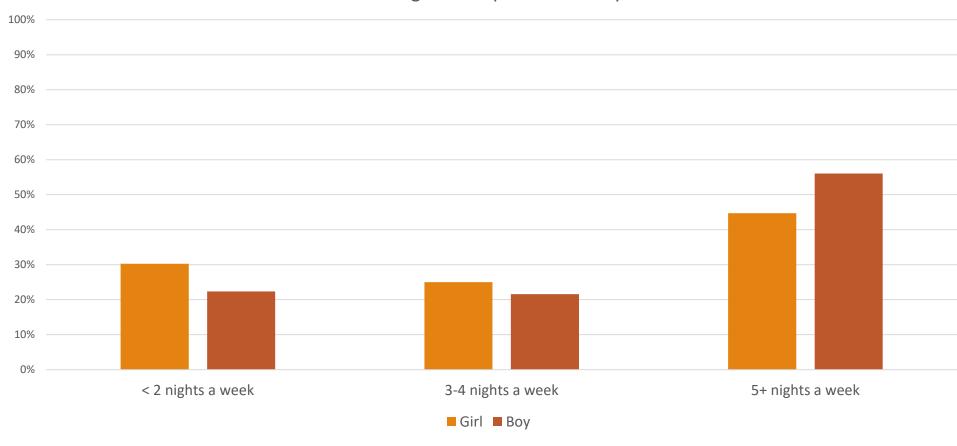
Wellbeing by # of Good Night's Sleep



Children who reported having a good night's sleep more often were more likely to report higher well-being.

MDI 2022/23, Grades 6-8, Sleep





Girls are less likely to report getting a "good night's sleep" 5+ days/week than boys.



Screen Time



Changed Screen time questions from # hours after school -> # hours per day And, added a new social media question for grades 6,7,8

In a normal week, how many hours per day do you...

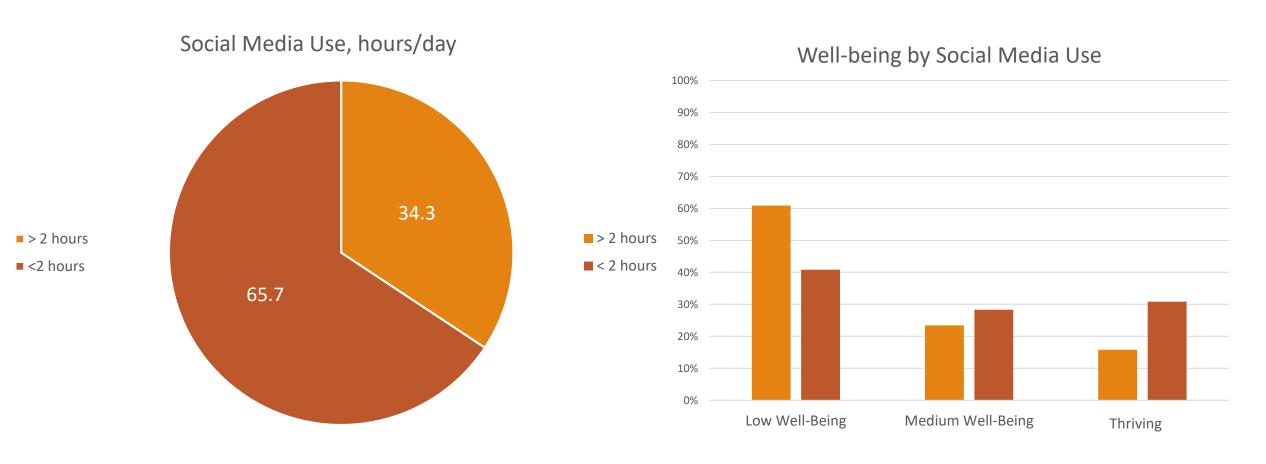
- a) ... sit and watch TV, movies, or videos including YouTube
- b) ... play video or computer games
- c) ... hang out with friends on the phone, tablet or computer (for example, video call, text messaging)

Grade 6,7,8 only:

a) ... spend on social media sites or apps, such as Instagram, Snapchat, Twitter, Facebook, TikTok either browsing or posting



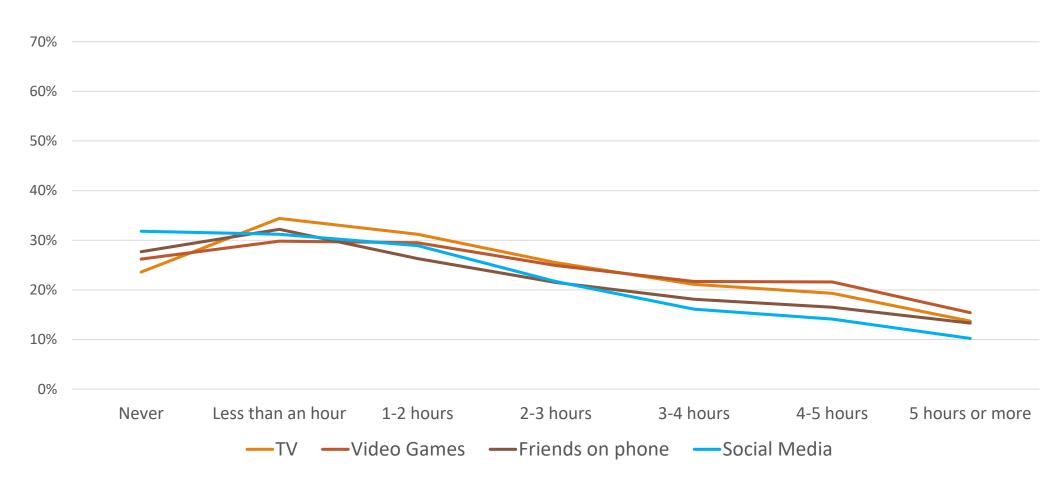
MDI 2022/23, Grades 6-8, Social Media Use



Over 1/3 of children in grades 6-8 reported using social media more than 2 or more hours/day.

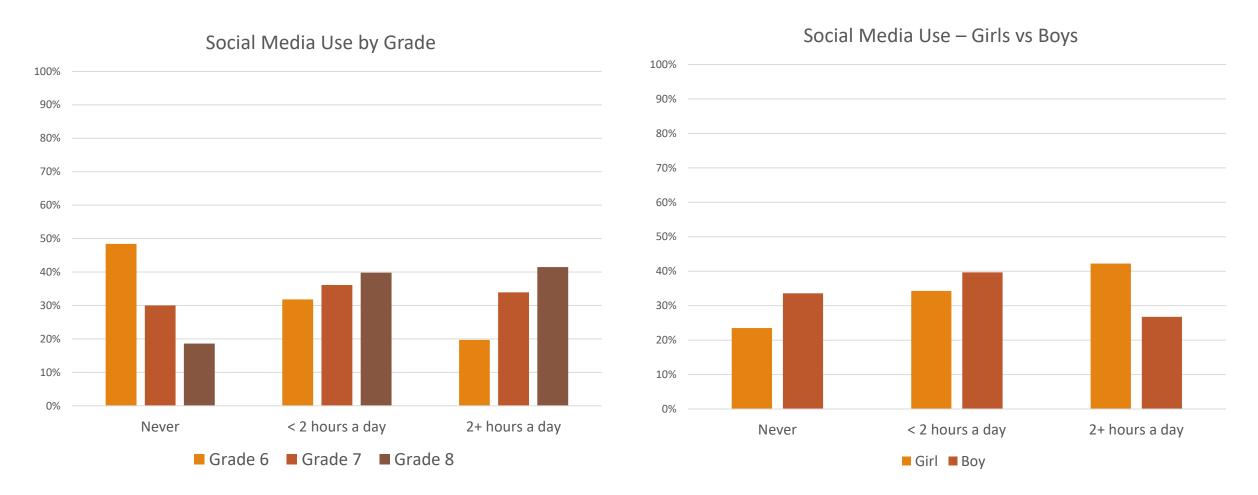
Children who reported using social media 2+ hours/day were more likely to report lower levels of thriving.

MDI 2022/23, Grades 6-8, % Thriving by Screen Time



- Overall, higher levels of screen time were related to lower levels of thriving.
- Goldilocks effect: for almost all types of screen time, a little bit of usage was better for thriving than no usage.
- For social media, any time reported using social media was negatively related to thriving compared to no usage.

MDI 2022/23, Grades 6-8, Social Media Use



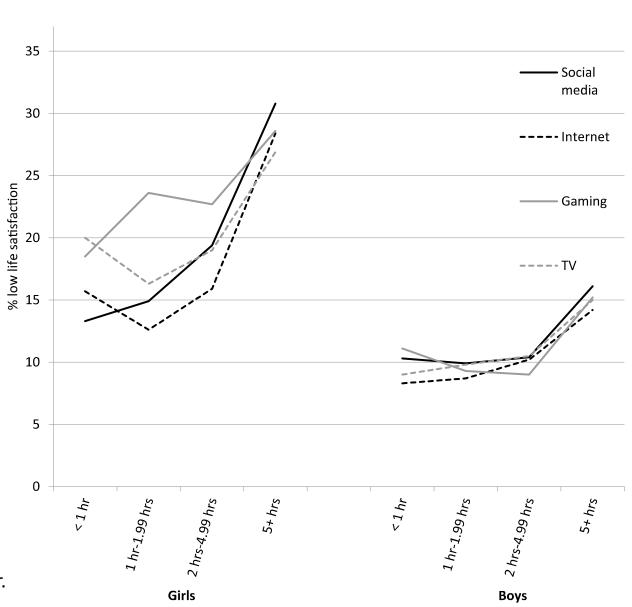
Older children reported using social media more time each day than younger children. Girls reported spending more time on social media than boys.

Effects of social media on mental health



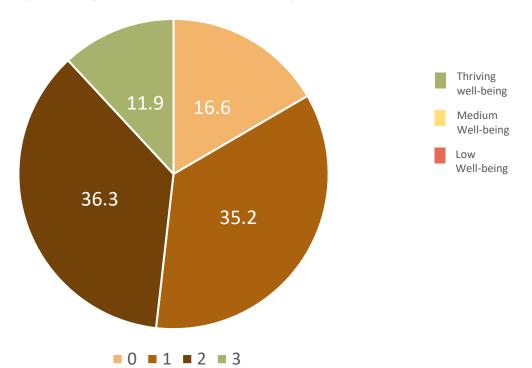
Unequal effects of different types of screen time

Twenge, J. M., & Farley, E. (2021). Not all screen time is created equal: Associations with mental health vary by activity and gender. *Social Psychiatry and Psychiatric Epidemiology, 56,* 207-217.

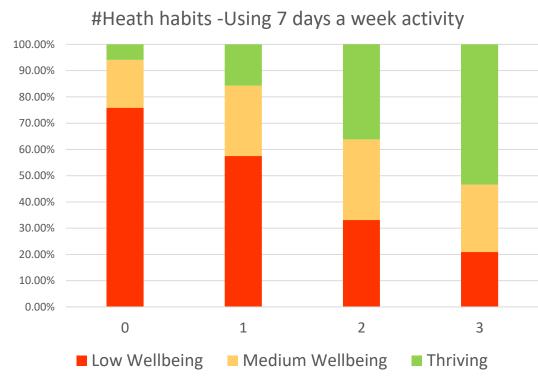


MDI 2022/23, Grades 6-8, Healthy Habits: Good Sleep + Low Social Media Use + Physically Active

% Reporting Number of Healthy Habits

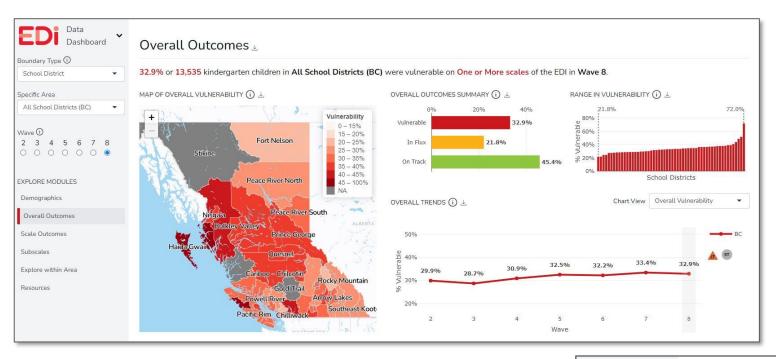


1/3 of children reported healthy habits that met recommendations regarding sleep, physical activity, and screen time.



Meeting recommendations for more healthy habits was related to increased thriving.

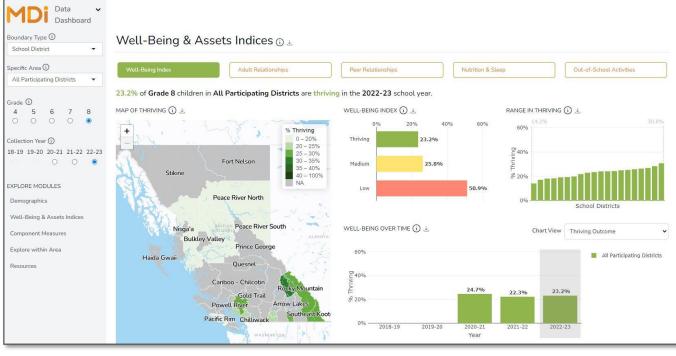




EDI Data Dashboard: dashboard.earlylearning.ubc.ca

New Data Dashboards

MDI Data Dashboard: mdi.dashboard.earlylearning.ubc.ca



Data in Action





The MDI

MDI Data & Reports

Using the MDI

Resources

News & Events

About



Exploring the data with others is an ACTION!

- School administrators, teachers, staff
- Youth
- Community partners & networks
- Health authority & government partners
- Parents & Caregivers

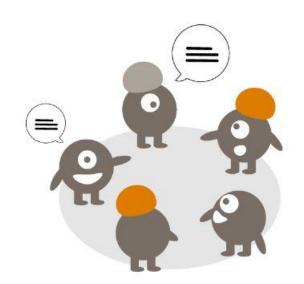
Promote **shared responsibility** for children and families across systems and sectors.





Children's Voices Matter

One of the core beliefs underlying the Middle Years Development Instrument (MDI) is that children's voices matter. Asking children for their input can be powerful because it provides rich data on child well-being that would not otherwise be accessible if we did not ask them - data that can be used to create environments and interactions which can promote children's well-being. It is also tells children that their thoughts and feelings are valued and provides them a say in how their schools and communities should support them.



PDF

MDI Lesson Plan Ideas

Last Updated: August 7, 2020

A lesson plan to explore your local MDI Assets data with children.

Download PDF V

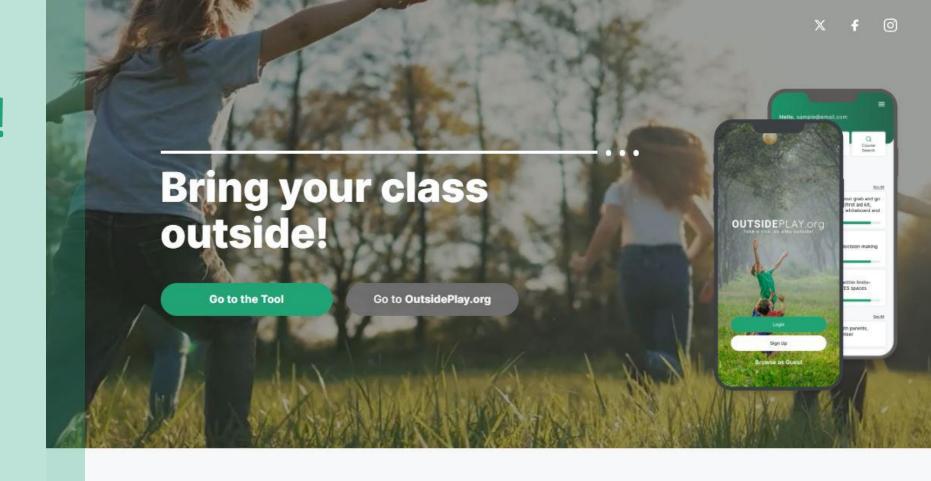
discovermdi.ca

Focus on Assets

- Nurture positive relationships with adults, with peers
- Out of school activities inclusive, low barrier/low cost
- Provide opportunities to be physically active and connect IRL
- Climate & community related activities and actions help children get involved
- Work towards safe and inclusive school/community environments for all kids.

Get Outside!

New Resource for Educators



Outdoor Play and Learning

This tool is designed for elementary school teachers. There are four themes to explore which offer valuable insights and hands-on resources to begin locating play and learning outdoors.

teacher.outsideplay.org



