



SCHOOL DISTRICT 47 | **POWELL RIVER**

SCHOOL DISTRICT & COMMUNITY REPORT

2021/2022



ACKNOWLEDGEMENTS

We express our deep gratitude to the xʷməθkʷəy̓əm (Musqueam) Nation for the privilege of working on their traditional, ancestral and unceded territory at the Point Grey Campus of the University of British Columbia.

The Middle Years Development Instrument (MDI) project is made possible with funding from BC school districts and school boards across the country. We would like to thank and acknowledge all participating school districts for their support of and collaboration towards this project.

We are grateful to the teachers, education staff and school administrators who work directly with us to gather data and use our reports. This includes a commitment to training and completing questionnaires, engaging with students, parents and caregivers and using HELP's data and research in schools, districts and communities. We also extend our warmest appreciation to the students who take the time to share their experiences with us. Thank you.

HELP would like to acknowledge the exceptional support we have received since 2001 from the Ministries of Children and Family Development, Education and Health. This investment has enabled the expansion of HELP's unique child development monitoring system that supports high quality, evidence-informed decisions on behalf of children and their families.

MDI RESEARCH LEADS

HELP's Middle Years research is led by Dr. Kimberly Schonert-Reichl and Dr. Eva Oberle. HELP acknowledges Drs. Schonert-Reichl and Oberle for their leadership and expertise in social and emotional development research, their dedication to exploring children's experiences in the middle years and for raising the profile of children's voices, locally and internationally.

ABOUT THE HUMAN EARLY LEARNING PARTNERSHIP

The Human Early Learning Partnership (HELP) is an interdisciplinary research institute based at the School of Population and Public Health, Faculty of Medicine, at the University of British Columbia. HELP's unique partnership brings together researchers and practitioners from across BC, Canada and internationally to address complex child development issues. HELP's research projects explore how different environments and experiences contribute to health and social inequities in children's development over their life course.

The institute was founded by Drs. Clyde Hertzman and Hillel Goelman in 1999. Clyde's vision for HELP was to advance knowledge about child development and importantly, to apply this knowledge in communities. This report, and the work of HELP over two decades, would not have been possible without his vision and passion.

To learn more please visit our website at [earlylearning.ubc.ca \(http://earlylearning.ubc.ca/\)](http://earlylearning.ubc.ca/).

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INTRODUCTION TO THE MDI

WHY THE MIDDLE YEARS MATTER

Experiences in the middle years, especially between the ages of 10 to 13, have critical and long lasting effects. They are powerful predictors of adolescent adjustment and future success. During this time, children are experiencing significant cognitive, social and emotional changes that establish their lifelong identity and set the stage for adolescence and adulthood. The overall health and well-being of children in their middle years affects their ability to concentrate and learn, develop and maintain friendships and make thoughtful decisions.

During the late middle childhood years (also referred to as early adolescence), children have an increased awareness of themselves and others. During middle childhood they are developing ideas about how they may or may not "fit in" to their social and academic environments (Rubin et al., 2006). These ideas have the power to either promote health and academic achievement or lead to negative outcomes such as depression and anxiety in adulthood (Jacobs et al., 2008). Although middle childhood is a time of risk, it is also a time of opportunity. There is mounting evidence to suggest that positive relationships to adults and peers during this critical time act to increase a child's resiliency and school and life success.

WHAT IS THE MIDDLE YEARS DEVELOPMENT INSTRUMENT?

The Middle Years Development Instrument (MDI) is a self-report questionnaire that asks children in Grade 4 to Grade 8 about their thoughts, feelings and experiences in school and in the community. It is a unique and comprehensive questionnaire that helps us gain a deeper understanding of how children are doing at this stage in their lives. Researchers working at the Human Early Learning Partnership (HELP) are using results to learn more about children's social-emotional health and well-being. In addition, the MDI is being used across sectors to support collaboration and inform policy and practice.

The MDI uses a strengths-based approach to assess five areas of development that are strongly linked to well-being, health and academic achievement. In addition, the MDI focuses on highlighting the promotive and protective factors and assets that are known to support and optimize development in middle childhood. These areas are: *Social and Emotional Development*, *Physical Health and Well-being*, *Connectedness*, *Use of After-School Time* and *School Experiences*. Each of these dimensions is made up of several measures. Each measure is made up of one or more individual questions.

Combining select measures from the MDI helps us paint a more comprehensive portrait of children's overall well-being and the assets that contribute to their healthy development. The results for key MDI measures are summarized by two indices: The Well-being Index and the Assets Index.

The following illustrates the relationship between MDI dimensions and measures, and highlights which measures contribute to the Well-being and Assets Indices.

- A measure in the Well-being Index
- A measure in the Assets Index
- * A measure in the Grade 6, 7 and 8 MDI only



SOCIAL & EMOTIONAL DEVELOPMENT

Measures

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ○ Optimism
Empathy
Prosocial Behaviour ○ Self-Esteem ○ Happiness | <ul style="list-style-type: none"> ○ Absence of Sadness
Absence of Worries
Self-Regulation (Short-Term)
Self-Regulation (Long-Term) * Responsible Decision-Making | <ul style="list-style-type: none"> * Self-Awareness * Perseverance * Assertiveness * Citizenship/Social Responsibility |
|---|--|--|



PHYSICAL HEALTH AND WELL-BEING

Measures

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ○ General Health ■ Eating Breakfast ■ Meals with Adults in Your Family | <ul style="list-style-type: none"> Food ■ Frequency of Good Sleep | <ul style="list-style-type: none"> Help-Seeking for Emotional Well-being Transportation To and From School |
|---|--|--|



CONNECTEDNESS

Measures

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> ■ Adults at School ■ Adults in the Neighbourhood | <ul style="list-style-type: none"> ■ Adults at Home ■ Peer Belonging ■ Friendship Intimacy | <ul style="list-style-type: none"> Important Adults |
|---|--|--|



USE OF AFTER-SCHOOL TIME

Measures

- | | | |
|--|--|---|
| <ul style="list-style-type: none"> ■ Organized Activities <ul style="list-style-type: none"> ○ Educational Lessons or Activities | <ul style="list-style-type: none"> ○ Youth Organizations ○ Sports ○ Music or Arts | <ul style="list-style-type: none"> How Children Spend their Time After-school People/Places Children's Wishes and Barriers |
|--|--|---|



SCHOOL EXPERIENCES

Measures

- | | | |
|---|--|--|
| <ul style="list-style-type: none"> Academic Self-Concept School Climate | <ul style="list-style-type: none"> School Belonging Motivation | <ul style="list-style-type: none"> Future Goals Victimization and Bullying |
|---|--|--|

For more information on all of the measures, including questions, response options and scoring for the MDI results found in this report, please refer to the [MDI Companion Guide](https://www.discovermdi.ca/resources/mdi-companion-guide/). For additional resources visit, the [Discover MDI Field Guide](https://www.discovermdi.ca/category/mdi-essentials/).

CONNECTING THE MDI WITH THE PERSONAL AND SOCIAL COMPETENCIES OF THE BC CURRICULUM

Your MDI data provide a unique approach to understanding children’s social and emotional development and well-being in relation to the [BC Ministry of Education’s Personal and Social Competencies \(https://curriculum.gov.bc.ca/competencies\)](https://curriculum.gov.bc.ca/competencies).

Areas measured by the MDI reflect facets of the “Personal and Social Competency” domain of BC’s Curriculum, providing valuable information for understanding children’s growth and progress within this core competency. The MDI questions provide an opportunity for students to self-assess and reflect on their social and personal competency, including reflecting on MDI concepts, questions and results.



PERSONAL & SOCIAL COMPETENCIES

Positive Personal & Cultural Identity

Related MDI Measures:

- Connectedness to Adults at Home, School and Community
- Peer Belonging
- Friendship Intimacy
- Empathy
- School Belonging
- School Climate
- Self-Esteem
- Academic Self-Concept
- Importance of Grades
- Friends & Learning
- Self-Awareness
- Perseverance
- Responsible Decision-Making

Personal Awareness & Responsibility

Related MDI Measures:

- Academic Self-Concept
- Self-Esteem
- Self-Regulation
- General Health
- Optimism
- Self-Awareness
- Perseverance
- Responsible Decision-Making
- Assertiveness
- Use of After-School Time

Social Responsibility

Related MDI Measures:

- Citizenship and Social Responsibility
- Prosocial Behaviour
- Empathy
- School Climate
- Connectedness to Adults at School
- Connectedness to Peers
- Self-Regulation
- Assertiveness

ABOUT THIS REPORT

HOW THE RESULTS ARE REPORTED

School district data in this report includes all children who participated within the public school district in 2021/2022. Administration of the MDI took place between the months of January to mid-March 2022.

School district data is compared to the **average for all districts**, which includes children from all participating public school districts. Districts with large populations contribute more in computing the **average for all districts** than districts with smaller populations. Results for large districts tend to be closer to the average for all districts. Please see the table below for a list of participating districts, and note that the average is based on participating districts and **does not** represent all school districts in the entire province.

Where school districts or neighbourhoods contain fewer than 35 children, the results are suppressed. The data in this report have been rounded. Many questions on the MDI allow children to provide multiple responses. Totals for some measures and questions may not equal 100%.

#	School District	# of Children	Participation Rate
10	Arrow Lakes	24	73%
33	Chilliwack	866	83%
37	Delta	766	70%
42	Maple Ridge-Pitt Meadows	1,009	88%
47	Powell River	102	42%
49	Central Coast	11	92%
50	Haida Gwaii	29	83%
51	Boundary	84	85%
52	Prince Rupert	117	88%
53	Okanagan Similkameen	133	79%
61	Greater Victoria	654	44%
70	Pacific Rim	194	75%
72	Campbell River	316	81%
	Total	4,305	

UNDERSTANDING MDI DATA

The **MDI Companion Guide** provides information on all of the measures, including questions, response options and scoring, for the MDI results found in this report. The guide is available to [download here](https://www.discovermdi.ca/resources/mdi-companion-guide/) (https://www.discovermdi.ca/resources/mdi-companion-guide/).

For more information on the MDI, including answers to common questions such as, what is the MDI; why use the MDI and how to use the MDI, visit the [Discover MDI Field Guide](https://www.discovermdi.ca/) (https://www.discovermdi.ca/).



2021/2022 RESULTS FOR POWELL RIVER

DEMOGRAPHICS

Population		Gender Identity	
Total Sample	102	Boys	63%
Participation Rate	42%	Girls	39%
Children completing MDI at school	99%	In Another Way	<5 Children
Children completing MDI at home	1%		
Languages Spoken at Home			
First Nations, Métis or Inuit	0%	Mandarin	0%
Cantonese	1%	Punjabi	0%
English	100%	Spanish	0%
French	6%	Filipino/Tagalog	0%
Hindi	0%	Vietnamese	0%
Japanese	2%	Other	4%
Korean	0%		

Total Sample: Refers to the total number (#) of children represented in this report. Children are included in the sample if they complete a question and the data are reported.

Participation Rate: Refers to the percentage of the Grade 4 population that participated in the MDI survey this year. In 2021/22, due to the global pandemic and in response to requests from school districts, boards and/or associations, the MDI was administered to a small percentage of children at home or in remote settings.

Gender Identity: Children are asked to describe their gender as "Boy," "Girl" or "In another way." Children may choose not to answer the question at all. Children are able to select more than one response and therefore, in some cases, percentages may not add to 100%. Data are suppressed where fewer than 5 children selected the response.

Languages Spoken at Home: Children are able to select more than one language spoken at home.

First Nations, Métis or Inuit Languages: If a child selects "First Nations, Métis or Inuit" as a language spoken in the home, they are then asked to identify, if possible, the specific language. First Nations, Métis or Inuit language data are not publicly available.

Other: A limited selection of languages is offered on the MDI questionnaire. The "Other" category gives children an opportunity to enter their own response(s).

WELL-BEING & ASSETS INDICES

Combining select measures from the MDI helps us paint a more comprehensive portrait of children’s overall well-being and the assets that contribute to their healthy development. The results for key MDI measures are summarized by two indices. This section of the report focuses on results for the Well-being Index and the Assets Index. Learn more about the important relationship between individual measures, the Well-being Index and the Assets Index in the [Discover MDI Field Guide](https://www.discovermdi.ca/intro-to-mdi-dimensions-and-indices/) (<https://www.discovermdi.ca/intro-to-mdi-dimensions-and-indices/>).

WELL-BEING INDEX

The Well-being Index combines MDI measures relating to children’s physical health and social and emotional development that are of critical importance during the middle years. These are: Optimism, Happiness, Self-Esteem, Absence of Sadness and General Health.

- MEASURES**
- Optimism
 - Happiness
 - Self-Esteem
 - Absence of Sadness
 - General Health

Scores from these five measures are combined and reported by three categories of well-being, providing a holistic summary of children’s mental and physical health.



High Well-being (Thriving)
Children who score in the high range on at least 4 of the 5 measures of well-being and have no low-range scores.

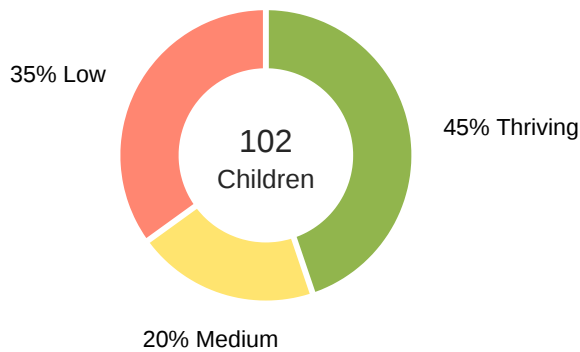


Medium Well-being
Children who score in the high range on fewer than 4 of the 5 measures of well-being, and have no low-range scores.

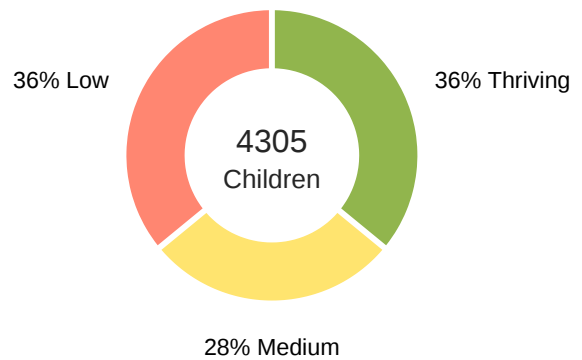


Low Well-being
Children who score in the low range on at least 1 of the 5 measures of well-being.

POWELL RIVER



ALL PARTICIPATING DISTRICTS



ASSETS INDEX

The Assets Index combines MDI measures that highlight four key assets that help to promote children’s positive development and well-being. Assets are positive experiences, relationships or behaviours present in children’s lives. Assets are considered actionable, meaning that schools and communities can focus their efforts in these areas to create the conditions and contexts where children can thrive.

Note: School Experiences are also considered to be an asset that contribute to children's well-being; however, this asset is not reported as part of the Assets Index to prevent the ranking of individual schools or sites. Please refer to the School Climate and Bullying and Victimization measures for data related to this asset.



ADULT RELATIONSHIPS

- Adults at School
- Adults in the Neighbourhood
- Adults at Home



PEER RELATIONSHIPS

- Peer Belonging
- Friendship Intimacy



NUTRITION & SLEEP

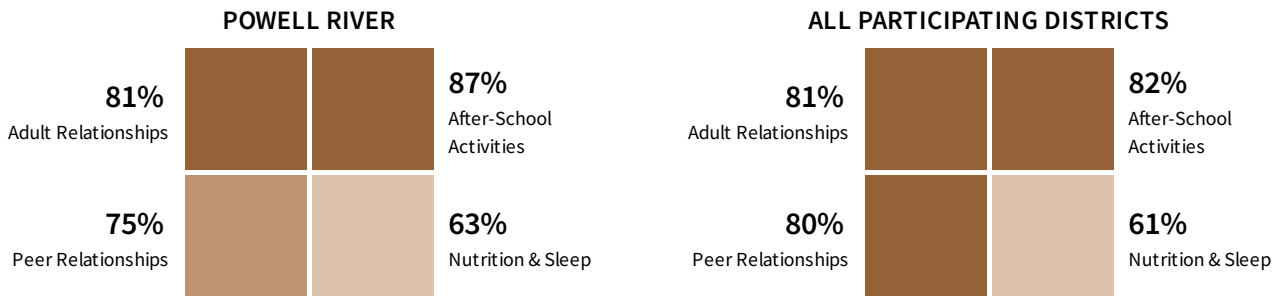
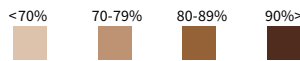
- Eating Breakfast
- Meals with Adults in Your Family
- Frequency of Good Sleep



AFTER-SCHOOL ACTIVITIES

- Organized Activities

Percentage of children reporting the presence of an asset





SOCIAL & EMOTIONAL DEVELOPMENT

Social and emotional competence is integral to children’s social and emotional development and includes the ability to understand and manage emotions, develop caring and empathy for others, establish positive relationships, make responsible decisions, and handle challenging situations effectively (Weissberg et al., 2015). Promoting children’s social and emotional competence is critical for their successful development across the lifespan (Jones et al., 2015). For example, social and emotional competence is associated with greater motivation and success in school (Mahoney et al., 2020), as well as positive outcomes later in life, such as earning a college degree, finding stable employment, engaging in a healthy lifestyle, and psychological well-being (Domitrovich et al., 2017). Social and emotional competencies can be best promoted when children experience supportive environments across multiple contexts - at school with teachers and peers, in the home with elders, family, or caregivers, and in after-school programs with peers and community members.

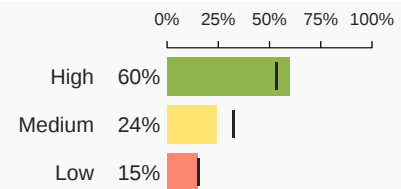
Detailed information on the MDI survey questions and response scales for Social and Emotional Development are available in the [Discover MDI Field Guide \(https://www.discovermdi.ca/social-emotional-development/\)](https://www.discovermdi.ca/social-emotional-development/).

RESULTS FOR POWELL RIVER

Average for all Districts

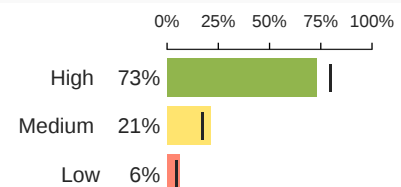
OPTIMISM

Optimism refers to the mindset of having positive expectations for the future. e.g., "I have more good times than bad times."



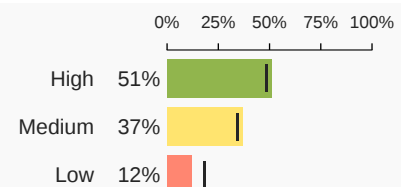
EMPATHY

Empathy is the experience of understanding and sharing the feelings of others. e.g., "I care about the feelings of others."



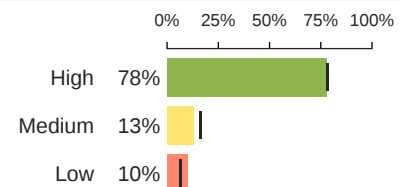
PROSOCIAL BEHAVIOUR

Prosocial behaviour refers to actions that benefit others. e.g., "I helped someone who was hurt."



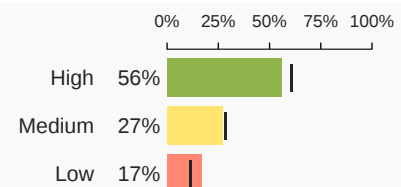
SELF-ESTEEM

Self-esteem refers to a person's sense of self-worth. e.g., "A lot of things about me are good."



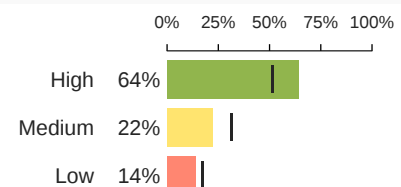
HAPPINESS

Happiness refers to how content or satisfied children are with their lives. e.g., "I am happy with my life."



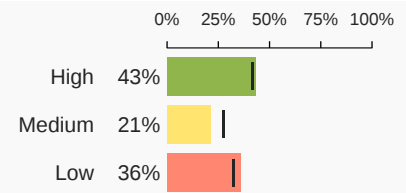
ABSENCE OF SADNESS

Sadness measures the beginning symptoms of depression. e.g., "I feel unhappy a lot of the time."



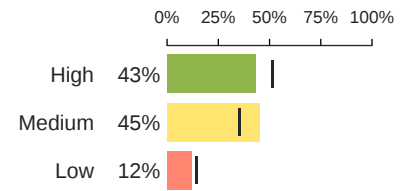
ABSENCE OF WORRIES

Worries measure the beginning symptoms of anxiety. e.g., "I worry a lot that other people might not like me."



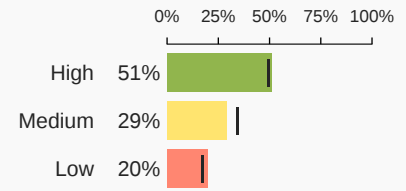
SELF-REGULATION (LONG-TERM)

Long-term self-regulation requires adapting present behaviour to achieve a goal in the future. e.g., "If something isn't going according to my plans, I change my actions to try and reach my goal."



SELF-REGULATION (SHORT-TERM)

Short-term self-regulation is about impulse control. It requires adapting behaviour or emotions to meet an immediate goal. e.g., "I can calm myself down when I'm excited or upset."



RESEARCH HIGHLIGHTS

SOCIAL AND EMOTIONAL DEVELOPMENT

Social and emotional competencies include children's ability to recognize, understand, and effectively respond to emotions, manage stress and be optimistic. They also include showing concern for others, sustaining healthy relationships and making effective personal and social decisions (Weissberg, Durlak, Domitrovitch, & Gullota, 2015).

Middle childhood is an important time for promoting self-regulation and problem-solving strategies to help children persevere in the face of obstacles and setbacks. Related skills and strategies learned during middle childhood tend to stick with children throughout the rest of their lives (Skinner et al., 2016).

A Vancouver-based study asked Grade 10 children to volunteer 1-1.5 hours per week with elementary school children. After 10 weeks researchers found participants had significantly decreased their risk for cardiovascular disease. The greatest health benefits were seen in adolescents who displayed the highest self-report measures of empathy (Schreier, Schonert-Reichl, & Chen, 2013).



PHYSICAL HEALTH & WELL-BEING

Promoting children’s physical health and well-being in the middle years lays the foundation for a healthy lifestyle. Physical health outcomes are not uniquely controlled by genetics. They can also be influenced by external factors such as family relationships, connections with peers, and larger economic and social conditions (Hertzman, C., & Boyce, T., 2010). Children who feel healthy are more likely to be engaged in school, feel a connection to their teachers, perform better academically, and are less likely to be bullied or bully others (Forrest et al., 2013). Being physically active also promotes children’s mental health (Moeijes et al., 2018). Children benefit from guidance and opportunities that support the development of healthy habits - such as regular physical activity, quality sleep and healthy meals - that they can carry forward into adolescence and adulthood.

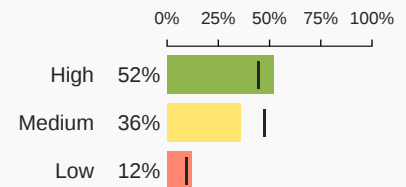
Detailed information on the MDI survey questions and response scales for Physical Health and Well-being are available in the [Discover MDI Field Guide \(https://www.discovermdi.ca/physical-health-well-being/\)](https://www.discovermdi.ca/physical-health-well-being/).

RESULTS FOR POWELL RIVER

Average for all Districts

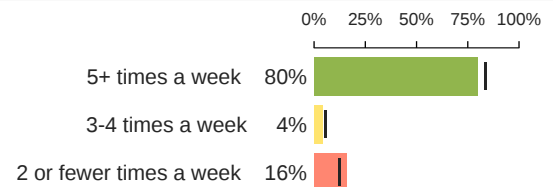
GENERAL HEALTH

Children are asked, "In general, how would you describe your health?"



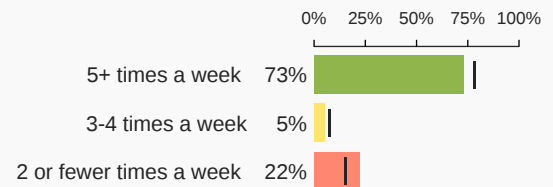
EATING BREAKFAST

Children are asked, "How often do you eat breakfast?"



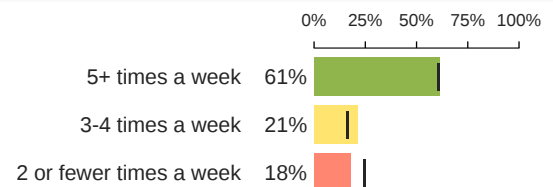
MEALS WITH ADULTS IN YOUR FAMILY

Children are asked, "How often do your parents or other adult family members eat meals with you?"

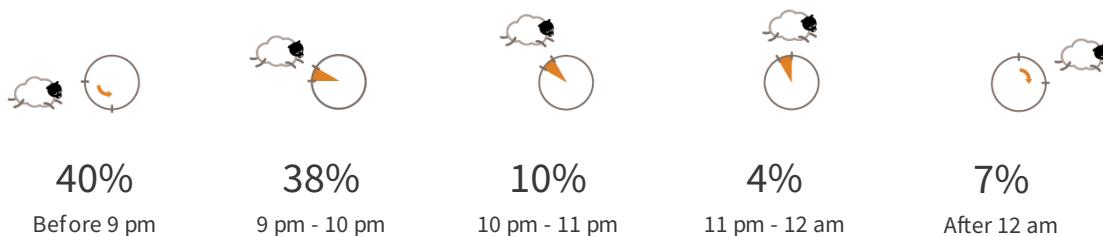


FREQUENCY OF GOOD SLEEP

Children are asked, "How often do you get a good night's sleep?"



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



HOW OFTEN DO YOU EAT FOOD LIKE POP, CANDY, POTATO CHIPS, OR SOMETHING ELSE?



HELP-SEEKING FOR EMOTIONAL WELL-BEING

WHO WOULD YOU TALK TO IF YOU WERE FEELING SAD, STRESSED, OR WORRIED?

Examples provided include a teacher, school counselor, parent, grandparent, older sibling or cousin, elder, after-school program staff, doctor, nurse etc. (Children can select all of the options that apply; therefore, percentages may not total 100%.)

An adult at school	36%
A family member	90%
An adult in my community	16%
A health professional	19%
My friend(s)	53%
Don't know who to talk to	13%
Prefer to handle it on my own	22%
Talk to someone else (someone not on this list)	13%

TRANSPORTATION TO AND FROM SCHOOL

Children are asked, “How do you usually get to school?”; “How do you usually get home from school?” and “If you could choose, how would you wish to get to and from school?”

	To School	From School	Wish
Car	60%	55%	35%
School bus	18%	22%	15%
Public transportation (public bus, train or ferry)	1%	0%	2%
Walk	16%	19%	14%
Cycle, skateboard, scooter or rollerblade	3%	2%	27%
Something else	2%	2%	7%



RESEARCH HIGHLIGHTS

PHYSICAL HEALTH & WELL-BEING

Eating meals together as a family often is related to increased self-esteem and school success, and decreased chance of eating disorders, substance abuse, violent behaviour and symptoms of depression (Harrison et al., 2015).

Seeking help for emotional support from appropriate and effective resources, such as school adults, parents and family members, health professional, and counsellors, can help promote positive mental health and resilience, and serve as a protective factor for mental illness (Rickwood et al., 2005; Xu et al., 2018).

Children ages 5 to 13 need 9–11 hours of uninterrupted sleep a night (Hirshkowitz et al., 2015). When children do not get enough sleep they are more likely to have troubles at school, be involved in family disagreements and display symptoms of depression (Smaldone, Honig, & Byrne, 2007).

Because of changes in the brain that take place around the time of puberty, children are more strongly attracted to junk foods that contain high amounts of fat and sugar than adults (Reichelt, 2016).

Belonging is a fundamental need for everyone. Feeling a sense of connectedness to family, peers, school, and community is one of the most important assets for a child’s well-being, health, and success in life (Masten, 2018; Thomson et al., 2018). Research shows that children with positive peer relationships feel better about themselves, experience greater mental health, are more prosocial, and perform better academically (Wentzel, 1998). A single caring adult, be it a family member, coach, teacher, an elder, or a neighbour, can positively influence a child’s life and promote resilience (Werner, 2004). Children’s life satisfaction is related to their sense of belonging with peers and their supportive relationships with adults even more so than family income or personal health (Gadermann et al., 2015; Oberle et al., 2014). This is true across cultures (Emerson et al., 2018). For children, connectedness to land, language, and culture also can play an important role in encouraging a strong and healthy sense of identity (First Nations Information Governance Centre, 2016).

Detailed information on the MDI survey questions and response scales for Connectedness is available in the [Discover MDI Field Guide](https://www.discovermdi.ca/connectedness/) (<https://www.discovermdi.ca/connectedness/>).

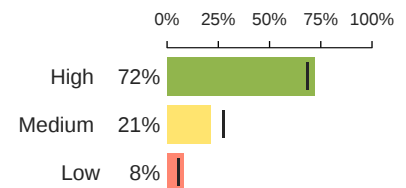
RESULTS FOR POWELL RIVER

| Average for all Districts

CONNECTEDNESS WITH ADULTS

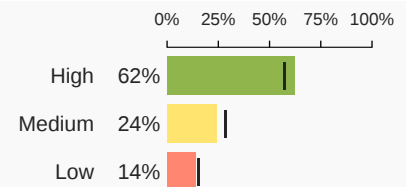
ADULTS AT SCHOOL

Assesses the quality of relationships children have with the adults they interact with at school. e.g., "At my school there is an adult who believes I will be a success."



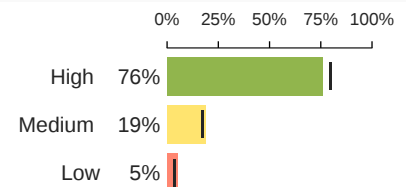
ADULTS IN THE NEIGHBOURHOOD/COMMUNITY

Assesses the quality of relationships children have with the adults they interact with in their neighbourhood or community. e.g., "In my neighbourhood/community there is an adult who really cares about me."



ADULTS AT HOME

Assesses the quality of relationships children have with the adults in their home. e.g., "In my home there is a parent or other adult who listens to me when I have something to say."



NUMBER OF IMPORTANT ADULTS AT SCHOOL



2 or more

73%



One

8%



None

19%

Average for all Districts

70%

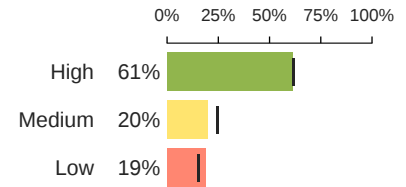
11%

19%

CONNECTEDNESS WITH PEERS

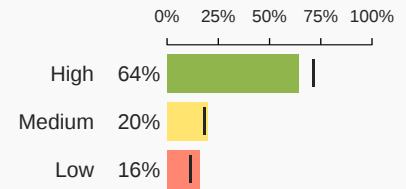
PEER BELONGING

Measures children's feelings of belonging to a social group. e.g., "When I am with other kids my age, I feel I belong."



FRIENDSHIP INTIMACY

Assesses the quality of relationships children have with their peers. e.g., "I have a friend I can tell everything to."



RESEARCH HIGHLIGHTS CONNECTEDNESS

Children who do not feel part of a group or feel cast out by their own group are at risk of anxiety and depression. They are also at higher risk of low school attendance and future school drop-out (Veiga et al., 2014).

Strong social connections in adolescence are a better predictor of well-being in adulthood than their academic achievement (Olsson, 2013).

For younger students during elementary and middle school years, a nurturing and caring relationship with a classroom teacher is vital. Connections with warm and accepting teachers enhance emotional well-being, increase motivation, engagement and success in school for children in early adolescence. They are also buffers for children who are experiencing mental health problems (Oberle, 2018).

Social competencies and friendship-building skills can buffer children against bullying, anxiety and depression (Guhn et al., 2013).



USE OF AFTER-SCHOOL TIME

Children’s involvement in activities outside of school hours exposes them to important social environments. After-school activities, such as art and music classes, sports leagues, and community groups provide distinct experiences that help children to build relationship and social and emotional skills (Vandell et al., 2020). Children who participate in structured extracurricular activities experience school success and are less likely to drop out of school (Thouin et al., 2020). Data from the MDI helps to fill a gap in the research on children’s participation in activities during the “critical hours” (from 3 pm to 6 pm) when children are most often left unsupervised (Schonert-Reichl et al., 2013).

Detailed information on the MDI survey questions and response scales for Use of After-School Time is available in the [Discover MDI Field Guide](https://www.discovermdi.ca/use-of-after-school-time/) (<https://www.discovermdi.ca/use-of-after-school-time/>).

RESULTS FOR POWELL RIVER

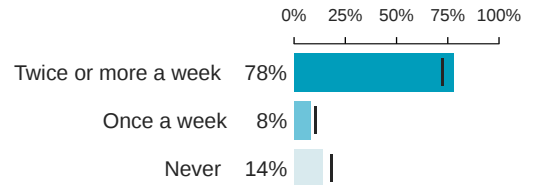
| Average for all Districts

AFTER-SCHOOL ACTIVITIES

Children were asked, "During the last week after school (from 3 pm - 6 pm), how many days did you participate in?":

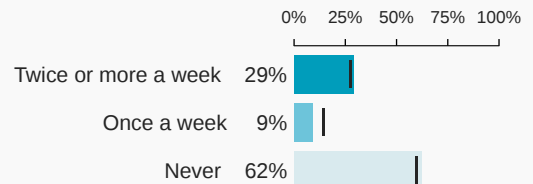
ANY ORGANIZED ACTIVITY

Children who participated in any after-school activity that was structured and supervised by an adult (e.g., educational lessons, youth organizations, music or art lessons and sports practice).



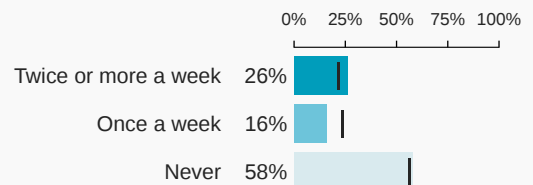
EDUCATIONAL LESSONS OR ACTIVITIES

For example: Tutoring, attending a math school, foreign language lessons, or some other academic related activity.



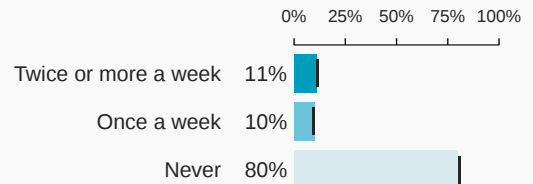
MUSIC OR ART LESSONS

For example: Drawing or painting classes, musical instrument lessons or some other activity related to music or art.



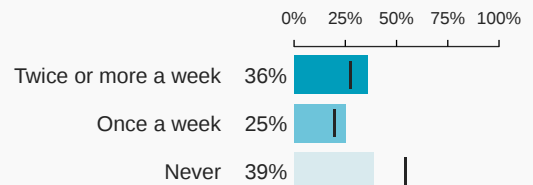
YOUTH ORGANIZATIONS

For example: Scouts, Girl Guides, Boys and Girls Clubs, or some other group organization.



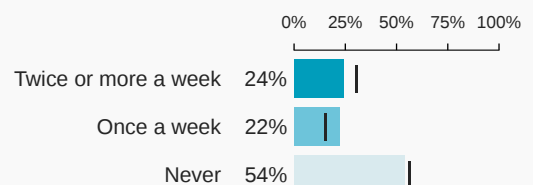
INDIVIDUAL SPORTS (WITH A COACH OR INSTRUCTOR)

For example: Swimming, dance, gymnastics, ice skating, tennis or another individual sport.



TEAM SPORTS (WITH A COACH OR INSTRUCTOR)

For example: Basketball, hockey, soccer, football, or another team sport.



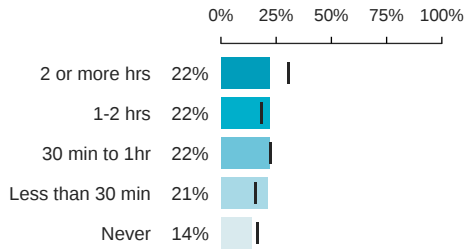
HOW CHILDREN SPEND THEIR TIME

Children were asked how they spend their time during the after-school hours of 3 pm - 6 pm:

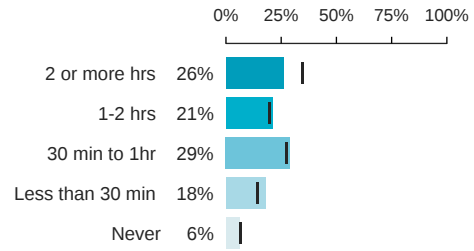
Percentage of children who reported:

COMPUTER USE & TV

VIDEO OR COMPUTER GAMES

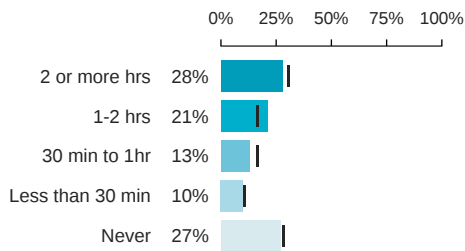


WATCH TV, NETFLIX, YOUTUBE OR SOMETHING ELSE

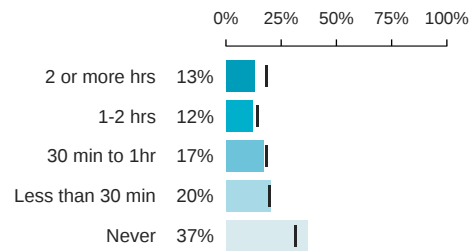


SOCIALIZING WITH FRIENDS

HANG OUT WITH FRIENDS IN PERSON

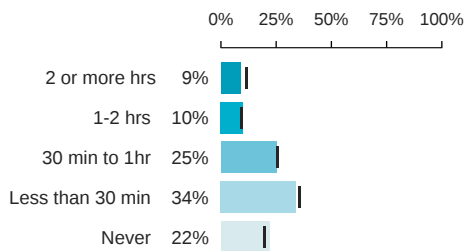


USE A PHONE OR INTERNET TO TEXT OR CHAT WITH FRIENDS

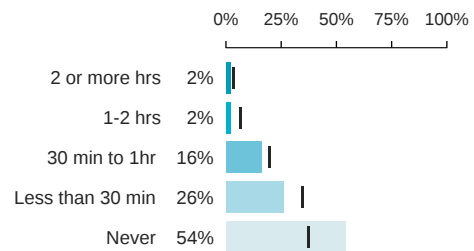


READING & HOMEWORK

READ FOR FUN

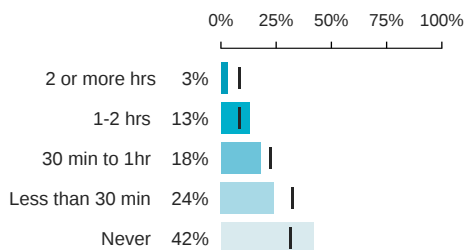


DO HOMEWORK

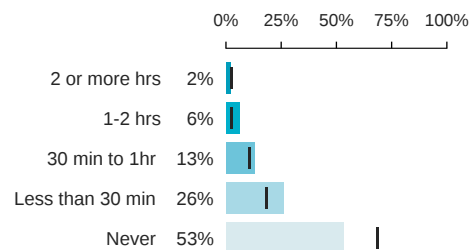


ARTS & MUSIC

ARTS & CRAFTS

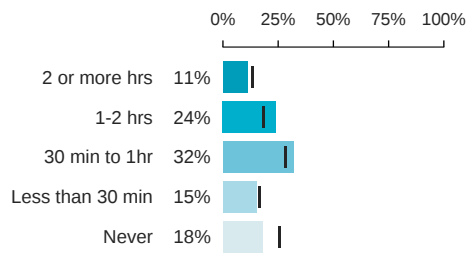


PRACTICE A MUSICAL INSTRUMENT



SPORTS

PLAY SPORTS OR EXERCISE FOR FUN



WHAT CHILDREN WISH TO BE DOING



Children were asked what they want to be doing during the after-school hours of 3 pm - 6 pm:

I am already doing the activities I want to be doing

78%

I wish I could do additional activities

29%

I am doing some of the activities I want, but I wish I could do more

7%

Children who answered that they wish to be doing additional activities were asked to identify one activity they wish they could do and where they would like to do it. Note: responses are grouped into categories for reporting purposes.

WISHES

(Number of Children)

Physical and/or outdoor activities	34
Free time/relaxing	4
Other	4
Friends and playing	0
Time with family at home	0
Learning new things	0
Music and fine arts	0
Computer/Video Games/TV	0

WHERE WOULD YOU LIKE THIS ACTIVITY TO BE?

(Number of Children)

Community Centre	11
Home	6
Other	6
School	3
Park or Playground	2

PERCEIVED BARRIERS TO PARTICIPATING IN DESIRED AFTER-SCHOOL ACTIVITIES



Children were asked what prevents them from doing the activities they wish to be doing after school (3 pm - 6 pm):

(Number of Children)

I have no barriers	45
I have to go straight home after school	21
The schedule does not fit the times I can attend	14
I don't know what's available	14
I am too busy	11
I am afraid I will not be good enough in that activity	11
Other	11
It costs too much	10
None of my friends are interested or want to go	9
I need to take care of siblings or do things at home	8
The activity that I want is not offered	6
My parents do not approve	5
It is too difficult to get there	5
It is not safe for me to go	4
I have too much homework to do	1

AFTER-SCHOOL PEOPLE AND PLACES

WHERE DO YOU GO AFTER SCHOOL? (FROM 3 PM - 6 PM)

	Never	1x /week	2x +/week
Home	7%	5%	88%
Stay at school for an activity	69%	16%	16%
After-school program or child care	75%	9%	16%
Friend's house	40%	38%	21%
Park/playground/community centre	45%	26%	29%
The mall or stores	67%	23%	9%
Someplace else	42%	33%	26%

WHO ARE YOU WITH AFTER SCHOOL? (FROM 3 PM - 6 PM)

(Children can select all of the options that apply)

By myself	21%
Friends about my age	28%
Younger brothers/sisters	34%
Older brothers/sisters	29%
Mother (or stepmother/foster mother)	67%
Father (or stepfather/foster father)	52%
Other adult (for example, elder, aunt or uncle, coach, babysitter)	6%
Grandparent(s)	17%
Other	5%



IN YOUR NEIGHBOURHOOD/COMMUNITY THERE ARE SAFE PLACES WHERE YOU FEEL COMFORTABLE HANGING OUT WITH FRIENDS:

69%

Yes

9%

No

22%

Don't know

IN YOUR NEIGHBOURHOOD/COMMUNITY THERE ARE PLACES THAT PROVIDE PROGRAMS FOR KIDS YOUR AGE:

57%

Yes

10%

No

32%

Don't know



RESEARCH HIGHLIGHTS

USE OF AFTER-SCHOOL TIME

Participation in after-school programs can result in greater connectedness to school and success in school as well as decreased negative behaviours (Durlak et al., 2010).

Quiet reflection time and daydreaming is just as essential to brain health and development as active and focused activities (Immordino-Yang, 2012).

Children who demonstrate a lack of self-control and problem solving skills may experience the greatest benefit from activities such as music, arts and sports that help to develop these skills (Diamond, 2014).

A study examining the experiences of children in Grades 1–5 who participated in after-school programs found that children who participated in high-quality, structured after-school programs had increased social-emotional skills, in addition to fewer conduct problems and higher social self-control and assertion (Wade, 2015).

Challenging and enjoyable after-school activities can improve youth's ability to reason and problem solve, exercise choice and discipline and be creative and flexible, which are strong predictors of academic, career, and life success (Diamond, 2014).



SCHOOL EXPERIENCES

Children’s sense of safety and belonging at school has been shown to foster their school success in many ways. When children have positive experiences at school, they are more likely to feel they belong within their school, feel more motivated and engaged, and have higher academic achievement (Wang & Degol, 2016). Children who feel a sense of connection and belonging to school are also less likely to engage in high-risk behaviours (Eccles & Roeser, 2011). Understanding children’s school experiences improves the ability to both create and cultivate school environments that are safe, caring, and supportive.

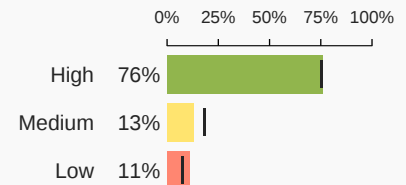
Detailed information on the MDI survey questions and response scales for School Experiences are available in the [Discover MDI Field Guide](https://www.discovermdi.ca/school-experiences/) (<https://www.discovermdi.ca/school-experiences/>).

RESULTS FOR POWELL RIVER

| Average for all Districts

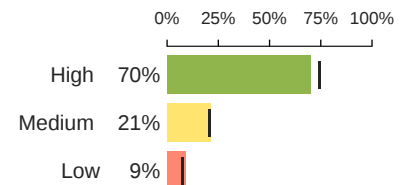
ACADEMIC SELF CONCEPT

Children's beliefs about their academic ability, including their perceptions of themselves as students and how interested and confident they feel in school. e.g., "I am certain I can learn the skills taught in school this year."



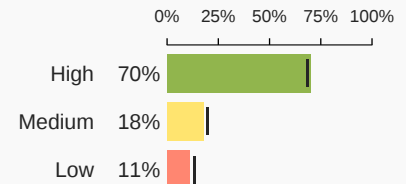
SCHOOL CLIMATE

The overall tone of the school environment, including the way teachers and students interact and how students treat each other. e.g., "People care about each other in this school."



SCHOOL BELONGING

School belonging is the degree to which children feel connected and valued at their school. e.g., "I feel like I am important to this school."



Percentage of children who feel it is **very important** to:



55%

make friends



60%

get good grades



68%

learn new things

Percentage of children who **agree a little** or **agree a lot** that:

When I grow up, I have goals and plans for the future.

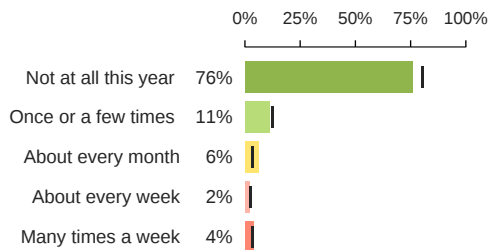


73%

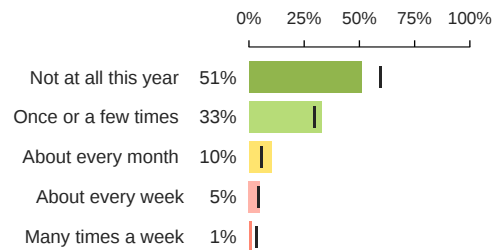
VICTIMIZATION AND BULLYING AT SCHOOL

Children are asked: "During this school year, how often have you been bullied by other students in the following ways?":

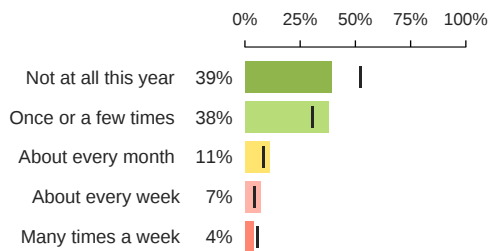
CYBER



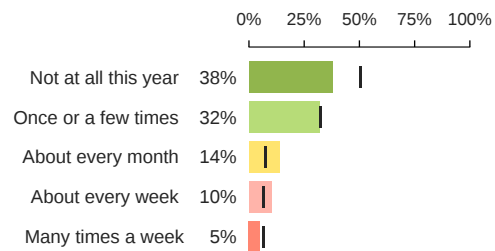
PHYSICAL



SOCIAL



VERBAL



RESEARCH HIGHLIGHTS SCHOOL EXPERIENCES

Children's perception of kindness within a school is a consistent indicator of a positive school climate. Students who see kind behaviours in students, teachers and staff also describe their school environments as being safe and encouraging places to learn. As children transition from Grade 4 to Grade 8, perceptions of kindness in schools decrease (Binfet, Gademmann & Schonert-Reichl, 2016).

Feelings of belonging are associated with lower emotional distress, the reduction of negative behaviours (such as bullying and mental health issues) and are associated to rates of higher resilience later in life (van Harmelen et al., 2016).

Children and youth who demonstrate empathy are less likely to bully others and are more likely to defend against bullying. Research shows that specific empathy skills differ between those who bully, are victimized, defend or are bystanders. Focusing on developing children's understanding of what others feel results both in less bullying and more defending behaviours (van Noorden et al, 2015).

NEIGHBOURHOOD RESULTS



Neighbourhoods have unique characteristics that provide important context for interpreting MDI results. Understanding neighbourhood-level differences within a school district or community is essential when considering actions to support children’s well-being. The neighbourhood results section includes:

Neighbourhood Maps

- Well-Being Index Map: representing the percentage of children who are “thriving.”
- Assets Index Maps: representing the percentage of children reporting the presence of each of the four assets of the Assets Index: Adult Relationships, Peer Relationships, Nutrition and Sleep, and After-School Activities.

Neighbourhood Data Table - A summary table of the Well-Being Index and Assets Index data.

Neighbourhood Profiles - A summary of MDI data based on the neighbourhoods in which children live, including children from all participating public schools. Results are provided for the Well-Being Index, the Assets Index and a selection of questions related to after-school time and community belonging and safety.

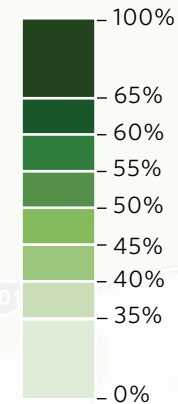
Please note that neighbourhood data are reported based on children’s home postal codes and include all children who live within the school district boundaries. Where neighbourhoods contain fewer than 35 children, the results are suppressed.



WELL-BEING INDEX


The MDI Well-Being Index is a composite score of 5 measures that are of critical importance during the middle years. Children who score in the high range on at least 4 of the 5 measures of well-being and have no low-range scores are considered to be “thriving.”

Percentage of Children Thriving



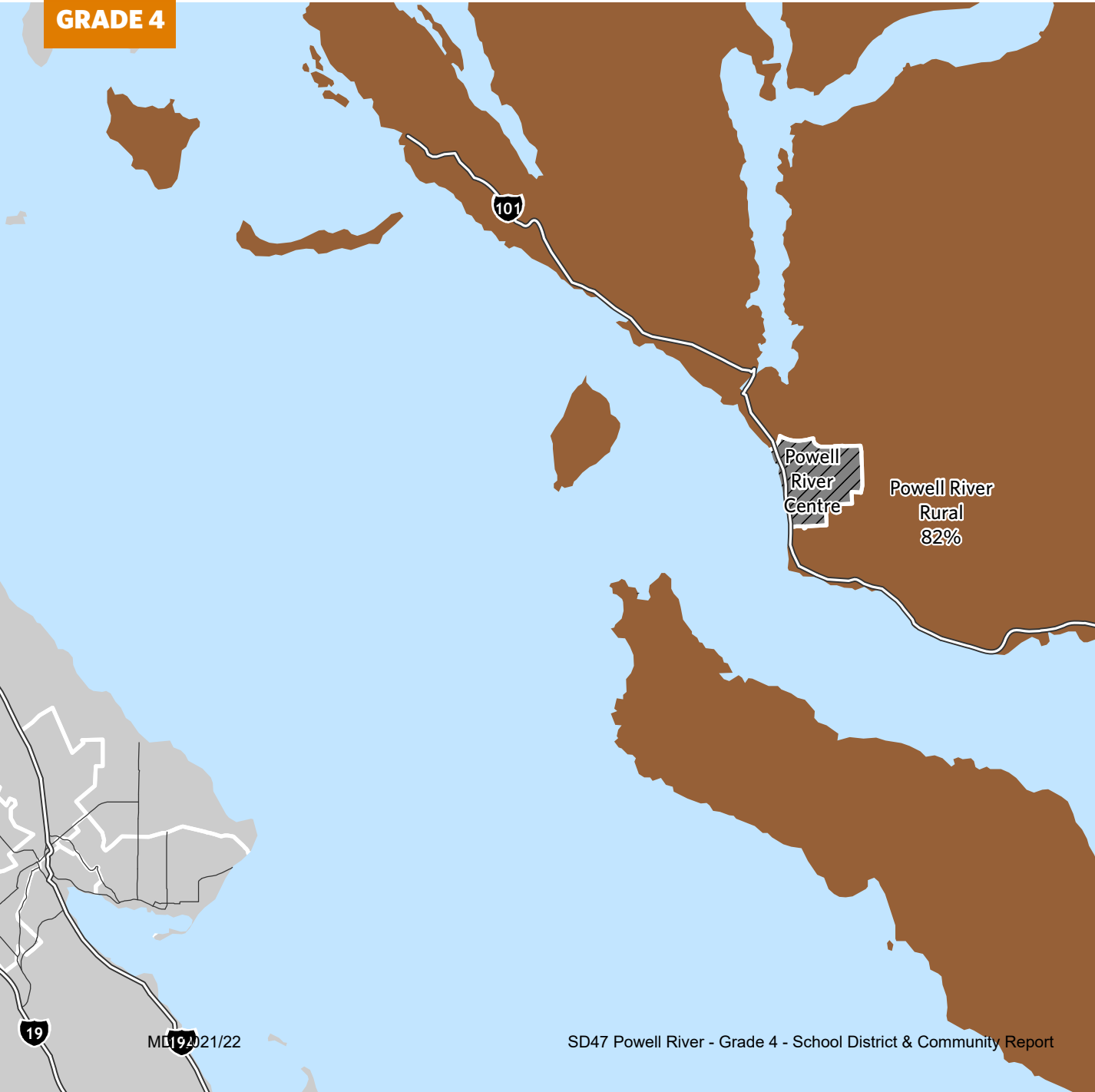
SD 47
45%

All Participating
Districts*
36%

 Data Suppressed (<35 students)

*See page 7 for a list of participating school districts in 2021/22.

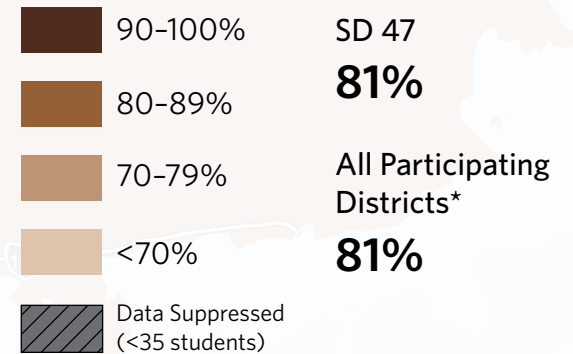
Note: Data are mapped using home postal codes, not by where children attend school.



ADULT RELATIONSHIPS

Children's health and well-being are directly related to the presence of adult relationships at home, at school and in their neighbourhood or community.

Percentage of children reporting the presence of the adult relationship asset

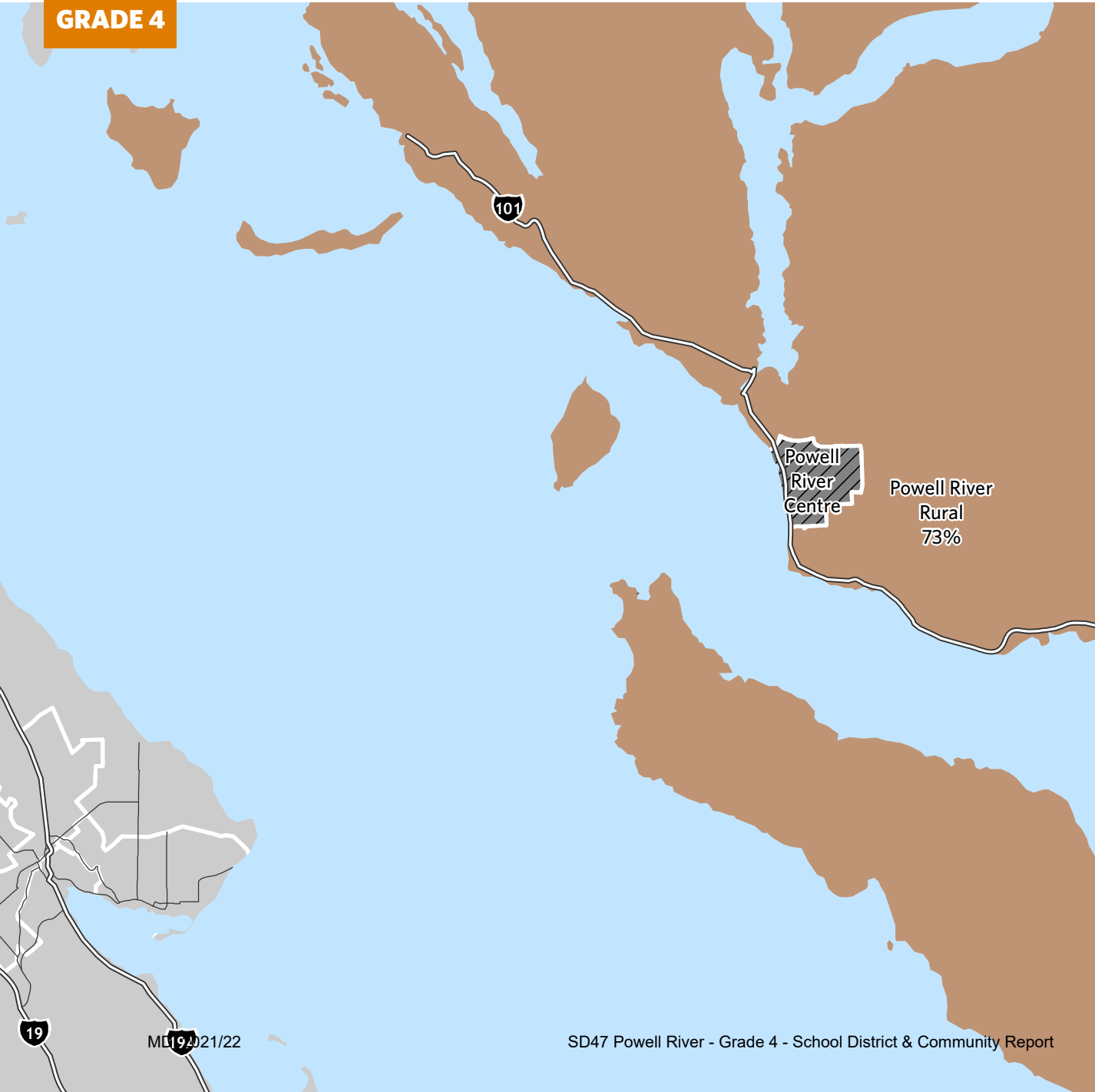


*See page 7 for a list of participating school districts in 2021/22.

Note: Data are mapped using home postal codes, not by where children attend school.

**HUMAN
EARLY LEARNING
PARTNERSHIP**

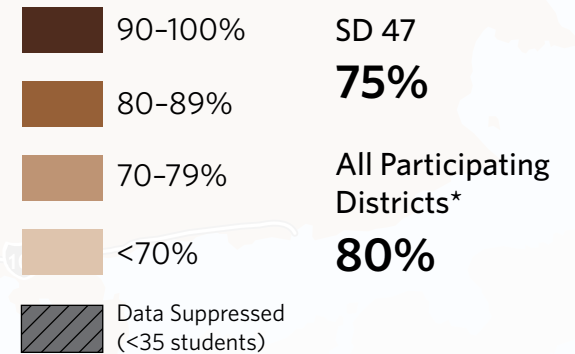




PEER RELATIONSHIPS

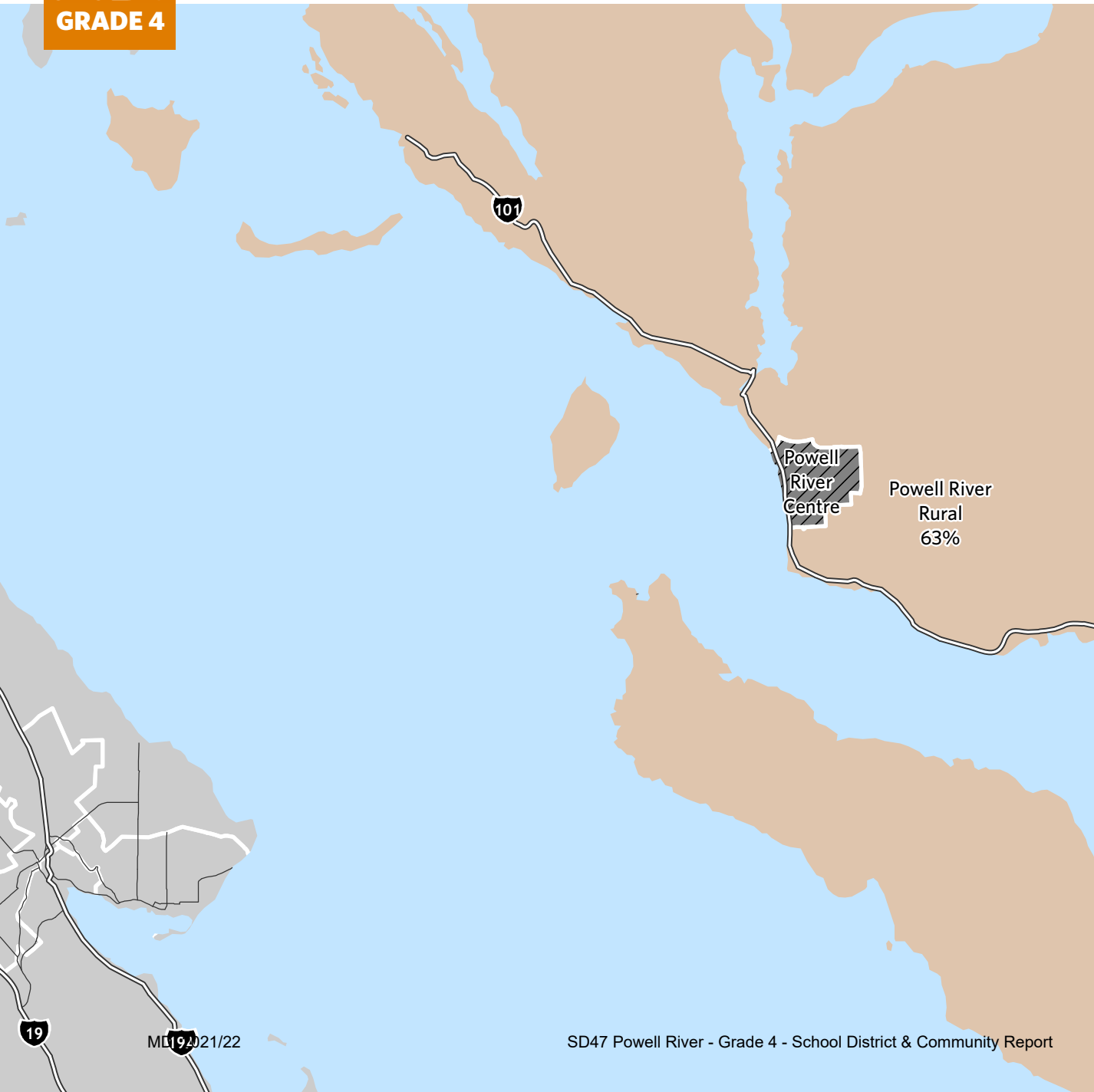
Children's health and well-being are directly related to feeling a sense of belonging with their peers and having close or intimate friendships.

Percentage of children reporting the presence of the peer relationship asset



*See page 7 for a list of participating school districts in 2021/22.

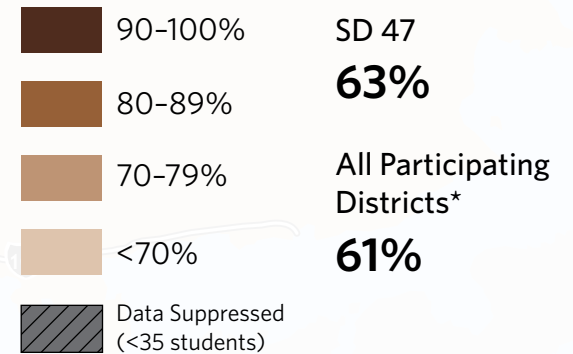
Note: Data are mapped using home postal codes, not by where children attend school.



NUTRITION & SLEEP

Children's health and well-being are directly related to their nutrition and sleeping habits.

Percentage of children reporting the presence of the nutrition and sleep asset

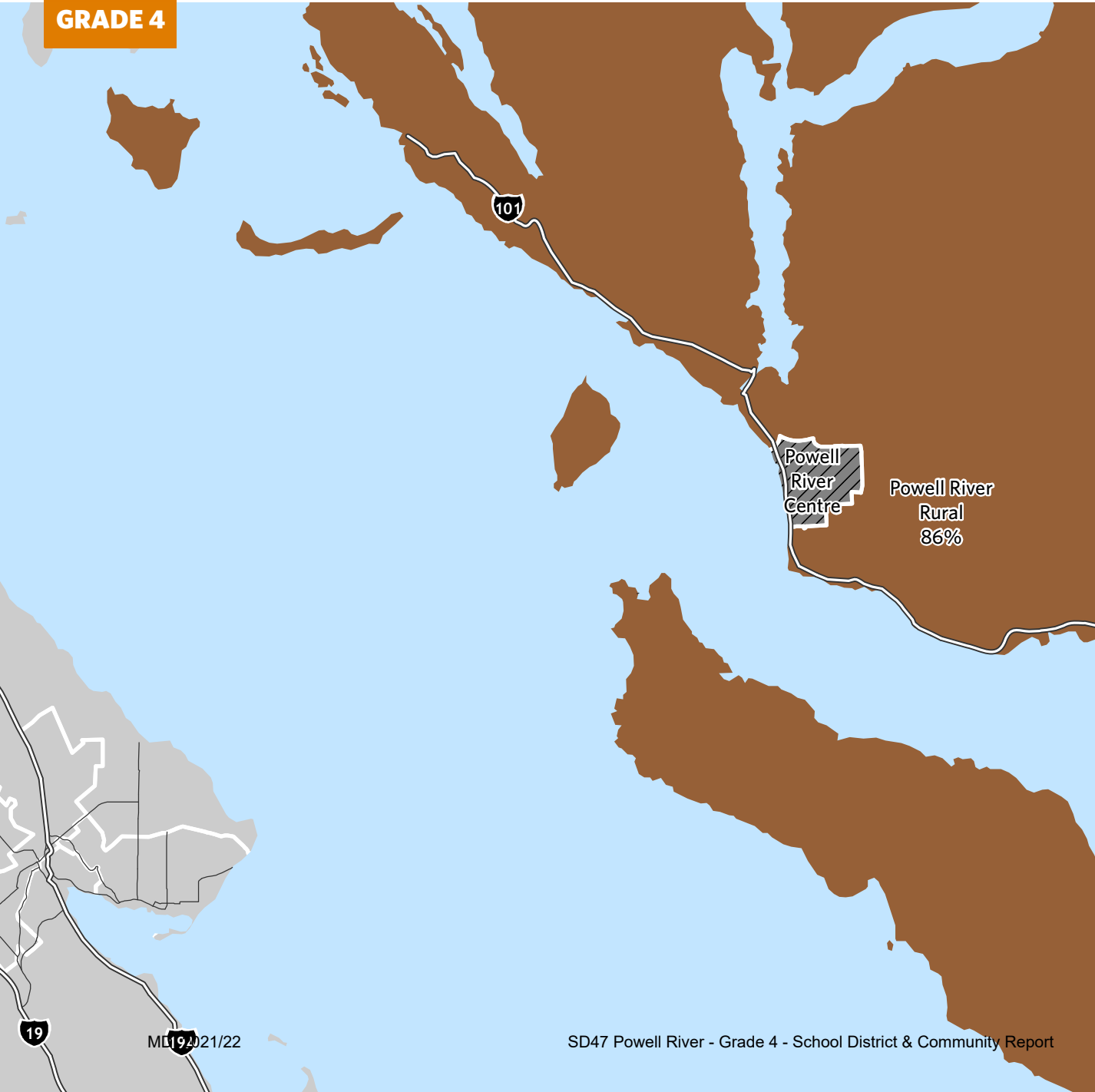


*See page 7 for a list of participating school districts in 2021/22.

Note: Data are mapped using home postal codes, not by where children attend school.

HUMAN
EARLY LEARNING
PARTNERSHIP

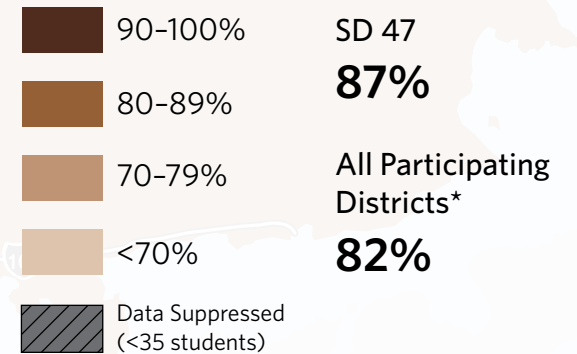




AFTER-SCHOOL ACTIVITIES

Children's health and well-being are directly related to the positive activities they participate in during the after-school hours of 3-6 pm.

Percentage of children reporting the presence of the after-school activity asset



*See page 7 for a list of participating school districts in 2021/22.

Note: Data are mapped using home postal codes, not by where children attend school.

NEIGHBOURHOOD DATA TABLE

WELL-BEING INDEX

ASSETS INDEX

Percentage of children experiencing:

Percentage of children reporting the presence of these assets in their lives:



Neighbourhood	Number of Children	Thriving	Medium to High Well-being	Low Well-being	Adult Relationship	Peer Relationship	Nutrition & Sleep	After-school Activities
Powell River Centre	34				<i>Suppressed</i>			
Powell River Rural	66	47%	15%	38%	82%	73%	63%	86%
Powell River (47)	102	45%	20%	35%	81%	75%	63%	87%
All Participating Districts	4305	36%	28%	36%	81%	80%	61%	82%

Note: Neighbourhood data are reported based on children’s home postal codes and include all children who live within the school district boundaries. Therefore, the number of children in all neighbourhoods may not equal the total school district count. MDI results are suppressed where there are fewer than 35 children.



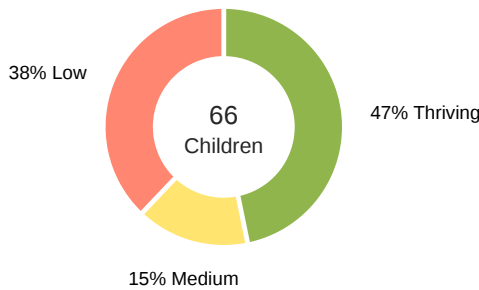
POWELL RIVER RURAL

POWELL RIVER

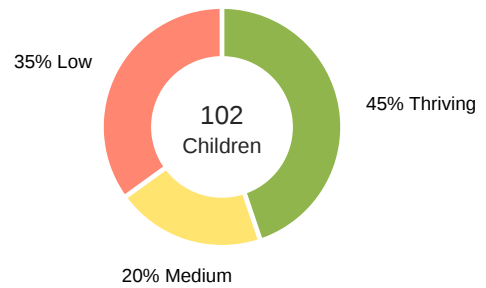
NUMBER OF CHILDREN: 66

WELL-BEING INDEX

POWELL RIVER RURAL



POWELL RIVER

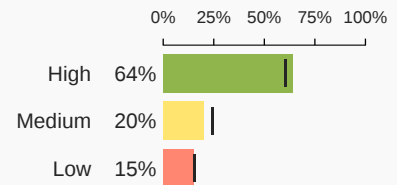


MEASURES COMPRISING THE WELL-BEING INDEX

| School District Average

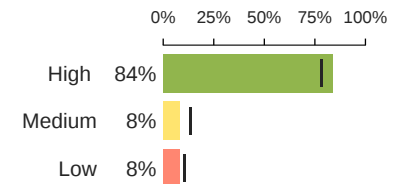
OPTIMISM

Optimism refers to the mindset of having positive expectations for the future. e.g., "I have more good times than bad times."



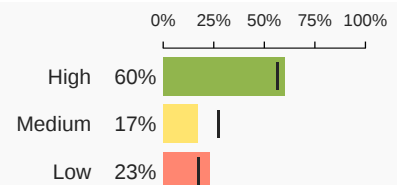
SELF-ESTEEM

Self-esteem refers to a person's sense of self-worth. e.g., "A lot of things about me are good."



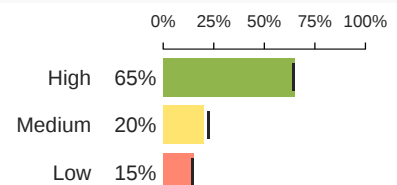
HAPPINESS

Happiness refers to how content or satisfied children are with their lives. e.g., "I am happy with my life."



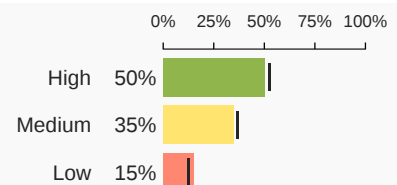
ABSENCE OF SADNESS

Sadness measures the beginning symptoms of depression. e.g., "I feel unhappy a lot of the time."



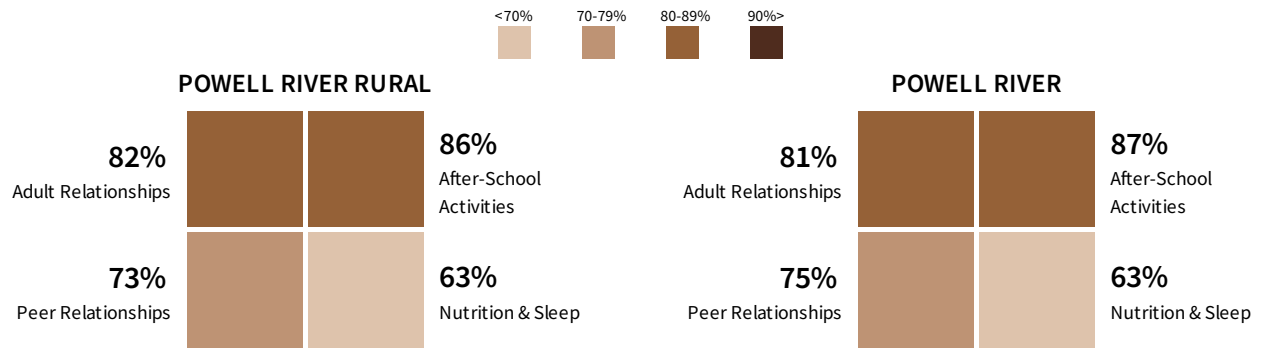
GENERAL HEALTH

Children are asked, "In general, how would you describe your health?"



ASSETS INDEX

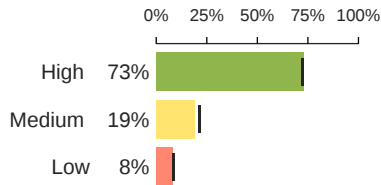
Percentage of children reporting the presence of an asset



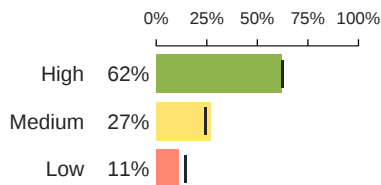
MEASURES COMPRISING THE ASSETS INDEX

ADULT RELATIONSHIPS

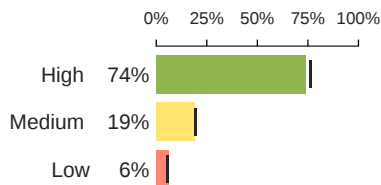
Adults at School



Adults in the Neighbourhood/Community

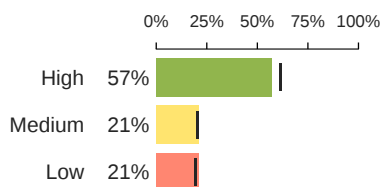


Adults at Home

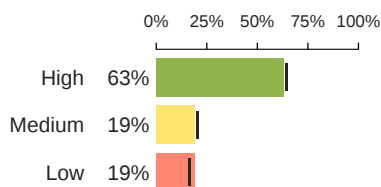


PEER RELATIONSHIPS

Peer Belonging

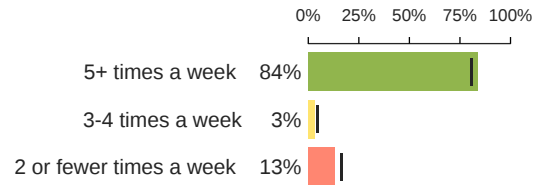


Friendship Intimacy

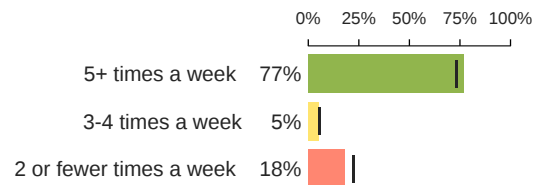


NUTRITION AND SLEEP

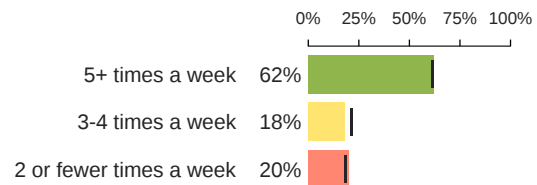
Eating Breakfast



Meals with Adults in Your Family

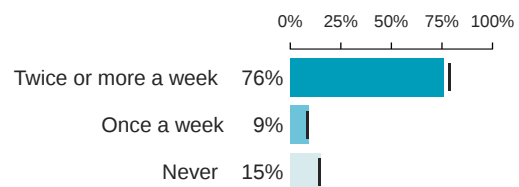


Frequency of Good Sleep



AFTER-SCHOOL ACTIVITIES

Any Organized Activity



| School District Average

USE OF AFTER-SCHOOL TIME

WHAT CHILDREN WISH TO BE DOING



Children were asked what they want to be doing during the after-school hours of 3pm-6pm:

I am already doing the activities I want to be doing

75%

I wish I could do additional activities

35%

I am doing some of the activities I want, but I wish I could do more

9%

TOP WISHES

(Number of students)

Physical and/or outdoor activities	30
Free time/relaxing	2
Other	2

TOP BARRIERS

(Number of students)

I have to go straight home after school	15
I don't know what's available	11
The schedule does not fit the times I can attend	9

AFTER-SCHOOL ACTIVITIES

Children were asked, "During last week AFTER SCHOOL (from 3 pm - 6 pm), how many days did you participate in":

	Not at all	1x /week	2x +/week
Educational lessons or activities	66%	13%	21%
Art or music lessons	59%	19%	22%
Youth organizations	79%	10%	12%
Individual sports with a coach or instructor	36%	26%	38%
Team sports with a coach or instructor	49%	31%	20%



IN YOUR NEIGHBOURHOOD/COMMUNITY THERE ARE PLACES THAT PROVIDE PROGRAMS FOR KIDS YOUR AGE:

56%

Yes

11%

No

33%

Don't know

COMMUNITY BELONGING & SAFETY

IN YOUR NEIGHBOURHOOD/COMMUNITY THERE ARE ADULTS WHO:

(Percentage of children who responded "very much true")



39%

Really care about me.



43%

Believe that I will be a success.



37%

Listen to me when I have something to say.



IN YOUR NEIGHBOURHOOD/COMMUNITY THERE ARE SAFE PLACES WHERE YOU FEEL COMFORTABLE HANGING OUT WITH FRIENDS:

70%

Yes

9%

No

20%

Don't know

MOVING TO ACTION WITH DISCOVERMDI.CA

MDI data can support planning, foster collaboration and inform action across schools, organizations and communities. There are many opportunities for working with your MDI results and there are examples of successful initiatives from across the province to learn from.

We encourage you to take time to visit **Discover MDI: A Field Guide to Well-being in Middle Childhood** at [discovermdi.ca](https://www.discovermdi.ca), an online resource where you can access information and research on the many aspects of well-being in middle childhood, resources and tools for understanding and sharing MDI data and to connect with MDI Champions who are working on similar issues in their schools and communities. Here are some key resources and tools to get you started:

UNDERSTAND YOUR MDI DATA

MDI reports provide information with both detail and depth into the social and emotional lives of children. Approach the results with a lens of curiosity, inquiry and appreciation. The Discover MDI Field Guide can walk you through [how to read and interpret your MDI data](https://www.discovermdi.ca/exploring-mdi-data/) (<https://www.discovermdi.ca/exploring-mdi-data/>). It also provides background research to support further understanding of the MDI data.

CHOOSING A FOCUS: THINK BIG, START SMALL

It may be overwhelming to consider the many opportunities for change presented in the MDI data. Where will your focus be? What results do you have some influence over? How will you make change? For example, if you are interested in the area of social and emotional development, the Discover MDI Field Guide provides in-depth information on the [MDI and its dimensions and measures](https://www.discovermdi.ca/intro-to-mdi-dimensions-and-indices/) (<https://www.discovermdi.ca/intro-to-mdi-dimensions-and-indices/>), including the [measures of social and emotional development](https://www.discovermdi.ca/social-emotional-development/) (<https://www.discovermdi.ca/social-emotional-development/>).

ENGAGING OTHERS

Increasing local dialogue on the importance of child well-being in the middle years is an excellent way to start improving outcomes for children. Once you are ready, review your MDI report with multiple audiences: children, parents and elders, caregivers and teachers, school administrators, after-school programmers, local early/middle childhood committees, local government and other community stakeholders. Visit the Discover MDI Field Guide for tips and tools to [widen the conversation and to think critically about the data together](https://www.discovermdi.ca/sharing-mdi-data/) (<https://www.discovermdi.ca/sharing-mdi-data/>).

MAKING CHANGE

The MDI provides opportunities to weave together data and local knowledge to create a change process that reflects the unique context of your school, district or community. The Discover MDI Field Guide's 'Making Change Workshops' support school and community change-makers through the process of facilitating exploration of MDI data, creating action teams and turning ideas into concrete plans. There are full facilitation guides for each workshop, paired with worksheets and companion slide decks. Explore [workshop resources](https://www.discovermdi.ca/workshops/) (<https://www.discovermdi.ca/workshops/>).

SHARING DATA WITH CHILDREN

Do the results surprise you or raise further questions? Conversations with children will help explore and clarify results in these areas. Sharing data with children will provide them with an opportunity to share their perspectives and ideas on how to create environments and interactions that help them thrive. If you are wondering how to involve children of all ages and their families in exploring these results, [explore MDI essential resources](https://www.discovermdi.ca/category/md-essentials/) (<https://www.discovermdi.ca/category/md-essentials/>).

BE INSPIRED AND CONNECT WITH OTHERS

Innovation happens when people build on ideas, rather than simply duplicating them. The Discover MDI Field Guide provides opportunities to learn from seasoned MDI Champions – [check out their stories and learn from their approaches](https://www.discovermdi.ca/making-change-with-the-mdi/), (<https://www.discovermdi.ca/making-change-with-the-mdi/>), explore the collection of [downloadable tools](https://www.discovermdi.ca/category/md-essentials/) (<https://www.discovermdi.ca/category/md-essentials/>) and [find upcoming training and learning opportunities](https://www.discovermdi.ca/category/news-and-events/) (<https://www.discovermdi.ca/category/news-and-events/>). Be inspired, edit, adapt or create new!

If you have any additional questions about the MDI project, please visit our website at [earlylearning.ubc.ca/mdi](https://www.earlylearning.ubc.ca/mdi) or contact the MDI team at mdi@help.ubc.ca.

REFERENCES

INTRODUCTION TO THE MDI

Jacobs, R. H., Reinecke, M. A., Gollan, J. K., & Kane, P. (2008). Empirical evidence of cognitive vulnerability for depression among children and adolescents: A cognitive science and developmental perspective. *Clinical Psychology Review, 28*(5), 759–782. Science Direct.

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). Peer interactions, relationships, and groups. In N. Eisenberg, W. Damon, & R. M. Lerner (Eds.), *Handbook of child psychology: Social, emotional, and personality development* (pp. 571–645). John Wiley & Sons Inc.

SOCIAL & EMOTIONAL DEVELOPMENT

Domitrovich, C. E., Durlak, J. A., Staley, K. C., & Weissberg, R. P. (2017). Social-emotional competence: An essential factor for promoting positive adjustment and reducing risk in school children. *Child Development, 88*(2), 408-416.

<http://dx.doi.org/10.1111/cdev.12739>

Jones, D. E., Greenberg, M., & Crowley, M. (2015). Early social-emotional functioning and public health: The relationship between kindergarten social competence and future wellness. *American Journal of Public Health, 105*(11), 2283-2290.

<https://dx.doi.org/10.2105%2FAJPH.2015.302630>

Mahoney, J., Weissberg, R., Greenberg, M., Dusenbury, L., Jagers, R., Niemi, K., Schlinger, M., Schlund, J., Shriver, T., VanAusdal, K., & Yoder, N. (2020). Systemic social and emotional learning: Promoting educational success for all preschool to high school students. *American Psychologist, 1*-16.

<https://casel.org/wp-content/uploads/2020/10/Design-Systemic-SEL.pdf>

Schreier H., Schonert-Reichl K., & Chen E. (2013). Effect of volunteering on risk factors for cardiovascular disease in adolescents: a randomized controlled trial. *JAMA Pediatrics, 167*(4): 327–332.

Skinner, E. A., & Zimmer-Gembeck, M. J. (2016). Development of coping during middle childhood: Cognitive reappraisal, mental modes of coping, and coordination with demands. In E. A. Skinner & M. J. Zimmer-Gembeck, *The Development of Coping* (pp. 163–183). Cham: Springer International Publishing.

Weissberg, R.P., Durlak, J.A., Domitrovich, C.E., & Gullotta, T.P. (2015). Social and emotional learning: Past, present, and future. In J.A. Durlak, C.A. Domitrovich, R.P. Weissberg, & T.P. Gullotta (Eds.) *Handbook of social and emotional learning* (3–19). New York, NY: Guilford Press.

PHYSICAL HEALTH & WELL-BEING

Forrest, C. B., Bevans, K. B., Riley, A. W., Crespo, R., & Louis, T. A. (2013). Health and school outcomes during children's transition into adolescence. *Journal of Adolescent Health, 52*(2), 186-194. <https://doi.org/10.1016/j.jadohealth.2012.06.019>

Harrison, M. E., Norris, M. L., Obeid, N., Fu, M., Weinstangel, H., & Sampson, M. (2015). Systematic review of the effects of family meal frequency on psychosocial outcomes in youth. *Canadian Family Physician, 61*(2), 96–106.

Hertzman, C., & Boyce, T. (2010). How experience gets under the skin to create gradients in developmental health. *Annual Review of Public Health, 31*(1), 329 - 347. <https://doi.org/10.1146/annurev.publhealth.012809.103538>

Moeijes, J., van Busschbach, J. T., Bosscher, R. J., & Twisk, J. W. R. (2018). Sports participation and psychosocial health: A longitudinal observational study in children. *BMC Public Health, 18*(702). <https://doi.org/10.1186/s12889-018-5624-1>

Reichelt, A. C. (2016). Adolescent maturational transitions in the prefrontal cortex and dopamine signaling as a risk factor for the development of obesity and high fat/high sugar diet induced cognitive deficits. *Frontiers in Behavioral Neuroscience, 10*, 1–17.

Smaldone A, Honig J., & Byrne M. (2007). Sleepless in America: inadequate sleep and relationships to health and well-being of our nation's children. *Pediatrics, 119* (suppl 1): S29-S37.

CONNECTEDNESS

Emerson, S. D., Mâsse, L. C., Ark, T. K., Schonert-Reichl, K. A., & Guhn, M. (2018). A population-based analysis of life satisfaction and social support among children of diverse backgrounds in British Columbia, Canada. *Quality of Life Research*, 27(10), 2595-2607.

<https://doi.org/10.1007/s11136-018-1922-4>

First Nations Information Governance Centre. Now is the time: Our data, our stories, our future. The national report of the First Nations regional early childhood, education, and employment survey. Ottawa, ON: FNIGC; 2016. Available from https://fnigc.ca/wp-content/uploads/2021/01/FNIGC_FNREES-National-Report-2016-EN_FINAL_01312017.pdf.

Gadermann, A. M., Guhn, M., Schonert-Reichl, K. A., Hymel, S., Thomson, K., & Hertzman, C. (2015). A population-based study of children's well-being and health: the relative importance of social relationships, health-related activities, and income. *Journal of Happiness Studies*, 17, 1847-1872.

Guhn, M., Schonert-Reichl, K. A., Gadermann, A. M., Hymel, S., & Hertzman, C. (2013). A population study of victimization, relationships, and well-being in middle childhood. *Journal of Happiness Studies*, 14(5), 1529-1541.

Masten, A. S. (2018). Resilience theory and research on children and families: past, present, and promise. *Journal of Family Theory & Review*, 10(1), 12-31. <https://doi.org/10.1111/jftr.12255>

Oberle, E., Guhn, M., Gadermann, A. M., Thomson, K., & Schonert-Reichl, K. A. (2018). Positive mental health and supportive school environments: A population-level longitudinal study of dispositional optimism and school relationships in early adolescence. *Social Science & Medicine*, 214, 154-161.

Oberle, E., Schonert-Reichl, K. A., Guhn, M., & Hertzman, C. (2014). The role of supportive adults in promoting positive development in middle childhood: a population-based study. *Canadian Journal of School Psychology*, 29, 296-316.

Olsson, C., McGee, R., Nada-Raja, S., & Williams, S. (2013). A 32-year longitudinal study of child and adolescent pathways to well-being in adulthood. *Journal of Happiness Studies*, 14(3), 1069-1083.

Thomson, K. C., Oberle, E., Gadermann, A. M., Guhn, M., Rowcliffe, P., & Schonert-Reichl, K. A. (2018). Measuring social-emotional development in middle childhood: The Middle Years Development Instrument. *Journal of Applied Developmental Psychology*, 55, 107-118. <https://doi.org/10.1016/j.appdev.2017.03.005>

Veiga, F., Wentzel, K., Melo, M., Pereira, T., Faria, L., & Galvão, D. (2014). Students' engagement in school and peer relations: A literature review. In *I Congresso Internacional Envolvimento dos Alunos na Escola: Perspetivas da Psicologia e Educação* (pp. 196-211).

Werner, E. E. (2004). Journeys from childhood to midlife: Risk, resilience, and recovery. *Pediatrics*, 114(2), 492-492.

USE OF AFTER-SCHOOL TIME

Diamond, A. (2014). Want to optimize executive functions and academic outcomes?: Simple, just nourish the human spirit. In *Minnesota Symposia on Child Psychology* (Vol. 37, p. 205). NIH Public Access.

Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology*, 45(3-4), 294-309.

Immordino-Yang, M. H., Christodoulou, J. A., & Singh, V. (2012). Rest is not idleness implications of the brain's default mode for human development and education. *Perspectives on Psychological Science*, 7(4), 352-364.

Schonert-Reichl, K. A., Guhn, M., Gadermann, A., Hymel, S., Sweiss, L., & Hertzman, C. (2013). Development and validation of the Middle Years Development Instrument (MDI): Assessing children's well-being and assets across multiple contexts. *Social Indicators Research*, 114(2), 345-369. <https://doi.org/10.1007/s11205-012-0149-y>

Thouin, É., Dupéré, V., Dion, E., McCabe, J., Denault, A-S., Archambault, I. Brière, F.N., Leventhal, T., & Crosnoe, R. (2020) School-based extracurricular activity involvement and high school dropout among at-risk students: Consistency matters. *Applied Developmental Science*, 1-14. <https://doi.org/10.1080/10888691.2020.1796665>

Vandell, D. L., Lee, K. T. H., Whitaker, A. A., & Pierce, K. M. (2020). Cumulative and differential effects of early child care and middle childhood out-of-school time on adolescent functioning. *Child Development*, 91(1), 129-144. <https://doi.org/10.1111/cdev.13136>

Wade C. (2015). The longitudinal effects of after-school program experiences, quality, and regulatable features on children's social-emotional development. *Child and Youth Services Review*, 48, 70-79.

SCHOOL EXPERIENCES

Binfet, J., Gadermann, A., & Schonert-Reichl, K. (2016). Measuring kindness at school: psychometric properties of a school kindness scale for children and adolescents. *Psychology in the Schools, 53*(2), 111–126.

Eccles, J. S., & Roeser, R. W. (2011). Schools as developmental contexts during adolescence. *Journal of Research on Adolescence, 21*(1), 225-241. <http://dx.doi.org/10.1111/j.1532-7795.2010.00725.x>

van Harmelen A. L., Gibson, J. L., St. Clair, M. C., Owens, M., Brodbeck, J., Dunn, V., ... Goodyer, I. M. (2016). Friendships and family support reduce subsequent depressive symptoms in at-risk adolescents. *PLoS ONE 11*(5): e0153715.

van Noorden, T. H., Haselager, G. J., Cillessen, A. H., & Bukowski, W. M. (2015). Empathy and involvement in bullying in children and adolescents: A systematic review. *Journal of Youth and Adolescence, 44*(3), 637–657

Wang, M.-T., & Degol, J. L. (2016). School climate: A review of the construct, measurement, and impact on student outcomes. *Educational Psychology Review, 28*(2), 315-352. <https://doi.org/10.1007/s10648-015-9319-1>

For all publications on the MDI including ones on reliability and validity visit, the [Discover MDI Field Guide](https://www.discovermdi.ca/references/) (<https://www.discovermdi.ca/references/>).