

MDi

HUMAN
EARLY LEARNING
PARTNERSHIP



A Companion Guide to the Middle Years Development Instrument (MDI)

Updated: November 2023



ACKNOWLEDGEMENTS/ABOUT THE HUMAN EARLY LEARNING PARTNERSHIP

ACKNOWLEDGEMENTS

We express our deep gratitude to the $\text{x}^{\text{m}}\text{m}\text{ə}\text{θ}\text{k}^{\text{w}}\text{ə}\text{y}^{\text{ə}}\text{m}$ (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.

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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.

MDI RESEARCH LEADS

HELP's Middle Years research is led by Dr. Eva Oberle. HELP acknowledges Dr. Oberle for her leadership and expertise in social and emotional development research, her dedication to exploring children's experiences in the middle years, and for raising the profile of children's voices. HELP also acknowledges the contributions of Dr. Kimberly Schonert-Reichl and her expertise in the area of social and emotional learning to the development and implementation of the MDI.

ABOUT THE HUMAN EARLY LEARNING PARTNERSHIP

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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.

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ABOUT THE MDI COMPANION GUIDE

The Companion Guide to the Middle Years Development Instrument (MDI) supports the understanding and interpretation of the MDI questionnaire and related MDI data reports. MDI reports, including the MDI Data Dashboard and PDF reports by School District & Community, may be found on the HELP Website Reports page: <https://earlylearning.ubc.ca/reports>. This guide provides a description of questions and measures on the MDI questionnaire as well as the Well-Being and Assets Indices.

This guide provides:

- Scoring descriptions for the measures, assets, and indices;
- A breakdown of the questions included in a measure when that measure is comprised of more than one question;
- Information on the importance of these measures for children’s well-being and healthy development during the middle years;

For more information on the sources of items and constructs as well as information on the validity and reliability of the MDI, please see “Development and validation of the Middle Years Development Instrument (MDI): Assessing children’s well-being and assets across multiple contexts” (Schonert-Reichl et al., 2012) available here: <https://link.springer.com/article/10.1007/s11205-012-0149-y>. For technical details on the scoring methodology, please contact the MDI team to request the MDI Coding Manual at mdi@help.ubc.ca. For information on changes to the MDI questionnaire and school administration over time, see the Appendix.

ABOUT 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 Out-of-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 page illustrates the relationship between MDI dimensions and measures, and highlights which measures contribute to the Well-Being and Assets Indices.

DIMENSIONS OF THE MDI

5 DIMENSIONS OF THE MDI



SOCIAL & EMOTIONAL DEVELOPMENT

MEASURES

- Optimism
- Empathy
- Prosocial Behaviour
- Self-Esteem
- Happiness
- Absence of Sadness
- Absence of Worries
- Self-Regulation (Short-Term)

MDI 6/7/8 Responsible Decision-Making

MDI 6/7/8 Self-Awareness

MDI 6/7/8 Citizenship and Social Responsibility
Concern for the Environment



PHYSICAL HEALTH & WELL-BEING

MEASURES

- General Health
- Eating Breakfast
- Meals with Adults in Your Family
- Food
- Frequency of Good Sleep
- Help-Seeking for Emotional Well-Being
- Transportation to and from School
- Physical Activity
- Wake-up & Sleep Time

MDI 6/7/8 These questions are on the Grade 6/7/8 MDI only

** Previously called "Use of After-School Time." In 2022/23, this dimension was renamed to reflect changes to the questionnaire.



CONNECTEDNESS

MEASURES

- Adults at School
- Adults in the Neighbourhood
- Adults at Home
- Peer Belonging
- Friendship Intimacy
- Important Adults



USE OF OUT-OF-SCHOOL TIME**

MEASURES

- Organized Activities
 - Educational Lessons or Activities
 - Youth Organizations
 - Sports
 - Music or Arts
- How Children Spend Their Time (unstructured activities)
- Out-of-School Places
- Children's Wishes



SCHOOL EXPERIENCES

MEASURES

- Academic Self-Concept
- School Climate
- School Belonging
- Victimization and Bullying

WELL-BEING INDEX

○ A measure in the Well-Being Index



ASSETS INDEX

■ A measure in the Assets Index





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 out-of-school programs with peers and community members.

The MDI asks children to respond to questions about their current social and emotional functioning in the following areas: optimism, empathy, prosocial behaviour, self-esteem, happiness, self-regulation and psychological well-being. In addition, the Grade 6/7/8 MDI questionnaire asks about the following: responsible decision-making, self-awareness and citizenship and social responsibility.

OPTIMISM. Optimism refers to the mindset of having positive expectations for the future. The items on the optimism measure were drawn from the Resilience Inventory (Noam & Goldstein, 1998). Research indicates that optimism is linked to a range of benefits including greater success in school, less likelihood of depression and anxiety, greater satisfaction in relationships, and better physical health (see Oberle et al., 2018). It is also a strong predictor of resiliency for children facing adversity (Masten, 2018). Children are asked to rate the following statements using the response options described in the left panel:

- **I have more good times than bad times.**
- **I believe more good things than bad things will happen to me.**
- **I start most days thinking I will have a good day.**

EMPATHY. Empathy is the experience of feeling what another person feels (Spinrad & Eisenberg, 2017). The empathy items on the MDI were drawn from the Interpersonal Reactivity Index (IRI; Davis, 1983, modified by Eisenberg et al., 2002). Research shows that empathy in children is related to their social competence, prosocial behaviour, and academic competence (Spinrad & Eisenberg, 2009). Children are asked to rate the following statements using the response options described in the left panel:

- **I am a person who cares about the feelings of others.**
- **I feel sorry for other kids who don’t have the things that I have.**
- **When I see someone being mean it bothers me.**

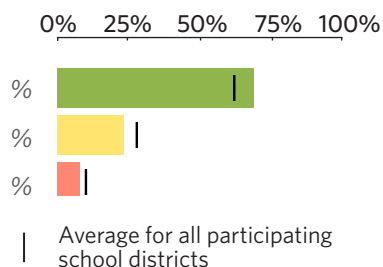
Response Options

- Agree a lot
- Agree a little
- Don’t agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were ‘Agree a little’ or ‘Agree a lot’
- Medium: Children whose average responses were ‘Don’t agree or disagree’ or those who reported a mix of positive and negative responses
- Low: Children whose average responses were ‘Disagree a little’ or ‘Disagree a lot’

Example Result



Response Options

for Prosocial Behaviour questions

- Many times a week
- About every week
- About every month
- Once or a few times
- Not at all this school year

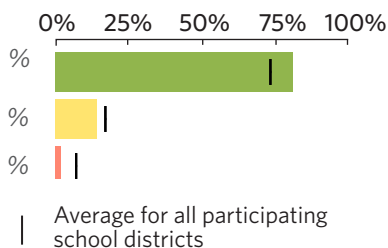
Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were 'Agree a little' or 'Agree a lot'
- Medium: Children whose average responses were 'Don't agree or disagree' or those who reported a mix of positive and negative responses
- Low: Children whose average responses were 'Disagree a little' or 'Disagree a lot'

Example Result



PROSOCIAL BEHAVIOUR. Prosocial behaviour is behaving in socially appropriate and responsible ways (Mahoney et al., 2020). Prosocial behaviour items on the MDI are drawn from Youth Outcome Measures for AfterSchool KidzLit (Developmental Studies Center, 2001). Prosocial skills promote healthy relationships with adults and peers and protect children against bullying and victimization (Divecha & Brackett, 2020). Prosocial skills are also linked to better academic achievement (Spinrad & Eisenberg, 2009). Not only are prosocial skills valued by teachers, they may also protect against bullying from peers (Hymel et al., 2010). Children are asked to rate the following statements using the response options described in the left panel:

- **I helped someone who was hurt.**
- **I helped someone who was being picked on.**
- **I cheered someone up who was feeling sad.**

SELF-ESTEEM. Self-esteem refers to a person's sense of self-worth. It is one of the most critical measures of middle childhood health and well-being. It is during the middle childhood years that children begin to form beliefs about themselves as either "competent" or "inferior" people (Orth et al., 2018). The self-esteem items on the MDI are drawn from the Self-Description Questionnaire (SDQ; Marsh, 1988). Children are asked to rate the following statements using the response options listed in the left panel:

- **A lot of things about me are good.**
- **In general, I like being the way I am.**
- **Overall, I have a lot to be proud of.**

HAPPINESS. Happiness, or subjective well-being, refers to how content or satisfied children are with their lives. The items assessing happiness on the MDI are drawn from the Satisfaction with Life Scale for Children (SWLS-C; Gadermann et al., 2010). Happiness tends to decline in children after age 10 (Casas & Gonzalez-Carrasco, 2019), so it is important to understand which assets can contribute to children's happiness in middle childhood. Peer belonging and relationships with adults at home are strong predictors of children's happiness (Gadermann et al., 2016). On the MDI, children are asked to rate the following statements using the response options described in the left panel:

- **In most ways my life is close to the way I would want it to be.**
- **The things in my life are excellent.**
- **I am happy with my life.**
- **So far I have gotten the important things I want in life.**
- **If I could live my life over, I would have it the same way.**

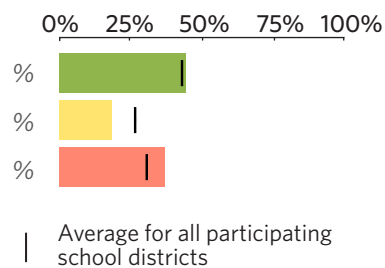
Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were 'Agree a little' or 'Agree a lot'
- Medium: Children whose average responses were 'Don't agree or disagree' or those who reported a mix of positive and negative responses
- Low: Children whose average responses were 'Disagree a little' or 'Disagree a lot'

Example Result



ABSENCE OF SADNESS. Items about children’s sadness on the MDI are drawn from the Seattle Personality Questionnaire (SPQ; Kusche’ et al., 1988). The risk for developing symptoms of depression, such as sadness, increases in middle childhood around the time of puberty (Mackrell et al., 2016). Problems with peers (Wang et al., 2018) and negative school experiences (Liu & Chen, 2020) predict symptoms of depression throughout middle childhood and beyond. Children offer a different perspective on their mental health than their parents, who tend to rate their children’s mental health more positively than their children do (Canadian Health Survey on Children and Youth, 2019). Thus, it is important to gain children’s perspectives on their levels of sadness in order to gain an accurate picture of the status of mental health in young people. On the MDI, children are asked to rate the following statements on the response scale described in the left panel. Note that because the MDI was designed to be a strengths-based tool, these questions are reverse scored.

- **I feel unhappy a lot of the time.**
- **I feel upset about things.**
- **I feel that I do things wrong a lot.**

ABSENCE OF WORRIES. On the MDI, questions about children’s worries are drawn from the Seattle Personality Questionnaire (SPQ; Kusche’ et al., 1988). Worry is a component of anxiety symptoms. Anxiety is among the most prevalent mental health concerns for children, and children who experience symptoms of both anxiety and depression are especially at risk for mental health issues (Cervin et al., 2020). Poorer mental health is also related to difficulty making friends and poorer academic achievement (Canadian Health Survey on Children and Youth, 2019). On the MDI children are asked to rate the following statements using the response options displayed in the left panel. Because the MDI was designed to be a strengths-based tool, these questions are reverse scored:

- **I worry a lot that other people might not like me.**
- **I worry about what other kids might be saying about me.**
- **I worry about being teased.**

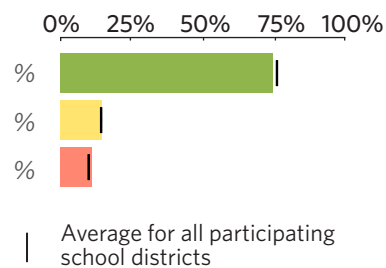
Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were 'Agree a little' or 'Agree a lot'
- Medium: Children whose average responses were 'Don't agree or disagree' or those who reported a mix of positive and negative responses
- Low: Children whose average responses were 'Disagree a little' or 'Disagree a lot'

Example Result



SELF-REGULATION (SHORT-TERM). Self-regulation refers to a person’s ability to adapt their behaviour, thoughts or emotions in the context of their environment to meet a particular goal (Blair & Diamond, 2008). Self-regulation develops steadily throughout middle childhood and adolescence into young adulthood (Steinberg et al., 2018). Children’s self-regulation is positively associated with academic achievement, social skills, health, and well-being (Pandey et al., 2018). Children with proficient self-regulation skills also show lower instances of depression, behavioural problems, and substance abuse (Pandey et al., 2018). Short-term self-regulation specifically involves responding to situations “in the heat of the moment,” such as controlling an impulsive reaction, trying not to fidget in class, or focusing one’s attention on an immediate project or activity (Moilanen et al., 2018). On the MDI, short-term self-regulation is assessed via questions drawn from the Adolescent Self-regulatory Inventory (ASRI; Moilanen, 2007). Children are asked to rate the following statements using the response options described in the left panel:

- **When I am sad, I can usually start doing something that will make me feel better.**
- **After I’m interrupted or distracted, I can easily continue working where I left off.**
- **I can calm myself down when I’m excited or upset.**

SELF-REGULATION (LONG-TERM). *Removed in 2022/23. The MDI questionnaire from 2012/13 to 2021/22 asked children about long-term self-regulation. For information on these questions, including the reasons for removing them, response options and scoring, please see page 32 of the Appendix.*

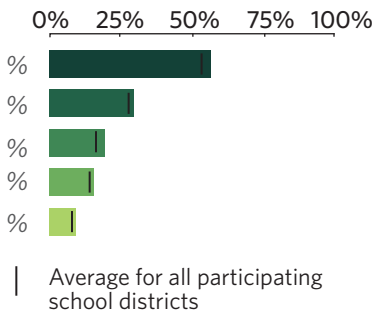
Response Options

- Yes, very much
- Yes, quite a bit
- Yes, somewhat
- Yes, a little
- No, not at all

Scoring

- Very much
- Quite a bit
- Somewhat
- A little
- Not at all

Example Result



CONCERN FOR THE ENVIRONMENT. *Added to the MDI questionnaire in 2022/2023.* The MDI asks children to evaluate their level of concern about climate change, species extinction, deforestation and pollution. Research shows that environmental awareness is an important curricular topic in today’s schools and teachers and parents reported that children are increasingly expressing concern about climate and environmental change (Baker et al., 2021). While environmental concerns are an important aspect of societal awareness, very high levels of concern can impact children’s well-being. Recent studies have shown that almost 90% of children globally and in Canada reported feeling helpless in their concern about the environment (Galway & Field, 2022; Hickman et al., 2021). Practitioners and researchers agree that emotional responses are appropriate and can be used to propel action. Supports are necessary to foster emotional resiliency and encourage children and youth to feel empowered and become valuable contributors to climate action. Canadian youth reported that the best resources were safe spaces to engage in conversation about environmental concerns and taking individual and collective climate action (Galway & Field, 2023). Such supports will combat feelings of powerlessness in relation to concerns for the environment and empower children as agents of change for the future.

To assess the level of concern about climate change and its impact, children are asked the following question adapted from the Comprehensive Monitoring Primary School Survey (Centre for Social and Early Emotional Development, 2020):

Are you concerned about the following environmental issues?

- **Climate change (for example, global warming)**
- **Species extinction (when an entire type of animal dies out)**
- **Deforestation (cutting down too much forest)**
- **Pollution (for example, garbage, ocean plastic)**

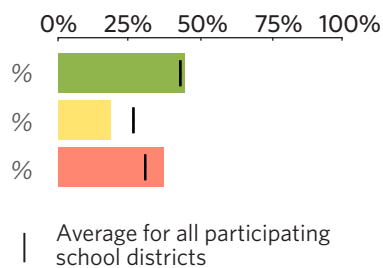
Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were 'Agree a little' or 'Agree a lot'
- Medium: Children whose average responses were 'Don't agree or disagree' or those who reported a mix of positive and negative responses
- Low: Children whose average responses were 'Disagree a little' or 'Disagree a lot'

Example Result



MDI 6/7/8 RESPONSIBLE DECISION-MAKING. *Included only on the MDI Grade 6/7/8 questionnaire.* Responsible decision-making involves making ethical personal and social choices (Mahoney et al., 2020). This includes being able to make realistic appraisals about the consequences of one's actions. It is associated with less risky and delinquent behaviour in middle childhood and early adolescence (Ross & Tolan, 2018). Items on the MDI are drawn from the American Institutes of Research and the Collaborative for Academic, Social, and Emotional Learning (AIR and CASEL, 2013). To assess responsible decision-making, children are asked to rate the following statements using the response options described in the left panel:

- **When I make a decision, I think about what might happen afterward.**
- **I take responsibility for my mistakes.**
- **I say "no" when someone wants me to do things that are wrong or dangerous.**

MDI 6/7/8 SELF-AWARENESS. *Included only on the MDI Grade 6/7/8 questionnaire.* Self-awareness is the ability to accurately recognize the influence of personal emotions and thoughts on behaviour (Mahoney et al., 2020). It means being able to accurately assess one's strengths and limitations, while possessing a well-grounded sense of confidence and optimism. In middle childhood and adolescence, those with greater self-awareness are more likely to report higher academic performance and school engagement and less likely to report symptoms of depression in middle childhood and early adolescence (Ross & Tolan, 2018). The items in the MDI to assess self-awareness are drawn from the Interpersonal Mindfulness in Teaching Scale (Greenberg et al., 2010) and were modified to be appropriate for use with children. Using the response scale described in the left panel, children are asked to rate the following statements:

- **When I'm upset, I notice how I am feeling before I take action.**
- **I am aware of how my moods affect the way I treat other people.**
- **When difficult situations happen, I can pause without immediately acting.**

MDI 6/7/8 PERSEVERANCE. *Removed in 2022/23 from the MDI Grade 6/7/8 questionnaire. The MDI questionnaire from 2021/22 and earlier asked children about perseverance. For information on these questions, including the reasons for removing them, response options and scoring, please see page 34 of the Appendix.*

MDI 6/7/8 ASSERTIVENESS. *Removed in 2022/23 from the MDI Grade 6/7/8 questionnaire. The MDI questionnaire from 2021/22 and earlier asked children about assertiveness. For information on these questions, including the reasons for removing them, response options and scoring, please see page 35 of the Appendix.*

Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

MDI 6/7/8 CITIZENSHIP AND PERSONAL RESPONSIBILITY. By interacting with the world and by watching the positive examples of the adults around them, children can learn to act responsibly within their communities, help those in need, and develop skills to improve society. Citizenship and Personal Responsibility includes measures of Personal Meaning and Volunteering.

MDI 6/7/8 PERSONAL MEANING. Items in the MDI to assess personal meaning were drawn from the Brief Version of the Personal Meaning Profile (Macdonald, Wong, & Gingras, 2012). Children are asked to rate the following statements using the response options described in the left panel:

- **I believe I can make a difference in the world.**
- **I try to make the world a better place.**

MDI 6/7/8 VOLUNTEERING. *Removed in 2022/23 from the MDI Grade 6/7/8 questionnaire. The MDI questionnaire from 2021/22 and earlier asked children about volunteering. For information on these questions, including the reasons for removing them, response options and scoring, please see page 35 of the Appendix.*



PHYSICAL HEALTH AND WELL-BEING

The MDI questionnaire asks children to evaluate their own physical well-being, including their overall health (perceptions of their own health condition), nutrition and sleeping habits. Physical health outcomes are not uniquely controlled by genetics. They can be affected by different factors or determinants in one’s environment: family, relationships, lifestyle, economic and social conditions, as well as the neighbourhoods in which we live (Hertzman & Boyce, 2010). Children in the middle years who feel healthy are more likely to be engaged in school, have a feeling of connectedness with 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).

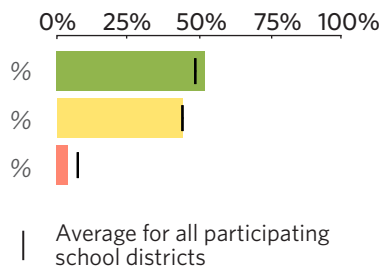
Response Options

- Excellent
- Good
- Fair
- Poor

Scoring

- High: Children who responded ‘Excellent’
- Medium: Children who responded ‘Good’
- Low: Children who responded ‘Fair’ or ‘Poor’

Example Result



GENERAL HEALTH. General health is described by The World Health Organization (WHO) as “not merely the absence of disease or infirmity.” It involves knowing and recognizing one’s own state of physical well-being. To obtain information about children’s health, children are asked the following question that was drawn from the Youth Health Survey (McCreary Centre Society, 2009) using the response options described in the left panel:

- **In general, how would you describe your health?**

BODY IMAGE. *Removed in 2019/20. The MDI questionnaire from 2012/13 to 2018/19 asked children about body image.*

Response Options

- Every day
- 6 times a week
- 5 times a week
- 4 times a week
- 3 times a week
- 2 times a week
- Once a week
- Never

Scoring

- High: 5 or more times per week
- Medium: 3-4 times per week
- Low: 2 or fewer times per week

Example Result

| Frequency | Percentage |
|--|------------|
| High (5 or more times per week) | ~85% |
| Medium (3-4 times per week) | ~10% |
| Low (2 or fewer times per week) | ~5% |
| Average for all participating school districts | ~75% |

BREAKFAST. Eating breakfast not only increases nutrient intake for building strong bodies, it also can improve memory and concentration (Adolphus et al., 2016). As children get older, they tend to skip breakfast more often, which is linked to inadequate nutrition (Barr et al., 2014). For many families, meeting recommended nutrition guidelines is not financially feasible (Mulik & Haynes-Maslow, 2017). In Canada, 19% of families with children do not have access to sufficient food (Statistics Canada, 2020). Understanding eating patterns can help identify potential barriers to food security and support efforts to make sufficient nutritious food accessible for all children.

On the MDI, children are asked the following question using the response options described in the left panel:

- **How often do you eat breakfast?**

MEALS WITH ADULTS IN YOUR FAMILY. Frequently eating meals together as a family is related to increased self-esteem and school success, and decreased chances of developing eating disorders, substance abuse, violent behaviour, and symptoms of depression (Jones, 2018). Families who enjoy meals together benefit from a greater sense of connection and better communication (Middleton et al., 2020). To obtain information about children’s meal with family members, they are asked the following question using the response options described in the left panel:

- **How often do your parents or adult family members eat meals with you?**

FOOD. Throughout middle childhood and adolescence, children experience a growth spurt which requires an increase in nutritious foods (Das et al., 2018). To obtain information about children’s nutrition, children are asked the following question using the response options outlined in the left panel:

- **How often do you eat food like pop, candy, potato chips or something else?**

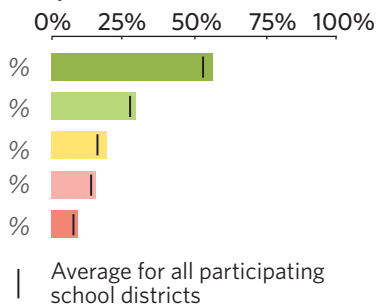
Response Options for Physical Activity

- Never
- 1 day
- 2 days
- 3 days
- 4 days
- 5 days
- 6 days
- Every day

Scoring

- Everyday
- 5-6 days
- 3-4 days
- 1-2 days
- Never

Example Result



FREQUENCY OF GOOD SLEEP. School-aged children need approximately 9-11 hours of uninterrupted sleep a night (Chaput & Janssen, 2016). The Canadian Society for Exercise Physiology (CSEP) recommends that children ages 5-13 get 9 to 11 hours of sleep, and those ages 14-17 years get 8 to 10 hours of uninterrupted sleep per night, with consistent bed and wake up times (2021). Children who do not get enough sleep are more likely to have trouble concentrating in school, be involved in family disagreements, and display symptoms of depression (Buxton et al., 2015; Matricciani et al., 2019). On the MDI, to obtain information about children’s sleep patterns, they are asked the following questions:

- **How often do you get a good night’s sleep?** (response options in the left panel)
- **What time do you usually go to bed during the weekdays?**

| | | |
|--|-------------------------|----------------------|
| | Response Options | 10:00 pm to 11:00 pm |
| | Before 9:00 pm | 11:00 pm to 12:00 am |
| | 9:00 pm to 10:00 pm | After 12:00 am |

- **What time do you usually wake up during weekdays?** Added to the MDI questionnaire in 2022/23.

| | | |
|--|-------------------------|--------------------|
| | Response Options | 7:00 am to 8:00 am |
| | Before 6:00 am | After 8:00 am |
| | 6:00 am to 7:00 am | |

PHYSICAL ACTIVITY. Added to the MDI questionnaire in 2022/23. Children are asked to report the time spent in physical activity each day. The Canadian Society for Exercise and Physiology (CSEP) produced evidence-based guidelines that address the entire day. The 24-hour movement guidelines recommend that children aged 5-17 get at least 60 minutes of moderate to vigorous physical activity per day on at least 3 days per week involving a variety of aerobic activities (2021). Less than half of Canadian children and youth ages 5-17 are meeting the 60-minute national physical activity guideline according to ParticipACTION’s Report card on physical activity for children and youth (2022). To explore whether children and youth participating in the MDI are meeting the national guidelines, children are asked the following question adapted from the Health Behaviour in School-Aged Children (HBSC) study in Canada:

- **In a normal week, how many days are you physically active for a total of at least 60 minutes or one hour per day?**

HELP-SEEKING FOR EMOTIONAL WELL-BEING. *Added to the MDI questionnaire in 2019/20.* Mental health concerns, such as anxiety and depression, often start in middle childhood (Cervin et al., 2020). Seeking help for emotional support can help prevent and address mental health issues (Rickwood et al., 2005; Xu et al., 2018). In Canada, about 10–20% of children between the ages of 9 to 19 experience mental health disorders (Mental Health Commission of Canada, 2016) and only 20% of children who need help receive it (Waddell et al., 2005).

Understanding children’s help-seeking behaviours for emotional well-being can help schools and communities design interventions that create stronger networks of support for children and that build capacity in those people that children are turning to for help. The MDI items are adapted from the California Healthy Kids Survey (Constantine & Benard, 2001). To assess help-seeking on the MDI, children are asked the following question:

Who would you talk to if you were feeling sad, stressed or worried? *(Children can select all of the options that apply)*

- **An adult at school (for example, a teacher, school counselor, or another adult at school)**
- **A family member (for example, a parent, grandparent, aunt/uncle, older sibling or cousin, or another adult that lives with me)**
- **An adult in my community (for example, a coach, an elder, after-school program staff, or another adult in my community)**
- **A health professional (for example, a doctor, nurse, or a counselor)**
- **My friend(s)**
- **I would not know who to talk to**
- **I would prefer to handle it on my own**
- **I would talk to someone else (someone not on this list)**

TRANSPORTATION TO AND FROM SCHOOL. *Added to the MDI questionnaire in 2019/20.* When children use active transportation methods (e.g., walking, cycling, skateboarding) to get to and from school, it can help promote increased physical activity and may result in improvements in physical and mental health (Buttazzoni et al., 2018; 2019).

Children do not always have a choice about how they get to and from school; factors such as perceived safety, the built environment (e.g., sidewalks) and distance to school can affect whether children use active forms of transportation. Understanding the ways in which children get to and from school is important for identifying barriers and opportunities to increasing their active transport options. In addition to asking children how they get to and from school, the MDI questionnaire also asks children how they wish to get to and from school. The MDI items were adapted from the Core Indicators and Measures for Youth Health (Kroeker et al., 2012).

- **How do you usually get TO school?**
- **How do you usually get home FROM school?**
- **If you could choose, how would you WISH to get TO and FROM school?**

Response Options

Car
School Bus
Public transportation (public bus, train or ferry)
Walk
Cycle, skateboard, scooter or rollerblade
Something else (describe): _____





**CONNECTEDNESS
TO ADULTS**

Belonging is a fundamental need for people of all ages. Feeling a sense of connectedness in one’s family, peer group, 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, a teacher in the school or a neighbour, can make a very powerful difference in a child’s life (Werner, 2004). Children’s life satisfaction is related to their sense of belonging with peers and their supportive relationships with adults at home and school, even more so than family income or personal health (Gadermann et al., 2016; Oberle et al., 2014). This is true across cultures (Emerson et al., 2018).

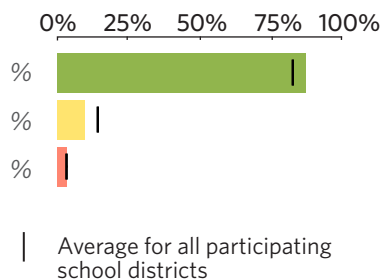
Response Options

- Very much true
- Pretty much true
- A little true
- Not at all true

Scoring

- High: children whose average responses were ‘pretty much’ or ‘very much’ true
- Medium: children whose responses were ‘a little true’ or those who reported a mix of positive and negative responses
- Low: children whose responses were on average ‘not at all true’

Example Result



ADULTS AT SCHOOL. School adults, including teachers, principals and school staff, are in a unique position to form meaningful bonds with children. Research shows that higher levels of adult support at school is linked to higher optimism, an important indicator of mental health (Oberle et al., 2018). Close bonds and consistent positive supports from teachers promote healthy development and well-being throughout childhood and adolescence (Werner, 2013). Children who perceive their teachers as caring report feeling more engaged in school and perform better academically (Wang & Eccles, 2013). The MDI items that ask children about the important adults in their school were adapted from the California Healthy Kids Survey (Constantine & Benard, 2001). Children are asked to rate the following statements using the response options described in the left panel:

At my school there is an adult who:

- **really cares about me.**
- **believes I will be a success.**
- **listens to me when I have something to say.**

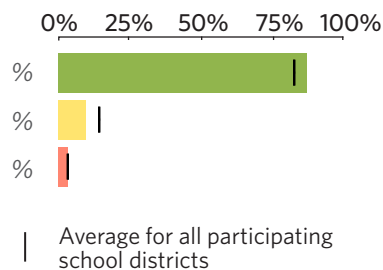
Response Options

- Very much true
- Pretty much true
- A little true
- Not at all true

Scoring

- High: children whose average responses were 'pretty much' or 'very much' true
- Medium: children whose responses were 'a little true' or those who reported a mix of positive and negative responses
- Low: children whose responses were on average 'not at all true'

Example Result



ADULTS IN THE NEIGHBOURHOOD/COMMUNITY. Children who have an adult in their community to whom they look up to and spend time with report higher self-esteem and life satisfaction, feel more competent in school and are less likely to engage in risky behaviour. Supportive relationships between youth and adults in the community are related to positive identity development, prosocial behaviour, civic participation, and a sense of belonging in the community (Ramey et al., 2017; 2018). Supportive community adults can include coaches, religious leaders, friends' parents and neighbours, as well as doctors or counsellors. The MDI items that ask children about the important adults in their community were adapted from the California Healthy Kids Survey (Constantine & Benard, 2001). Children are asked to rate the following statements using the response options described in the left panel:

In my neighbourhood/community (not from your school or family), there is an adult who:

- really cares about me.
- believes that I will be a success.
- listens to me when I have something to say.

ADULTS AT HOME. When parents and guardians provide a secure, supportive, and reliable home base, their children tend to have fewer behaviour and emotional difficulties (Oldfield et al., 2016). A healthy parent-child relationship enables children to form other healthy relationships that will serve them throughout their lives (Sutton, 2019). The items on the MDI that ask children about the important adults in their home were adapted from the California Healthy Kids Survey (Constantine & Benard, 2001). Children are asked to rate the following statements using the response options in the left panel:

In my home there is a parent or another adult who:

- believes I will be a success.
- listens to me when I have something to say.
- I can talk to about my problems.

Response Options

2 or More: Children who listed the initials of two or more important adults at their school.

One: Children who listed the initials of one adult from their school who is important to them.

None: Children who did not list any adults from their school who were important to them.



%
2 or more



%
One



%
None

NUMBER OF IMPORTANT ADULTS AT SCHOOL. Adults at school, including teachers, principals and school staff, are in a unique position to observe how children are doing day-to-day and to form meaningful bonds with them. Research shows that higher levels of adult support at school is linked to higher optimism, an important indicator of mental health (Oberle et al., 2018). Close bonds and consistent positive supports from teachers promote healthy development and well-being throughout childhood and adolescence (Werner, 2013). Children who perceive their teachers as caring report feeling more engaged in school and perform better academically (Wang & Eccles, 2013). The MDI questionnaire asks children to list the initials of all of the adults from their school who are important to them. These items were drawn from the research of Blyth, Hill, and Thiel (1982) and Furman and Buhrmester (1985) on children’s perceptions of their relationships with significant adults. On the MDI, children are asked the following question:

- **Are there any adults who are IMPORTANT TO YOU at your school?**

If the answer is ‘Yes’, the child is then asked to write the first or last initial of ALL of the adults who are important to them at their school, to a maximum of six.

Why ask the question this way?

Past research has shown that when children are asked to identify the number of important adults more generally in their lives, they may overestimate. Alternatively, when children are asked to identify each important individual by writing down their initials, they are more thoughtful and accurate in identifying the actual number of adults who are important to them.

MDI 6/7/8 **WHAT MAKES AN ADULT IMPORTANT TO YOU?** *Removed in 2022/23 from the MDI Grade 6/7/8 questionnaire. In 2021/22 and earlier, children are asked about what makes an adult important to them to obtain more specific information about the qualities of the important relationships. These items were taken from Furman and Buhrmester’s (1985) Network of Relationships Inventory (NRI). For information on these questions, including the reasons for removing them, response options and scoring, please see pages 35–36 of the Appendix.*



CONNECTEDNESS TO PEERS

Beginning in middle childhood, friendships and peer support begin to have a stronger influence on children’s school motivation, academic achievement and success (Wentzel & Muenks, 2016). Children begin to place more importance on peer groups than on relationships to adults. During this phase of human development children need to feel they have friends they can count on.

PEER BELONGING. During the middle childhood years children begin to associate more with their peers. Children absorb information from peers about how to behave, who they are and where they fit (Ryan et al., 2019). Feeling part of a group can boost self-esteem, confidence and personal well-being (Wentzel & Muenks, 2016). Peer relationships provide opportunities for learning cooperation, gaining support, acquiring interpersonal skills and persisting through difficulties. The items on the MDI that assess peer belonging were adapted from the Relational Provisional Loneliness Questionnaire (RPLQ; Hayden-Thomson, 1989). Children are asked the following questions using the response options in the left panel:

- **When I am with other kids my age, I feel I belong.**
- **I feel part of a group of friends that do things together.**
- **I feel that I usually fit in with other kids around me.**

FRIENDSHIP INTIMACY. During the middle years peer relationships grow in complexity. Children begin to seek friendships based on quality (having a friend who cares, talks to them and helps them with problems) rather than quantity. Close, mutual friendships provide validation for children’s developing sense of self and self-esteem. Children with friends tend to like school more and be more motivated academically (see Wentzel & Muenks, 2016). Same-age friends are also often in a better position than adults to empathize or provide comfort during stressful life events such as a transition to a new school, parent separation or difficulties with other peers. The items on the MDI that assess friendship intimacy were adapted from the *Relational Provisional Loneliness Questionnaire* (RPLQ; Hayden-Thomson, 1989). Children are asked the following questions using the response options listed in the left panel:

- **I have a friend I can tell everything to.**
- **There is somebody my age who really understands me.**
- **I have a least one really good friend I can talk to when something is bothering me.**

Response Options

Agree a lot

Agree a little

Don’t agree or disagree

Disagree a little

Disagree a lot

Scoring

■ High: Children whose average responses were ‘Agree a little’ or ‘Agree a lot’

■ Medium: Children whose average responses were ‘Don’t agree or disagree’ or those who reported a mix of positive and negative responses

■ Low: Children whose average responses were ‘Disagree a little’ or ‘Disagree a lot’

Example Result

| Response Category | Percentage |
|-------------------|------------|
| High (Green) | 75% |
| Medium (Yellow) | 20% |
| Low (Red) | 5% |

Average for all participating school districts



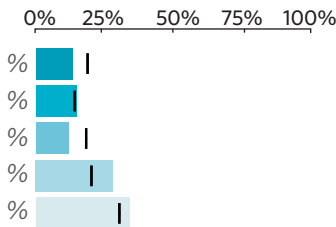
USE OF OUT-OF-SCHOOL TIME

Response Options

Updated in 2022/23

- Everyday
- 6 days
- 5 days
- 4 days
- 3 days
- 2 days
- 1 day
- Never

Example Result



| Average for all participating school districts

Response Options for organized activities in 2021/22 and earlier:

- 5 times a week
- 4 times a week
- 3 times a week
- Twice a week
- Once a week
- Never

We know that the environments in which children live and play are important, yet we know very little about how school-aged children actually spend their after-school hours.

Children’s involvement in activities outside of school hours exposes them to important social environments. Out-of-school activities such as art and music classes, sports leagues, and community groups provide distinct and important experiences that help children to build relationship skills and gain competencies (Vandell et al., 2020). Children who are more involved in extracurricular activities tend to experience better school success and are less likely to drop out (Thouin et al., 2020). Research featuring MDI data found that children who participated in many different types of activities or individual and team sports reported greater well-being and health compared to children that did not participate in those activities (Oberle et al., 2019).

To help schools and communities support children’s access to quality after-school programming, we not only ask children how they spend their after-school time, we also ask them what they wish to be doing after school and perceived barriers to participation in desired activities.

PARTICIPATION IN ORGANIZED OUT-OF-SCHOOL ACTIVITIES. Participation in after-school activities has been shown to boost children’s competence, self-esteem, school engagement, personal satisfaction and academic achievement (Simpkins et al., 2019). Out-of-school activities allow children to meet new friends, to strengthen existing friendships and to feel like they belong to a group of peers with shared interests. Taking part in organized out-of-school programs in the middle years is linked to higher scores on academic assessments, greater social confidence, and less risk-taking and impulsivity at age 15 (Vandell et al., 2020).

The MDI questionnaire asks children how often they participate in organized activities (ones that are structured and supervised by a teacher, coach, instructor, volunteer or other adult). These items were adapted from research by George and Chaskin (2004). Children are asked the following questions, using the response options described in the left panel (Note: the response options for this question were updated in 2022/23 and are therefore not comparable to previous years):

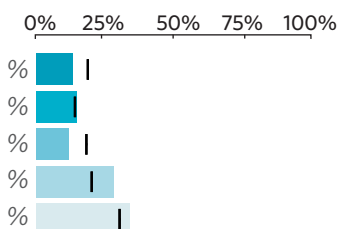
In a normal week, outside of school hours, how often do you spend time doing the following activities:

- Educational lessons or activities (e.g., tutoring, math, language school).
- Art or music lessons (e.g., drawing, painting, playing a musical instrument).
- Youth organizations (e.g., Scouts, Girl Guides, Boys and Girls Clubs, After School Care).
- Individual sports with a coach or instructor (e.g., swimming, dance, gymnastics, tennis, skating).
- Team sports with a coach or instructor (e.g., basketball, hockey, soccer, football).

Response Options

- Everyday
- 5-6 days
- 3-4 days
- 1-2 days
- Never

Example Result



| Average for all participating school districts

Response Options for unstructured activities in 2021/22 and earlier:

- 2+ hours per day
- 1-2 hours
- 30 min to 1 hour
- Less than 30 min
- Not at all

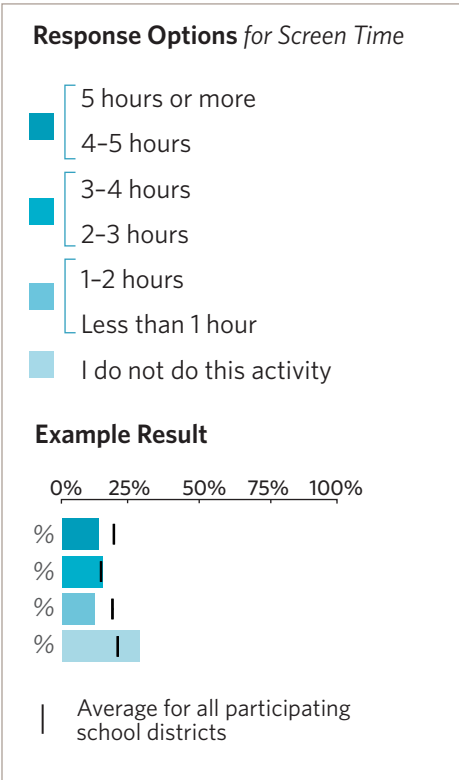
DAILY TIME SPENT DOING UNSTRUCTURED ACTIVITIES. The MDI also explores children’s experiences in unstructured activities. Children are asked about the type of unstructured activities they are involved in and how often they are involved in these activities outside of school hours in a normal week. Completing homework assignments, watching television or videos (including Netflix and YouTube), and computer use are three unstructured activities that children report spending most of their time on during the after-school period. A balance of several activities both structured and unstructured, rather than spending a lot of time on any one particular interest or activity, is the most optimal for supporting children’s holistic development (Linver et al., 2009). To obtain information about the nature and frequency of unstructured activities, children are asked the following questions adapted from research by George and Chaskin (2004), using the response options described in the left panel:

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

- Hang out with friends in person
- Read for fun
- Do homework
- Cultural activities
- Religious, spiritual, or faith-based activities
- Play sports or exercise for fun
- Play at a park, playground, or in the neighbourhood
- MDI 6/7/8 Volunteer
- MDI 6/7/8 Work at job

MDI Grade 6/7/8 questionnaire only

SCREEN TIME. New category added to the MDI questionnaire in 2022/23. Social media use among youth has been steadily rising over the last decade. Evidence from a literature review reported a link between social media consumption and detrimental mental health outcomes, cyber bullying and self-harm behaviours (Abi-Jaoude et al., 2020). Additionally, systematic review of 36 studies reported that social media use is a risk factor for decreased sleep quality and poor mental health outcomes (Alonso et al., 2021). On the other hand, social media use can contribute to positive youth development by maintaining connections, friendships, and offering opportunities for support. The Canadian Society for Exercise Physiology (CSEP) 24-hour guidelines recommend no more than 2 hours of recreational screen time for youth per day (2021). Gaining insight into adolescents’ consumption of social media and screen time can increase public awareness and promote social policy initiatives for nurturing home and school environments that foster resilience, and teach internet safety, as youth continue to navigate the challenges of adolescence. Adapted from the Ontario Student Survey (Centre for Addiction and Mental Health, 2019), students will respond to the following questions (continued on next page) using the response options in the left panel:



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

- Sit and watch TV, movies, or videos, including YouTube?
- Play video or computer games?
- Hang out with friends on the phone, tablet or computer (for example, video call, text messaging)?
- **MDI 6/7/8** Spend on social media sites or apps, such as Instagram, Snapchat, Twitter, Facebook, TikTok either browsing or posting? *The social media question is included only on the MDI Grade 6/7/8 questionnaire.*

WHAT CHILDREN WISH TO BE DOING AFTER SCHOOL. The MDI is the only population-level survey that asks children what they wish they could be doing. Children are given two choices to select from:

Think about activities you want to do outside of school.

- I am already doing the activities I want to be doing.
- I wish I could do additional activities.

When a child selects both answers above a third answer is recorded: I am doing some of the activities I want, but I wish I could do more.

Those children who express that they wish they could be doing additional activities are asked to select as many activities as they like from the following categories:

- **Physical and/or Outdoor Activities:** Team sports, individual sports, being outside at a park or playground.
- **Music and Fine Arts:** Music and art lessons/practice, crafts, cooking, building, writing.
- **Friends and Playing:** Hanging out with friends, going to a friend’s house, having friends over, any activity specified with friends, games, talking with friends.
- **Computer/Video Games/TV:** Video games, Internet, social media, movies, TV, YouTube, coding, texting, tablets, cell phones.
- **Time with Family/at Home:** Being at home, spending time with parents, siblings, grandparents, activities with family members.
- **Work Related Activities/Volunteering:** Babysitting, working, paper route.
- **Free Time/Relaxing:** Time to myself, walk home alone, free time, sleeping, relaxing, reading.
- **Other:** Shopping, chores, travel, clubs. The “Other” category is also used for responses that are undecipherable, appear infrequently, or do not fit into a clear category.



I am already doing the activities I want to be doing

%

I wish I could do additional activities

%

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

%

PERCEIVED BARRIERS TO PARTICIPATING IN DESIRED ACTIVITIES. *Removed in 2022/23. The MDI questionnaire from 2021/22 and earlier asked children about barriers that stop them from participating in after-school activities. For information on these questions, including the reasons for removing them, response options and scoring, please see page 36 of the Appendix.*

AFTER-SCHOOL PLACES. Children are asked how often they go to the following places after school using the response options described in the left hand panel:

Response Options

Never
Once a week
Twice a week
3 times a week
4 times a week
5 times a week (every day)

- Home
- Stay at school for an activity
- After-school program or child care
- Friend's house
- Park/playground/community centre
- Library
- Someplace else

AFTER-SCHOOL PEOPLE. *Removed in 2022/23. The MDI questionnaire from 2021/22 and earlier asked children about who they are with after school (from 3 pm to 6 pm). For information on these questions, including the reasons for removing them, response options and scoring, please see page 37 of the Appendix.*

NEIGHBOURHOOD PLACES. *Removed in 2022/23. The MDI questionnaire from 2021/22 and earlier asked children about places in the neighbourhood. For information on these questions, including the reasons for removing them, response options and scoring, please see page 37 of the Appendix.*



SCHOOL EXPERIENCES

Children’s sense of safety and belonging at school has been shown to foster 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 in class, and achieve higher academic performance (Wang & Degol, 2016). These children are also less likely to engage in high-risk behaviours (Eccles & Roeser, 2011).

The MDI questionnaire asks children about the following school experiences: academic self-concept, school climate, school belonging, and experiences with peer victimization. School success is optimized when children perceive that they are learning within a safe, caring and supportive environment (Wentzel, 1997).

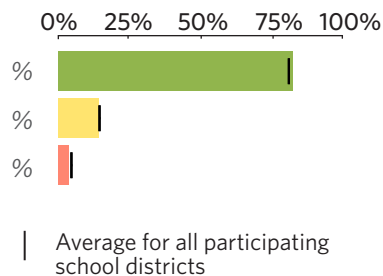
Response Options

- Agree a lot
- Agree a little
- Don’t agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were ‘agree a little’ or ‘agree a lot’
- Medium: Children whose average responses were ‘don’t agree or disagree’ or those who reported a mix of positive and negative responses
- Low: Children whose average responses were ‘disagree a little’ or ‘disagree a lot’

Example Result



ACADEMIC SELF-CONCEPT. Academic self-concept refers to a child’s beliefs about their own academic ability, including their perceptions of themselves as students and how interested and confident they feel at school. Experiencing success and receiving consistent positive feedback from parents and teachers greatly influences how children view themselves as learners (Trautwein & Möller, 2016). Children’s academic self-concept on the MDI draws from items adapted from research by Roeser, Midgley, and Urda (1996). Children are asked to rate the following statements using the response options described in the left panel:

- **I am certain I can learn the skills taught in school this year.**
- **If I have enough time, I can do a good job on all my school work.**
- **Even if the work in school is hard, I can learn it.**

SCHOOL CLIMATE. School climate is the overall tone of the school environment, including the way teachers and students interact and how students treat each other. Children’s comfort in their learning environment affects their motivation, enjoyment of school, ability to pay attention in class and academic achievement (Darling-Hammond & Cook-Harvey, 2018). An optimal school environment is one that values student participation, provides time for self-reflection, encourages peer collaboration, and enables students to make decisions about classroom rules and activities (Wang & Degol, 2016). The MDI items that assess school climate were adapted from the research of Battistich and colleagues (1997) on caring school communities. Children are asked to rate the following statements using the response options in the left panel:

- **Teachers and students treat each other with respect in this school.**
- **People care about each other in this school.**
- **Students in this school help each other, even if they are not friends.**

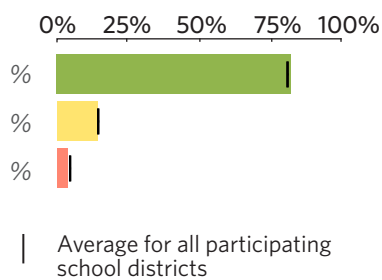
Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring

- High: Children whose average responses were 'agree a little' or 'agree a lot'
- Medium: Children whose average responses were 'don't agree or disagree' or those who reported a mix of positive and negative responses
- Low: Children whose average responses were 'disagree a little' or 'disagree a lot'

Example Result



SCHOOL BELONGING. School belonging is the degree to which children feel connected and valued at their school. Feelings of school belonging are associated with more positive views of learning, better academic motivation and competence, higher self-esteem, and greater happiness (Allen et al., 2018). Children who feel they belong at school are less likely to be late or absent and more likely to complete high school. They also show lower emotional distress and fewer negative behaviours, such as bullying (Allen et al., 2018). The MDI items that assess school belonging were adapted from the research of Roeser, Midgley, and Urdan (1996) on children's perceptions of their school environment.

Children are asked to rate the following statements using the response options in the left panel:

- **I feel like I belong in this school.**
- **I feel like I am important to this school.**

MOTIVATION. *Removed in 2022/23. The MDI questionnaire from 2021/22 and earlier asked children about motivation in school. For information on these questions, including the reasons for removing them, response options and scoring, please see page 38 of the Appendix.*

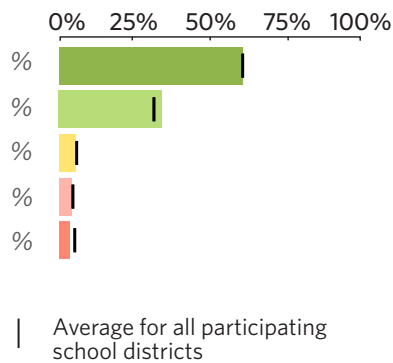
FUTURE GOALS. *Removed in 2022/23. The MDI questionnaire from 2021/22 and earlier asked children about their future goals. For information on these questions, including the reasons for removing them, response options and scoring, please see page 38 of the Appendix.*

MDI 6/7/8 FUTURE ASPIRATIONS. *Removed in 2022/23 from the MDI Grade 6/7/8 questionnaire. The MDI questionnaire for Grade 6/7/8 from 2021/22 and earlier asked children about their future aspirations. For information on these questions, including the reasons for removing them, response options and scoring, please see page 38 of the Appendix.*

Response Options

- Not at all this school year
- Once or a few times
- About every month
- About every week
- Many times a week

Example Result



VICTIMIZATION AND BULLYING AT SCHOOL. Bullying is a distinct form of aggressive behaviour in which one child or a group of children act intentionally and repeatedly to cause harm or embarrassment to another child or group of children who have less power. Higher reports of peer victimization, such as bullying and social exclusion, are linked to higher levels of depression and anxiety, whereas feeling connected to one’s peers is linked to lower depression and anxiety (Guhn et al., 2013).

Despite recent media attention to the problem of cyber-bullying, it is particularly social bullying (manipulation, gossip and exclusion) that increases during the middle years (Trach et al., 2010). The MDI questionnaire asks children about four different types of bullying. Children are provided with definitions of each type. The MDI item assessing children’s experiences with victimization were adapted from the Safe School Student Survey (Trach et al., 2010). Children are asked the following question using the response options in the left panel:

This school year, how often have you been bullied by other students in the following ways?

- **Cyber:** For example, someone used the computer or text messages to exclude, threaten, embarrass you, or to hurt your feelings.
- **Physical:** For example, someone hit, shoved, or kicked you, spat at you, beat you up, or damaged or took your things without permission.
- **Social:** For example, someone left you out, excluded you, gossiped and spread rumours about you, or made you look foolish.
- **Verbal:** For example, someone called you names, teased, embarrassed, threatened you, or made you do things you didn’t want to do.

THE WELL-BEING AND ASSETS INDICES

Combining select measures from the MDI helps us paint a fuller picture of children’s overall well-being and the assets that contribute to their healthy development. The results for key MDI measures are summarized into two indices:

- **The Well-Being Index** consists of measures relating to children’s physical health and social and emotional development that are of critical importance during the middle years. These include: Optimism, Self-Esteem, Happiness, Absence of Sadness, and General Health.
- **The Assets Index** consists of measures of key assets that help to promote children’s positive development and well-being. Assets are resources and influences present in children’s lives, such as supportive relationships and enriching activities. The MDI measures five types of assets: Adult Relationships, Peer Relationships, Nutrition and Sleep, Out-of-School Activities, and School Experiences. The School Experiences asset is not reported as part of the Assets Index to prevent the ranking of individual schools or districts. Please refer to the ‘School Climate’ and ‘Bullying and Victimization’ measures for data related to this asset.

The chart below illustrates the relationship between MDI dimensions and measures, and highlights which measures contribute to the Well-Being and Assets Indices.



SOCIAL & EMOTIONAL DEVELOPMENT

- Optimism
- Self-Esteem
- Happiness
- Absence of Sadness



PHYSICAL HEALTH & WELL-BEING

- General Health
- Eating Breakfast
- Meals with Adults at Home
- Frequency of Good Sleep



CONNECTEDNESS

- Adults at School
- Adults in the Neighbourhood
- Adults at Home
- Peer Belonging
- Friendship Intimacy



USE OF OUT-OF-SCHOOL TIME

- Organized Activities

○ WELL-BEING INDEX



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

■ ASSETS INDEX



- 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 at Home
- Frequency of Good Sleep



- OUT-OF-SCHOOL ACTIVITIES
- Organized Activities

THE WELL-BEING AND ASSETS INDICES

THE WELL-BEING INDEX

Response Options

- Agree a lot
- Agree a little
- Don't agree or disagree
- Disagree a little
- Disagree a lot

Scoring



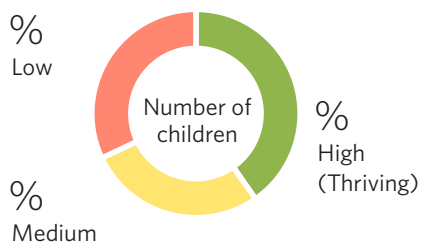
High Well-Being (Thriving): Children who score in the high range on at least 4 of the 5 measures of well-being and have no low-range scores.



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.



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.

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: 'Thriving,' 'Medium to High' Well-Being, or 'Low' Well-Being, as described in the previous section.

The Well-Being Index combines scores from the following 15 items:

OPTIMISM

- I have more good times than bad times
- I believe more good things than bad things will happen to me
- I start most days thinking I will have a good day

SELF-ESTEEM

- In general, I like being the way I am
- Overall, I have a lot to be proud of
- A lot of things about me are good

HAPPINESS

- In most ways my life is close to the way I would want it to be
- The things in my life are excellent
- I am happy with my life
- So far I have gotten the important things I want in life
- If I could live my life over, I would have it the same way

ABSENCE OF SADNESS (reverse-scored)

- I feel unhappy a lot of the time
- I feel upset about things
- I feel that I do things wrong a lot

GENERAL HEALTH

- In general, how would you describe your health?

Response Options for General Health question

- Excellent
- Good
- Fair
- Poor

THE WELL-BEING AND ASSETS INDICES

THE ASSETS INDEX

The Assets Index consists of measures of key developmental assets that help to promote children's positive development and well-being. Assets are resources and influences present in children's lives such as supportive relationships and enriching activities. The Assets Index combines scores from the following 23 items:



ADULT RELATIONSHIPS

(9 items; 3 measures)

Asset present = average response "a little true" or higher for each of the three measures of adult relationships (school, home and neighbourhood)

ADULTS AT SCHOOL

- At my school there is an adult who really cares about me.
- At my school there is an adult who believes I will be a success.
- At my school there is an adult who listens to me when I have something to say.

ADULTS AT HOME

- In my home there is a parent or another adult who believes I will be a success.
- In my home there is a parent or another adult who listens to me when I have something to say.
- In my home there is a parent or another adult who I can talk to about my problems.

ADULTS IN THE NEIGHBOURHOOD/COMMUNITY

- In my neighbourhood/community (not from your school or family), there is an adult who:
 - really cares about me.
 - believes that I will be a success.
 - listens to me when I have something to say.



PEER RELATIONSHIPS

(6 items; 2 measures)

Asset present = average response "don't agree or disagree" or higher for each of the two measures of peer relationships (peer belonging and friendship intimacy)

PEER BELONGING

- When I am with other kids my age, I feel I belong.
- I feel part of a group of friends that do things together.
- I feel that I usually fit in with other kids around me.

FRIENDSHIP AND INTIMACY

- I have a friend I can tell everything to.
- There is somebody my age who really understands me.
- I have at least one really good friend I can talk to when something is bothering me.



NUTRITION AND SLEEP

(3 items)

Asset present = 3 or more days per week

- How often do you eat breakfast?
- How often do you get a good night's sleep?
- How often do your parents or other adult family members eat meals with you?



OUT-OF-SCHOOL ACTIVITIES*

(5 items)

Asset present = Participates in any organized activity whether it's the same or different activities in a week.

In a normal week, outside of school hours, how often did you spend time doing the following activities?:

- Educational lessons or activities
- Art or music lessons
- Youth organizations
- Individual sports with an instructor
- Team sports with an instructor

THE WELL-BEING AND ASSETS INDICES

THE ASSETS INDEX

***Note about the Out-of-School Activities Asset:** In the 2022/23 reporting year, the MDI questionnaire was changed to ask children about their activities outside of school hours. In previous years, children were asked about their activities only during the hours of 3 pm to 6 pm on school days. As a result, the Out-of-School Activities Asset data are not comparable to the After-School Activities Asset data from previous years.

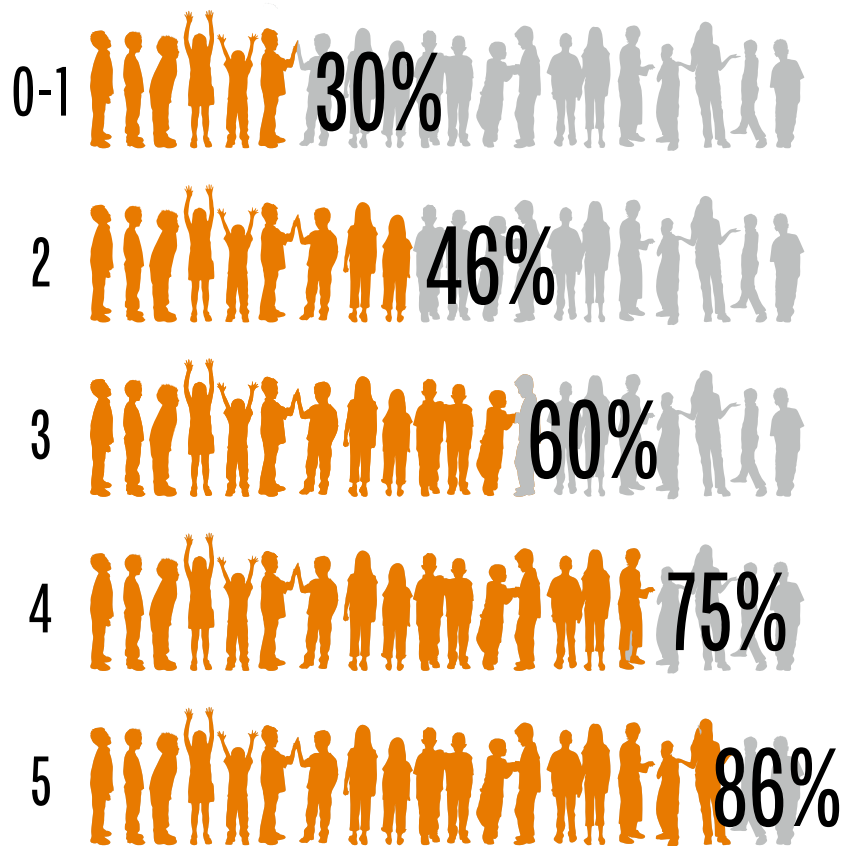
THE RELATIONSHIP BETWEEN ASSETS AND WELL-BEING

One of the key findings from the MDI program of research, consistent across all participating school districts, is that children’s self-reported well-being is significantly and positively related to the number of assets they perceive as being present in their lives. In other words, as the number of assets increase, children are more likely to report higher well-being, and each additional asset is associated with a further increase in well-being.

Number of Assets

Number of following assets that children report having in their lives:

- Adult Relationships
- Peer Relationships
- Out-of-School Activities
- Nutrition and Sleep
- Positive School Experiences



Percent Experiencing Well-Being

Children who have ‘Medium to High Well-Being’ or are ‘Thriving’ on the Well-Being Index

APPENDIX

CHANGES TO MDI ADMINISTRATION & MDI QUESTIONNAIRE

The MDI is continually adapted and improved to align with emerging research and practice, while balancing consistency in the questionnaire for tracking measures over time. Following is a summary of recent changes to the MDI questionnaire and administration in schools.

GRADES

The MDI was first piloted in 2009 with Grade 4 students in Vancouver, BC. In 2012 the Grade 7 version, which includes additional measures significant to children transitioning from middle childhood to early adolescence was piloted. Beginning in 2020/21 we have made the Grade 4 questionnaire available to children in Grades 4 and 5, and the Grade 7 questionnaire to Grades 6, 7 and 8. In BC and Canada, school districts and independent schools partner with the Human Early Learning Partnership (HELP) to administer the MDI in their schools and choose which grades they would like to participate each year. For more information on MDI participation, please visit <https://earlylearning.ubc.ca/mdi>

TIME OF YEAR

The MDI was administered in schools in the fall (November–December) until 2018-19 when the MDI administration was shifted to the winter (January–February).

IMPORTANT ADULTS

In 2018-19 many school districts who participated in the MDI noticed a decrease in the number of children who reported “two or more important adults” and an increase in the number of children who reported “no important adults” compared to previous years. This decrease could have possibly been influenced by two factors: (1) the change in timing of data collection (previous to 2018-2019 data were collected in November; starting in 2018-2019 data were collected in January/February) and (2) by a change in the appearance of the question for children as they completed the MDI. In 2018-19, the text boxes to enter the initials of adults only appeared this year if the option “yes” was chosen. In 2019-2020, we changed the appearance back to align with previous years (i.e., 2017-2018 and before). It is important to take both the change in time of year and change in question appearance into account when making comparisons between MDI data collected in the 2018-2019 school year with data from previous and current years.

CHANGES TO MDI QUESTIONNAIRE

Response Options

Agree a lot
Agree a little
Don't agree or disagree
Disagree a little
Disagree a lot

SELF-REGULATION (LONG-TERM)

In 2022/23, questions about children's long-term self-regulation skills were removed. Self-regulation refers to one's ability to control behaviour, emotions and thoughts while pursuing long-term goals. Self-regulation involves the ability to control impulses and manage challenging emotions before acting. As well as the ability to rebound following adverse life experiences. Long-term self-regulation skills rely heavily on management of emotions and resilience, which develop throughout adolescence and early adulthood. Executive functioning is the mechanism underpinning these self-regulation skills through working memory, inhibitory control of impulses and mindset shifting (Theodoraki et al., 2020). Though there is an initial spike between ages 3 to 5 in the development of executive functioning, more complex aspects do not develop until later adolescence and early adulthood. Given this information the decision was made to remove the following questions assessing long-term self-regulation skills since many of these skills will be developed in later adolescence.

In the MDI questionnaire (2021/22 and earlier) children were asked:

- **If something isn't going according to my plans, I change my actions to try and reach my goal.**
- **When I have a serious disagreement with someone, I can talk calmly about it without losing control.**
- **I work carefully when I know something will be tricky.**

MDI 6/7/8 PERSEVERANCE

In 2022/23, questions about perseverance were removed from the MDI Grade 6/7/8 questionnaire. Perseverance refers to the persistent effort to achieve one's goals, even in the face of setbacks (Shubert et al., 2020). It develops rapidly during middle childhood and early adolescence. Positive school climate and teacher support are linked to perseverance in children (Schubert et al., 2020). Teachers expressed that the length of the questionnaire can be challenging for some students. Based on this feedback these questions were removed to streamline administration of the questionnaire.

In the MDI questionnaire (2021/22 and earlier) children were asked:

- **Once I make a plan to get something done, I stick to it.**
- **I keep at my schoolwork until I am done with it.**
- **I feel a sense of accomplishment from what I do.**
- **I am a hard worker.**
- **I finish whatever I begin.**

Response Options

Agree a lot
Agree a little
Don't agree or disagree
Disagree a little
Disagree a lot

MDI 6/7/8 ASSERTIVENESS

In 2022/23, questions about children's assertiveness in school were removed from the MDI Grade 6/7/8 questionnaire.

- **If I have a reason, I will change my mind.**
- **If I disagree with a friend, I tell them.**
- **If I don't understand something, I will ask for an explanation.**

BODY IMAGE

In 2019/20, questions about body image and weight were removed from the MDI questionnaire.

MDI 6/7/8 VOLUNTEERING

In 2022/23, questions that asked children about volunteering were removed from the MDI Grade 6/7/8 questionnaire.

In the MDI questionnaire (2021/22 and earlier) children were asked:

- **Have you ever volunteered?**
- **Are you currently volunteering?**
- **Do you plan to volunteer in the future?**

Response Options

Yes
No

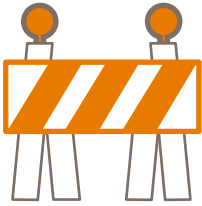
MDI 6/7/8 WHAT MAKES AN ADULT IMPORTANT TO YOU?

In 2022/23 the question that asked children about what makes an adult important to them was removed from the MDI Grade 6/7/8 questionnaire. Children continue to have the opportunity to report on important adults at home, school, and their neighborhood in the section on connectedness that is used for the adult relationships' asset index.

In the MDI questionnaire (2021/22 and earlier) children were asked: **What makes an adult important to you?** (*Children can select all of the options that apply*)

- **This person teaches me how to do things that I don't know.**
- **I can share personal things and private feelings with this person.**
- **This person likes me the way I am.**
- **This person encourages me to pursue my goals and future plans.**
- **I get to do a lot of fun things with this person or because of this person.**

- **This person is like who I want to be when I am an adult.**
- **This person is always fair to me and others.**
- **This person stands up for me and others when we need it.**
- **This person lets me make decisions for myself.**



PERCEIVED BARRIERS TO PARTICIPATING IN DESIRED ACTIVITIES

In 2022/23, the question that asked children about the barriers that stop them from participating in after-school activities were removed. Since the MDI measured children’s perceived barriers, the data from this question should not be considered a direct measure of the availability of, or access to, after-school programs or opportunities. Instead, the barriers that children are reporting should act as a starting point for discussions with parents, schools, and community service providers. The decision was made in 2022/23 to remove this question since children can report what activities they wish to participate in within the out-of-school time section.

In the MDI questionnaire (2021/22 and earlier) children were asked to select from the following list of barriers (*Children can select all of the options that apply*):

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

AFTER SCHOOL PEOPLE

In 2022/23, the question that asked children who they are with after school were removed. The decision to include this question in 2012/13 was made to assess the need for after school programming in the community. Given the changes in the availability of after school care options the following question was removed.

In the MDI questionnaire (2021/22 and earlier) children were asked: **Who are you with after school (from 3 pm to 6 pm)?** *(Children can select all of the options that apply)*

- **By myself**
- **Friends about my age**
- **Younger brothers/sisters**
- **Older brothers/sisters**
- **Mother (or stepmother/foster mother)**
- **Father (or stepfather/foster father)**
- **Other adult (for example, elder, aunt or uncle, coach, babysitter)**
- **Grandparent(s)**
- **Other (Children can describe in their own words)**

Response Options

Yes

No

Don't Know

NEIGHBOURHOOD PLACES

In 2022/23, questions about places in the neighbourhood were removed. Children had the opportunity to report if they attend community programs or neighbourhood green spaces in the out of school unstructured activities section on the MDI questionnaire.

In the MDI questionnaire (2021/22 and earlier) children were asked the following questions, adapted from George and Chaskin (2004):

- **Are there places in your neighbourhood/community that provide programs for kids your age?**
- **Are there safe places in your neighbourhood/community where you feel comfortable to hang out with friends?**

Response Options

Not important at all
Not very important
Somewhat important
Very important

MOTIVATION

In 2022/23, questions about motivation in school were removed. The percentage of children who rated the following as “very important” were included in the MDI reports. The questions were removed since similar information is captured through questions on peer belonging, friendship intimacy and academic self-concept.

In the MDI questionnaire (2021/22 and earlier) children were asked,

How important is it to you to do the following in school?

- **Make friends?**
- **Get good grades?**
- **Learn new things?**

Response Options

Agree a lot
Agree a little
Don't agree or disagree
Disagree a little
Disagree a lot

FUTURE GOALS

In 2022/23, questions about children’s future goals were removed.

In the MDI questionnaire (2021/22 and earlier), children were asked the following Yes or No questions:

- **When I grow up, I have goals and plans for the future.**
- **MDI 6/7/8 I feel I have important things to do in the future. (MDI Grade 6/7/8 questionnaire only)**

MDI 6/7/8 FUTURE ASPIRATIONS

In 2022/23, questions about children’s future aspirations were removed from the MDI Grade 6/7/8 questionnaire.

In the MDI questionnaire (2021/22 and earlier), children are asked the following Yes or No questions:

- **I plan to graduate from high school.**
- **I plan to graduate from college, university, or some other training after high school.**

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BRITISH COLUMBIA

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<https://curriculum.gov.bc.ca/competencies/personal-and-social>

BC Mental Health Plan
<https://www2.gov.bc.ca/gov/content/governments/about-the-bcgovernment/mental-health-and-addictions-strategy>

ERASE Strategy
<http://www.erasebullying.ca/>

ACE BC
<http://www.acebc.ca/>

Safe, Caring and Orderly Schools
<http://www.bced.gov.bc.ca/sco/resources.htm>

CANADA

Social and Emotional Learning Resource Finder (UBC)
<http://www.selresources.com/sel-resources/>

Promoting Relationships and Eliminating Violence Network (PREVNet)
<http://www.prevnet.ca>

Dalai Lama Center - "Heart-Mind online"
<http://www.heartmindonline.org/>

Canadian Association for School Health
<http://www.cash-aces.ca/>

UNITED STATES

Collaborative for Academic, Social, and Emotional Learning (CASEL)
<http://www.casel.org/>

Edutopia (Lessons and videos on Social and Emotional Learning)
<http://www.edutopia.org/>

Greater Good Science Center
<http://greatergood.berkeley.edu/>

The Search Institute
<http://www.search-institute.org/>

SEL School (Great Teachers and Leaders)
<http://www.gtlcenter.org/sel-school>

Morningside Center for Teaching Social Responsibility,
<http://www.morningsidecenter.org/>

For research publications on the middle years including articles published using MDI data, please visit:
<http://www.discovermdi.ca/references/>