Measuring What Matters:

Exploring Measures of Métis Children's Social and Emotional Well-being Through Evidence Synthesis and Consensus Group Methods

by

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Abstract

The measurement tools selected for use in studies with Indigenous children have an undeniable impact on the validity and applicability of the findings presented, underscoring the need to take seriously calls for the development of self-determined measures that are rooted in the cultures, histories, identities, and worldviews of Indigenous Peoples. This thesis describes a participatory research project in partnership with the Métis Nation of Alberta (MNA) to advance the creation of self-determined measures of Métis children's social and emotional well-being (SEWB). This thesis describes a scoping review that aimed to identify, describe, and consolidate measures that have been developed to assess SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States. Notably, and in alignment with other calls for action, the findings from this review highlight a glaring deficiency in efforts to develop measures that are specifically tailored for use with Métis children in Canada. The measures identified in this review were used in a subsequent study that applied modified versions of the Delphi technique and the nominal group technique to reach consensus among a group of knowledge holders on constructs that are important and relevant to measuring SEWB of Métis children in the context of the MNA. This stepwise process resulted in the creation of a conceptual map, consisting of 30 constructs that work together to describe SEWB of Métis children as multifaceted, interconnected, and relational. Ultimately, this study yields valuable insights into constructs that are important to the SEWB of Métis children in Alberta. These findings have been utilized to inform the development of three practice recommendations for the MNA. Moreover, they underscore the pivotal role that public health practitioners and policymakers have in supporting Indigenous Peoples' self-determination.

Preface

This thesis is an original work by Ashton James (AJ). The research project described in Chapter 3, of which this thesis is a part, received research ethics approval from the University of Alberta Research Ethics Board 2 (Project Name: "Building Consensus on Measures of Métis Children's Social and Emotional Well-being in Alberta," University of Alberta Ethics ID: Pro00128206, Date Approved: February 14th, 2023).

No part of this thesis has been previously published; however, some of the research included in this thesis was the result of collaborations.

The scoping review described in Chapter 2 was co-authored by Claire Cordingley (CC), Lindsay Grist (LG), Stuart Lau (SL), Liz Dennett (LD), Nathalie Kermoal (NK), and Maria B. Ospina (MO). AJ conceptualized and wrote this chapter. AJ developed the search strategies in conjunction with LD. AJ and SL completed the screening and full-text review stages of this review. AJ, CC, and LG completed the data extraction and verification stages of this review. AJ analyzed and interpreted the extracted data. As AJ's supervisor, MO provided feedback on the review protocol and interim results. As members of AJ's supervisory committee, NK and MO reviewed this chapter.

The consensus study described in Chapter 3 was co-authored by Reagan Bartel (RB), Kelsey Bradburn (KB), Nathalie Kermoal (NK), and Maria B. Ospina (MO). AJ conceptualized and wrote this chapter. AJ designed this study with input from MO. RB and KB provided feedback on study protocols and supported participant recruitment. AJ collected, analyzed, and interpreted the data. As AJ's supervisor, MO provided feedback on the study protocol and interim results. All co-authors reviewed this chapter.

Acknowledgements

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I also would like to sincerely acknowledge all the relationships that supported me through this process. Thank you to my supervisor, Maria Ospina, for offering guidance and compassion not only through my graduate studies, but also throughout the five years that we have known and collaborated with one another. Thank you, Nathalie Kermoal, for agreeing to join my supervisory committee and lending invaluable expertise and insights that shaped this research process. Thank you, Reagan Bartel and Kelsey Bradburn, for your deep friendship and wholehearted support in this process, offering me grace when balancing work, graduate studies, and a pandemic were a bit too much. Thank you to the people who participated in this research – this work exists because of your willingness to share your perspectives and I am more grounded in its impact because of your contributions. Thank you to my family, friends, and partner for understanding when I needed to take time away from time together for this research. Thank you to my dog, Stuart, for regularly reminding me to take breaks. And lastly, thank you to the land that held me throughout this process. I wrote much of this thesis while at my family's cabin near Alder Flats, a privilege that I do not take lightly.

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1 Introduction

1.1 Self-location

"We resist colonial models of writing by talking about ourselves first and then relating pieces of our stories and ideas to the research topic."[1] It is with this intention that I begin by introducing myself in the context of my thesis research. Absolon describes self-location as "sharing a story about who you are, where you come from, and what that means."[2] Self-location is a reflexive exercise that supports a researcher to think about how their position influences the research process. Self-location also allows others to interpret the research presented with an understanding of who the researcher is and is not. I am a white settler woman with mixed European ancestry. My maternal ancestors migrated from Europe and settled near Alder Flats, a small community in west-central Alberta, in the early 1900s. Near the same time, my paternal relatives settled and set roots near Edgerton, a small community in east-central Alberta, building a family farm that is an important part of my family's identity.

It is late July when I am writing this. The days are hot and full of sunlight. This is usually a good time to look for saskatoon berries, as the shrubs that line the coulee where I grew up send out cascading arrays of dark purple berries. Growing up, I spent hours picking berries with my siblings and cousins and turning them into pies, syrups, and more to share with the people I loved. As an adult, I still look to saskatoon berries as an annual gift that connects me to the place I was born and raised. I come from many generations of farmers, homesteaders, hunters, and trappers, all who taught me the importance of acknowledging the lands, and the people, that raised you. These aspects of my upbringing shape the way I approach this research, as I come with an appreciation of the importance of connection to land and family, and an understanding that I have been afforded these privileges as a white settler in Canada.

I was fortunate to be raised in a context where I was close with my grandparents, parents, aunts and uncles, siblings, cousins, and broader community. My lived experience of family was expansive and included my mother's two Métis foster brothers, who joined my mother's family in her early years of life. Despite this, I was born at a time when, and in a context where, Indigenous histories were not discussed in much detail. I was born generations after British invasion and settler expansion across Canada, when many state-sanctioned policies focused on Indigenous assimilation and erasure were well entrenched and established in Canadian society. Over the past three decades, public attention to the impacts of colonialism on Indigenous Peoples in Canada has grown. Some prominent events that drew public attention in recent years include the publication of several national reports, such as the Truth and Reconciliation Commission of Canada (TRC) report in 2015[3] and the National Inquiry into Missing and Murdered Indigenous Women and Girls (MMIWG) report in 2019,[4] renewed calls to investigate the presence of unmarked graves at former residential school sites following the discovery of more than 200 unmarked graves at the former residential school in Kamloops, British Columbia in 2021,[5] and Pope Francis' travel to Canada to apologize for the role of the Roman Catholic Church in the residential school system in 2022.[6]

During this time, I graduated from the University of Alberta with a Bachelor of Arts in Psychology and Sociology. Neither of my parents pursued an undergraduate degree, but they both valued post-secondary education. This value, and the fact that I excelled in Alberta's public secondary education system, shaped my decision to enroll in a post-secondary program. I left my undergraduate education with an (albeit limited) understanding of social determinants of health and a motivation to address health inequities, which shaped my subsequent career trajectory; however, much deeper learning (and unlearning) happened in my professional life while working

to support community-driven initiatives in Ethiopia, Uganda, and, for the past five years, in Alberta with the Métis Nation of Alberta (MNA). My desire to continue learning and be more effective in the professional spaces I exist in are some of the reasons I chose to enroll in a Master of Epidemiology program in 2020.

1.2 Research paradigm

Self-location also involves articulating a research paradigm that aligns with your view of the world.[2] Research paradigms can be understood as "concepts, perspectives, or models from which we see, interpret, and understand the world."[2] In academic settings, research paradigms are often described as beliefs about the nature of reality (i.e., ontology), what is considered knowledge (i.e., epistemology), and how knowledge is created (i.e., methodology), as well as values and principles that are foundational to the research process (i.e., axiology). I have chosen to root my thesis in an allied research paradigm, proposed by Jaworsky as a research paradigm for "quantitative and mixed methods researchers as well as other health researchers who aim to ally with Indigenous communities."[7] Importantly, in describing an allied research paradigm, Jaworsky asserts that the term "ally" is not a self-proclaimed title. Rather, researchers are recognized as allies by the groups they are allied with.

Researchers within an allied research paradigm believe that multiple realities exist.[7] This means I acknowledge that my position, and the positions of others who have been involved in this research, including participants, partners at the MNA, and my supervisory committee, have shaped the research process. In the context of my thesis, this is reflected in my identification of research questions with partners at the MNA, selection of methods in consultation with my supervisor, co-construction of knowledge with participants, and engagement with the knowledge gathered to make meaning and share it with others. Similarly, in an allied research paradigm

multiple forms of knowledge exist. This epistemological belief is reflected in my thesis through the application of a participatory methodology, in partnership with the MNA, that incorporates knowledge synthesis, consensus group, and Indigenous methods to gather diverse forms of knowing and being.

Participatory research approaches call for collaboration between researchers and communities in all stages of the research process, from defining research questions to making meaning of and sharing research results.[8] In their practice framework for participatory research, Cargo and Mercer identify three common elements of participatory research approaches: "mutual respect and trust; capacity building, empowerment, and ownership; and accountability and sustainability."[8] While these elements can be operationalized in many ways, participatory research approaches are widely acknowledged for their ability to challenge dominant power structures, prioritize community voices, and generate actionable and meaningful knowledge. Indigenous and allied scholars have called for the use of participatory approaches in health research with Indigenous communities as these elements are also recognized for supporting relational accountability and self-determination.[7,9,10]

Relational accountability is an important component of an allied research paradigm as research is recognized as involving complex relationships that must be approached with great care, including relationships with Indigenous communities, academic institutions, funding agencies, and more broadly.[7,11] Self-determination refers to Indigenous Peoples' inherent right to make decisions about matters affecting them and their futures, and "is one of the most important determinants of Indigenous health and well-being."[12] Several ethical guidelines for research with Indigenous Peoples have been developed to assert Indigenous self-determination in research processes, including the principles of ethical Métis research outlined by the former National

Aboriginal Health Organization and upheld by the MNA.[13–15] To remain accountable to my relationships with the MNA, I have chosen to frame my research axiology using the principles of ethical Métis research.[15] Figure 1.1 illustrates these principles and provides examples of how they are operationalized in my thesis.

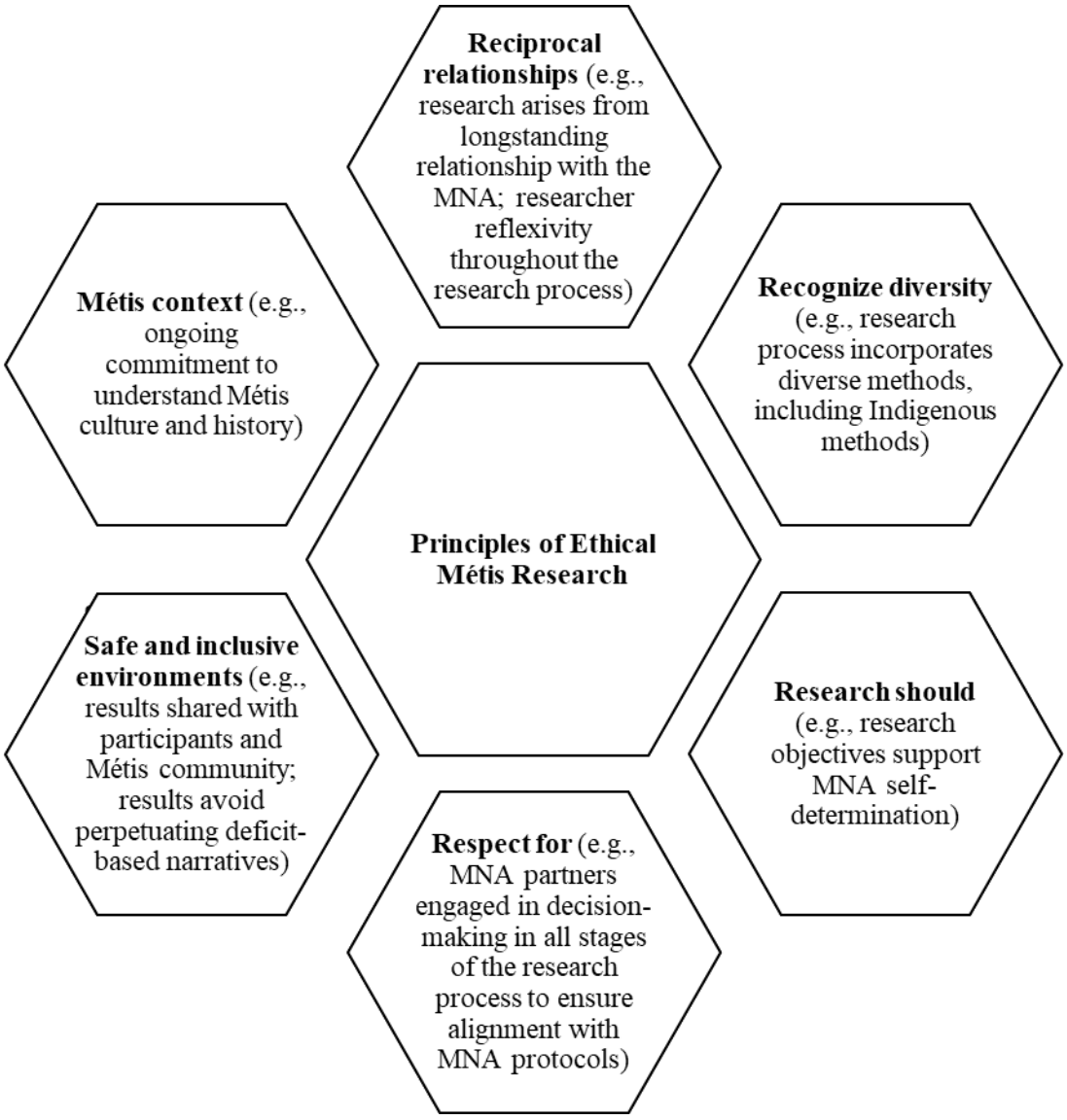

Figure 1.1: Principles of ethical Métis research

In recent decades, social determinants of health frameworks have shifted discussions on health inequity to emphasize that health is shaped by the social contexts that people exist in.[16] While acknowledging this truth, some have drawn attention to the limitations of these

frameworks in fully contextualizing the realities of Indigenous Peoples as "the concept of social determinants of health, by definition, tends to exclude or marginalize other types of determinants not typically considered to fall under the category of the 'social' – for example, spirituality, relationship to the land, geography, history, culture, language, and knowledge systems."[17] With these considerations in mind, I have selected the concept of social and emotional well-being (SEWB) as a conceptual framework to guide my research process. SEWB is an Indigenous concept that considers the impacts of colonialism and other structural determinants on Indigenous Peoples' health, as well as sources of strength, resilience, and healing to overcome health inequities.[18] Gee et al. conceptualize SEWB as representing the connection of individuals, families, and communities to seven broad domains: "body; community; culture; family and kinship; land (or 'country'); mind and emotions; and spirit, spirituality, and ancestors."[18] Although the concept of SEWB originated in Australia, its alignment with Indigenous perspectives on health and well-being in diverse contexts, makes it an appropriate framework for this research.[19]

1.3 Métis People in Canada

The Métis are a post-contact Indigenous People who arose from the unions of First Nations women and European fur traders as early as the 18th century.[20] Over time, Métis People developed a collective identity and culture that was rooted in shared experiences, traditions, values, and ways of life that were passed down throughout generations, including the Michif language, distinct art forms, and a governance structure guided by traditions of the buffalo hunt. This sense of peoplehood was, and continues to be, a source of pride and a crucial aspect of Métis identity, providing a sense of belonging and community.[21] Métis People lived in close relationship to other Indigenous Peoples, including the Cree, Saulteaux, and the Assiniboine

Peoples, and these relationships continue to be reflected in similarities between Métis and First Nations cultures.[22]

Métis identity refers to more than being of "mixed" First Nations and European ancestry.[21] As reflected in the national definition put forward by the Métis National Council, the Métis are a people connected to place. The Métis National Council defines Métis as "a person who self-identifies as Métis, is distinct from other Aboriginal Peoples, is of historic Métis Nation ancestry, and who is accepted by the Métis Nation."[23] Originally centered in and around the Red River Valley in what is now known as Winnipeg, Manitoba, the Métis homeland expanded to encompass the prairie provinces of Alberta, Saskatchewan, and Manitoba, as well as parts of British Columbia and Ontario, and the southern part of the Northwest Territories.[20] While Métis People are not recognized as a distinct Indigenous People in the United States, the traditional Métis homeland also included the northern parts of Montana and North Dakota.[24] Importantly, Métis identity also transcends place, encompassing a collective identity that exists regardless of where a Métis person lives today.[21]

Métis People have experienced significant impacts related to colonization. In the late 1800s, Canada implemented a fraudulent scrip system that dispossessed Métis People from their lands and left many to live in road allowances.[20,25] In their efforts to pursue westward expansion and settlement, Canada issued scrip to Métis People, promising them land in the west, in exchange for their traditional and unceded territories. Scrip was essentially coupons, issued to Métis People, that could be redeemed as land, in acres, or as money for the purchase of land. The scrip system was fraught with bureaucratic hurdles and corruption, with most land that was promised to Métis People ending up in the hands of white settlers. Some of these barriers included the complex and time-consuming processes of applying for and receiving scrip,

requiring Métis People to travel long distances to Dominion Land Offices to redeem scrip, and the corrupt tendency for scrip to be forged and sold at a profit to non-Métis settlers.

Known as the *otipemisiwak* (the people that own themselves), Métis People organized in response and asserted their right to govern themselves.[20,25] This mobilization led to the creation of the MNA in 1928, a governance body for Métis People in Alberta. The mandate of the MNA is "to be a representative voice on behalf of Métis People in Alberta, provide Métis People an opportunity to participate in government policy and, most importantly, promote and facilitate the advancement of Métis People through the pursuit of self-reliance, self-determination, and self-management."[26] In the 2021 Census, 624,220 people self-identified as Métis.[27] Of these, 127,475 resided in Alberta, comprising Canada's second largest Métis population. Nearly 50% of self-identified Métis People in Alberta are citizens of the MNA.[6] In addition to the MNA, there are eight Métis land bases in Alberta, known as Métis settlements, that are governed by the Métis Settlements General Council.[20]

Despite being one of three constitutionally recognized Indigenous Peoples in Canada, the federal government did not accept responsibility for Métis issues until 2016, following the Supreme Court of Canada's decision to recognize Métis as "Indians" under the Constitution Act of 1867, known commonly as the *Daniels* decision.[28] The *Daniels* decision propelled the negotiation of a series of nation-to-nation agreements between the MNA (and other Métis Nations) and Canada, including an agreement signed in 2019 recognizing the MNA as the Indigenous government for Métis People in Alberta.[6] This agreement led to the creation of the Otipemisiwak Métis Government Constitution, which was ratified in 2022,[6] and the recent introduction of Bill C-53 to facilitate the implementation of a modern-day treaty with the MNA and other Métis Nations in 2023.[29] While there have been many gains since the *Daniels* decision,

jurisdictional barriers to the equitable allocation of health resources among First Nations, Inuit, and Métis Peoples continue to persist, with Métis Peoples being excluded from many federal health programs.[30]

1.4 Epidemiology and Indigenous health in Canada

Epidemiology is the study of how health-related outcomes are distributed in groups of people and the factors that influence this distribution.[31] In many ways, epidemiology is a practical skill: epidemiology methods involve making comparisons between groups of people to understand differences in the distribution of health-related outcomes, the results of which are often reported as the "risk" of experiencing a health-related outcome or the "odds" of a particular factor being present.[31] In other ways, epidemiology is a subjective process.[7,9,32] Walter and Andersen write that "we do, live, and embody social position, and as researchers, it covertly, overtly, actively, and continuously shapes how we do, live, and embody research practice."[32] Who we are as people shapes the research process and, in the field of epidemiology, this can include influencing the questions that are asked, the variables that are selected, and the measurement tools that are designed, among other decisions. While researchers strive to identify potential biases in epidemiological studies, this practice has been criticized for focusing on "identifying logical flaws and potential biases in relation to the numbers rather than probing the underlying motivations and embedded racial biases from which the data are drawn."[33]

Needless to say, while the results of epidemiological studies are used to inform many health-related program, service delivery, and policy decisions, many look to epidemiology with a certain amount of suspicion.[9,10,33–35] Smylie and Firestone write that "the core problem with Canada's Indigenous health information infrastructure is that none of the primary population health data sources consistently, inclusively, or reliably gather Indigenous identity

information."[35] Self-identification is a central component of Indigenous identity and is recognized as the most accurate and respectful way to identify Indigenous Peoples; however, few data sources in Canada include questions on self-identification to determine Indigenous identity.[9,35,36] Understanding the self-determined priorities of Indigenous communities is further limited by the lack of disaggregated data. More than 30% of Indigenous Peoples in Canada self-identify as Métis; however, data specific to Métis People is extremely limited, leading some to refer to Métis People as the "forgotten" Indigenous population due to the lack of health research, programs, and policies specific to their experiences.[25,27]

Data limitations aside, in making comparisons between Indigenous and (often) non-Indigenous populations, epidemiology studies also tend to frame Indigenous health in terms of "difference, disparity, disadvantage, dysfunction, and deprivation."[34] Such deficit-based narratives can perpetuate harmful stereotypes towards Indigenous Peoples, particularly when interpreted in isolation of the historical and contemporary contexts that give rise to these gaps, and run the risk of becoming internalized, contributing to further harm among Indigenous individuals and communities.[7,10,34] While drawing attention to gaps can inform public health actions, communities have also indicated that deficit-based narratives provide little information on how to actually strengthen health and well-being.

Similarly, epidemiological studies have been criticized as inadequately reflecting the impact of crucial determinants on the lived realities of Indigenous Peoples.[9,10,37] Criticisms have highlighted the lack of constructs that emphasize the strengths of Indigenous Peoples in existing measurement tools, such as the protective role of cultural connectedness on health and well-being. These concerns apply to the measurement of Indigenous health and well-being across the life course.[38,39] In a systematic review of longitudinal studies on the health and well-being of

Indigenous children, reviewers concluded that the review findings "identified some important gaps around the measurement of the broader determinants of Indigenous health and well-being operating at the macrosocial level, in particular key constructs around culture, history, and discrimination."[38] Indigenous communities have responded by creating community-led measurement tools, such as the First Nations Regional Health Survey created by the First Nations Health Authority, the success of which is often cited in calls for Indigenous communities to be meaningfully engaged in the creation of other self-determined measures.[7,9,33,35]

1.5 Research objectives

Contributing to growing efforts to address these concerns, through building consensus on constructs that are meaningful to measuring the SEWB of Métis children in Alberta, is the focus of my thesis. Specifically, my thesis research has two objectives:

1. Identify, describe, and consolidate measures that have been developed to assess the SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States.
2. Build consensus on constructs that are important to measuring the SEWB of Métis children aged 10 years or younger in the context of the MNA.

Children are treasured members of Métis communities as they are recognized as holding pivotal roles related to upholding and passing on cultural and community connections.[6] This research was completed in partnership with the MNA to support the Children and Family Services Department in their work to "build strong, resilient Métis families."[40] The objectives of this thesis research were determined in collaboration with the Director of Children and Family Services and focus on Métis children aged 10 years or younger as most initiatives offered by the Children and Family Services Department are tailored to children within this age range.

1.6 Thesis organization

This thesis is organized as a paper-based thesis, containing two separate manuscripts. Following this introduction, the second chapter presents a scoping review that summarizes existing evidence on measures that have been developed to assess the SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States, in alignment with the first objective of my thesis. The third chapter applies the findings from the scoping review in a study that applies consensus group techniques to reach agreement among a group of knowledge holders on constructs that are important to measuring the SEWB of Métis children aged 10 years or younger in the context of the MNA, in alignment with the second objective of my thesis. The final chapter "connects the dots" by drawing on LaFrance and Nichols' Indigenous evaluation framework to discuss the strengths and limitations of this research and providing three recommendations for applying these learnings within the MNA, as well as discussing broader public health practice and policy implications.[41]

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2 Measures of social and emotional well-being among Indigenous children in Australia, Canada, New Zealand, and the United States: A scoping review

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2.1 Introduction

Indigenous children face well-documented health inequities that have been extensively studied in the scientific literature.[1] These disparities are also observed among Indigenous children in countries sharing similar colonial histories, such as Australia, Canada, New Zealand, and the United States. Such similarities are part of a growing body of literature acknowledging that health inequities among Indigenous children are shaped by the historical and enduring experiences of colonialism, including intergenerational trauma, identity erasure, social exclusion, and deliberate policies that sever kinship and land-based connections.[2] Existing data on the health and well-being of Indigenous children has been criticized for inadequately reflecting the profound impacts of colonialism and other determinants on their health.[1,3,4]

There is growing consensus that Indigenous communities must be meaningfully engaged in the creation of self-determined measures of Indigenous children's health and well-being to ensure the integration of constructs related to Indigenous histories, cultures, and worldviews.[1,3,4] In Canada, notable responses have included the development of the Aboriginal Children's Health and Well-being Measure (ACHWM), a self-report measure that was originally created with children in the Wikwemikong First Nation in Ontario and later adapted through engagement with other Indigenous communities.[5,6] This innovative tool has garnered recognition for its inclusion of multidimensional constructs and its focus on identifying inherent strengths, providing valuable insights to guide the development of strength-based, health promotion interventions.[3]

It is important to explore other efforts to create self-determined measures of Indigenous children's health and well-being. Such knowledge is important to help researchers and practitioners better understand what measurement tools exist and promising measure development practices, as well as where further work is needed. The objective of this scoping

review was to identify, describe, and consolidate measures that have been developed to assess the social and emotional well-being (SEWB) of Indigenous children in Australia, Canada, New Zealand, and the United States. SEWB is a "multidimensional concept of health that includes mental health, but which also encompasses domains of health and well-being such as connection to land or 'country', culture, spirituality, ancestry, family, and community."[7] This review also explored the engagement of Indigenous Peoples in measure development processes, with particular attention to who was engaged and how they were engaged, as both are central to many guidelines on research involving Indigenous Peoples and community-engaged research, more broadly.[8–10]

Unlike systematic reviews, scoping reviews are amenable to exploring broad topics and including diverse sources of evidence, making them "an ideal tool to determine the scope or coverage of a body of literature on a given topic."[11] A preliminary search of current or underway evidence syntheses in JBI Evidence Synthesis, Cochrane Library, PROSPERO, CINAHL, and MEDLINE was conducted on May 4th, 2021. There were no current or underway scoping reviews on this topic. One ongoing systematic review on the reliability and validity of instruments that have been used to assess the SEWB of Indigenous Peoples in Australia was identified; however, this review was not focused on measures specifically developed to assess SEWB among Indigenous children in multiple countries with similar histories of colonization.[12]

2.2 Review questions

This review was guided by the following research questions:

1. What measures have been developed to assess the SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States?

2. In what ways, if any, were Indigenous Peoples engaged in the process of developing measures of Indigenous children's SEWB within the sources of evidence identified for the primary review question?

2.3 Inclusion criteria

Documents that described measures that were developed to assess the SEWB of Indigenous children, aged 18 years or younger, in Australia (Aboriginal and Torres Strait Islander), Canada (First Nations, Inuit, and Métis), New Zealand (Māori), and/or the United States (Alaska Native, Native American, and Native Hawaiian) were included in this review. We included documents that used a developed measure to assess Indigenous children's SEWB, as well as documents that assessed the measurement properties of a developed measure. This review focused on Indigenous children in Australia, Canada, New Zealand, and the United States as these geographical areas share many similarities. Namely, "Indigenous Peoples in these countries share similar experiences as subjects of British colonialism, including comparable colonial histories, laws, policies, and political structures,"[13] such as those aimed at assimilation and dislocation from the land.[14] Indigenous Peoples in these countries are also recognized for asserting their right to self-determination in recent years.[15]

SEWB was conceptualized as representing the connection of Indigenous children to seven domains proposed by Gee et al.: body; community; culture; family and kinship; land; mind and emotions; and spirit, spirituality, and ancestors (Figure 2.1).[7] Measures were considered to be instruments, such as surveys, scales, or sets of items, or procedures, such as direct observation, that were used to quantify or assess a particular attribute of Indigenous children's SEWB.[16] Peer reviewed publications of experimental, observational, descriptive, and qualitative study designs, as well as grey literature documents limited to reports by government agencies

and Indigenous organizations, were included. Conference proceedings, theses and dissertations, books and book chapters, and literature reviews were excluded. To support the feasibility of this scoping review, only evidence sources published in English, between 2004 and 2021, were included.

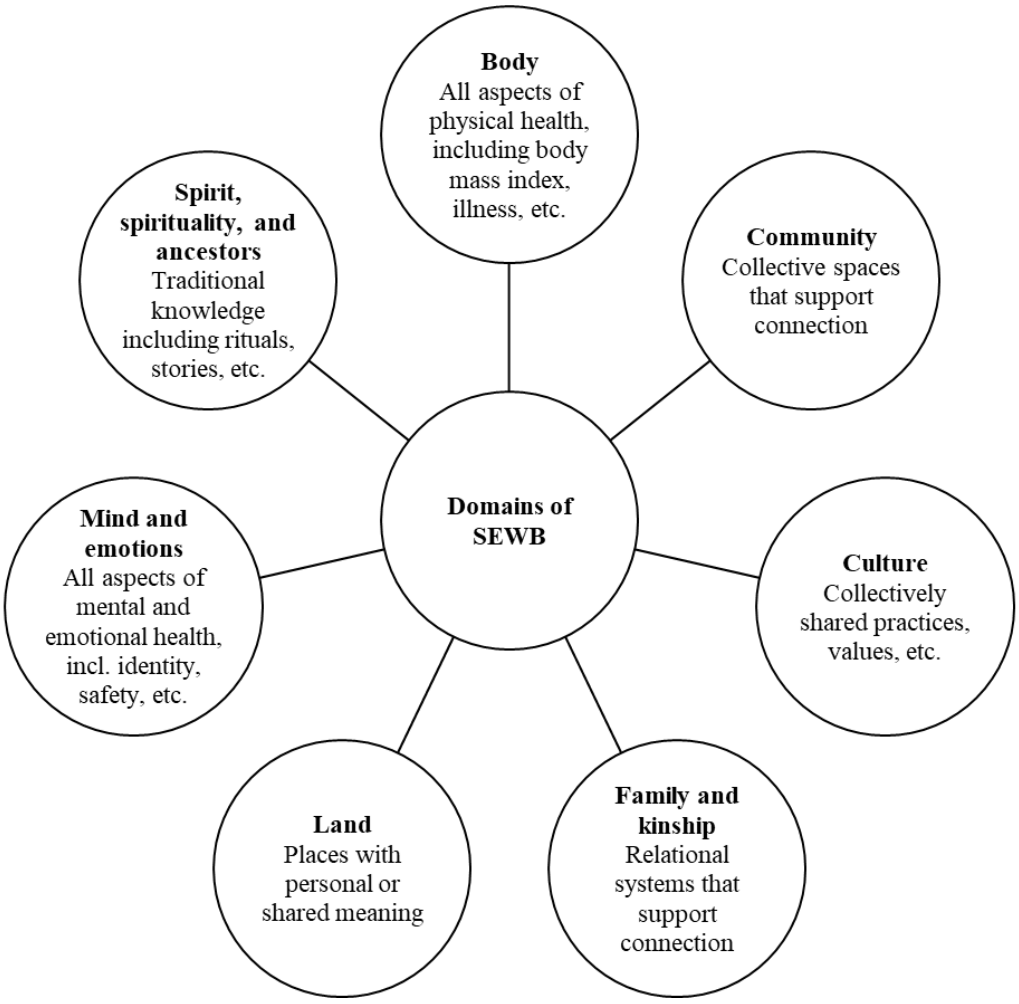

Figure 2.1: Domains of SEWB

2.4 Methods

This review followed the JBI methodology for scoping reviews and an *a priori* protocol.[17] Consultation with knowledge users is an important part of the scoping review process. The Métis Nation of Alberta (MNA) Director of Children and Family Services and

Director of Health participated in the identification of this topic as findings from this review were used in a subsequent study in partnership with the MNA, described in Chapter 3.

Search strategy

The search strategy aimed to locate both peer-reviewed publications and grey literature documents, as outlined earlier. An initial limited search of MEDLINE was undertaken to identify articles on this topic. Search terms for the concept of SEWB were drawn from keywords associated with the seven domains of SEWB previously defined by Gee et al., including resilien*, "mental health", spirit*, connection, community, and kinship. The text words contained in the titles and abstracts of relevant articles, and the index terms used to describe the articles, were used to develop a full search strategy for each of the databases searched in conjunction with a librarian at the University of Alberta, as reported in Appendix 1. The following databases were searched between September 10th and 14th, 2021: MEDLINE, EMBASE, CINAHL, ERIC, SocINDEX, and Scopus. In addition to these databases, the reference lists of included studies and iPortal: Indigenous Studies Portal were hand-searched to identify additional documents for inclusion.

Sources of evidence selection

Citations identified in the database searches were uploaded to Covidence and duplicates were removed. Two reviewers piloted the inclusion criteria by screening the title and abstract of 25 citations and met to discuss discrepancies and make modifications to the inclusion criteria. Following the pilot test, titles and abstracts were screened by two reviewers for assessment against the inclusion criteria. The full texts of potentially relevant documents were retrieved and reviewed by two reviewers. Reasons for the exclusion of documents at this stage were recorded in Covidence and reported in a Preferred Reporting Items for Systematic Reviews and Meta-

analyses Extension for Scoping Reviews (PRISMA-ScR) flow diagram.[17] Disagreements that arose during the selection process were resolved through discussion.

Data extraction

Data from included documents was extracted by one reviewer and verified by a second reviewer using a pre-tested data extraction form (Appendix 2). The data extracted included descriptive details about the documents included and the inclusion criteria (i.e., citation details, country of origin, study design, and participant numbers and characteristics, including gender and Indigenous identity), as well as details of community engagement in measure development processes, where reported. The primary purpose of the study, classified as "description and explanation," "evaluation," or "inform decision-making" was extracted for documents that used a developed measure to assess Indigenous children's SEWB. While an appraisal of the methodological quality of identified measures was beyond the scope of the knowledge synthesis, data regarding the types of evidence reported in documents that assessed the measurement properties of a developed measure were extracted. For each measure identified, descriptive characteristics about the measure (i.e., mode of administration, composition, response options, scoring, constructs measured, alignment with the seven domains of SEWB) were extracted.

Data analysis and presentation of results

Characteristics of included documents and identified measures were summarized in evidence tables. Continuous data were reported as medians with interquartile ranges and proportions were used for categorical data, where appropriate.[18]

2.5 Results

Document inclusion

The literature searches resulted in the inclusion of 30 documents in this scoping review: 28 peer-reviewed articles[5,6,19–44] and two grey literature documents.[45,46] Figure 2.2 describes the study selection process for this review.

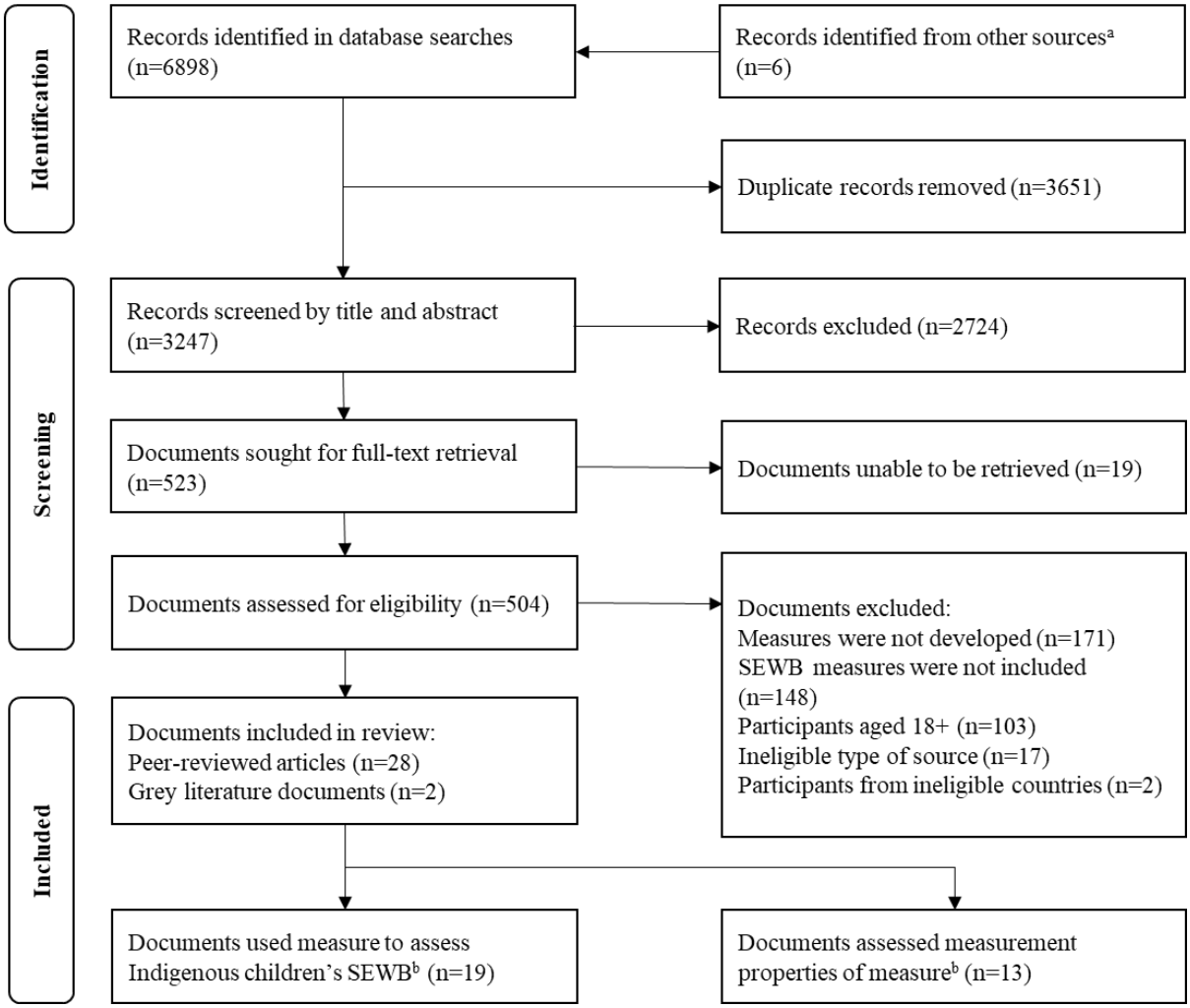

Figure 2.2: Flow diagram of study selection
[a] Additional documents identified by hand-searching the reference lists of included studies and iPortal: Indigenous Studies Portal. Of these, four were peer-reviewed articles and two were grey literature documents.
[b] Two documents assessed the measurement properties of a developed measure and used the measure to assess Indigenous children's SEWB.[39,43]
Abbreviations: n=number of documents

Document characteristics

This scoping review identified 19 documents that used a developed measure to assess Indigenous children's SEWB.[19,23,24,26–29,32–35,37,39–43,45,46] These documents were published between 2006 and 2021. The median year of publication was 2017, with an interquartile range (IQR) of 8 years (2020-2012). Most documents utilized cross-sectional study designs (n=12) [24,27–29,33–35,37,41–43,45] and focused on Indigenous children in the United States (n=13).[19,23,24,26–29,34,35,37,41–43] Of these, six documents focused on Native American children,[29,34,35,37,41,42] two documents focused on Alaska Native children,[19,23] and four documents included both Alaska Native and Native American children.[24,26-28] Additionally, one document included both Native American children in the United States and First Nations children in Canada.[43] Sample sizes ranged from 20 to 14,170 participants. The median (IQR) sample size was 181 (263-93) participants. These documents corresponded to 25 measures that were predominately used in documents that aimed to describe and explain the distribution of health-related events within a population (n=12),[24,27–29,33–35,37,40–43] followed by documents that aimed to evaluate the effects of health-promoting interventions (n=5).[19,23,26,32,39] Fewer documents aimed to inform decision-making in community and healthcare settings (n=2).[45,46]

Additionally, 13 of the documents included in this review aimed to assess the measurement properties of a developed measure of Indigenous children's SEWB.[5,6,20–22,25,30,31,36,38,39,43,44] These documents were published between 2009 and 2021. The median (IQR) year of publication was 2014 (2019-2012). Similarly, most documents utilized cross-sectional study designs (n=9)[20–22,25,30,31,36,38,43] and focused on Indigenous children in the United States (n=8).[20–22,30,31,36,38,43] Of these, six documents focused on Alaska Native children,[20-22,30,31,36] one document focused on Native American children,[38] and one document involved both Native

American children in the United States and First Nations children in Canada.[43] Sample sizes ranged from nine participants to 459 participants. The median (IQR) sample size was 284 (284-55) participants. Table 2.1 summarizes the characteristics of documents included in this review. Appendix 3 reports these characteristics in a consolidated evidence table.

Table 2.1: Characteristics of included documents

Characteristic	Documents that assessed Indigenous children's SEWB (n=19)[b]	Documents that assessed measurement properties (n=13)[b]
Country		
Australia	4	2
Canada	2	4
New Zealand	1	-
United States	13	8
Indigenous population[a]		
Aboriginal	4	2
Torres Strait Islander	4	2
First Nations	2	4
Inuit	1	1
Métis	1	-
Māori	1	-
Alaska Native	6	6
Native American	11	2
Study design[a]		
Cross-sectional	12	9
Qualitative	-	3
Pre-post	4	1
Prospective cohort	2	-
Randomized controlled	1	-

[a] Numbers reported exceed the total number of documents included in this review as some documents included participants from multiple countries and Indigenous groups.
[b] Two documents assessed the measurement properties of a developed measure and used the measure to assess Indigenous children's SEWB.[39,43]
Abbreviations: n=number of documents

In all 13 documents, community engagement was emphasized as the predominant approach to demonstrating content validity.[5,6,20–22,25,30,31,36,38,39,43,44] Of these, eight documents also reported using pre-existing measures to inform measure development processes.[6,20–22,30,31,39,43] Similarly, evidence of internal consistency reliability was reported in eight documents.[21,25,30,31,36,38,39,43] Evidence of construct validity was provided in nine documents, including evidence of the measure's factor structure (n=8),[20–22,25,30,31,36,43] convergent validity

(n=7),[20,22,25,30,31,36,38] and divergent validity (n=3).[20,30,38] Collectively, these documents assessed the properties of 12 measures that were developed to assess the SEWB of Indigenous children. Table 2.2 lists these measures and the measurement properties that were assessed in the documents described above.

Table 2.2: Measurement properties reported

Measure	Country	Reliability (n=9)	Content validity (n=13)	Construct validity (n=8)
Aboriginal Children's Health and Well-being Measure[5,6,44]	CA		✓	
Adolescent Historical Loss Scale[43]	CA; US	✓	✓	✓
Awareness of Connectedness Scale[36]	US	✓	✓	✓
Brief Family Relationship Scale[21,31]	US	✓	✓	✓
Connected Self Scale[39]	AU	✓	✓	
First Nations-Child Quality of Life Survey[25]	AU	✓	✓	✓
Multicultural Mastery Scale[21,31]	US	✓	✓	✓
Peer Influences Scale[21]	US	✓	✓	
Reasons for Life Scale[21,22]	US		✓	✓
Reflective Processes Scale[21,22]	US		✓	✓
Wicozani Instrument[38]	US	✓	✓	✓
Youth Community Protective Factors Scale[19,21]	US	✓	✓	

Abbreviations: n=number of measures; AU=Australia; CA=Canada; US=United States

Review findings

The documents included in this review provided information on 34 measures of Indigenous children's SEWB. Most measures were self-report measures designed to be completed by children (n=24).[5,6,19–24,26–36,38–40,43–46] Of these, one measure included direct observation, whereby children's height and weight were measured by research staff.[46] The remaining measures were self-report measures to be completed by a parent or caregiver (n=9),[19,25,37,41,42,45,46] or a teacher (n=1).[46] Of these, five measures were also proxy measures, in which the parent, caregiver, or teacher was asked to report on particular aspects of children's SEWB.[25,45,46]

Most measures were related to several domains of SEWB (n=26) (Table 2.3).[5,6,20–29,32–41,43–46] Of these, only three measures addressed all seven domains of SEWB.[5,6,43,44] Measures related to the connection of Indigenous children to family and kinship were the most common (n=22)[5,6,19,20,25,30–33,36,37,39–41,43–46], followed closely by those related to connection to community (n=21)[5,6,22–24,26–29,33–35,37,40,42–46] and culture (n=20).[5,6,19–22,25,30,32,36,37,39,43–46] Measures related to connection with the land were the least common (n=8).[5,6,23,33,36,40,43,44,46] Appendix 4 provides a detailed description of the measures identified in this scoping review.

Most documents included in this review reported some form of engagement with Indigenous communities in measure development processes (n=18).[5,6,19–22,25,30,31,36–39,42–46] Most often, this involved engaging community members to inform item content through focus group discussions (n=5),[6,22,25,30,31] interviews (n=3),[5,36,44] consensus building processes (n=2),[25,36] and in broad national consultation processes with Indigenous communities and organizations (n=2).[45,46] Community members were also commonly engaged as participants when pilot testing new measures (n=9)[20–22,25,30,31,36,38,46] and as members of advisory committees (n=7).[6,30,36,38,43,44,46] Additionally, five documents indicated that community-based approvals for study procedures were granted.[20–22,30,46] Fewer documents engaged community members as part of the research team (n=2)[21,48] or as hired research staff (n=2).[42,46] Most documents engaged Indigenous children in measure development processes (n=11),[5,6,20–22,30,31,36–38,44] followed by Elders (n=6),[5,6,22,30,38,46] and parents and caregivers of Indigenous children (n=4).[5,25,30,44]

Table 2.3: Measures by domain of SEWB

Measure	Body (n=12)	Community (n=21)	Culture (n=20)	Family, kinship (n=22)	Land (n=8)	Mind, emotions (n=17)	Spirit (n=11)
Aboriginal Children's Health and Well-being Measure[5,6,44]	✓	✓	✓	✓	✓	✓	✓
Aboriginal Children's Survey[45]	✓	✓	✓	✓		✓	
Adolescent Historical Loss Scale[43]	✓	✓	✓	✓	✓	✓	✓
Adult Community Protective Factors Scale[19]				✓			
Attitudes and beliefs towards traditional foods[23]	✓		✓		✓		
Awareness of connectedness scale[36]		✓		✓	✓		
Boarding school connectedness[21,31,32]		✓					
Brief Family Relationship Scale[21,31]				✓			
Connected Self Scale[39]		✓		✓		✓	
Connection to Native American identity and culture[29]			✓				
Cultural characteristics[33]			✓	✓			
Cultural engagement[42]			✓				
Enculturation[23]			✓				
Ethnic engagement[40]			✓	✓	✓		
Family and Child Stressful Life Events Scale[43]				✓		✓	
First Nations-Child Quality of Life Survey[25]	✓	✓		✓		✓	
Individual values[37]	✓	✓	✓	✓		✓	✓
Intentions to participate in traditional practices[26]			✓				✓
LSIC Child Questionnaire[46]	✓	✓	✓	✓	✓	✓	✓
LSIC Parent 1 Questionnaire[46]	✓	✓	✓	✓	✓	✓	
LSIC Parent 2 Questionnaire[46]	✓	✓	✓	✓			
LSIC Teacher Questionnaire[46]		✓	✓	✓		✓	
Multicultural Mastery Scale[21,31]		✓		✓		✓	
Outcome expectancies for values[37]	✓	✓	✓	✓		✓	✓
Peer Influence Scale[21]		✓					
Perceived values of the community[37]	✓	✓	✓	✓		✓	✓
Perception of Native American culture[41]			✓	✓			
Reasons for Life Scale[21,22]		✓	✓			✓	✓
Reflective Processes Scale[21,22]		✓		✓		✓	
Social and emotional skills[32]		✓		✓		✓	
Spiritual practices[34,35]			✓				✓
Traditional practices[24,27,28]			✓		✓		✓
Wicozani Instrument[38]	✓					✓	✓
Youth Community Protective Factors Scale[19,21]		✓					

Abbreviations: LSIC=Longitudinal Study of Indigenous Children; n=number of measures

2.6 Discussion

This scoping review provides insights on previous efforts to develop measures of Indigenous children's SEWB in Australia, Canada, New Zealand, and the United States. While the documents included in this review focused on Indigenous populations in all four countries, none of the documents focused specifically on Native Hawaiian populations in the United States. This is a considerable gap as the vast majority of documents included in this review originated from the United States. Despite the active engagement of Native Hawaiian People in seeking federal recognition of their identity and rights, such recognition has yet to be granted.[47] This systematic exclusion of Native Hawaiian People from United States policies and programs may be a contributing factor to the absence of measures tailored to their unique experiences.

Notably, none of the documents included in this review focused on two-spirited, lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (2SLGBTQQIA+) populations. This a significant omission as the health and well-being of Indigenous 2SLGBTQQIA+ Peoples is shaped in unique ways.[48] Intersectional approaches that recognize and address the complex identities and experiences of Indigenous 2SLGBTQQIA+ Peoples are needed to develop measures that are inclusive of diverse gender and sexual identities.

The 34 measures identified in this review collectively cover all seven domains of SEWB, as conceptualized by Gee et al. These measures contribute to a holistic picture of Indigenous children's well-being, aligned with Indigenous perspectives that highlight the importance of strong connections to a multitude of dimensions.[7,49] Indigenous perspectives also acknowledge that the various dimensions of well-being are deeply connected and influence each other. In Indigenous worldviews, health is fundamentally relational, meaning that the well-being of children is shaped by the relationships they hold with their families, communities, and the land.

Most of the measures identified in this review were related to Indigenous children's connection to family, kinship, and community, emphasizing the importance of these connections and calls for the development of "Indigenous wellbeing measures that not only align to Indigenous cultural, social, economic, and environmental priorities, but [that] also consider individual, family, tribal, and community needs."[14]

This review found fewer measures that were related to Indigenous children's connection to land and spirit. In describing the domains of SEWB, Gee et al. wrote "perhaps here, in the connection to spirit and spirituality, the consequences of colonization for many Aboriginal and Torres Strait Islander Peoples are most keenly felt."[7] Settler colonialism in Australia and elsewhere involved a multitude of disruptive policies, including those focused on suppressing Indigenous spiritual practices, destroying sacred sites, and dislocating Indigenous Peoples from the land.[2,7,50] In Indigenous worldviews, land is considered to be spiritually significant, with many spiritual practices being linked to sacred locations. It is possible that colonial policies that have strained Indigenous Peoples' connection to land and spirit have also contributed to a lack of emphasis on these domains in measure development processes. Indigenous spiritual practices have also continued to evolve as Indigenous Peoples work to reclaim these connections.[7,50] This, along with notable gaps in scholarship in these areas, may further complicate measure development efforts.[50,51]

Some have also argued that social determinants of health frameworks tend to underemphasize the importance of land.[52,53] Richmond asserts "in Canadian and academic policy worlds, the idea of 'connectedness to land' as a determinant of health among First Nations has received very little attention."[53] This tendency may also contribute an underemphasis on connection to land in measure development processes. Nonetheless, research exploring

community-based understandings of connection to land and spirit, as it relates to Indigenous children's well-being, are needed to better understand this finding. Fewer measures were also related to children's connection to body, though this finding was somewhat expected as many existing measures tend to emphasize physical constructs (e.g., mortality), negating a need to focus on this domain in efforts to develop new measures that explore other domains of well-being.[1]

Previous studies have been criticized as inadequately reflecting the impacts of colonialism on Indigenous children's well-being.[1] In 2021, Lloyd-Johnson et al. published a systematic review exploring longitudinal studies on Indigenous children's health and well-being that had been published internationally. Of the 210 studies included, only three studies reported variables related to the impacts of colonialism. Similarly, in this review, only two measures specifically named colonial policies and programs in the constructs measured, including children's perception of historical losses (e.g., the loss of land)[43] and family separation due to colonial policies.[33] Colonization has impacted the lives of Indigenous Peoples in profound and lasting ways, a truth that needs to be considered in measure development processes.[2,14]

Indigenous and allied scholars have advanced calls to apply participatory approaches in research with Indigenous communities to address many of these gaps.[4,14,54–56] While most of the documents included in this review reported some form of community engagement in measure development processes, 12 documents did not report any engagement with Indigenous communities. Researchers have acknowledged that participatory approaches can sometimes pose challenges to publishing in academic journals, including navigating the sometimes differing expectations of communities and academic institutions.[10] This provides one possible explanation for under reporting community engagement in measure development processes. Nonetheless, this

finding directs attention to the need for more transparent reporting in studies involving Indigenous communities. In a review of guidelines specific to reporting Indigenous health research, Huria and colleagues developed a consolidated list of reporting criteria to encourage more transparent reporting practices among researchers.[57] These criteria and the findings from this review point towards opportunities for this practice to continue to grow, including in defining partnership agreements, incorporating Indigenous methods, and increasing the involvement of community members as hired staff, research team members, and co-authors on academic publications.

Strengths and limitations

Scoping reviews are an effective method for mapping the existing literature on a topic as they are amenable to including a wide range of sources, including both peer-reviewed and grey literature sources, providing a more inclusive view of the evidence landscape.[11] Similarly, scoping reviews are amenable to including various types of evidence. The scoping review process supported our inclusion of two population-level surveys on Indigenous children's health that were drawn from the grey literature, as well as studies that utilized qualitative and arts-informed methods to inform measure development processes. Choosing an evidence synthesis method that was inclusive of diverse forms of knowledge was important in our efforts to better respect Indigenous ways of knowing, as such perspectives are not as commonly reflected in quantitative evidence sources.[58]

These aspects of scoping reviews lend to their strength, but also pose challenges to assessing the methodological quality of included documents.[17] In this review, details on the properties reported in documents that assessed the measurement properties of a newly developed measure were extracted; however, we did not appraise the quality of identified measures,

limiting the conclusions that can be drawn from this review. While we also did not assess the methodological quality of included documents, as in a systematic review, we did apply a critical lens to explore the engagement of Indigenous Peoples in measure development processes.

This scoping review followed guidelines for the conduct and reporting of scoping reviews outlined by the JBI, enhancing the transparency and reproducibility of the review process and findings.[17] The JBI methodology for scoping reviews outlines a systematic process and detailed reporting criteria to support rigour in the conduct of scoping reviews. In this scoping review, this included developing search strategies in conjunction with a librarian, as well as having two reviewers involved in the screening, full-text review, and data extraction stages of this review. Nonetheless, it is possible that reviewer subjectivity in study selection and data extraction processes could have contributed to the exclusion of documents that met the review criteria and inaccurate or incomplete data extraction.

2.7 Conclusion

This scoping review identified 34 measures that were developed to assess the SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States. This review provides a comprehensive overview of Indigenous children's SEWB; however, it also highlights significant gaps that require future attention. Notably, the majority of the measures were designed for Indigenous populations within the United States, leaving a dearth of tools for assessing SEWB in Indigenous children outside of this region. It is crucial to address this limitation by undertaking further efforts to adapt existing measures and develop new ones that are culturally relevant and applicable in diverse contexts. These endeavors will enhance our understanding of Indigenous children's SEWB and contribute to more effective interventions and support systems.

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3 Building consensus on measures of Métis children's social and emotional well-being in Alberta

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3.1 Introduction

Children hold central and cherished roles in Métis communities, including roles related to ensuring cultural continuity and inspiring hope for the future.[1–3] As such, Métis children are nurtured within rich and expansive environments, where people within their kinship networks impart valuable knowledge that contributes to building a sense of belonging and connection to Métis identity in the early years of life. These efforts to nurture the health and well-being of Métis children are recognized as essential to sustaining healthy families and communities in the future and across generations. While colonialism has had a profound effect on these intergenerational knowledge transfer pathways, Métis communities continue to reclaim these connections through the assertion of self-determined programs and initiatives focused on nurturing Métis children, their families, and their broader communities.[2]

In recent years, Métis self-determination has been supported through growing collaboration with the federal government in Canada, including the implementation of framework agreements specific to early learning and childcare (ELCC).[4] These agreements outline principles and objectives to guide collaborative efforts focused on creating self-determined ELCC programs and services and have been accompanied by flexible funding mechanisms to support Métis Nations in their efforts. Métis Nations across Canada, including the Métis Nation of Alberta (MNA), have responded by developing several initiatives to support children and their families in the early years of life.[5] Similarly, the federal government passed Bill C-92 in 2019, which aims to address the deeply concerning and complex issues associated with the overrepresentation of Indigenous children in care by returning control to Indigenous nations.[6] Bill C-92 provides a framework for Indigenous nations in Canada to establish their own processes regarding children in care, rooted in community and culture.

Nevertheless, colonial policies and legislation in Canada continue to directly impact the health of Métis children in a multitude of ways.[7–9] Indigenous and allied scholars have long directed attention to impacts of the Indian Act in contributing to the lack of disaggregated Indigenous health data in Canada.[10–12] The Métis are one of Canada's constitutionally recognized Indigenous populations; however, data specific to the experiences of Métis children is extremely limited.[13,14] In a review of ELCC data specific to First Nations, Métis, and Inuit populations in Canada, Greenwood et al. report that the "lack of Métis-specific representativeness in the data remains a significant gap to be addressed," having only identified two data sources that provided Métis-specific ELCC data (i.e., the Census and the Aboriginal Peoples Survey).[13] Similarly, in the scoping review described in Chapter 2, only one of the measures identified was developed for use with Métis children (i.e., the Aboriginal Children's Survey).[15] Measures that reflect the distinct historical experiences and contemporary realities of Métis children are needed to develop self-determined policies and programs that nurture the well-being of Métis children in Alberta and across the Métis Nation homeland.[13,14] This study works in partnership with the MNA to begin addressing this gap.

3.2 Research objective

The objective of this study was to reach consensus among a group of knowledge holders regarding constructs that hold significance in assessing the social and emotional well-being (SEWB) of Métis children aged 10 years or younger within the context of the MNA.

3.3 Methods

This study applied a participatory approach that combined consensus group techniques and Indigenous methods to prioritize Métis perspectives in all stages of the research process.[16–18] Specifically, this study used modified versions of the Delphi technique and the nominal group

technique (NGT) to reach agreement among a group of knowledge holders.[18] The Delphi technique relies on iterative rounds of anonymous surveys and participant feedback, guiding individuals to refine their responses in light of the collective group opinion. This iterative process aims to achieve consensus. Similarly, the NGT aims to steer participants towards consensus, but distinguishes itself by fostering discussion among participants to generate ideas and share viewpoints. This study was conducted in alignment with the Accurate Consensus Reporting Document (ACCORD)[19] and Conducting and Reporting Delphi Studies (CREDES)[20] guidelines for the conduct and reporting of consensus studies and an *a priori* protocol.

Two-round modified online Delphi survey

Study participants

A two-round modified online Delphi survey engaged knowledge holders with expertise on Métis children's well-being from two participant groups: 1) parents and caregivers of Métis children aged 10 years or younger in Alberta, and 2) organizational representatives and decision-makers from Métis organizations across Canada with expertise on Métis children's well-being. The recommended sample size for building consensus among a group of experts is variable; however, a systematic review conducted in 2014 found that Delphi studies most often involved 11 to 25 participants.[21] To ensure a balance in perspectives, this study recruited 12 parents and caregivers of Métis children and 12 organizational representatives and decision-makers, for a total of 24 participants.

Parents and caregivers of Métis children aged 10 years or younger were identified using a convenience sampling approach that leveraged a contact list compiled by the MNA Department of Children and Family Services.[22] This list included 200 parents and caregivers of Métis children who agreed to be contacted about participating in MNA engagement opportunities

related to Métis children's well-being. The people on this contact list were sent an invitation via email (Appendix 5), which included a copy of the information letter describing details of the two-round modified online Delphi survey (Appendix 6). The first 12 people who met the eligibility criteria (i.e., being a parent or caregiver of a Métis child aged 10 years or younger in Alberta at the time of this study) and indicated their willingness to participate in the Delphi survey were recruited.

Organizational representatives and decision-makers with expertise on Métis children's well-being were identified using a purposeful sampling approach, based on recommendations from the MNA Director of Children and Family Services, and the MNA Director of Health, encompassing individuals affiliated with the MNA, as well as representatives from other Métis Nations and organizations across Canada.[22] These identified individuals were also extended invitations and a copy of the information letter through email.

Study procedures

In March 2023, participants were emailed a link to access the first Delphi questionnaire. The questionnaire encompassed a list of 66 constructs pertinent to the SEWB of Indigenous children aged 10 years or younger (Appendix 7). The constructs were presented to participants in eight domains to manage the complexity of matrices within the survey instrument, in accordance with the tailored design method for survey development.[23] These constructs were derived from the scoping review detailed in Chapter 2. The survey instrument was pretested for face validity with a sample of six MNA staff members not involved in the Delphi rounds.[23]

In the first Delphi round, participants were asked to rate the importance of each construct listed to the SEWB of Métis children. Responses were collected using a 7-point Likert-type scale that included three semantic descriptors (1=not important; 4=moderately important; 7=extremely

important).[20] The first Delphi questionnaire also included an open-ended question asking participants to propose additional constructs for inclusion in the second Delphi questionnaire.

In the second Delphi round conducted in April 2023, participants were emailed a summary of their individual responses and an aggregate summary of the group's responses to the first Delphi questionnaire (Appendix 8), and a link to access the second Delphi questionnaire (Appendix 9). In both Delphi rounds, consensus was defined *a priori* as a rating of 1-3 (not important) or a rating of 5-7 (important) by at least 20 of 24 participants (or equivalent proportions). For each construct, the aggregate summary reported the participant's individual rating, the group's median rating, the number of participants who rated the construct as "not important," the number of participants who rated the construct as "important," and whether consensus was achieved. In the second Delphi questionnaire, participants were asked to reflect on their responses to the first Delphi questionnaire and to rate the importance of each construct for which consensus was not achieved for a second time, as well as additional constructs that were suggested for inclusion.

The Delphi questionnaires were distributed electronically through a Research Electronic Data Capture (REDCap) system that was stored on a secure server at the University of Alberta.[24,25] Participants were given two weeks to complete each Delphi round; however, questionnaire deadlines were extended for some participants who specifically requested this. Non-respondents received an email reminder that was sent one week following the initial distribution of each questionnaire. Participants were offered a $50 honorarium for participation in the two-round modified online Delphi survey, regardless of their participation in both Delphi rounds. Consent was implied based on submission of questionnaire responses, with incomplete questionnaires being excluded from the analysis.

Data analysis

Data from each Delphi round was exported from REDCap as a Microsoft Excel file. Data was analyzed using Stata Statistical Software (Version 17.0. College Station, TX: StataCorp LLC 2021). Demographic characteristics are reported as medians with interquartile ranges for continuous data and proportions for categorical data.[26] Data in categories with fewer than 10 participants was suppressed to protect the anonymity of respondents.[27] Data from the Likert-type scales was treated as ordinal data and reported as medians with interquartile ranges and proportions.[25] Non-parametric statistical tests were used to compare two participant groups: 1) parents and caregivers of Métis children aged 10 years or younger, and 2) organizational representatives and decision-makers with expertise on Métis children's well-being. Fisher's exact tests examined categorical data and Mann-Whitney U tests assessed continuous and ordinal data.[25] A significance level of $p < 0.05$ was applied. Consensus was defined *a priori* as a rating of 1-3 (not important) or a rating of 5-7 (important) by at least 20 of 24 participants (or equivalent proportions) and was reported as proportions.[18,20,21] Constructs listed in open-ended responses received in the first Delphi questionnaire were extracted for inclusion in the second Delphi questionnaire.

Modified nominal group meetings

Study participants

In this study phase, MNA representatives responsible for enacting decisions on initiatives related to Métis children's well-being were involved. While the recommended sample size for achieving consensus among a group of experts is variable, seven participants has been identified as a preferable nominal group size.[18] A purposeful sample of eight MNA representatives were identified based on recommendations from the MNA Director of Children and Family Services

and the MNA Director of Health, in alignment with our aim to recruit six to eight participants for this phase of the study. Potential participants were sent an invitation via email (Appendix 10), which included a copy of the information letter and consent form describing details of the nominal group meeting process (Appendix 11).

Study procedures

The modified NGT incorporated Indigenous methods (i.e., gathering, storytelling, and visiting) that are meaningful to Métis families and communities.[29–31] To accommodate participant schedules, two nominal group meetings were hosted in June 2023: one in-person at the MNA Provincial Office in Edmonton, Alberta and one online using Zoom. Each nominal group meeting lasted for approximately three hours.

The nominal group meetings opened with a presentation on the results of the scoping review and the two-round modified online Delphi survey. This initial phase aimed to anchor discussions in existing evidence and perspectives on key constructs crucial to the SEWB of Métis children (Step 1) (Appendix 12). Following this presentation, participants were presented with a list of constructs identified as important to the SEWB of Métis children from the two-round modified online Delphi survey. Additionally, the participants were provided with the following questions to guide individual reflections and group discussions about the presented constructs (Step 2): What constructs align well with the work you do? What constructs align well with your department's current programs and initiatives? What constructs align well with your department's future visions? In this step, participants were also invited to suggest revisions to the constructs presented.

In an online poll in Nearpod, participants were prompted to anonymously vote for the constructs that hold importance not only for the SEWB of Métis children, but also for measuring

the SEWB of Métis children within the context of the MNA (Step 3). The results of the poll were reviewed with participants, who were then encouraged to share their thoughts on the group's responses and the rationale for their individual votes (Step 4). To streamline the poll complexity, the constructs were presented in eight distinct domains and this process (Steps 2 to 4) was reiterated for each domain. Written informed consent was sought prior to participation in the nominal group meetings and participants were offered a $50 honorarium.

Data analysis

Poll results were exported from Nearpod as a PDF file and transcribed into a Microsoft Excel spreadsheet. Consensus was defined *a priori* as endorsement by at least 5 of 6 participants (or equivalent proportions) and was reported as proportions. The group discussions were audio recorded and transcripts were generated. Latent content analysis using NVivo 12 Plus (QSR International, 2018) was used to summarize the data generated from the group discussions.[28] The transcripts were re-read multiple times and codes were assigned to the data, focusing on discerning the factors that influenced participants' decisions. The codes were categorized and four themes were developed to describe the data, which are presented narratively, employing a flower metaphor, to contextualize the quantitative findings of the study. The metaphor of a flower was chosen for its deep symbolism in Métis culture.[32] Métis floral beadwork, consisting of vibrant and intricate floral designs, is a distinct and cherished art form that has been passed down throughout generations. Traditionally, clothing and accessories were adorned with beaded floral patterns, serving as expressions of Métis cultural identity and Métis Peoples' relationships with the land. Floral beadwork continues to be an important part of Métis culture, with its practice and symbolism persevering despite colonial pressures. The identified themes underwent validation through participant verification.

3.4 Results

Two-round modified online Delphi survey

Participant characteristics

All the 24 participants that were recruited completed the first Delphi questionnaire, including 12 parents and caregivers of Métis children aged 10 years or younger, and 12 organizational representatives and decision-makers with expertise on Métis children's well-being. The median age of participants was 41 years, with an interquartile range of 14.5 (34.5-49) years (Table 3.1). Most participants identified as women (n=18) and Métis (n=23). Of participants who identified as Métis, most were also MNA citizens (n=19). Most participants were employed full-time (n=18), had completed an undergraduate, graduate, or professional degree (n=15), resided in an urban location (n=18), and were living with a spouse or significant other (n=15) at the time of this study. The proportion of participants with an annual household income of less than $100,500 (n=10) was similar to the proportion of participants with an annual household income of $100,500 or more (n=11). The only statistically significant difference between participants who were parents and caregivers of Métis children aged 10 years or younger, and participants who were organizational representatives and decisions-makers with expertise on Métis children's well-being, was being a parent or caregiver of a Métis child aged 10 years or younger (Fisher's exact test, $p<0.001$).

Of the 24 participants who completed the first Delphi questionnaire, 21 participants completed the second Delphi questionnaire, including 10 parents and caregivers of Métis children aged 10 years or younger and 11 organizational representatives and decision-makers with expertise in Métis children's well-being (87.5% response rate). There were no statistically significant differences between respondents and non-respondents in the second Delphi round.

Table 3.1: Characteristics of participants in Delphi round #1

Characteristic	Delphi survey participants (n=24)
Age in years (median, IQR)	41 (14.5)
Gender (n)	
Woman	18
Man	< 10
Two-spirit	< 10
Transgender (n)	< 10
Cultural background[a] (n)	
Métis	23
White	< 10
MNA citizen (n)	19
Highest level of completed education (n)	
High school	< 10
Technical, trade, or vocational school	< 10
Undergraduate, graduate, or professional degree[b]	15
NR	< 10
Employment status[a] (n)	
Employed full-time	18
Employed part-time	< 10
In training or education	< 10
Retired	< 10
Unemployed	< 10
Household income (n)	
Less than $100,500[b]	10
$100,500 or more[b]	11
NR	< 10
Location of primary residence (n)	
City[b]	18
Town	< 10
Rural	< 10
Relationship status[a] (n)	
Single	< 10
In a relationship/married, living apart	< 10
In a relationship/married, living together	15
Separated or divorced	< 10
Widowed	< 10
NR	< 10
Parent/caregiver of a Métis child ≤ 10 years	15

[a] Participants could select multiple responses for cultural background, employment status, and relationship status.
[b] Response categories combined to report values ≥ 10.
Abbreviations: IQR=interquartile range, reported as the difference between the 75th and 25th percentiles; MNA=Métis Nation of Alberta; n=number of participants; NR=not reported

Constructs of Métis children's SEWB

Of the 66 constructs initially presented in the first Delphi questionnaire, 57 constructs were rated as "important" (i.e., received a rating of 5-7) by at least 20 of 24 participants (Table

3.2). None of the constructs were rated as "not important" (i.e., received a rating of 1-3) by at least 20 of 24 participants). There were statistically significant differences in the mean rank between parents and caregivers of Métis children aged 10 years and younger and organizational representatives and decision-makers with expertise on Métis children's well-being for the following three constructs: goals for the future (z score=2.530; p=0.0114); parent/caregiver experiences of discrimination and racism (z score=-2.183; p=0.0290); and screen time (z score=-2.278; p=0.0227) (Table 3.3). The median rating among organizational representatives and decision-makers was significantly higher than the median rating among parents and caregivers for two constructs: "parent/caregiver experiences of discrimination and racism" and "screen time," whereas the median rating among parents and caregivers was higher than the median rating among organizational representatives and decision-makers for "goals for the future."

In the second Delphi questionnaire, participants were presented with nine constructs from the first Delphi questionnaire for which consensus was not obtained, as well as 24 additional constructs that were recommended for inclusion in the second Delphi round. Of the 33 constructs that were presented in the second Delphi questionnaire, 25 constructs were rated as "important" by at least 17 of 21 participants (Table 3.2). No constructs were rated as "not important" and there were no differences in the mean rank between participant groups (Table 3.3).

At the end of both Delphi rounds, 82 constructs were identified as "important" to the well-being of Métis children aged 10 years or younger in Alberta (Table 3.2). Of these, 58 constructs were from the scoping review and 24 constructs were suggested for inclusion by participants in the first Delphi round. Consensus was not obtained for the remaining 8 constructs, all of which were drawn from the scoping review (i.e., the remaining constructs were not rated as "important" or "not important" by at least 80% of participants).

Table 3.2: Number of participants that rated constructs as not important (rating 1-3) or important (rating 5-7)

Construct	Delphi round #1 (n=24)		Delphi round #2 (n=21)	
	Not important (n)[a]	Important (n)[a]	Not important (n)[a]	Important (n)[a]
Mind and emotions				
Coping strategies	0	**22**	-	-
Goals for the future	0	**20**	-	-
Reasons for living	1	**22**	-	-
Relationships with others	0	**24**	-	-
Sources of support	0	**24**	-	-
Stressful life experiences	0	**21**	-	-
Emotional intelligence[b]	-	-	0	**20**
Executive functioning skills[b]	-	-	0	**17**
Feeling safe and loved unconditionally[b]	-	-	0	**21**
Personality traits[b]	-	-	1	**19**
Positive attitudes about the future[b]	-	-	0	**20**
Resiliency[b]	-	-	1	**19**
Physical body				
Access to food	0	**24**	-	-
Feeding behaviours	2	18	3	12
Types of foods and beverages consumed, including traditional foods	0	**22**	-	-
Dental hygiene	2	**22**	-	-
Developmental milestones	0	**22**	-	-
Physical activity	0	**24**	-	-
Body measurements	1	15	4	11
Sleeping behaviours	0	**23**	-	-
Injuries requiring medical attention	0	**22**	-	-
Physical health concerns	0	**23**	-	-
Culture				
Connection to Indigenous identity	0	**24**	-	-
Exposure to Indigenous languages	0	**24**	-	-
Knowledge of Indigenous languages	0	19	2	16
Participation in cultural practices	0	**23**	-	-
Participation in spiritual practices	0	**20**	-	-
Perceptions of historical loss	0	**21**	-	-
Support to understand Indigenous culture and history	0	**23**	-	-
Awareness of the connections between individual well-being and the well-being of family, community, and the environment	0	**24**	-	-
Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being	0	**24**	-	-
Connection to land[b]	-	-	1	**19**
Connection to Indigenous community[b]	-	-	0	**18**

Participation in land-based practices[b]	-	-	1	**18**
Participation in Métis celebrations[b]	-	-	0	**20**
Understanding of Métis culture and history[b]	-	-	0	**20**
Family and kinship				
Homework behaviours	4	14	5	11
Household characteristics	2	17	2	14
Involvement of extended family and kinship in caregiving	0	**21**	-	-
Participation in activities with family members or kinship	0	**22**	-	-
Perceptions of family and kinship interactions	0	**23**	-	-
Relationships with parents/caregivers	0	**24**	-	-
History of child apprehension	0	**24**	-	-
History of family separation because of the Residential School System or the Sixties Scoop	0	**24**	-	-
Consideration of Indigenous culture and kinship in child apprehension cases[b]	-	-	0	**21**
Family history of Children's Services involvement[b]	-	-	0	**21**
Parent/caregiver characteristics				
Family demographic characteristics	1	**20**	-	-
Financial security	0	**21**	-	-
Parent/caregiver access to parenting advice and support	0	**20**	-	-
Parent/caregiver connection to Indigenous identity	0	**23**	-	-
Parent/caregiver coping strategies	0	**24**	-	-
Parent/caregiver experiences of discrimination and racism	0	**23**	-	-
Parent/caregiver life satisfaction	0	**23**	-	-
Parent/caregiver physical activity	0	**20**	-	-
Parent/caregiver physical health	0	**23**	-	-
Parent/caregiver relationships with others	0	**23**	-	-
Parent/caregiver substance use	0	**23**	-	-
Parent/caregiver identification of child(ren) as Métis[b]	-	-	0	**21**
Parent/caregiver parenting practices[b]	-	-	0	**21**
Parent/caregiver resiliency[b]	-	-	0	**19**
Parent/caregiver perceptions				
Parent/caregiver confidence in their parenting	0	**22**	-	-
Parent/caregiver perceptions of child(ren)'s friends	1	19	2	**17**
Parent/caregiver perceptions of child(ren)'s quality of life	1	**22**	-	-
Parent/caregiver perceptions of family and kinship interactions	0	**23**	-	-
Parent/caregiver perceptions of the importance of cultural practices	0	**24**	-	-
Parent/caregiver perceptions of the importance of knowing Indigenous languages	0	**22**	-	-

Parent/caregiver perceptions of other cultures, ethnicities, and races[b]	-	**-**	0	**21**
Parent/caregiver perceptions of 2SLGBTQQIA+ community[b]	-	**-**	0	**20**
Childcare and school				
Childcare access	0	**24**	-	**-**
Childcare cost	0	**22**	-	**-**
Expression of Indigenous identity at school	0	**23**	-	**-**
School attendance	0	**22**	-	**-**
School engagement	0	**24**	-	**-**
School performance	0	18	0	16
School characteristics	0	**22**	-	**-**
Community				
Bullying	0	**24**	-	**-**
Community safety	0	**24**	-	**-**
Identity of friends	3	17	6	10
Participation in out-of-school activities	0	**21**	-	**-**
Perceptions of opportunities in the community	0	**21**	-	**-**
Screen time	2	17	2	14
Contact with healthcare professionals, including traditional healers	0	**23**	-	**-**
Contact with healthcare settings	0	**21**	-	**-**
Medication use, including traditional medicines	1	**21**	-	**-**
Medication access, including natural medicines[b]	-	**-**	0	**20**
Access to community services, including inclusive 2SLGBTQQIA+ services[b]	-	**-**	1	**19**
Exposure to other cultures, ethnicities, and races[b]	-	**-**	0	**21**
Perceptions of other cultures, ethnicities, and races[b]	-	**-**	0	**21**
Perceptions of 2SLGBTQQIA+ community[b]	-	**-**	1	**18**
Positive role models[b]	-	**-**	0	**20**

[a] Ratings collected on a 7-point Likert-type scale where 1=not important, 4=moderately important, and 7=extremely important; consensus ≥ 20 of 24 participants in Delphi round #1 indicated in bold; consensus ≥ 17 of 21 participants in Delphi round #2 indicated in bold.

[b] Additional constructs that were suggested for inclusion in Delphi round #1.

Abbreviations: n=number of participants; 2SLGBTQQIA+=two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.

Table 3.3: Comparison of ratings between participant groups

Construct	Delphi round #1			Delphi round #2		
	Parent median (IQR)[a]	Org. median (IQR)[a]	*p* value[b]	Parent median (IQR)[a]	Org. median (IQR)[a]	*p* value[b]
Mind and emotions						
Coping strategies	7 (0)	7 (0)	0.4817	-	-	-
Goals for the future	6.5 (1)	5 (2)	**0.0114**	-	-	-
Reasons for living	7 (0)	7 (0)	0.5468	-	-	-
Relationships with others	7 (0)	7 (0)	0.9290	-	-	-
Sources of support	7 (0)	7 (0.5)	0.7133	-	-	-
Stressful life experiences	6.5 (2)	7 (0.5)	0.2305	-	-	-
Emotional intelligence[c]	-	-	-	7 (1)	7 (0)	0.2686
Executive functioning skills[c]	-	-	-	7 (1)	6 (2)	0.2936
Feeling safe and loved unconditionally[c]	-	-	-	7 (0)	7 (0)	0.1285
Personality traits[c]	-	-	-	7 (1)	5 (1)	0.0540
Positive attitudes about the future[c]	-	-	-	7 (2)	6 (2)	0.7877
Resiliency[c]	-	-	-	6.5 (2)	7 (1)	0.3266
Physical body						
Access to food	7 (0.5)	7 (0)	0.2835	-	-	-
Feeding behaviours	5.5 (3)	5 (1.5)	0.9291	4.5 (3)	6 (3)	0.3683
Types of foods and beverages consumed, including traditional foods	6 (2)	6 (2)	0.7592	-	-	-
Dental hygiene	5.5 (1.5)	6 (2)	0.5066	-	-	-
Developmental milestones	7 (2)	7 (1.5)	0.7211	-	-	-
Physical activity	6.5 (2)	7 (1)	0.5232	-	-	-
Body measurements	5 (1.5)	5 (2)	0.7632	4 (3)	5 (3)	0.4515
Sleeping behaviours	6.5 (2)	6 (1.5)	0.5426	-	-	-
Injuries requiring medical attention	7 (2)	6.5 (1)	0.7705	-	-	-
Physical health concerns	7 (0.5)	7 (1)	0.3446	-	-	-
Culture						
Connection to Indigenous identity	7 (1)	7 (0.5)	0.3966	-	-	-
Exposure to Indigenous languages	6.5 (1)	6.5 (1.5)	0.8503	-	-	-
Knowledge of Indigenous languages	6 (2)	6 (1.5)	0.4338	5.5 (1)	6 (1)	0.9129
Participation in cultural practices	7 (1)	7 (1)	0.7892	-	-	-
Participation in spiritual practices	6.5 (2)	6 (2.5)	0.4663	-	-	-
Perceptions of historical loss	6.5 (1)	6 (2.5)	0.2598	-	-	-
Support to understand Indigenous culture and history	7 (0)	7 (0.5)	0.5690	-	-	-
Awareness of the connections between individual well-being and the well-being of family, community, and the environment	7 (1)	7 (1)	1.000	-	-	-
Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being	7 (0.5)	7 (0.5)	0.9087	-	-	-
Connection to land[c]	-	-	-	6 (1)	7 (2)	0.4933
Connection to Indigenous community[c]	-	-	-	6.5 (2)	7 (2)	0.7242
Participation in land-based practices[c]	-	-	-	6.5 (2)	7 (2)	0.9695

Participation in Métis celebrations[c]	-	-	-	7 (1)	7 (2)	0.8003
Understanding of Métis culture and history[c]	-	-	-	7 (1)	7 (0)	0.1196
Family and kinship						
Homework behaviours	5 (1.5)	4 (2.5)	0.1500	4.5 (3)	5 (3)	0.8581
Household characteristics	4.5 (2)	6 (2)	0.0508	5 (2)	6 (2)	0.4493
Involvement of extended family and kinship in caregiving	6 (2)	7 (0.5)	0.1425	-	-	-
Participation in activities with family members or kinship	6.5 (2)	7 (0.5)	0.1425	-	-	-
Perceptions of family and kinship interactions	7 (1)	7 (0)	0.2186	-	-	-
Relationships with parents/caregivers	7 (0.5)	7 (0)	0.0699	-	-	-
History of child apprehension	7 (0.5)	7 (0)	0.2655	-	-	-
History of family separation because of the Residential School System or the Sixties Scoop	7 (0)	7 (0)	0.5136	-	-	-
Consideration of Indigenous culture and kinship in child apprehension cases[c]	-	-	-	7 (1)	7 (0)	0.2573
Family history of Children's Services involvement[c]	-	-	-	6.5 (2)	7 (0)	0.0563
Parent/caregiver characteristics						
Family demographic characteristics	5 (1.5)	6.5 (1.5)	0.2178	-	-	-
Financial security	6 (2)	6 (2)	0.9038	-	-	-
Parent/caregiver access to parenting advice and support	6.5 (2)	7 (1)	0.6118	-	-	-
Parent/caregiver connection to Indigenous identity	6 (1.5)	7 (1)	0.3237	-	-	-
Parent/caregiver coping strategies	7 (1)	7 (1)	1.000	-	-	-
Parent/caregiver experiences of discrimination and racism	6 (0.5)	7 (1)	**0.0290**	-	-	-
Parent/caregiver life satisfaction	7 (1.5)	7 (1)	0.4209	-	-	-
Parent/caregiver physical activity	7 (2)	6.5 (2)	0.8236	-	-	-
Parent/caregiver physical health	6.5 (2)	7 (1.5)	0.7502	-	-	-
Parent/caregiver relationships with others	7 (1.5)	7 (1.5)	0.8411	-	-	-
Parent/caregiver substance use	7 (0.5)	7 (1.5)	0.4487	-	-	-
Parent/caregiver identification of child(ren) as Métis[c]	-	-	-	6 (2)	7 (1)	0.3153
Parent/caregiver parenting practices[c]	-	-	-	7 (1)	7 (0)	0.0562
Parent/caregiver resiliency[c]	-	-	-	7 (2)	7 (1)	0.8249
Parent/caregiver perceptions						
Parent/caregiver confidence in their parenting	6.5 (2)	6 (1.5)	0.9264	-	-	-
Parent/caregiver perceptions of child(ren)'s friends	6 (2)	6 (2)	0.7862	7 (1)	6 (2)	0.1330
Parent/caregiver perceptions of child(ren)'s quality of life	7 (1)	7 (1)	0.7885	-	-	-
Parent/caregiver perceptions of family and kinship interactions	7 (0.5)	7 (0.5)	0.8192	-	-	-

Parent/caregiver perceptions of the importance of cultural practices	6 (1)	7 (1)	0.2334	-	-	-
Parent/caregiver perceptions of the importance of knowing Indigenous languages	6 (2)	6 (2)	0.7623	-	-	-
Parent/caregiver perceptions of other cultures, ethnicities, and races[c]	-	-	-	6 (2)	6 (1)	0.3273
Parent/caregiver perceptions of 2SLGBTQQIA+ community[c]	-	-	-	6 (2)	6 (1)	0.6553
Childcare and school						
Childcare access	7 (0)	7 (0.5)	0.5676	-	-	-
Childcare cost	7 (0)	7 (0.5)	0.5417	-	-	-
Expression of Indigenous identity at school	6.5 (1)	7 (0.5)	0.2514	-	-	-
School attendance	7 (1.5)	6 (1)	0.4755	-	-	-
School engagement	7 (1)	6 (1)	0.5274	-	-	-
School performance	6 (2)	5.5 (2.5)	0.3553	5 (3)	5 (1)	0.9710
School characteristics	7 (2)	7 (2)	0.8958	-	-	-
Community						
Bullying	7 (1)	7 (0)	0.1216	-	-	-
Community safety	7 (1)	7 (0)	0.1309	-	-	-
Identity of friends	6 (2)	5 (2.5)	0.2720	4 (1)	5 (4)	0.5909
Participation in out-of-school activities	6 (2.5)	6 (2)	0.5477	-	-	-
Perceptions of opportunities in the community	6 (2)	7 (1)	0.2143	-	-	-
Screen time	4.5 (1.5)	6 (1.5)	**0.0227**	4.5 (4)	6 (2)	0.1121
Contact with healthcare professionals, including traditional healers	6.5 (1.5)	6 (1)	0.9752	-	-	-
Contact with healthcare setting	5.5 (2)	6 (2)	0.7362	-	-	-
Medication use, including traditional medicines	6.5 (2)	6.5 (2)	0.8757	-	-	-
Medication access, including natural medicines[c]	-	-	-	7 (2)	7 (0)	0.1843
Access to community services, including inclusive 2SLGBTQQIA+ services[c]	-	-	-	6 (2)	7 (1)	0.1899
Exposure to other cultures, ethnicities, and races[c]	-	-	-	6.5 (1)	6 (1)	0.9689
Perceptions of other cultures, ethnicities, and races[c]	-	-	-	7 (1)	6 (1)	0.5820
Perceptions of 2SLGBTQQIA+ community[c]	-	-	-	6 (3)	6 (1)	0.3121
Positive role models[c]	-	-	-	7 (1)	7 (1)	0.6897

[a] Ratings collected on a 7-point Likert-type scale where 1=not important, 4=moderately important, and 7=extremely important.

[b] Calculated using Mann-Whitney U test; p value < 0.05 indicated in bold.

[c] Additional constructs that were suggested for inclusion in Delphi round #1.

Abbreviations: IQR=interquartile range, reported as the difference between the 75th and 25th percentiles; 2SLGBTQQIA+=two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.

Modified nominal group meetings

Constructs of Métis children's SEWB

Of the eight participants that were invited to participate via email, six participated in the nominal group meetings. Of the 82 constructs that were determined to be important to the SEWB of Métis children from the two-round modified online Delphi survey, 12 were combined to create six overarching constructs, resulting in a total of 76 constructs that were considered by participants (Table 3.4). In total, 30 were identified as "relevant" to measuring the SEWB of Métis children within the context of the MNA (i.e., were selected by at least 5 of 6 participants). Figure 3.1 provides an overview of the consensus process that resulted in the identification of these 30 constructs.

Table 3.4: Number of participants that selected constructs for inclusion

Construct	Number of participants (n=6)[a]
Mind and emotions	
Feeling safe and loved unconditionally[b]	**6**
Sources of support	**6**
Coping strategies	4
Emotional intelligence[b]	4
Positive attitudes about the future[b]	4
Reasons for living	4
Relationships with others	4
Stressful life experiences	4
Executive functioning skills[b]	3
Resiliency[b]	3
Goals for the future	0
Personality traits[b]	0
Physical body	
Access to food	**6**
Injuries requiring medical attention	**6**
Physical health concerns	**6**
Dental hygiene	4
Physical activity	4
Developmental milestones	3
Sleeping behaviours	1
Types of foods and beverages consumed, including traditional foods	1
Culture	
Awareness of the connections between individual well-being and the well-being of family, community, and the environment	**6**
Connection to land, including participation in land-based practices[c]	**6**
Connection to Indigenous community[b]	**6**
Connection to Indigenous identity	**6**
Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being	**6**
Participation in cultural practices	**6**
Understanding of Métis culture and history[b]	**6**
Exposure to Indigenous languages	4
Perceptions of historical loss	4
Participation in Métis celebrations[b]	3
Participation in spiritual practices	3
Support to understand Indigenous culture and history	3
Family and kinship	
Consideration of Indigenous culture and kinship in child apprehension cases[b]	**6**
Family history of Children's Services involvement, including child apprehension[c]	**6**
History of family separation because of the Residential School System or Sixties Scoop	**6**
Involvement of extended family in caregiving	**6**
Perceptions of family and kinship dynamics	**6**
Participation in activities with family members or kinship	4
Relationships with parents/caregivers	4

Parent/caregiver characteristics	
Parent/caregiver connection to Indigenous identity	**6**
Parent/caregiver parenting practices[b]	**6**
Family demographic characteristics	4
Parent/caregiver access to parenting advice and support	4
Parent/caregiver coping strategies	4
Parent/caregiver experiences of discrimination and racism	4
Parent/caregiver relationships with others	4
Parent/caregiver life satisfaction	3
Parent/caregiver physical activity	3
Parent/caregiver physical health	3
Parent/caregiver resiliency[b]	3
Financial security	1
Parent/caregiver identification of child(ren) as Métis[b]	1
Parent/caregiver substance use	0
Parent/caregiver perceptions	
Parent/caregiver confidence in their parenting	**6**
Parent/caregiver perceptions of child(ren)'s quality of life	**6**
Parent/caregiver perceptions of diversity, including other cultures, ethnicities, races, and gender and sexual identities[c]	**6**
Parent/caregiver perceptions of the importance of cultural practices, including knowing Indigenous languages[c]	**6**
Parent/caregiver perceptions of family and kinship interactions	4
Parent/caregiver perceptions of child(ren)'s friends	3
Childcare and school	
Childcare access, including cost[c]	**6**
School engagement	**6**
School attendance	4
Expression of Indigenous identity at school	4
School characteristics	3
Community	
Access to community services, including inclusive 2SLGBTQQIA+ services[b]	**6**
Community safety	**6**
Contact with healthcare professionals, including traditional healers	**6**
Medication access, including natural medicines[b]	**6**
Positive role models[b]	**6**
Bullying	4
Perceptions of diversity, including other cultures, ethnicities, races, and gender and sexual identities[c]	4
Contact with healthcare settings	3
Participation in out-of-school activities	3
Perceptions of opportunities in the community	1
Exposure to other cultures, ethnicities, and races[b]	0
Medication use, including traditional medicines	0

[a] Consensus ≥ 5 of 6 participants indicated in bold.

[b] Additional constructs were suggested for inclusion in Delphi round #1.

[c] Combined constructs, based on discussions in the nominal group meetings.

Abbreviations: n=number of participants; 2SLGBTQQIA+=two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.

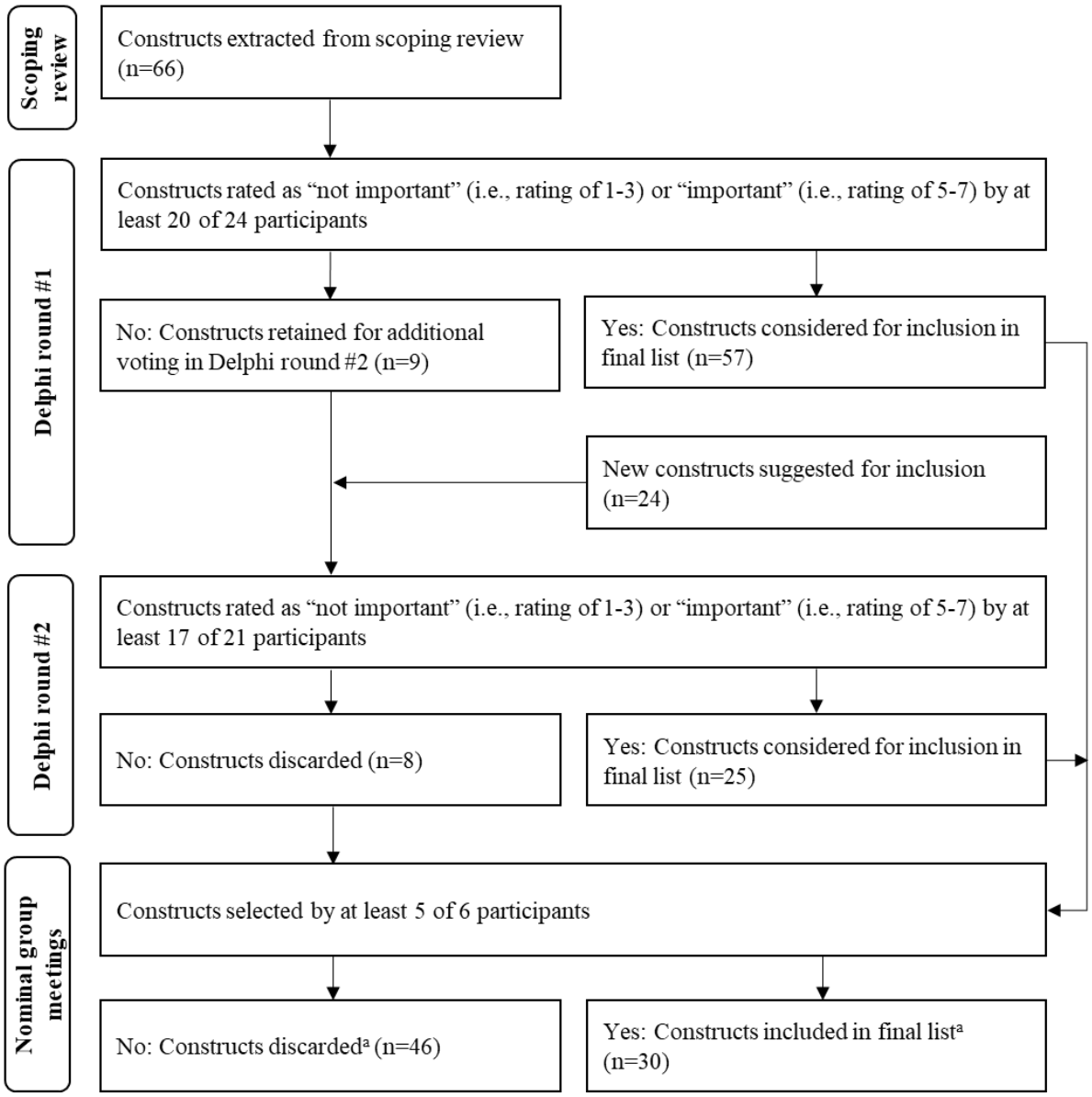

Figure 3.1: Flow diagram of consensus process
[a] 12 constructs were combined to create six overarching constructs
Abbreviations: n=number of constructs

Themes

From the qualitative data, four themes were developed. The metaphor of a flower is employed to help conceptualize the ways in which these themes work together to describe the factors that were considered by participants in the nominal group meetings. While the flower

offers four distinct components (i.e., the roots, stem, leaves, and bloom), it can also be recognized as symbolizing the interconnectedness between these four themes:

1. Roots: Resisting colonialism and reclaiming Métis identity
2. Stem: Working within our context
3. Leaves: Embracing a Métis vision of health
4. Bloom: Sharing stories of strength

Roots: Resisting colonialism and reclaiming Métis identity

Much like the roots of a flower, this theme can be conceptualized as the foundation that supports the other three themes. Participants voiced critical concerns about several of the constructs presented, questioning whether the construct was truly valuable in understanding Métis children's SEWB, or if it better reflected colonial worldviews. In discussing executive functioning skills (e.g., children's ability to plan ahead and follow directions), participants commented:

> *"I always just have been feeling like we live in this world that is just not built for us, culturally and historically. I guess we live in this world that just doesn't align with who we are and we've had to adapt."*

There were concerns that some of the constructs, if applied in a Métis context, may be measuring the extent to which Métis children thrive in colonial contexts, for example in public school systems that have been largely influenced by western approaches to learning and education. Similarly, participants shared concerns that some constructs may relate to colonial values, such as those associated with achievement and productivity (e.g., setting goals for the future). These perspectives reflect the ways that participants challenged colonial constructs as a foundational part of their decision-making process.

Participants' decision-making processes were also rooted in the importance of understanding and reclaiming Métis identity. Participants discussed the importance of constructs that tapped children's connection to their Métis identity, emphasizing the ways in which a strong Métis identity contributes to children's sense of belonging and connection to Métis culture, more broadly:

> *"We are coming to a place, at least I know that I see it within the MNA, that kids are proud to say that they are Métis and they want to share it with everyone… I think just really understanding and being connected to their identity really changes things for them and they can explore their world in a different way and they can do that at a young age."*

Participants also acknowledged that connection to identity has changed over time for many Métis People, sharing stories of how past generations of family and community members often hid their Métis identity. Participants agreed that recalling and sharing ancestral narratives is important, as understanding Métis history is a crucial component in the process of reclaiming Métis identity. In recalling stories of their ancestors navigating voyageur canoes, participants reflected on the ways that these stories can nourish children's connection to their Métis identity:

> *"We were hard workers, we never gave up, and we have the ability to be great and do great because look at what our ancestors did. That's social and emotional well-being."*

Stem: Working within our context

This theme describes how participants' decision-making processes were shaped by their awareness of the context in which they worked. They acknowledged that their grasp of their working context provided support and stability for MNA initiatives, akin to the stem of a flower. An essential factor for participants was the careful selection of constructs that harmonized with priorities voiced by the community. Participants' selected constructs that aligned closely with

existing MNA initiatives, including those related to childcare and children in care, as these are both core pillars of the MNA's Department of Children and Family Services:

> *"Childcare costs and childcare access is huge, because this is the space that I am breathing these days and through community surveys and things we know that access to childcare spaces is limited throughout the province and we know that access to Métis childcare service providers is almost non-existent and we know that childcare costs are through the roof."*

Similarly, participants recognized the importance of selecting constructs that were actionable within the MNA's sphere of influence, while being attentive to the fact that the MNA operates within a resource-constrained setting, with many programs relying on external grant funding:

> *"I cast a vote for coping strategies because a lot of the work we do in our department, we don't necessarily have a ton of resources to do, but what we can do is kind of support personal agency and agency of parents or caregivers or guardians or community to support kids."*

Participants' decision-making approaches further revealed an awareness of the provincial and national contexts within which the MNA operates. They specifically remarked upon the need to acknowledge the impacts of the COVID-19 pandemic on children's SEWB. Additionally, participants' decisions took into account Alberta's current political landscape, wherein access to many community and healthcare services has been negatively impacted. Participants frequently emphasized the need to acknowledge unique considerations regarding children in care when discussing the significance of context:

"When I think about Métis kids in care under the age of 10, there have been some instances where they have grown up on wild meat and then they come into care and they don't have access to wild meat or they are placed in a home that does not eat meat… So, I feel like measuring access to food could play a huge role in understanding that there are stories out there like that."

Leaves: Embracing a Métis vision of health

Participants consistently applied a multifaceted view of health when discussing the constructs presented. In alignment with the flower metaphor, this theme mirrors how the interconnection among various domains, akin to the numerous leaves on a flower, synergistically contribute to the advancement of a Métis perspective on health:

"It is totally the point of thinking about social and emotional well-being this way, the idea that it is obviously so much more than just someone's emotional state… Community and family and all these other interactions have a big part in it."

Participants spoke of health as inherently relational, emphasizing that families, kinship systems, and communities all play an integral role in nurturing the SEWB of Métis children:

"Positive role models, to me that could be like your example here, the 2SLGBTQQIA+ community, as well as like knowledge holders and knowledge keepers and Elders… If kids see themselves within community spaces, they are likely to have greater trust, sense of belonging, and I think that is really important."

Participants specifically voiced that parents and caregivers play an incredibly important role in shaping children's SEWB, as children learn to understand the world through their relationships with their primary caregivers. Examples included modeling dental hygiene behaviours learned at home, as well as adopting caregivers' perspectives towards healthcare

providers. The role of parents and caregivers in connecting children to their Métis identity was highlighted as an important component of Métis children's SEWB:

> *"Connection to Indigenous identity… It's a relatively new concept for some Métis families and they are exploring ways in which they can connect their children to their identity and I think it is really important."*

Participants also drew on a relational understanding of health when discussing the sustainability of MNA programs, aiming to select constructs that aligned with MNA initiatives capable of being sustained over an extended period:

> *"I also think that building capacity in kids, whether they're neurodiverse or not, in parents, whether they're young, old, grandparents, is something that is sustainable and it can be intergenerational. If you teach somebody something, hopefully they will pass it on."*

Discussions in the nominal group meetings also centered on exploring definitions of the constructs presented through a Métis lens. These discussions continued to center a multidimensional understanding of health, often emphasizing relational and cultural ways of knowing:

> *"If people are living more engaged with community and things like that, then it's not so much physical activity, it's more just like participating in cultural experiences on the land and that would give you enough physical activity."*

Bloom: Sharing stories of strength

Similar to the bloom of a flower, the final theme embodies the complete vision underpinning participants' discussions: the advancement of Métis narratives of strength. This led participants to acknowledge that, while certain constructs might undoubtedly contribute to the

SEWB of Métis children, they may not align with the strengths-based perspective that participants aimed to convey:

> *"In the back of my mind, I'm thinking a bit about when we talk about this strength-based narrative and what stories are really worth telling and even what shows up here, like substance use, for example, among parents and caregivers. Something that people know is important and can have an impact on children, but at the same time, maybe it's something that we don't feel is important to measure because it is not really the story you want to focus on right now, when there are all these other things in the child's life that we can talk about, too."*

Participants carefully considered every construct within the broader scope of Métis children's lives. While discussing several of the constructs, participants were cautious about excluding those that they believed could lie beyond the influence of Métis children, their families, or communities. For example, participants were mindful that the place a child lives, particularly if rural or remote, can influence their exposure to diversity or the schools they have access to. This is again illustrated in the following comment, when discussing children's nutrition:

> *"I'm less interested in types of foods and beverages consumed, mostly because access to food tends to be a big problem. I just feel like it puts the onus on the individual to eat healthy when they can barely afford rent… Everyone knows what they're supposed to eat."*

Participants also expressed an aspiration to advance Métis narratives of strength toward self-determination, recognizing the ways in which the MNA could use the results of this study to enhance the SEWB of Métis children:

"This research is going to show the federal government that we understand our community and who better to provide for our Métis families than us, because we can give them all this. It is really important to paint that picture for ourselves… This is research done for and by Métis, and it focuses on the strengths of wellness."

3.5 Discussion

This study aimed to establish consensus among a group of knowledge holders regarding constructs that carry importance in evaluating and measuring the SEWB of Métis children within the context of the MNA. Following both Delphi rounds, 82 constructs were rated as "important" to the SEWB of Métis children. Of these constructs, 30 were determined to be both important and relevant to measuring the SEWB of Métis children in the context of the MNA in the nominal group meetings. While the Delphi survey did not result in a decrease in the number of constructs that were presented in the nominal group meetings, it did result in the creation of a detailed list for consideration that included constructs from existing literature and new constructs suggested for inclusion by participants in the first Delphi round.

Participant discussions during the nominal group meetings mapped onto four themes that closely correspond with the constructs that were retained in this final list of 30 constructs. For example, participants agreed that "understanding of Métis culture and history" held relevance in assessing the SEWB of Métis children within the scope of the MNA. This aligns with participant observations that comprehending Métis history serves as a pathway to establishing a connection with Métis identity. This viewpoint resonates with the ideas presented in the work of Métis scholar Brenda Macdougall on Métis kinship systems, whereby she asserts "so many of our young people grow up not knowing who their families are, or about their communities and nations. It is precisely through retelling of stories to and about each other that this violence

against our identities might be remedied. So it is, again, that family stories must be understood as health."[33]

The final list of constructs, and participant discussions in the nominal group meetings, emphasized the centrality of family and kinship within Métis worldviews. This has been frequently emphasized in work from other scholars, with the extensive interconnections between Métis communities, other communities, and the land extensively documented.[33,34] These relationships are often described through the concept of *wahkotowin,* a concept rooted in Indigenous cultures across Canada, including Métis culture.[2,3,34] Often translated as "kinship" or "all my relations," *wahkotowin* carries a profound meaning that underscores the importance of honouring and valuing these relationships, along with the responsibilities and commitments that arise from them.[34] Nearly half of the constructs that were rated as important and relevant to measuring the SEWB of Métis children were related to the central role of family and kinship in Métis children's lives. Much like the concept of *wahkotowin,* the constructs that were selected in this study emphasize the ways in which these relationships shape Métis children's upbringing and identity, as well as the collective accountability that family and community members hold in nurturing children's SEWB.

Overall, the resulting list consists of 30 constructs that underscore the importance of recognizing the multiple domains and relationships that shape Métis children's SEWB. The constructs on this list offer a starting point for developing Métis-specific measures of children's SEWB that can help guide MNA decision-making and program investments. Additionally, the results of this study direct attention towards opportunities to nurture the health and well-being of Métis children, families, and communities through expanding and sustaining self-determined programming related to the constructs included on this list. While the results of this study are

specific to the MNA, partnerships with other Métis Nations or organizations could be explored to validate this list of constructs, or replicate this study process, to inform similar actions in other Métis jurisdictions across Canada.

Strengths and limitations

The Delphi technique and the NGT are both recognized as effective methods for building consensus among a group of people with expertise on a topic, particularly when the results are intended to be used in applied settings.[18] While a valuable method, use of the Delphi technique has also been criticized as scholars have documented considerable variation in the ways that Delphi studies are conducted and reported.[19-21] In response to these concerns, researchers have developed guidelines to support transparency and rigour in the conduct of Delphi studies, including the ACCORD[19] and CREDES[20] guidelines. These guidelines have been applied in this study, lending to its strength.

Both the Delphi technique and the NGT have been applied in participatory projects involving Indigenous Peoples with great success, as consensus group methods are amenable to incorporating diverse forms of knowledge and Indigenous methods in decision-making processes.[30,31,35] This was a methodological strength of this study, as we were able to modify the NGT process to embed experiences of gathering, storytelling, and visiting in the nominal group meetings.[29] In reflecting on the impacts of these methods in their work with Métis women, Flaminio and colleagues assert that "we believe these methods ensure active engagement with the research and that wellness was part and parcel of our research."[29] This statement mirrors what other Indigenous scholars have stated: incorporating Indigenous research methods not only yields valuable insights, but also meaningfully impacts participants by strengthening community

connections, affirming the value of Indigenous knowledge, and supporting self-determination.[36,37]

An added strength of this study was the engagement of parents and caregivers as experts on Métis children's well-being. Parents and caregivers possess unique insights and intimate knowledge of their children's well-being, acquired through day-to-day interactions and experiences, that are invaluable in studies that seek to understand Indigenous children's well-being.[37] Similarly, the involvement of people who worked for the MNA, and other Métis Nations and organizations, offered valuable insights grounded in Métis ways of knowing. Together, the engagement of these knowledge holders offered a rich and contextualized understanding of constructs of Métis children's SEWB. The interconnected themes developed from participant discussions in the nominal group meetings reiterate the value of the NGT as a consensus building method, through which participants were able to elaborate on nuanced aspects of their decision-making processes that are not apparent in the quantitative data alone.[18,30,31]

Convenience and purposeful sampling approaches were used to recruit participants in this study. These sampling methods were appropriate for this study, as we aimed to leverage pre-existing relationships with the MNA to recruit a relatively small number of participants with specific experiences and areas of expertise; however, these approaches are not without limitations.[22] Both convenience and purposeful samples can introduce selection bias, as the participants recruited are unlikely to be representative of the broader population, limiting the generalizability of findings. While generalizability was not an objective of this study, it is important to have this limitation in mind when interpreting the results presented. In this study, most Delphi participants identified as women and reported that they were employed full-time, had completed a post-secondary degree, resided in an urban location, and were living with a

spouse or significant other at the time of this study. It is important to acknowledge that these characteristics of participants are biased towards the perspectives of mothers. Research has suggested that fathers offer unique perspectives that can aid in understanding and supporting the well-being of children, a perspective that is largely absent from this study.[39,40]

3.6 Conclusion

This study was completed in partnership with the MNA to advance the creation of self-determined measures of Métis children's SEWB. Using a participatory approach, this study applied modified versions of the Delphi technique and the NGT to reach consensus among a group of knowledge holders. The results of this study provide insights into constructs that are important to the SEWB of Métis children in Alberta, from the perspectives of parents, caregivers, and others who are considered to have expertise on the well-being of Métis children based on their professional roles. This study is a valuable step forward in addressing data gaps related to Métis children's well-being.

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4 Discussion

4.1 Personal reflection

In describing an allied research paradigm, Jaworsky writes "one can never be an expert in a community that they do not belong to."[1] In order to do allied research well, it is imperative that allied researchers make a concerted effort to honour Indigenous worldviews in the research process and reflect on the limitations of their own identity. It is with this understanding that I begin by discussing my thesis research using the Indigenous Evaluation Framework described by LaFrance et al.[2] This framework outlines four values that can be used to guide evaluative thinking in Indigenous contexts and have previously been applied to reflect on Métis Nation of Alberta (MNA) initiatives in other settings.[3] Similarly, I have used this framework to reflect on the strengths and limitations of my thesis research in relation to these values.

Being a people of place

The participatory nature of this research resulted in the development of a list of 30 constructs that are both important and relevant to measuring the social and emotional well-being (SEWB) of Métis children in the context of the MNA. The resulting list of constructs represent a synthesis of existing evidence and expert opinion, grounded in the lived experiences of participants and Métis ways of knowing. Figure 4.1 visually represents these constructs in a conceptual map. This conceptual map is highly contextualized, lending to my development of three tangible practice recommendations for the MNA, as presented later in this chapter. Contextualizing the results of this research in this way is an example of how I have worked to "activate place as a determinant of health" in this thesis, described by de Leeuw as "articulating that human health (or lack thereof) unfolds in and is impacted by *where* its existence occurs."[4] The highly contextualized nature of this research also means that the results cannot be

generalized to broader populations.[5] While generalizability was not an objective of this study, this is an important limitation to consider, as the conceptual map presented in Figure 4.1 should not be applied elsewhere without additional validation.

Recognizing our gifts

I consider my "multiplicity of roles" (i.e., being both a graduate student completing my thesis in partnership with the MNA and an employee of the MNA) to be a strength.[1] My pre-existing and enduring relationships with the MNA supported my identification of a meaningful and actionable research topic, as well as my ability to execute this study in a relatively seamless way. I also arrived with a prior understanding of Métis history and the MNA, supporting my ability to do this work in a good way, while within the time constraints of a graduate program. Importantly, who I am as a person also limits this research. I am not Métis or a parent of a Métis child (or a parent at all). I am a white woman who is able-bodied, cis-gendered, and in a heteronormative relationship. These aspects of who I am and who I am not influence the way I see the world and, in the context of this research, the way I see the results of this study. I acknowledge these limitations and have taken great care to amplify the voices of participants when describing the results of this study, as well as the voices of Métis and other Indigenous writers throughout this thesis. I have also taken care to transparently report the involvement of Métis People in this research, guided by the reporting criteria proposed by Huria et al.[6]

Honouring family and community

This research used a participatory approach, engaging with parents, caregivers, and others who have expertise on Métis children's well-being. Participatory approaches are recognized as enhancing the effectiveness and ethical integrity of research, generally, and specifically in research with Indigenous communities.[1,7,8] Engaging in research with human participants

demands careful attention to ethical considerations, particularly when involving Indigenous communities.[9] The application of a participatory approach and the ethics review process undertaken as part of this thesis supported me to plan this study in a way that facilitated the respectful engagement of participants. Strategies embedded in this research included those focused on protecting participant anonymity (e.g., removing identifying information from transcripts, reporting results in aggregate form, suppressing data for small numbers), as well as those focused on facilitating inclusive environments (e.g., extending questionnaire deadlines and offering multiple nominal group meeting dates to accommodate participant schedules).

Respecting sovereignty

The ethics review process also ensured that strategies supportive of Métis data sovereignty were described. Participant data was saved in a password-protected file, stored on the MNA's password-protected, encrypted shared network drive with restricted access. Following defense and approval of this thesis, any identifiable information will be destroyed. Other study data will be stored at the MNA Provincial Office in Edmonton, Alberta for 5 years in accordance with University of Alberta requirements. I have also taken care to share the findings presented in this thesis in a way that is meaningful to the MNA. This includes discussing the results of this research in relation to three practice recommendations for the MNA, as well as identifying broader implications of this research that are supportive of Indigenous self-determination. I have also made plans to share the findings of this research in an age-appropriate knowledge sharing product for Métis children (i.e., a children's story book), allowing research results to be shared back with the people who they are intended to benefit – Métis children.

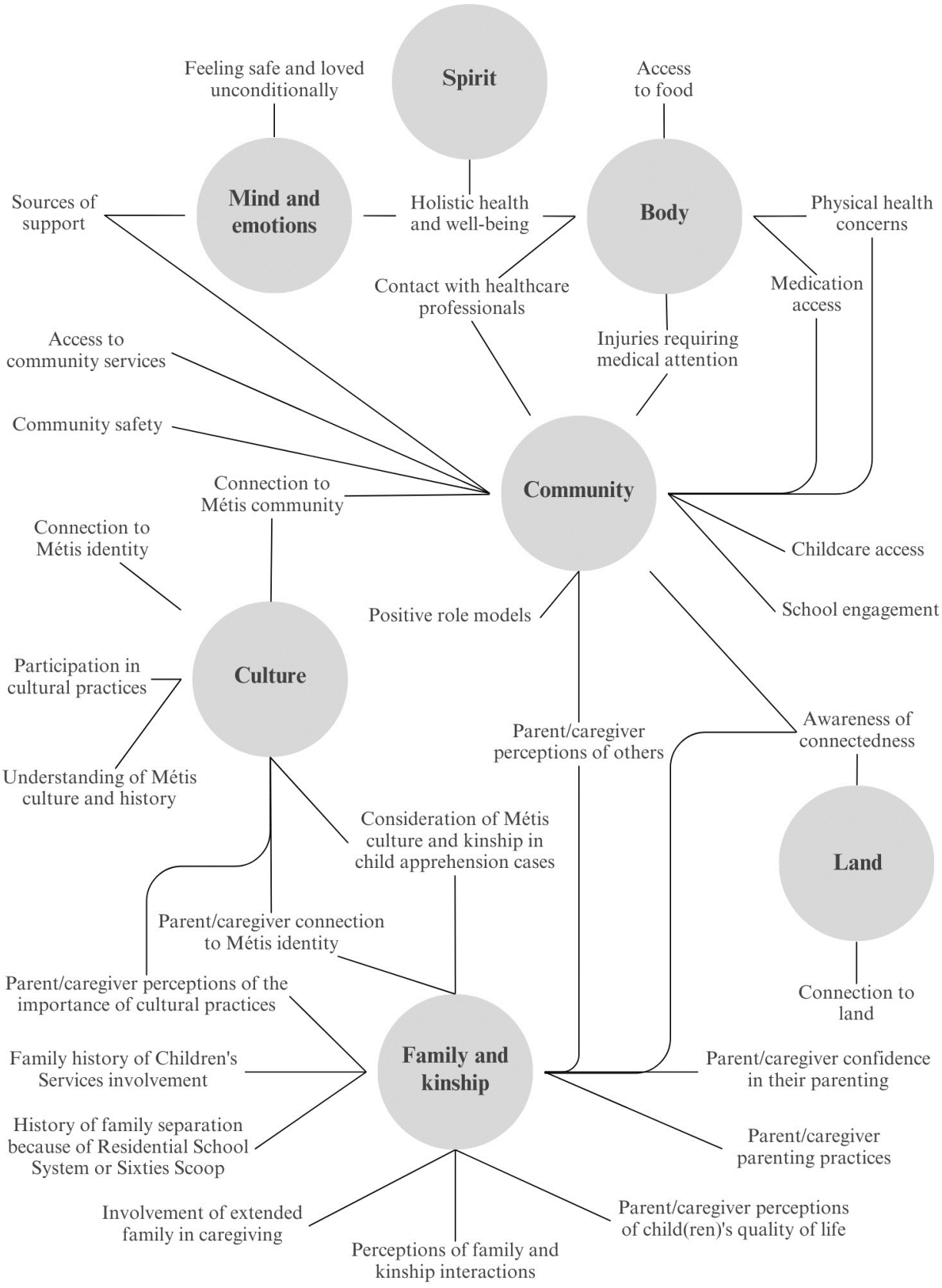

Figure 4.1: Conceptual map of Métis children's SEWB

4.2 Practice recommendations for the MNA

This research uncovers three opportunities for the MNA to expand on the learnings presented in this thesis and apply them in meaningful responses for Métis children, their families, and communities:

Recommendation #1: Engage Métis People in Alberta to expand conceptualizations of Métis children's SEWB

Recommendation #2: Develop a Métis-specific measure of children's SEWB

Recommendation #3: Create self-determined strategies to nurture Métis children's SEWB

Recommendation #1

Engage Métis community in Alberta to expand conceptualizations of Métis children's SEWB

Learnings from the scoping review, Delphi survey, and nominal groups meetings were applied in subsequent stages of this thesis, with each phase informing and enriching the next. This stepwise approach led to collective agreement on a list of 30 constructs that are meaningful to Métis children's SEWB. Nevertheless, the methods used to develop this list of constructs are not without limitations. This study engaged parents and caregivers of Métis children aged 10 years or younger and organizational representatives and decision-makers from the MNA, as well as other Métis Nations and organizations in Canada. While all participants in this study offered invaluable insights, the voices of other important members of the Métis community were not directly included in this study. Continued engagement efforts should integrate the voices of Métis children and Elders, as well as aim to better represent the perspectives of fathers, to expand the conceptual framework presented. Similarly, the voices of two-spirited, lesbian, gay, bisexual, transgender, queer, questioning, intersex, and asexual (2SLGBTQQIA+) people in the Métis community were not well represented in this study. Hunt discusses the erasure of diverse

gender and sexual identities from much of health research and policy in Canada, stating that colonial histories have led to a "forced disappearance of locally defined system of gender."[10] The findings presented in Chapter 2 of this thesis noted similar erasures, including the lack of involvement of 2SLGBTQQIA+ persons in the development of identified measures. Future engagement efforts should seek to better represent and understand the diverse identities, family, and kinship structures of the Métis community in Alberta.

This research also identified a limited number of constructs related to Métis children's connection to land and spirit. As discussed throughout this thesis, there are many possible reasons that previous measure development efforts may have underemphasized these domains.[4,11,12] The measures identified in Chapter 2 mostly conceptualized Indigenous children's connection to these domains through their participation in specific activities, such as engaging in spiritual practices like ceremonies or prayer.[13,14] While these practices undoubtedly represent an important expression of connection, continued engagement efforts should delve into the deeper significance of these domains in Métis Peoples' lives.

Recommendation #2

Develop a Métis-specific measure of children's SEWB

The conceptual map presented in Figure 4.1, and any subsequent expansions, should be used to inform the development of a Métis-specific measure of children's SEWB. Of the 34 measures identified in Chapter 2, only the Aboriginal Children's Survey was developed for use with Métis children.[15] Indigenous and collaborating scholars have long called for the creation of community-based measures that reflect the unique historical experiences, worldviews, and geographical contexts of Canada's Indigenous populations.[16–18] This recommendation calls for collaboration with researchers who have expertise in measure development and cross-cultural

adaptation processes, including psychometric testing. Ideally, Indigenous leadership in this field should be leveraged or, in the least, researchers who have experience working in Indigenous contexts.

Many of the constructs presented in Figure 4.1 are drawn from existing measures. Table 4.1 maps these constructs to the measures that were identified in Chapter 2 of this thesis. This table provides the MNA and collaborators with a list of possible measures that can be cross-culturally adapted or otherwise used to inform the development of a Métis-specific measure of children's SEWB. Of these measures, the breadth and length of the Aboriginal Children's Survey in Canada and the child and parent questionnaires from the Longitudinal Study of Indigenous Children in Australia share many synergies with the constructs in Figure 4.1.[15,19]

The Aboriginal Children's Health and Well-being Measure (ACHWM) may also offer a promising starting point.[20] While this measure was not developed for use with Métis communities, publications specific to this measure describe meaningful co-development and cross-cultural adaptation processes involving the use of arts-informed methods and cognitive interviewing that could also be applied with Métis children and families in Alberta to create a version of this measure that aligns with the constructs identified in this thesis and is specific to Métis children in the early years of life.[20–22] The ACHWM is also able to be used for population health surveillance, program evaluation, and mental health screening purposes.[23–25] Developing a measure that is able to be used in multiple ways is one strategy to undertake this work in a way that avoids overburdening the MNA.

Table 4.1: Constructs of Métis children's SEWB mapped to measures

Measure	Relevant constructs
Aboriginal Children's Health and Well-being Measure[21,22,26]	• Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being
Aboriginal Children's Survey[15]	• Access to food • Childcare access • Childcare cost • Contact with healthcare professionals, including traditional healers • History of child apprehension • Injuries requiring medical attention • Involvement of extended family and kinship in caregiving • Parent/carer perceptions of the importance of knowing Indigenous languages • Participation in cultural practices • Physical health concerns
Awareness of Connectedness Scale[27]	• Awareness of the connections between individual well-being and the well-being of family, community, and the environment
Brief Family Relationship Scale[28,29]	• Perceptions of family and kinship interactions
Connected Self Scale[30]	• Sources of support
Connection to Native American identity and culture[31]	• Connection to Indigenous identity • Participation in cultural practices
Cultural characteristics[32]	• Connection to Indigenous identity • Family members from the Stolen Generations • Participation in cultural practices at home
Cultural engagement[33]	• Participation in cultural practices
Ethnic engagement	• Participation in cultural practices
First Nations-Child Quality of Life Survey[34]	• Parents/caregiver perceptions of child(ren's) quality of life
Longitudinal Study of Indigenous LSIC Child Questionnaire[19]	• Community safety • Connection to Indigenous identity • Participation in cultural practices • School engagement
LSIC Parent 1 Questionnaire[19]	• Community safety • Contact with healthcare professionals, including traditional healers • Involvement of extended family and kinship in caregiving • Parent/caregiver connection to Indigenous identity • Parent/caregiver confidence in their parenting • School engagement
LSIC Parent 2 Questionnaire[19]	• Parent/caregiver confidence in their parenting • Parent/caregiver connection to Indigenous identity
Perception of Native American culture[35]	• Mothers' perceptions of cultural practices
Spiritual practices[13,14]	• Participation in cultural practices
Traditional practices[36]	• Participation in cultural practices
Wicozani Instrument[37]	• Holistic health and well-being, including mental, physical, and spiritual health and well-being

Abbreviations: LSIC=Longitudinal Study of Indigenous Children

In the least, future applications should consider administering a Métis-specific measure of children's SEWB as a cross-sectional survey at regular intervals, much like the national Census. This would support the MNA to identify sub-populations that may benefit from specific interventions and understand changes in the constructs in Figure 4.1 over time, ultimately providing the MNA with contextually meaningful data that can be used to inform decision-making related to Métis children's SEWB. Additionally, a Métis-specific measure of children's SEWB could also be used to better understand the effects of MNA programs, including detecting meaningful differences in particular constructs before and after participation in a program.

Recommendation #3

Create self-determined strategies to nurture Métis children's SEWB

The MNA is already responding to the needs of Métis children and families, offering a variety of self-determined programs, services, and resources that relate to many of the constructs included in Figure 4.1.[38] Notable examples include the development of resources for the home, including early learning cards and games, that serve to connect children and their families to Métis culture and history. The MNA Department of Children and Family Services is also currently leading province-wide engagements to inform actions that can be taken under Bill C-92 to support Métis children in care.

The conceptual map presented in Figure 4.1 can help strengthen the MNA's strategic responses, ensuring alignment with constructs that are important and relevant to Métis children's SEWB. For example, information on the MNA's website suggests that there may not be any current initiatives at the MNA focused on supporting parents' to be confident in their parenting practices.[38] Such initiatives would be supportive of the conceptualization of Métis children's SEWB presented in Figure 4.1, as well as previous research at the MNA reporting that colonial

histories have left many parents feeling like they lack the resources to parent in the ways they would like to.[39]

This conceptual map can also be used to reinforce work that is already underway. Many of the MNA's existing initiatives focus on connecting children and families to Métis culture in the early years of life.[38] Greenwood describes opportunities for cross-sectoral collaboration in early childhood education, emphasizing the ways in which children can learn in a cultural way within formalized early childhood settings.[40] There is space for the MNA to explore similar collaborations and envision the creation of Métis spaces where play can be used as a vehicle for connecting Métis children to their culture and identity. Nevertheless, strategic planning efforts should continue to emphasize the centrality of family and kinship in Métis children's lives, involving children and their families in planning and evaluation efforts.

4.3 Public health practice and policy implications

In a review of best practices for supporting Indigenous self-determination in health, Halseth and Murdock conclude "self-determination requires that communities have the tools and resources they need to deliver high-quality programs and services that address their needs and priorities."[41] The findings presented in this thesis and the recommendations provided above direct attention towards opportunities that public health practitioners and policymakers have to support Indigenous Peoples' self-determination:

Implication #1: The recommendations provided in this chapter call for concerted efforts and complex, multisectoral collaborations to nurture the SEWB of Métis children. There is a need for flexible and long-term funding agreements that support the MNA, and other Indigenous nations, to undertake this work without the added burden of navigating unsustainable funding models.[41,42]

Implication #2: Participatory approaches that involve Indigenous Peoples in meaningful ways yield valuable insights that can be used to inform contextually relevant actions. Public health practitioners and policymakers should continue to expand their understanding and applications of participatory approaches in work with Indigenous communities, with an emphasis on privileging Indigenous leadership in these spaces and incorporating Indigenous methods that are meaningful to the communities involved.[1,17]

Implication #3: Measures that reflect Indigenous Peoples' conceptualizations of SEWB are needed to inform the development of self-determined responses. While work has been undertaken in this area, there are many gaps that need to be addressed.[43] Public health practitioners and policymakers should take this seriously and prioritize opportunities to co-create meaningful measures in a wide range of public health spaces.

4.4 Conclusion

In *Research as Resistance,* Potts and Brown write "anti-oppressive research involves making explicit the political practices of creating knowledge."[44] In this thesis, I have worked to think critically about how knowledge is created in epidemiology studies with Indigenous Peoples and use my position to advance the self-determined priorities of the MNA. Participants in the nominal group meetings reinforced the value of this work, stating "we can move forward and advocate and create these programs and know that we're doing it in a good way." In the end, this thesis describes a participatory process that resulted in the creation of conceptual map that is grounded in the context of Métis children's lives and responsive to the MNA's ability to take action where it is valued most – in relationship with children and their families.

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Appendices

Appendix 1: MEDLINE search strategy

Search No.	Search Terms	Records Retrieved[a]
1. Indigenous	exp american native continental ancestry group/ or oceanic ancestry group/ or ((Native* adj1 (American* or Canadian* or Alaska*)) or (Natives not digital natives) or Tribes or Indigenous or Aborigin* or Inuit* or Inuk or Inupiat* or First Nation or First Nations or Metis or Eskimo* or Aleut* or Amerindian* or (Indian* adj3 America*) or Canadian Indian* or first people* or autochthonous people* or Torres strait islander* or Maori*).mp.	85,100
2. Children	exp Child/ or adolescent/ or exp pediatrics/ or minors/ or (pediatric* or paediatric* or child* or newborn* or neonat* or infant* or toddler* or preschool* or pre-school* or kindergarten* or kindergarden* or elementary school* or nursery school* or (day care* not adult*) or schoolchild* or boy or boys or girl* or middle school* or pubescen* or juvenile* or teen* or youth* or high school* or adolesc* or pre-pubesc* or prepubesc* or grade-1 or grade-one or grade-2 or grade-two or grade-3 or grade-three or grade-4 or grade-four or grade-5 or grade-five or grade-6 or grade-six or grade-7 or grade-seven or grade-8 or grade-eight or grade-9 or grade-nine or grade-10 or grade-ten or grade-11 or grade-eleven or grade-12 or grade-twelve or junior-high or m*-old or 1-y*-old or one-y*-old or 2-y*-old or two-y*-old or 3-y*-old or three-y*-old or 4-y*-old or four-y*-old or 5-y*-old or five-y*-old or 6-y*-old or six-y*-old or 7-y*-old or seven-y*-old or 8-y*-old or eight-y*-old or 9-y*-old or nine-y*-old or 10-y*-old or ten-y*-old or 11-y*-old or eleven-y*-old or 12-y*-old or twelve-y*-old or 13-y*-old or thirteen-y*-old or 14-y*-old or fourteen-y*-old or 15-y*-old or fifteen-y*-old or 16-y*-old or sixteen-y*-old or 17-y*-old or seventeen-y*-old or 18-y*-old or eighteen-y*-old).mp. or (child* or adolesc* or pediat* or paediat*).jn.	4,759,606
3. Wellbeing	Mental health/ or (wellbeing or well-being or resilien* or mental health or spirit* or connection* or "sense of community" or (wholistic adj8 health) or kinship*).mp.	527,493
4.	1 AND 2 AND 3	2,199
5. Indicator	(Likert or scale* or VAS or survey* or questionnaire* or index or checklist or tool or tools or test or tests or instrument or instruments or score* or inventory or Measures or indicator or indicators or factor or protective factor* or risk factor* or Valid* or responsiveness or reproduca* or reproduci* or generali?ab* or reliability or sensitivity or specificity or correlation* or psychometric or accuracy or predictor or predictors or prediction or predictability or clinimetric*).mp.	11,423,432
6. COSMIN filter (translated to MEDLINE)[b]	instrumentation.sh. OR methods.sh. OR "validation studies".pt. OR "comparative study".pt. OR "psychometrics".sh. OR psychometr*.ti,ab. OR clinimetr*.tw. OR clinometr*.tw. OR "outcome assessment (health care)".sh. OR "outcome assessment".ti,ab. OR "outcome measure*".tw. OR "observer variation".sh. OR "observer variation".ti,ab. OR "Health Status Indicators".sh. OR "reproducibility of results".sh. OR reproducib*.ti,ab. OR "discriminant analysis".sh. OR reliab*.ti,ab. OR unreliab*.ti,ab. OR valid*.ti,ab. OR "coefficient of variation".ti,ab. OR coefficient.ti,ab. OR homogeneity.ti,ab. OR	7,201,575

	homogeneous.ti,ab. OR "internal consistency".ti,ab. OR (cronbach*.ti,ab. AND (alpha.ti,ab. OR alphas.ti,ab.)) OR (item.ti,ab. AND (correlation*.ti,ab. OR selection*.ti,ab. OR reduction*.ti,ab.)) OR agreement.tw. OR precision.tw. OR imprecision.tw. OR "precise values".tw. OR test-retest.ti,ab. OR (test.ti,ab. AND retest.ti,ab.) OR (reliab*.ti,ab. AND (test.ti,ab. OR retest.ti,ab.)) OR stability.ti,ab. OR interrater.ti,ab. OR inter-rater.ti,ab. OR intrarater.ti,ab. OR intra-rater.ti,ab. OR intertester.ti,ab. OR inter-tester.ti,ab. OR intratester.ti,ab. OR intra-tester.ti,ab. OR interobserver.ti,ab. OR inter-observer.ti,ab. OR intraobserver.ti,ab. OR intra-observer.ti,ab. OR intertechnician.ti,ab. OR inter-technician.ti,ab. OR intratechnician.ti,ab. OR intra-technician.ti,ab. OR interexaminer.ti,ab. OR inter-examiner.ti,ab. OR intraexaminer.ti,ab. OR intra-examiner.ti,ab. OR interassay.ti,ab. OR inter-assay.ti,ab. OR intraassay.ti,ab. OR intra-assay.ti,ab. OR interindividual.ti,ab. OR inter-individual.ti,ab. OR intraindividual.ti,ab. OR intra-individual.ti,ab. OR interparticipant.ti,ab. OR inter-participant.ti,ab. OR intraparticipant.ti,ab. OR intra-participant.ti,ab. OR kappa.ti,ab. OR kappa*.ti,ab. OR kappas.ti,ab. OR repeatab*.tw. OR ((replicab*.tw. OR repeated.tw.) AND (measure.tw. OR measures.tw. OR findings.tw. OR result.tw. OR results.tw. OR test.tw. OR tests.tw.)) OR generaliza*.ti,ab. OR generalisa*.ti,ab. OR concordance.ti,ab. OR (intraclass.ti,ab. AND correlation*.ti,ab.) OR discriminative.ti,ab. OR "known group".ti,ab. OR "factor analysis".ti,ab. OR "factor analyses".ti,ab. OR "factor* structure".ti,ab. OR "factor structures".ti,ab. OR dimension*.ti,ab. OR subscale*.ti,ab. OR (multitrait.ti,ab. AND scaling.ti,ab. AND (analysis.ti,ab. OR analyses.ti,ab.)) OR "item discriminant".ti,ab. OR "interscale correlation*".ti,ab. OR error.ti,ab. OR errors.ti,ab. OR "individual variability".ti,ab. OR "interval variability".ti,ab. OR "rate variability".ti,ab. OR (variability.ti,ab. AND (analysis.ti,ab. OR values.ti,ab.)) OR (uncertainty.ti,ab. AND (measurement.ti,ab. OR measuring.ti,ab.)) OR "standard error of measurement".ti,ab. OR sensitiv*.ti,ab. OR responsive*.ti,ab. OR (limit.ti,ab. AND detection.ti,ab.) OR "minimal detectable concentration".ti,ab. OR interpretab*.ti,ab. OR ((minimal.ti,ab. OR minimally.ti,ab. OR clinical.ti,ab. OR clinically.ti,ab.) AND (important.ti,ab. OR significant.ti,ab. OR detectable.ti,ab.) AND (change.ti,ab. OR difference.ti,ab.)) OR (small*.ti,ab. AND (real.ti,ab. OR detectable.ti,ab.) AND (change.ti,ab. OR difference.ti,ab.)) OR "meaningful change".ti,ab. OR "ceiling effect".ti,ab. OR "floor effect".ti,ab. OR "Item response model".ti,ab. OR IRT.ti,ab. OR Rasch.ti,ab. OR "Differential item functioning".ti,ab. OR DIF.ti,ab. OR "computer adaptive testing".ti,ab. OR "item bank".ti,ab. OR "cross-cultural equivalence".ti,ab.	
7.	5 OR 6	14,045,464
8.	4 AND 7	1,459
9.	Limit 8 to (English language and yr="2004-Current")	1,286

[a] Searched on September 10th, 2021.

[b] Translated from: Terwee CB, Jansma EP, Riphagen II, de Vet HC. Development of a methodological PubMed search filter for finding studies on measurement properties of measurement instruments. *Qual Life Res*. 2009 Oct;18(8):1115-23. doi: 10.1007/s11136-009-9528-5.

Appendix 2: Data extraction form

Evidence Source Details[a]	
Title	
Author(s)	
Year of publication	
Type of source	☐ Grey literature source ☐ Peer reviewed source
• Study design	
Purpose or objective(s)	*Description/explanation, evaluation, inform decision-making, assess measurement properties*
Participants	
• Number	
• Age	
• Gender	
• Geographic location	
• Indigenous group	☐ Aboriginal ☐ Torres Strait Islander ☐ First Nations ☐ Inuit ☐ Métis ☐ Māori ☐ Alaska Native ☐ Native American/American Indian ☐ Native Hawaiian
Country of origin	☐ Australia ☐ Canada ☐ New Zealand ☐ United States
Review Question Details	
i. What measures have been developed to assess the SEWB of Indigenous children in Australia, Canada, New Zealand, and the United States?	
Measure name	
Construct(s) measured	
Domain of SEWB	☐ Connection to spirit, spirituality, and ancestors ☐ Connection to body ☐ Connection to mind and emotions ☐ Connection to land ☐ Connection to culture ☐ Connection to community ☐ Connection to family and kinship
Composition of measure	
Response options	
Scoring	
Mode of administration	
Measurement Properties	
Reliability	*Test-retest reliability, inter-rater reliability, intra-rater reliability, internal consistency*
Validity	
• Content validity	*Face validity*

• Construct validity	*Structural validity, convergent validity, divergent validity, cross-cultural validity, hypothesis testing*
• Criterion validity	*Concurrent validity, predictive validity*
ii. In what ways, if any, were Indigenous Peoples engaged in the process of developing measures of Indigenous children's SEWB within the sources of evidence identified for the primary review question?	
Who was involved and in what ways	
Additional Details	

[a] Adapted from: Peters MDJ, Godfrey C, McInerney P, Munn Z, Tricco AC, Khalil, H. Chapter 11: Scoping Reviews (2020 version). In: Aromataris E, Munn Z (Editors). *JBI Manual for Evidence Synthesis*, JBI, 2020. Available from https://doi.org/10.46658/JBIMES-20-12.

Appendix 3: Characteristics of included documents

Reference	Country	Study design	Indigenous population	n (% female)[a]	Age of participants[a]	Measure	CE[b]
Allen et al., 2009	US	Pre-post	Alaska Native	55 (58.1%)	12-17 years (M=14.3, SD=1.8)	• Adult Community Protective Factors Scale • Youth Community Protective Factors Scale	NR
Allen et al., 2012	US	Cross-sectional	Alaska Native	284 (57.7%)	12-18 years (M=15.5, SD=1.5)	• Reflective Processes Scale	✓
Allen et al., 2014	US	Cross-sectional	Alaska Native	413 (54%)	12-18 years (M=15.3, SD=1.6)	• Brief Family Relationship Scale • Multicultural Mastery Scale • Peer Influences Scale • Reasons for Life Scale • Youth Community Protective Factors Scale	✓
Allen et al., 2021	US	Cross-sectional	Alaska Native	302 (53.3%)	12-18 years (M=14.8, SD=2.5)	• Reasons for Life Scale	✓
Bersamin et al., 2019	US	Pre-post	Alaska Native	76 (55%)	M=14.1, SD=1.8 years	• Attitudes and beliefs towards traditional foods • Enculturation	NR
Brown et al., 2021	US	Cross-sectional	Alaska Native, Native American	180 (51.7%)	14-18 years (M=15.6, SD=1.3)	• Traditional practices	NR
Butten et al., 2021	AU	Cross-sectional	Aboriginal, Torres Strait Islander	163 (37.4%)	0-12 years	• First Nations-Child Quality of Life Survey	✓
D'Amico et al., 2020	US	Randomized controlled	Alaska Native, Native American	185 (51.4%)	14-18 years	• Intentions to participate in traditional practices	NR
D'Amico et al., 2021	US	Cross-sectional	Alaska Native, Native American	185 (51.4%)	14-18 years (M=15.6)	• Traditional practices	NR
Department of Social Services,	AU	Prospective cohort	Aboriginal, Torres	N=1,218	11-16 years	• Footprints in Time Longitudinal	✓

Government of Australia, 2018			Strait Islander				Study of Indigenous Children Wave 11 Release Child, Parent 1, Parent 2, and Teacher questionnaires	
Dickerson et al., 2019	US	Cross-sectional	Alaska Native, Native American	185 (51.4%)	14-18 years	•	Traditional practices	NR
Edwards et al., 2021	US	Cross-sectional	Native American	102 (100%)	12-18 years (M=14.1, SD=1.9)	•	Connection to Native American identity and culture	✓
Fok et al., 2012	US	Cross-sectional	Alaska Native	284 (57.5%)	12-18 years (M=15.5, SD=1.5)	•	Multicultural Mastery Scale	✓
Fok et al., 2014	US	Cross-sectional	Alaska Native	284 (57.7%)	12-18 years (M=15.5, SD=1.5)	•	Brief Family Relationship Scale	✓
Franck et al., 2020	AU	Pre-post	Aboriginal, Torres Strait Islander	28 (35.7%)	13-15 years	•	Boarding school connectedness	NR
						•	Social and emotional skills	
Hall et al., 2017	AU	Cross-sectional	Aboriginal, Torres Strait Islander	180 (48.9%)	7.7-35 months	•	Cultural characteristics	NR
Kulis et al., 2012	US	Cross-sectional	Native American	123 (53%)	10-15 years (M=12.6, SD=0.7)	•	Spiritual practices	NR
Kulis et al., 2016	US	Cross-sectional	Native American	207 (51%)	11-15 years (M=12.5)	•	Spiritual practices	NR
Mohatt et al., 2011	US	Cross-sectional	Alaska Native	284 (57.7%)	12-18 years (M=15.5)	•	Awareness of Connectedness Scale	✓
Mousseau et al., 2014	US	Cross-sectional	Native American	183 (65%)	14-18 years	•	Individual values	✓
						•	Outcome expectancies for values	
						•	Perceived values of the community	
Peters et al., 2019	US	Cross-sectional	Native American	147 (51%)	Grade 6 students: M=11.2, SD=0.4; Grade 10 students:	•	Wicozani Instrument	✓

					M=15.2, SD=0.4 years			
Robinson et al., 2020	AU	Pre-post	Aboriginal, Torres Strait Islander	55 (Study 1: 33.3%; Study 2: 36.5%)	11-15 years	•	Connected Self Scale	✓
Statistics Canada, Government of Canada, 2006	CA	Cross-sectional	First Nations, Inuit, Métis	N=14,170	0-5 years	•	Aboriginal Children's Survey	✓
Stuart et al., 2014	NZ	Prospective cohort	Māori	431 (59.2%)	9-15 years (M=11.8, SD=1.7)	•	Ethnic engagement	NR
Tsethlikai et al., 2007	US	Cross-sectional	Native American	20 (60%)	6-9 years	•	Perception of Native American culture	NR
Tsethlikai et al., 2011	US	Cross-sectional	Native American	99 (55.5%)	7-12 years (M=9.9, SD=1.4)	•	Cultural engagement	✓
Whitbeck et al., 2009	CA, US	Cross-sectional	First Nations, Native American	459	11-13 years	•	Adolescent Historical Loss Scale • Family and Child Stressful Life Events Scale	✓
Young et al., 2013	CA	Qualitative	First Nations	38 (58%)	8-17 years (M=12.3, SD=2.9)	•	Aboriginal Children's Health and Well-being Measure	✓
Young et al., 2015	CA	Qualitative	First Nations	9 (55.6%)	8-17 years (M=12, SD=3.2)	•	Aboriginal Children's Health and Well-being Measure	✓
Young et al., 2017	CA	Qualitative	First Nations, Inuit	23	8-18 years (M=10.9, SD=2.7)	•	Aboriginal Children's Health and Well-being Measure	✓

[a] Reports the number and age of study participants in the target population for this review (i.e., Indigenous children aged 18 years or younger).

[b] Reports community engagement in measure development processes: NR=not reported; ✓=reported

Abbreviations: M=mean; n=number of participants; SD=standard deviation; AU=Australia; CA=Canada; NZ=New Zealand; US=United States

Appendix 4: Descriptions of included measures

Measure	Description	Constructs measured
Aboriginal Children's Health and Well-being Measure (Young et al., 2013; Young et al., 2015; Young et al., 2017)	Child self-report measure. Consists of 62 items across 4 domains: Emotional, Mental, Physical, and Spiritual. Screening questions are embedded within the measure. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being
Aboriginal Children's Survey (Statistics Canada, 2006)	Parent self-report/proxy measure. Consists of 14 sections. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Access to food • Body measurements • Childcare access • Childcare cost • Contact with healthcare professionals, including traditional healers • Developmental milestones • Exposure to Indigenous languages • Family demographic characteristics • Feeding behaviours • History of child apprehension • Injuries requiring medical attention • Involvement of extended family and kinship in caregiving • Knowledge of Indigenous languages • Medication use, including traditional medicines • Parent/carer perceptions of the importance of knowing Indigenous languages • Participation in cultural practices • Participation in out-of-school activities • Physical health concerns • Relationships with parents/caregivers • School attendance • Screen time • Sleeping behaviours • Support to understand Indigenous culture and history • Types of food and beverages consumed, including traditional foods

Adolescent Historical Loss Scale (Whitbeck et al., 2009)	Child self-report measure. Consists of 10 items. Responses collected on a 6-point scale ranging from "1 = several times a day" to "6 = never", with overall scores ranging from 10 to 60. Higher scores indicate fewer perceptions of historical loss.	• Perceptions of historical loss
Adult Community Protective Factors Scale (Allen et al., 2009)	Parent self-report measure. Consists of 12 items across 4 subscales: Support, Opportunities, Limits and Safety, and Role Model. Responses collected on a 5-point scale ranging from "1 = not at all" to "5 = a lot", with overall scores ranging from 12 to 50. Higher scores indicate that parents/carers engaged in more behaviours that support protective factors in youth.	• Parent/caregiver behaviours that support protective factors in youth
Attitudes and beliefs towards traditional foods (Bersamin et al., 2019)	Child self-report measure. Consists of 15 items across 4 domains: perceptions of the benefits of salmon, perceptions of the impact of eating Yup'ik foods, attitudes towards the impact of food choice on the environment, and attitudes towards the importance of having skills to harvest, process, and prepare salmon. Responses collected on a 5-point scale ranging from "1 = strongly disagree" to "5 = strongly agree" for items pertaining to students' perceptions and on a 4-point scale ranging from "1 = not at all important" to "4 = very important" for responses pertaining to students' attitudes. Higher scores indicate more favourable perceptions of and attitudes towards traditional foods.	• Perceptions of the benefits of eating salmon • Perceptions of the impact of eating traditional foods • Attitudes towards the impact of food choice on the environment • Attitudes towards the importance of having skills to harvest, process, and prepare salmon
Awareness of Connectedness Scale (Mohatt et al., 2011)	Child self-report measure. Consists of 12 items across 4 subscales: Awareness – Individual, Awareness – Family, Awareness – Community, and Awareness – Natural Environment. Responses collected on a continuous scale ranging from "not at all" to "a lot". Responses were converted to scores on a 5-point scale, with higher scores indicating a greater awareness of connectedness.	• Awareness of the connections between individual well-being and the well-being of family, community, and the environment
Boarding school connectedness (Franck et al., 2020)	Child self-report measure. Consists of 5 items. Responses collected on a 5-point scale ranging from "1 = strongly disagree" to "5 = strongly agree", with overall scores ranging from 5 to 25. Higher scores indicate greater connection to the boarding school environment.	• Connection to the boarding school environment
Brief Family Relationship Scale (Allen et al., 2014; Fok et al., 2014)	Child self-report measure. Consists of 16 items across 3 subscales: Cohesion, Expressiveness, and Conflict. Responses collected on a continuous scale ranging from "not at all" to "a lot". Responses were converted to scores on a 5-point scale, with some items reverse-scored to calculate the overall score.	• Perceptions of family and kinship interactions
Connected Self Scale (Robinson et al., 2020)	Child self-report measure. Consists of 14 items across 4 subscales: Self-concept, Home Support, School Connectedness, and Community Connectedness. Responses collected on a 4-point scale ranging from "1 = not at all true" to "4 = very much true", with overall scores ranging from 4 to 16. Higher scores indicate greater sense of connectedness.	• Sources of support

Connection to Native American identity and culture (Edwards et al., 2021)	Child self-report measure. Consists of 4 items. Responses collected on a 4-point scale ranging from "1 = strongly disagree" to "4 = strongly agree", with overall scores ranging from 4 to 16. Higher scores indicate a greater connection to identity and culture.	• Connection to Indigenous identity • Participation in cultural practices
Cultural characteristics (Hall et al., 2017)	Parent self-report measure. Consists of 4 items. Response options included "yes", "no", and "unknown	• Connection to Indigenous identity • Family members from the Stolen Generations • Participation in cultural practices at home
Cultural engagement (Tsethlikai et al., 2011)	Parent self-report measure. Consists of 2 items. Responses collected on a 3-point scale where "0 = does not speak", "1 = understands, but doesn't speak well", and "2 = understands and speaks fluently" and as an open-ended response in which the number of activities were counted to calculate the overall score. Higher scores indicate higher cultural engagement.	• Participation in cultural practices • Knowledge of Indigenous languages
Enculturation (Bersamin et al., 2019)	Child self-report measure. Consists of 2 items. Response options included: "a lot", "some", and "not at all."	• Engagement in Indigenous ways of living
Ethnic engagement (Stuart et al., 2014)	Child self-report measure. Consists of 5 items. Response options included: "0 = no" and "1 = yes", with overall scores ranging from 0 to 5. Higher scores indicate greater ethnic engagement.	• Participation in cultural practices
Family and Child Stressful Life Events Scale (Whitbeck et al., 2009)	Child self-report measure. Consists of 62 items: 29 pertaining to adolescent events and 32 pertaining to adult events. Response options included "yes" and "no". The number of "yes" responses were counted for an overall score ranging from 0 to 62. Lower scores indicate fewer stressful life experiences.	• Stressful life experiences
First Nations-Child Quality of Life Survey (Butten et al., 2021)	Parent self-report/proxy measure. Consists of 21 items across 3 domains: Patient Experience, Quality of Life, and Patient Support. Responses collected on a 5-point scale ranging from "1 = never" to "5 = always".	• Parents/caregiver perceptions of child(ren's) quality of life
Individual values (Mousseau et al., 2014)	Child self-report measure. Consists of 26 items across 3 domains: tradition/benevolence, power/materialism, and security/hedonism. Responses collected on a 7-point scale ranging from "1 = not important" to "7 = very important", with overall scores ranging from 26 to 182.	• Perceptions of the importance of values related to living a good life
Intentions to participate in traditional practices (D'Amico et al., 2020)	Child self-report measure. Consists of 25 items. Responses collected on a 4-point scale ranging from "1 = definitely yes" to "4 = definitely no", with overall scores ranging from 20 to 80. Higher scores indicate a higher likelihood of participating in traditional activities in the future.	• Likelihood of participating in a traditional activity in the next 6 months
LSIC Child Questionnaire (Department of Social Services, 2018)	Child self-report measure/direct observation. Consists of 28 modules. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Body measurements • Bullying • Community safety • Connection to Indigenous identity • Coping strategies • Dental hygiene

		• Exposure to Indigenous languages • Expression of Indigenous identity at school • Friends' self-harm behaviours • Friends' substance use behaviours • Goals for the future • Homework behaviours • Identity of friends • Participation in cultural practices • Participation in out-of-school activities • Puberty • Relationships with parents/caregivers • School attendance • School characteristics • School engagement • Sleep behaviours • Self-harm behaviours • Sources of sex education • Substance use behaviours • Types of foods and beverages consumed, including traditional foods
LSIC Parent 1 Questionnaire (Department of Social Services, 2018)	Parent self-report/proxy measure. Consists of 24 modules. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Community safety • Contact with healthcare professionals, including traditional healers • Contact with healthcare settings • Dental hygiene • Exposure to Indigenous languages • Family demographic characteristics • Financial security • Household characteristics • Involvement of extended family and kinship in caregiving • Knowledge of Indigenous languages • Parent/caregiver access to parenting advice and support • Parent/caregiver connection to Indigenous identity

		• Parent/caregiver confidence in their parenting • Parent/caregiver coping strategies • Parent/caregiver experiences of discrimination and racism • Parent/caregiver life satisfaction • Parent/caregiver perceptions of child(ren)'s friends • Parent/caregiver perceptions of family and kinship interactions • Parent/caregiver physical activity • Parent/caregiver physical health • Parent/caregiver relationships with others • Parent/caregiver substance use • Participation in activities with family members or kinship • Participation in out-of-school activities • Physical activity • Physical health concerns • Relationships with parents/caregivers • School attendance • School characteristics • School engagement • Screen time • Sleeping behaviours • Stressful life events • Types of foods and beverages consumed, including traditional foods
LSIC Parent 2 Questionnaire (Department of Social Services, 2018)	Parent self-report/proxy measure. Consists of 12 modules. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Family demographic characteristics • Financial security • Household characteristics • Parent/caregiver access to parenting advice and support • Parent/caregiver confidence in their parenting

		• Parent/caregiver connection to Indigenous identity • Parent/caregiver experiences of discrimination and racism • Parent/caregiver physical activity • Parent/caregiver physical health • Parent/caregiver relationships with others • Parent/caregiver substance use • Participation in activities with family members and kinship • School performance
LSIC Teacher Questionnaire (Department of Social Services, 2018)	Teacher self-report/proxy measure. Consists of 9 modules. Responses collected using a variety of response formats, including frequency of occurrence, degree of importance, dichotomous (yes or no) items, and open-ended responses.	• Exposure to Indigenous languages at school • Identity of friends • School attendance • School characteristics • School performance
Multicultural Mastery Scale (Allen et al., 2014; Fok et al., 2012)	Child self-report measure. Consists of 13 items across 3 subscales: Mastery – Friends, Mastery – Family, and Mastery – Self. Responses collected on a continuous scale ranging from "not at all" to "a lot". Responses were converted to scores on a 5-point scale, with higher scores indicating greater mastery.	• Coping strategies
Outcome expectancies for values (Mousseau et al., 2014)	Child self-report measure. Consists of 52 items across 3 domains: tradition/benevolence, power/materialism, and security/hedonism. Responses collected on a 7-point scale ranging from "1 = not sure at all" to "7 = very sure", with overall scores ranging from 52 to 364.	• Likelihood of obtaining values related to living a good life
Peer Influences Scale (Allen et al., 2014)	Child self-report measure. Consists of 10 items across two scales: Discourage and Disapproval. Responses collected on a 4-point scale.	• Friends' attitudes towards substance use
Perceived values of the community (Mousseau et al., 2014)	Child self-report measure. Consists of 26 items across 3 domains: tradition/benevolence, power/materialism, and security/hedonism. Responses collected on a 7-point scale ranging from "1 = not important" to "7 = very important", with overall scores ranging from 26 to 182.	• Perceptions of community values related to living a good life
Perception of Native American culture (Tsethlikai et al., 2007)	Parent self-report measure. Consists of 10 items. Responses collected on a 6-point scale ranging from "1 = disagree strongly" to "6 = agree strongly", with overall scores ranging from 10 to 60. Higher scores indicate a higher endorsement of Native American culture in mothers' parenting.	• Mothers' perceptions of cultural practices
Reasons for Life Scale	Child self-report measure. Consists of 11 items across 3 subscales: Cultural and Spiritual Beliefs, Efficacy Over Life Problems, and Others' Assessment. Responses collected on a continuous	• Reasons for living

	scale ranging from "not at all" to "a lot". Responses were converted to scores on a 5-point scale, with higher scores indicating greater protection against suicide.	
Reflective Processes Scale (Allen et al., 2014; Allen et al., 2021)	Child self-report measure. Consists of 10 items across three factors: things I want for myself, things I want for my family, and things I want for my life. Responses collected on a continuous scale ranging from "not at all" to "a lot". Responses were converted to a 5-poiint scale, with higher scores indicating greater reflective processes with regards to substance use.	• Reflection on consequences of substance use
Social and emotional skills (Franck et al., 2020)	Child self-report measure. Consists of 5 items. Responses collected on a 5-point scale ranging from "1 = strongly disagree" to "5 = strongly agree", with overall scores ranging from 5 to 25. Higher scores indicate greater social and emotional skills.	• Social and emotional skills
Spiritual practices (Kulis et al., 2012; Kulis et al., 2016)	Child self-report measure. Consists of 11 items. Responses collected on a 4-point scale ranging from "1 = not at all" to "4 = a lot". Calculated number of different activities that youth participated in to categorize participants as low (participated in 3 or fewer different activities), medium (participated in 4 to 7 different activities), and high (participated in 8 or more different activities).	• Participation in cultural practices • Participation in spiritual practices
Traditional practices (Brown et al., 2021; D'Amico et al., 2021; Dickerson et al., 2019)	Child self-report measure. Consists of 25 items. Responses collected on a 6-point scale ranging from "1 = never" to "6 = more than 20 times". Overall scores were calculated by counting the number of times that youth participated in any cultural or spiritual activity, ranging from 0 to 525, with higher scores indicating greater participation in cultural and spiritual activities.	• Participation in cultural practices • Participation in spiritual practices
Wicozani Instrument (Peters et al., 2019)	Child self-report measure. Consists of 9 items across 2 subscales: Wicozani Self-knowledge and Importance of Wicozani to Quality of Life. Responses collected on a 5-point scale ranging from "1 = extremely poor" to "5 = excellent" and as open-ended responses.	• Holistic health and well-being, including mental, physical, and spiritual health and well-being
Youth Community Protective Factors Scale (Allen et al., 2009; Allen et al., 2014)	Child self-report measure. Consists of 7 items across two subscales: Support and Opportunities. Responses collected on a 5-point scale ranging from "1 = not at all" to "5 = a lot", with overall scores ranging from 7 – 35. Higher scores indicate more opportunities and support in the community.	• Perceptions of opportunities in the community

Abbreviations: LSIC=Longitudinal Study of Indigenous Children

Appendix 5: Delphi participant recruitment email

Participant Recruitment Email, Delphi Survey

Subject Line: Invitation to Participate in a Research Study

Dear [Insert Participant Name],

I am a Master of Science graduate student at the University of Alberta, under the supervision of Dr. Maria-Beatriz Ospina and Dr. Nathalie Kermoal. I am emailing you to invite you to take part in a study that is part of my thesis research. This study is titled "Building Consensus on Measures of Métis Children's Social and Emotional Well-being (SEWB) in Alberta."

The objective of this study is to reach consensus among a group of Métis knowledge holders on components of well-being that are important to measure the well-being of Métis children aged 10 years or younger in Alberta. From this study, we wish to learn what components of Métis children's well-being are important to measure in your opinion. Your feedback will help us develop recommendations and surveys on measuring Métis children's well-being to be used in the future. This study is part of a larger study that aims to evaluate the well-being of Métis children in Alberta.

You are being asked to take part in this study because [insert statement for appropriate participant group].

- ***If a parent or caregiver:*** ... you are a parent or caregiver of a Métis child living in Alberta who is 10 years old or younger. The Métis Nation of Alberta (MNA) shared your email address because you previously asked to be emailed about upcoming opportunities to share your opinion on Métis children's well-being with the MNA.
- ***If an organizational representative or decision-maker:*** … you were identified as someone who has expertise on the well-being of Métis children based on your role as [insert title] at [insert organization name]. I received your email from [Kelsey Bradburn, the Métis Nation of Alberta Director of Children and Family Services or Reagan Bartel, the Métis Nation of Alberta Director of Health].

If you choose to take part in this study, you will be asked to complete two online questionnaires – one in March 2023 and one in April 2023. Each questionnaire should take you approximately 30 minutes to complete. In these questionnaires, you will be asked to share your opinion about what components of Métis children's well-being are important to measure. The questionnaires will be administered using a Research Electronic Data Capture (REDCap) system at the University of Alberta. I have attached a PDF document to this email that includes more details about this study.

If you are interested in taking part in this study, please respond to this email by [insert date]. If you have any questions, you can contact me by email at ajames@ualberta.ca or by phone at (780) 455 – 2200 ext. 433.

Thank you,
Ashton James

Appendix 6: Delphi participant information letter

Participant Information Letter, Delphi Survey

Title of the Study: Building Consensus on Measures of Métis Children's Social and Emotional Well-being (SEWB) in Alberta

Principal Investigator:

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Faculty of Health Sciences
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Kingston, ON
Adjunct Professor
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College of Health Sciences
University of Alberta
Edmonton, AB
(613) 533 – 6000 ext. 78152
mospina@ualberta.ca; jmb40@queensu.ca

Why am I being asked to take part in this research study?

You are being asked to take part in this research study because: a) you are a parent or caregiver of a Métis child living in Alberta who is 10 years old or younger or b) you are considered to have expertise in Métis children's well-being based on your role in your place of work. We received your email address from Kelsey Bradburn, the Métis Nation of Alberta (MNA) Director of Children and Family Services or Reagan Bartel, the Métis Nation of Alberta (MNA) Director of Health.

What is the reason for doing this study?
We want to improve the ways that Métis children's well-being is measured in program evaluations and research studies. From this study, we wish to learn what components of Métis children's well-being are important to measure in your opinion. Your feedback will help us develop recommendations and surveys on measuring Métis children's well-being to be used in the future. This study is part of Ashton James' Master of Science thesis research.

What will I be asked to do?
You will be asked to complete two online questionnaires. Each questionnaire should take you approximately 30 minutes to complete. In these questionnaires, you will be asked to share your opinion about what components of Métis children's well-being are important to measure and information about you (e.g., your age, gender, etc.). If you choose to take part in this study, you do not have to answer any questions that you do not want to answer. Once you have completed the questionnaire, you can choose the "submit" button at the end of the questionnaire to submit your responses.

What are the risks and discomforts?
If you are taking part in this study as someone who has expertise in Métis children's well-being based on your role in your place of work, we will be sharing the name of the organization you work for in the study results. We will not share your name, but it is possible that others may make assumptions about who was in this study based on the organizations reported. It is not possible to know all of the risks that may happen in a study, but the researchers have taken all reasonable safeguards to minimize any known risks to a study participant. It is possible that some questions may cause distress for some people. If you feel distressed while completing the questionnaires, you can contact the following for support:

- MNA Wellness Program: 1-844-729-0261
- Hope for Wellness Helpline: 1-855-242-3310
- Mental Health Helpline: 1-877-303-2642
- Provincial 211
- Health Link: 811

What are the benefits to me?
You are not expected to directly benefit from taking part in this study. The results of this study may help the MNA and others measure Métis children's well-being in meaningful ways in the future.

Do I have to take part in this study?
Being in this study is your choice. If you decide to be in this study, you can change your mind and stop being in the study by closing your browser and not choosing to submit your questionnaire responses. If you choose to be in this study, you do not have to answer any questions that you do not want to answer. Following completion of the questionnaire, we will email you a copy of your individual questionnaire responses. You will have two weeks to ask to change or remove any of your responses. If you or your child(ren) are citizens of the MNA, your decision will in no way

affect the programs or services that you have access to. If you are taking part in this study as someone who has expertise in Métis children's well-being based on your role at your place of work, your decision will in no way affect your job.

Will I be paid to be in this study?
You will receive a $50 honorarium for taking part in this study. If you choose to stop taking part in this study, you will still receive this honorarium.

Will my information be kept private?
Electronic responses to the questionnaires will be stored in a password-protected file on a password-protected, encrypted server at the MNA and will only be accessible to the research team. To help keep your information private, we recommend that you use standard safety measures such as signing out of your account, closing your browser, and locking your screen or device when you have completed the questionnaires.

Results will be published in a pooled (aggregate) format in Ashton James' thesis and may also be used in community and academic presentations and publications. Your answers to open-ended questions may be used word-for-word when sharing the results from this study, but your name and the name of your organization will not be shared with the quotes. You will be asked to share your name, email address, and other information about you (e.g., age, gender, etc.) in this questionnaire. This information will only be accessible to the research team.

During this study we will do everything we can to make sure that all information you share is kept private. No information relating to this study that includes your name or email address will be shared outside of the research team. Sometimes, by law, we may have to release your information with your name so we cannot guarantee absolute privacy, but we will make every legal effort to make sure that your information is kept private. During research studies, it is important that the information we get is accurate. For this reason, your information may be looked at by people from the Research Ethics Board.

After the study is done, we will still need to securely store your data that was collected as part of this study. At the end of the study, any data related to your name or email address will be destroyed. Other study data will be stored at the MNA Provincial Office in Edmonton, Alberta for 5 years on an encrypted hard drive, in a locked filing cabinet.

What if I have questions?
If you have any questions about the research now or later, please contact Ashton James at ajames@ualberta.ca or 780-455-2200 ext. 433.

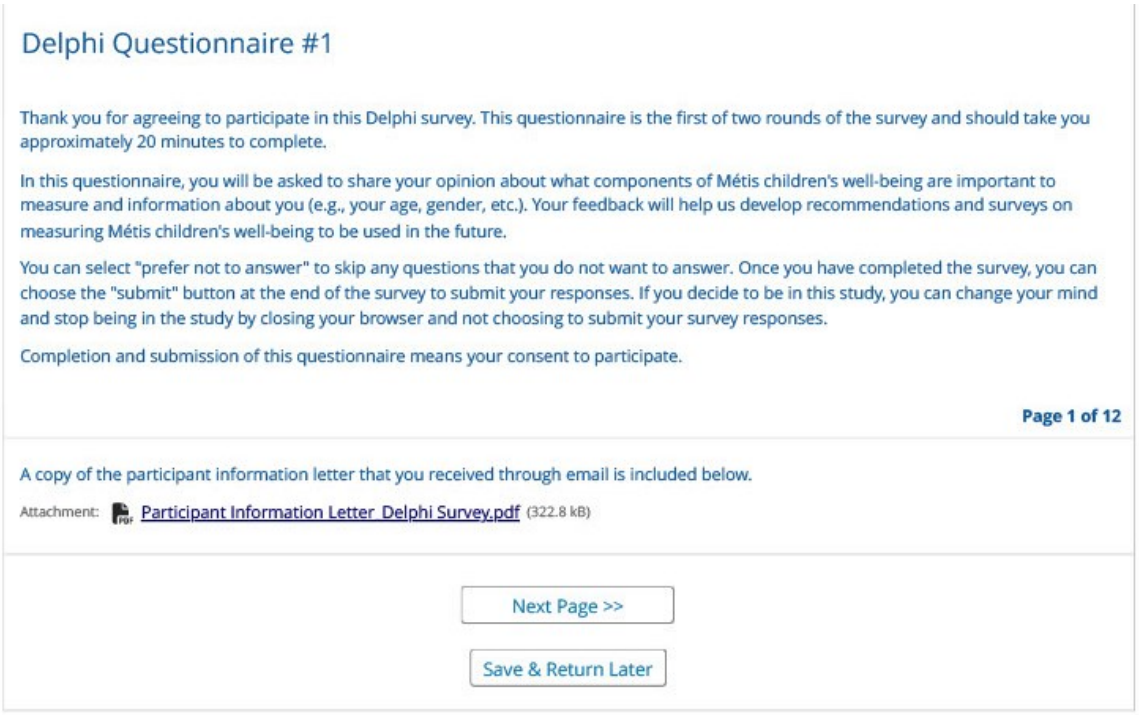
If you have any questions regarding your rights as a research participant, you may contact the University of Alberta Research Ethics Office at reoffice@ualberta.ca or 780-492-2615 and quote Ethics ID Pro00128206. This office is independent of the study investigators.

This study is being sponsored by the Canadian Institutes of Health Research (CIHR). The Principal Investigator is getting money from the study sponsor to cover the costs of doing this study. You are entitled to request any details concerning this compensation from the Principal Investigator.

How do I indicate my agreement to be in this study?
Completion and submission of this questionnaire means your consent to participate. This questionnaire will be open until Friday, March 31st, 2023.

Please keep this information letter for your records.

Appendix 7: Delphi round one questionnaire



Delphi Questionnaire #1

Thank you for agreeing to participate in this Delphi survey. This questionnaire is the first of two rounds of the survey and should take you approximately 20 minutes to complete.

In this questionnaire, you will be asked to share your opinion about what components of Métis children's well-being are important to measure and information about you (e.g., your age, gender, etc.). Your feedback will help us develop recommendations and surveys on measuring Métis children's well-being to be used in the future.

You can select "prefer not to answer" to skip any questions that you do not want to answer. Once you have completed the survey, you can choose the "submit" button at the end of the survey to submit your responses. If you decide to be in this study, you can change your mind and stop being in the study by closing your browser and not choosing to submit your survey responses.

Completion and submission of this questionnaire means your consent to participate.

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A copy of the participant information letter that you received through email is included below.

Attachment: Participant Information Letter_Delphi Survey.pdf (322.8 kB)

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Save & Return Later

Delphi Questionnaire #1

1. Mind and Emotions

The following components predominately relate to children's emotional and mental health and well-being. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's coping strategies and selecting "7" would indicate that you think it is extremely important to measure Métis children's coping strategies.

	1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a. **Coping strategies** * must provide value	○	○	○	○	○	○	○	○	◉
b. **Goals for the future** * must provide value	○	○	○	○	○	○	○	○	◉
c. **Reasons for living** * must provide value	○	○	○	○	○	○	○	○	◉
d. **Relationships with others** * must provide value	○	○	○	○	○	○	○	○	◉
e. **Sources of support** * must provide value	○	○	○	○	○	○	○	○	◉
f. **Stressful life experiences** * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

2. Physical Body

The following components predominately relate to children's physical health and well-being. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's access to food and selecting "7" would indicate that you think it is extremely important to measure Métis children's access to food.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Access to food * must provide value	○	○	○	○	○	○	○	○	◉
b.	Feeding behaviours (e.g., breast feeding, bottle feeding, eating solid foods) * must provide value	○	○	○	○	○	○	○	○	◉
c.	Types of foods and beverages consumed, including traditional foods * must provide value	○	○	○	○	○	○	○	○	◉
d.	Developmental milestones (e.g., toilet training) * must provide value	○	○	○	○	○	○	○	○	◉
e.	Dental hygiene (e.g., teeth brushing, flossing) * must provide value	○	○	○	○	○	○	○	○	◉
f.	Physical activity * must provide value	○	○	○	○	○	○	○	○	◉
g.	Body measurements (e.g., birth weight, body mass index) * must provide value	○	○	○	○	○	○	○	○	◉
h.	Sleeping behaviours * must provide value	○	○	○	○	○	○	○	○	◉
i.	Injuries requiring medical attention (e.g., broken bones, ingesting poisonous substances) * must provide value	○	○	○	○	○	○	○	○	◉
j.	Physical health concerns (e.g., chronic conditions) * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

3. Culture

The following components predominately relate to children's Indigenous identity and culture. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's connection to Indigenous identity and selecting "7" would indicate that you think it is extremely important to measure Métis children's connection to Indigenous identity.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Connection to Indigenous identity * must provide value	○	○	○	○	○	○	○	○	◉
b.	Exposure to Indigenous languages * must provide value	○	○	○	○	○	○	○	○	◉
c.	Knowledge of Indigenous languages * must provide value	○	○	○	○	○	○	○	○	◉
d.	Participation in cultural practices * must provide value	○	○	○	○	○	○	○	○	◉
e.	Participation in spiritual practices * must provide value	○	○	○	○	○	○	○	○	◉
f.	Perceptions of historical loss (e.g., loss of land) * must provide value	○	○	○	○	○	○	○	○	◉
g.	Support to understand Indigeous culture and history * must provide value	○	○	○	○	○	○	○	○	◉
h.	Awareness of the connections between individual well-being and the well-being of family, community, and the environment * must provide value	○	○	○	○	○	○	○	○	◉
i.	Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being * must provide value	○	○	○	○	○	○	○	○	◉

Delphi Questionnaire #1

4. Family and Kinship

The following components predominately relate to children's family and kinship interactions and home environments. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's homework behaviours and selecting "7" would indicate that you think it is extremely important to measure Métis children's homework behaviours.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Homework behaviours * must provide value	○	○	○	○	○	○	○	○	◉
b.	Household characteristics (e.g., number of siblings, number of parents/caregivers living at home) * must provide value	○	○	○	○	○	○	○	○	◉
c.	Involvement of extended family and kinship in caregiving * must provide value	○	○	○	○	○	○	○	○	◉
d.	Participation in activities with family members or kinship * must provide value	○	○	○	○	○	○	○	○	◉
e.	Perceptions of family and kinship interactions (e.g., spending time together, communication, conflict) * must provide value	○	○	○	○	○	○	○	○	◉
f.	Relationships with parents/caregivers * must provide value	○	○	○	○	○	○	○	○	◉
g.	History of child apprehension (child being removed from the care of their parent/caregiver) * must provide value	○	○	○	○	○	○	○	○	◉
h.	History of family separation because of the Residential School System or the Sixties Scoop * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

5. Parent/Caregiver Characteristics

The following components predominately relate to the influence of parent or caregiver characteristics on children's health and well-being. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure the demographic characteristics of parents/caregivers of Métis children and selecting "7" would indicate that you think it is extremely important to measure the demographic characteristics of parents/caregivers of Métis children.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Family demographic characteristics (e.g., employment, education, age, relationship status)) * must provide value	○	○	○	○	○	○	○	○	◉
b.	Financial security * must provide value	○	○	○	○	○	○	○	○	◉
c.	Parent/caregiver access to parenting advice and support * must provide value	○	○	○	○	○	○	○	○	◉
d.	Parent/caregiver connection to Indigenous identity * must provide value	○	○	○	○	○	○	○	○	◉
e.	Parent/caregiver coping strategies	○	○	○	○	○	○	○	○	◉
f.	Parent/caregiver experiences of discrimination and racism * must provide value	○	○	○	○	○	○	○	○	◉
g.	Parent/caregiver life satisfaction * must provide value	○	○	○	○	○	○	○	○	◉
h.	Parent/caregiver physical activity * must provide value	○	○	○	○	○	○	○	○	◉
i.	Parent/caregiver physical health * must provide value	○	○	○	○	○	○	○	○	◉
j.	Parent/caregiver relationships with others * must provide value	○	○	○	○	○	○	○	○	◉
k.	Parent/caregiver substance use * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

6. Parent/Caregiver Perceptions

The following components predominately relate to the influence of parent or caregiver perceptions on children's health and well-being. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure the parenting confidence of parents/caregivers of Métis children and selecting "7" would indicate that you think it is extremely important to measure the parenting confidence of parents/caregivers of Métis children.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Parent/caregiver confidence in their parenting * must provide value	○	○	○	○	○	○	○	○	◉
b.	Parent/caregiver perceptions of child(ren)'s friends * must provide value	○	○	○	○	○	○	○	○	◉
c.	Parent/caregiver perceptions of child(ren)'s quality of life * must provide value	○	○	○	○	○	○	○	○	◉
d.	Parent/caregiver perceptions of family and kinship interactions (e.g., spending time together, communication, conflict) * must provide value	○	○	○	○	○	○	○	○	◉
e.	Parent/caregiver perceptions of the importance of cultural practices * must provide value	○	○	○	○	○	○	○	○	◉
f.	Parent/caregiver perceptions of the importance of knowing Indigenous languages * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

7. Childcare and School

The following components predominately relate to children's childcare and school environments. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's childcare access and selecting "7" would indicate that you think it is extremely important to measure Métis children's childcare access.

	1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a. **Childcare access** * must provide value	○	○	○	○	○	○	○	○	◉
b. **Childcare cost** * must provide value	○	○	○	○	○	○	○	○	◉
c. **Expression of Indigenous identity at school** * must provide value	○	○	○	○	○	○	○	○	◉
d. **School attendance** * must provide value	○	○	○	○	○	○	○	○	◉
e. **School engagement** * must provide value	○	○	○	○	○	○	○	○	◉
f. **School performance** * must provide value	○	○	○	○	○	○	○	○	◉
g. **School characteristics (e.g., bilingual, cultural awareness, size)** * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

8. Community

The following components predominately relate to children's interactions with their broader community environments. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's experiences with bullying and selecting "7" would indicate that you think it is extremely important to measure Métis children's experiences with bullying.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	**Bullying** * must provide value	○	○	○	○	○	○	○	○	◉
b.	**Community safety** * must provide value	○	○	○	○	○	○	○	○	◉
c.	**Identity of friends (e.g., Indigenous)** * must provide value	○	○	○	○	○	○	○	○	◉
d.	**Participation in out-of-school activities** * must provide value	○	○	○	○	○	○	○	○	◉
e.	**Perceptions of opportunities in the community (e.g., things to do for fun, people to look up to)** * must provide value	○	○	○	○	○	○	○	○	◉
f.	**Screen time** * must provide value	○	○	○	○	○	○	○	○	◉
g.	**Contact with healthcare professionals, including traditional healers** * must provide value	○	○	○	○	○	○	○	○	◉
h.	**Contact with healthcare settings (e.g., hospitals)** * must provide value	○	○	○	○	○	○	○	○	◉
i.	**Medication use, including traditional medicines** * must provide value	○	○	○	○	○	○	○	○	◉

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Delphi Questionnaire #1

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9. **Please share any additional components of well-being that you feel are important to Métis children aged 10 years or younger. Your opinion is important to us. Please take your time considering this question.**

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Delphi Questionnaire #1

Demographic Information

The following questions are so we can get to know a bit more about you and understand how your individual identity may relate to your opinion on components of well-being that are important to Métis children. In research, we often must present demographic information in categories. We understand that these categories may be limiting. Please answer the following questions to the best of your ability.

1. **What is your age in years?**

2. **If you had to select one of the options below, which one best describes your gender identity?**
   * must provide value
   - ○ Man
   - ○ Non-binary
   - ○ Two-spirit
   - ○ Woman
   - ○ An identity other than those listed - please specify:
   - ◉ Prefer not to say

3. **Do you identify as transgender?**
   * must provide value
   - ○ Yes
   - ○ No
   - ◉ Prefer not to say

4. **How would you describe your cultural background? (Select all that apply)**
   * must provide value
   - ☐ Asian
   - ☐ Black
   - ☐ First Nations
   - ☐ Inuit
   - ☐ Latin American or Hispanic
   - ☐ Métis
   - ☐ Middle Eastern
   - ☐ White
   - ☐ Another race or ethnicity - please specify:
   - ☑ Prefer not to say

5. **Which of the following is the highest level of education that you have completed?**
   * must provide value
   - ○ Elementary or middle school
   - ○ High school
   - ○ Technical, trade, or vocational school
   - ○ Undergraduate degree
   - ○ Graduate or professional degree
   - ○ No school completed
   - ◉ Prefer not to say

6. **How would you describe your current employment status? (Select all that apply)**

* must provide value

- [ ] Employed full-time
- [ ] Employed part-time
- [ ] In training or education
- [ ] On a leave of absence
- [ ] Retired
- [ ] Unemployed
- [x] Prefer not to say

7. **What category best describes the annual income of all members in your household before taxes?**

* must provide value

- ○ Less than $31,300
- ○ $31,300 to less than $66,700
- ○ $66,700 to less than $100,500
- ○ $100,500 to less than $144,600
- ○ $144,600 to less than $254,300
- ○ More than $254,300
- ◉ Prefer not to say

8. **You live in an area that is best described as:**

* must provide value

- ○ Major city (e.g., Calgary or Edmonton)
- ○ City (e.g., Grande Prairie or Red Deer)
- ○ Town (e.g., Bonnyville or Peace River)
- ○ Rural (e.g., on a farm)
- ○ Remote (e.g., Fort Chipewyan)
- ◉ Prefer not to say

9. **How would you describe your current relationship status? (Select all that apply)**

* must provide value

- [ ] Single
- [ ] In a relationship/married, living apart
- [ ] In a relationship/married, living together
- [ ] Separated or divorced
- [ ] Widowed
- [x] Prefer not to say

10. **Are you the parent or caregiver of a Métis child that is 10 years-old or younger?**

* must provide value

- ○ Yes
- ○ No
- ◉ Prefer not to say

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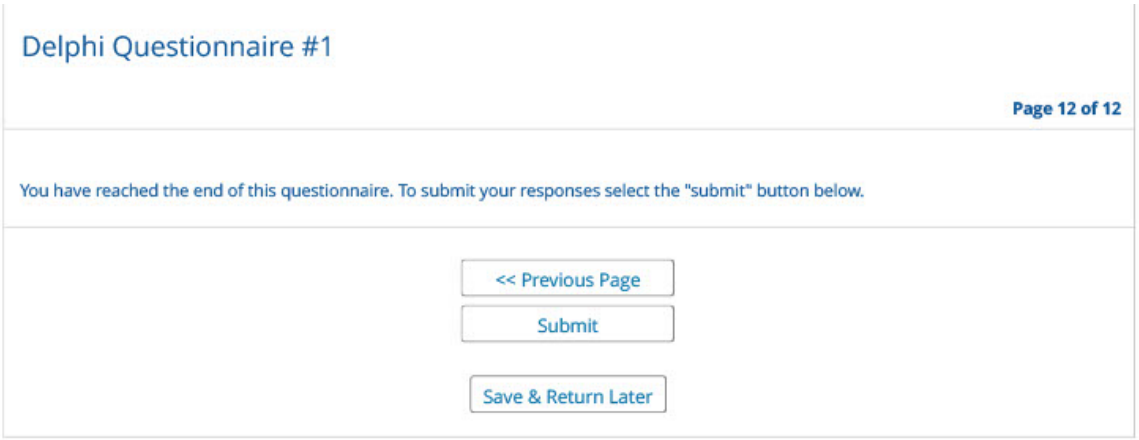
Delphi Questionnaire #1
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You have reached the end of this questionnaire. To submit your responses select the "submit" button below.
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Submit
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Appendix 8: Delphi round one participant summary template

Thank you for agreeing to participate in this Delphi survey. You recently completed the first of two questionnaires. In the first questionnaire, you shared your opinion about what components of Métis children's well-being are important to measure on a scale of 1 to 7, where 1 = not important, 4 = moderately important, and 7 = extremely important.

The information below provides a summary of responses to the first questionnaire, including your individual rating, the median (middle) rating from all participants, the number (n) of participants who rated each component of well-being as "not important" (rating of 1 – 3) or "important" (rating of 5 – 7), and whether or not consensus was achieved (rating of "not important" or "important" by at least 20 participants). In the second questionnaire, you will be asked to rate the importance of all components for which consensus was not achieved for a second time.

1. Mind and Emotions

The following components predominately relate to children's emotional and mental health and well-being.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Coping strategies		7	0	22	Yes
b. Goals for the future		6	0	20	Yes
c. Reasons for living		7	1	22	Yes
d. Relationships with others		7	0	24	Yes
e. Sources of support		7	0	24	Yes
f. Stressful life experiences		7	0	21	Yes

2. Physical Body

The following components predominately relate to children's physical health and well-being.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached

a. Access to food		7	0	24	Yes
b. Feeding behaviours (e.g., breastfeeding, bottle feeding, eating solid foods)		5	2	18	No
c. Types of foods and beverages consumed, including traditional foods		6	0	22	Yes
d. Dental hygiene (e.g., teeth brushing, flossing)		6	2	22	Yes
e. Developmental milestones (e.g., toilet training)		7	0	22	Yes
f. Physical activity		7	0	24	Yes
g. Body measurements (e.g., birth weight, body mass index)		5	1	15	No
h. Sleeping behaviours		6	0	23	Yes
i. Injuries requiring medical attention (e.g., broken bones, ingesting poisonous substances)		7	0	22	Yes
j. Physical health concerns (e.g., chronic conditions)		7	0	23	Yes

3. Culture

The following components predominately relate to children's Indigenous identity and culture.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Connection to Indigenous identity		7	0	24	Yes
b. Exposure to Indigenous languages		6.5	0	24	Yes
c. Knowledge of Indigenous languages		6	0	19	No
d. Participation in cultural practices		7	0	23	Yes
e. Participation in spiritual practices		6	0	20	Yes

f. Perceptions of historical loss (e.g., loss of land)		6	0	21	Yes
g. Support to understand Indigenous culture and history		7	0	23	Yes
h. Awareness of the connections between individual well-being and the well-being of family, community, and the environment		7	0	24	Yes
i. Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being		7	0	24	Yes

4. Family and Kinship

The following components predominately relate to children's family and kinship interactions and home environments.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Homework behaviours		5	4	14	No
b. Household characteristics (e.g., number of siblings, number of parents/caregivers living at home)		5.5	2	17	No
c. Involvement of extended family and kinship in caregiving		7	0	21	Yes
d. Participation in activities with family members or kinship		7	0	22	Yes
e. Perceptions of family and kinship interactions (e.g., spending time together, communication, conflict)		7	0	23	Yes
f. Relationships with parents/caregivers		7	0	24	Yes
g. History of child apprehension (child being removed from the care of their parent/caregiver)		7	0	24	Yes
h. History of family separation because of the Residential School System or the Sixties Scoop		7	0	24	Yes

5. Parent/Caregiver Characteristics

The following components predominately relate to the influence of parent or caregiver characteristics on children's health and well-being.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Family demographic characteristics (e.g., employment, education, age, relationship status)		6	1	20	Yes
b. Financial security		6	0	21	Yes
c. Parent/caregiver access to parenting advice and support		7	0	20	Yes
d. Parent/caregiver connection to Indigenous identity		7	0	23	Yes
e. Parent/caregiver coping strategies		7	0	24	Yes
f. Parent/caregiver experiences of discrimination and racism		6	0	23	Yes
g. Parent/caregiver life satisfaction		7	0	23	Yes
h. Parent/caregiver physical activity		7	0	20	Yes
i. Parent/caregiver physical health		7	0	23	Yes
j. Parent/caregiver relationships with others		7	0	23	Yes
k. Parent/caregiver substance use		7	0	23	Yes

6. Parent/Caregiver Perceptions

The following components predominately relate to the influence of parent or caregiver perceptions on children's health and well-being.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Parent/caregiver confidence in their parenting		6	0	22	Yes
b. Parent/caregiver perceptions of child(ren)'s friends		6	1	19	No
c. Parent/caregiver perceptions of child(ren)'s quality of life		7	1	22	Yes

d. Parent/caregiver perceptions of family and kinship interactions (e.g., spending time together, communication, conflict)		7	0	23	Yes
e. Parent/caregiver perceptions of the importance of cultural practices		7	0	24	Yes
f. Parent/caregiver perceptions of the importance of knowing Indigenous languages		6	0	22	Yes

7. Childcare and School

The following components predominately relate to children's childcare and school environments.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Childcare access		7	0	24	Yes
b. Childcare cost		7	0	22	Yes
c. Expression of Indigenous identity at school		7	0	23	Yes
d. School attendance		6	0	22	Yes
e. School engagement		6.5	0	24	Yes
f. School performance		6	0	18	No
g. School characteristics (e.g., bilingual, cultural awareness, size)		7	0	22	Yes

8. Community

The following components predominately relate to children's interactions with their broader community environments.

Component	Individual rating	Median rating	Not important (n)	Important (n)	Consensus reached
a. Bullying		7	0	24	Yes

b. Community safety		7	0	24	Yes
c. Identity of friends (e.g., Indigenous)		5.5	3	17	No
d. Participation in out-of-school activities		6	0	21	Yes
e. Perceptions of opportunities in the community (e.g., things to do for fun, people to look up to)		6.5	0	21	Yes
f. Screen time		5.5	2	17	No
g. Contact with healthcare professionals, including traditional healers		6	0	23	Yes
h. Contact with healthcare settings (e.g., hospitals)		6	0	21	Yes
i. Medication use, including traditional medicines		6.5	1	21	Yes

9. Additional Components of Well-being

In the first questionnaire, you were also asked to share any additional components of well-being that you feel are important to Métis children aged 10 years or younger. We received the following responses to this question. In the second questionnaire, you will have an opportunity to rate the importance of these components.

Mind and Emotions

- Emotional intelligence (e.g., ability to recognize emotions, ability to regulate emotions)
- Executive functioning skills (e.g., ability to plan ahead, ability to follow directions)
- Feeling safe and loved unconditionally
- Personality traits (e.g., temperament)
- Positive attitudes about the future
- Resiliency (ability to thrive in challenging circumstances)

Culture

- Connection to land
- Connection to Indigenous community
- Participation in land-based practices (e.g., harvesting, on-the-land survival skills)
- Participation in Métis celebrations
- Understanding of Métis culture and history

Family and kinship

- Consideration of Indigenous culture and kinship in child apprehension cases

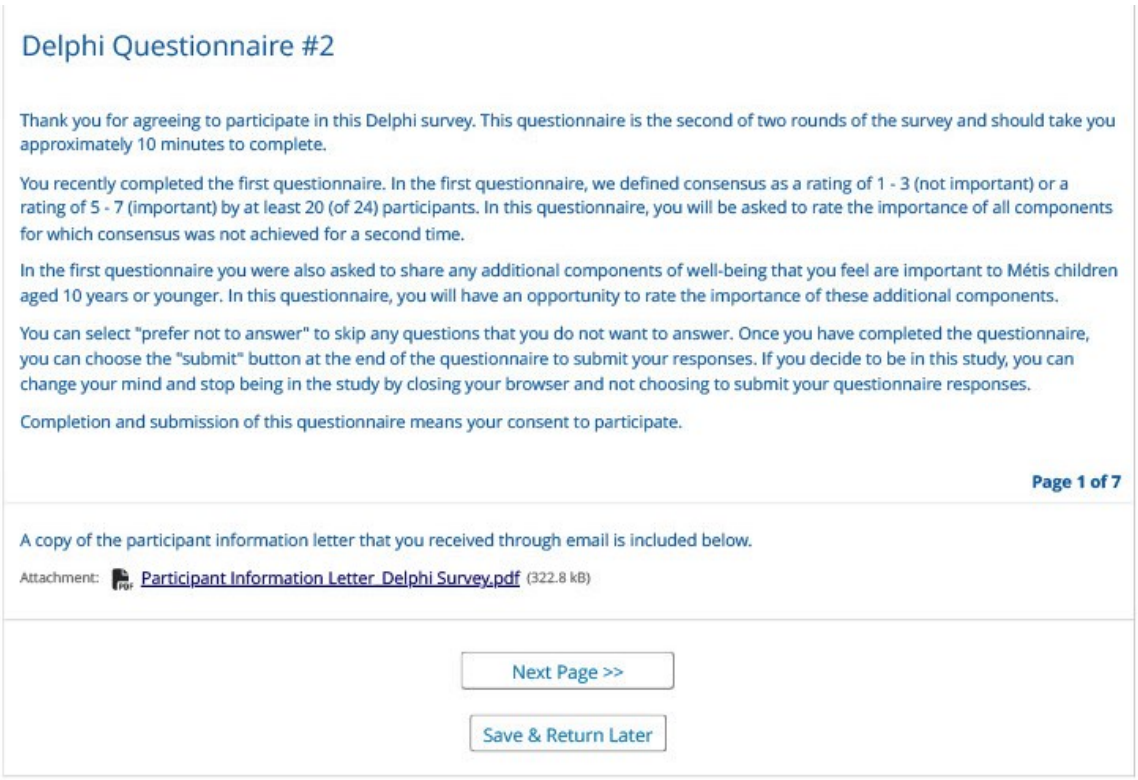
- Family history of Children's Services involvement

Parent/caregiver characteristics
- Parent/caregiver parenting practices (e.g., nurturing behaviours)
- Parent/caregiver resiliency (ability to thrive in challenging circumstances)

Parent/caregiver perceptions
- Parent/caregiver identification of children as Métis
- Parent/caregiver perceptions of other cultures, ethnicities, and races
- Parent/caregiver perceptions of 2SLGBTQQIA+ (two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.) community

Community
- Access to community services, including inclusive 2SLGBTQQIA+ services
- Medication access, including natural medicines
- Exposure to other cultures, ethnicities, and races
- Perceptions of other cultures, ethnicities, and races
- Perceptions of 2SLGBTQQIA+ community
- Positive role models (e.g., Métis, 2SLGBTQQIA+)

Appendix 9: Delphi round two questionnaire



Delphi Questionnaire #2

Thank you for agreeing to participate in this Delphi survey. This questionnaire is the second of two rounds of the survey and should take you approximately 10 minutes to complete.

You recently completed the first questionnaire. In the first questionnaire, we defined consensus as a rating of 1 - 3 (not important) or a rating of 5 - 7 (important) by at least 20 (of 24) participants. In this questionnaire, you will be asked to rate the importance of all components for which consensus was not achieved for a second time.

In the first questionnaire you were also asked to share any additional components of well-being that you feel are important to Métis children aged 10 years or younger. In this questionnaire, you will have an opportunity to rate the importance of these additional components.

You can select "prefer not to answer" to skip any questions that you do not want to answer. Once you have completed the questionnaire, you can choose the "submit" button at the end of the questionnaire to submit your responses. If you decide to be in this study, you can change your mind and stop being in the study by closing your browser and not choosing to submit your questionnaire responses.

Completion and submission of this questionnaire means your consent to participate.

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A copy of the participant information letter that you received through email is included below.

Attachment: Participant Information Letter_Delphi Survey.pdf (322.8 kB)

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Save & Return Later

Delphi Questionnaire #2

1. Components from Delphi Questionnaire #1

The following components are those from Delphi Questionnaire #1 for which consensus was not achieved. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's body measurements and selecting "7" would indicate that you think it is extremely important to measure Métis children's body measurements.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	Body measurements (e.g., birth weight, body mass index) * must provide value	○	○	○	○	○	○	○	○	○
b.	Feeding behaviours (e.g., breastfeeding, bottle feeding, eating solid foods) * must provide value	○	○	○	○	○	○	○	○	○
c.	Homework behaviours * must provide value	○	○	○	○	○	○	○	○	○
d.	Household characteristics (e.g., number of siblings, number of parents/caregivers living at home) * must provide value	○	○	○	○	○	○	○	○	○
e.	Knowledge of Indigenous languages * must provide value	○	○	○	○	○	○	○	○	○
f.	Identity of friends (e.g., Indigenous) * must provide value	○	○	○	○	○	○	○	○	○
g.	Parent/caregiver perceptions of child(ren)'s friends * must provide value	○	○	○	○	○	○	○	○	○
h.	School performance * must provide value	○	○	○	○	○	○	○	○	○
i.	Screen time * must provide value	○	○	○	○	○	○	○	○	○

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Delphi Questionnaire #2

2. Additional Components: Mind and Emotions

The following components are from responses to the question "Please share any additional components of well-being that you feel are important to Métis children aged 10 years or younger." These components predominately relate to children's emotional and mental health and well-being. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's emotional intelligence and selecting "7" would indicate that you think it is extremely important to measure Métis children's emotional intelligence.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	**Emotional intelligence (e.g., ability to recognize emotions, ability to regulate emotions)** * must provide value	○	○	○	○	○	○	○	○	○
b.	**Executive functioning skills (e.g., ability to plan ahead, ability to follow directions)** * must provide value	○	○	○	○	○	○	○	○	○
c.	**Feeling safe and loved unconditionally** * must provide value	○	○	○	○	○	○	○	○	○
d.	**Personality traits (e.g., temperament)** * must provide value	○	○	○	○	○	○	○	○	○
e.	**Positive attitudes about the future** * must provide value	○	○	○	○	○	○	○	○	○
f.	**Resiliency (ability to thrive in challenging circumstances)** * must provide value	○	○	○	○	○	○	○	○	○

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Delphi Questionnaire #2

3. Additional Components: Culture

The following components are from responses to the question "Please share any additional components of well-being that you feel are important to Métis children aged 10 years or younger." These components predominately relate to children's Indigenous identity and culture. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's connection to land and selecting "7" would indicate that you think it is extremely important to measure Métis children's connection to land.

	1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a. **Connection to land** * must provide value	○	○	○	○	○	○	○	○	○
b. **Connection to Indigenous community** * must provide value	○	○	○	○	○	○	○	○	○
c. **Participation in land-based practices (e.g., harvesting, on-the-land survival skills)** * must provide value	○	○	○	○	○	○	○	○	○
d. **Participation in Métis celebrations** * must provide value	○	○	○	○	○	○	○	○	○
e. **Understanding of Métis culture and history** * must provide value	○	○	○	○	○	○	○	○	○

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Delphi Questionnaire #2

4. Additional Components: Family, Kinship and Parent/Caregiver Characteristics

The following components are from responses to the question "Please share any additional components of well-being that you feel are important to Métis children aged 10 years or younger." These components predominately relate to children's family and kinship interactions and home environments. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure the consideration of Indigenous culture and kinship in child apprehension cases involving Métis children and selecting "7" would indicate that you think it is extremely important to measure the consideration of Indigenous culture and kinship in child apprehension cases involving Métis children.

	1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a. **Consideration of Indigenous culture and kinship in child apprehension cases** * must provide value	○	○	○	○	○	○	○	○	○
b. **Family history of Children's Services involvement** * must provide value	○	○	○	○	○	○	○	○	○
c. **Parent/caregiver identification of child(ren) as Métis** * must provide value	○	○	○	○	○	○	○	○	○
d. **Parent/caregiver parenting practices (e.g., nurturing behaviours)** * must provide value	○	○	○	○	○	○	○	○	○
e. **Parent/caregiver perceptions of other cultures, ethnicities, and races** * must provide value	○	○	○	○	○	○	○	○	○
f. **Parent/caregiver perceptions of 2SLGBTQQIA+ (two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.) community** * must provide value	○	○	○	○	○	○	○	○	○
g. **Parent/caregiver resiliency (ability to thrive in challenging circumstances)** * must provide value	○	○	○	○	○	○	○	○	○

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Delphi Questionnaire #2

5. Additional Components: Community

The following components are from responses to the question "Please share any additional components of well-being that you feel are important to Métis children aged 10 years or younger." These components predominately relate to children's interactions with their broader community environments. Please indicate how important each component is when measuring the well-being of Métis children aged 10 years or younger in your opinion. For example, selecting "1" would indicate that you think it is not important to measure Métis children's access to community services and selecting "7" would indicate that you think it is extremely important to measure Métis children's access to community services.

		1 = Not important	2	3	4 = Moderately important	5	6	7 = Extremely important	Not sure	Prefer not to say
a.	**Access to community services, including inclusive 2SLGBTQQIA+ services** * must provide value	○	○	○	○	○	○	○	○	○
b.	**Medication access, including natural medicines** * must provide value	○	○	○	○	○	○	○	○	○
c.	**Exposure to other cultures, ethnicities, and races** * must provide value	○	○	○	○	○	○	○	○	○
d.	**Perceptions of other cultures, ethnicities, and races** * must provide value	○	○	○	○	○	○	○	○	○
e.	**Perceptions of 2SLGBTQQIA+ community** * must provide value	○	○	○	○	○	○	○	○	○
f.	**Positive role models (e.g., Métis, 2SLGBTQQIA+)** * must provide value	○	○	○	○	○	○	○	○	○

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Delphi Questionnaire #2

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1. **Would you like to receive a copy of the community report that is created based on the results of this study?**
   - ○ Yes
   - ○ No

2. **Would you like to be contacted about participating in future MNA surveys on similar topics?**
   - ○ Yes
   - ○ No

You have reached the end of this questionnaire. To submit your responses select the "submit" button below.

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Submit

Save & Return Later

Appendix 10: Nominal group participant recruitment email

Participant Recruitment Email, Nominal Group Meeting

Subject Line: Invitation to Participate in a Research Study

Dear [Insert Participant Name],

I am a Master of Science graduate student at the University of Alberta, under the supervision of Dr. Maria-Beatriz Ospina and Dr. Nathalie Kermoal. I am emailing you to invite you to take part in a study that is part of my thesis research. This study is titled "Building Consensus on Measures of Métis Children's Social and Emotional Well-being (SEWB) in Alberta."

The objective of this study is to reach consensus among a group of Métis knowledge holders on components of well-being that are important to measure the well-being of Métis children aged 10 years or younger in Alberta. From this study, we wish to learn what components of Métis children's well-being are important to measure in your opinion. Your feedback will help us develop recommendations and surveys on measuring Métis children's well-being to be used in the future. This study is part of a larger study that aims to evaluate the well-being of Métis children in Alberta.

You are being asked to take part in this study because you work for the Métis Nation of Alberta (MNA) and are responsible for making decisions about programs and initiatives that are focused on Métis children. I received your email from [Kelsey Bradburn, the MNA Director of Children and Family Services or Reagan Bartel, the MNA Director of Health].

If you choose to take part in this study, you will be asked to participate in a nominal group meeting in June 2023. The meeting will be approximately 3 hours long. During this meeting, you will be asked to share your opinion about what components of Métis children's well-being are important to measure within the context of your work at the MNA. The meeting will be audio recorded. I have attached a PDF to this email that includes more details about this study.

If you are interested in taking part in this study, please respond to this email by [insert date]. If you have any questions, you can contact me by email at ajames@ualberta.ca or by phone at (780) 455 – 2200 ext. 433.

Thank you,
Ashton James

Appendix 11: Nominal group participant information letter and consent form

Participant Information Letter and Consent Form, Nominal Group Meeting

Title of the Study: Building Consensus on Measures of Métis Children's Social and Emotional Well-being (SEWB) in Alberta

Principal Investigator:
Ashton James
Graduate Student
School of Public Health
College of Health Sciences
University of Alberta
Edmonton, AB
(780) 455 – 2200 ext. 433
ajames@ualberta.ca

Supervisor:
Dr. Maria B. Ospina
Associate Professor
Department of Public Health Sciences
Faculty of Health Sciences
Queen's University
Kingston, ON
Adjunct Professor
School of Public Health
College of Health Sciences
University of Alberta
Edmonton, AB
(613) 533 – 6000 ext. 78152
mospina@ualberta.ca; jmb40@queensu.ca

Why am I being asked to take part in this research study?
You are being asked to take part in this research study because you work for the Métis Nation of Alberta (MNA) and are responsible for making decisions about programs and initiatives that are focused on Métis children. We received your email address from Kelsey Bradburn, the MNA Director of Children and Family Services or Reagan Bartel, the MNA Director of Health.

What is the reason for doing this study?
We want to improve the ways that Métis children's well-being is measured in program evaluations and research studies. From this study, we wish to learn what components of Métis children's well-being are important to measure in your opinion. Your feedback will help us develop

recommendations and surveys on measuring Métis children's well-being to be used in the future. This study is part of Ashton James' Master of Science thesis research.

What will I be asked to do?
You will be asked to participate in a nominal group meeting. The meeting will take place on Zoom or in-person at the MNA Provincial Office in Edmonton, Alberta and will be approximately 3 hours long. During this meeting, you will be asked to share your opinion about what components of Métis children's well-being are important to measure in the context of your work at the MNA in group discussions and an anonymous poll. If you choose to take part in this study, you do not have to answer any questions that you do not want to answer. The meeting will be audio recorded.

What are the risks and discomforts?
We will be sharing the name of the MNA in the study results. We will not share your name, but it is possible that others may make assumptions about who was in this study based on their knowledge of who works for the MNA. It is not possible to know all of the risks that may happen in a study, but the researchers have taken all reasonable safeguards to minimize any known risks to a study participant. It is possible that some questions may cause distress for some people. If you feel distressed as a result of your participation in this study, you can contact the following for support:

- MNA Wellness Program: 1-844-729-0261
- Hope for Wellness Helpline: 1-855-242-3310
- Mental Health Helpline: 1-877-303-2642
- Provincial 211
- Health Link: 811

What are the benefits to me?
You are not expected to directly benefit from taking part in this study. The results of this study may help the MNA and others measure Métis children's well-being in meaningful ways in the future.

Do I have to take part in this study?
Being in this study is your choice. If you decide to be in this study, you can change your mind and stop being in the study at any time. If you choose to be in this study, you do not have to answer any questions that you do not want to answer. Following completion of the meeting, we will email you a copy of your individual responses to the discussion questions. You will have two weeks to ask to change or remove any of your responses. Due to the anonymous nature of participation in the poll, you will not be able to change your responses to the poll once submitted. Your decision to take part in this study will in no way affect your employment at the MNA. If you are a citizen of the MNA, your decision will in no way affect the programs or services that you have access to.

Will I be paid to be in this study?

Will I be paid to be in this study?
You will receive a $50 honorarium for taking part in this study. If you choose to stop taking part in this study, you will still receive this honorarium.

Will my information be kept private?
An audio recording and transcript of the nominal group meeting, and a copy of the anonymous poll results, will be stored in a password-protected file on a password-protected, encrypted server at the MNA and will only be accessible to the research team.

Results will be published in a pooled (aggregate) format in Ashton James' thesis and may also be used in community and academic presentations and publications. Your answers to open-ended questions may be used word-for-word when sharing the results from this study, but your name will not be shared with the quotes.

During this study we will do everything we can to make sure that all information you share is kept private; however, we cannot guarantee that other participants will do the same. No information relating to this study that includes your name or email address will be shared outside of the research team. Sometimes, by law, we may have to release your information with your name so we cannot guarantee absolute privacy, but we will make every legal effort to make sure that your information is kept private. During research studies, it is important that the information we get is accurate. For this reason, your information may be looked at by people from the Research Ethics Board.

After the study is done, we will still need to securely store your data that was collected as part of this study. At the end of the study, any data related to your name will be destroyed. Other study data will be stored at the MNA Provincial Office in Edmonton, Alberta for 5 years on an encrypted hard drive, in a locked filing cabinet.

What if I have questions?
If you have any questions about the research now or later, please contact Ashton James at ajames@ualberta.ca or 780-455-2200 ext. 433.

If you have any questions regarding your rights as a research participant, you may contact the University of Alberta Research Ethics Office at reoffice@ualberta.ca or 780-492-2615 and quote Ethics ID Pro00128206. This office is independent of the study investigators.

This study is being sponsored by the Canadian Institutes of Health Research (CIHR). The Principal Investigator is getting money from the study sponsor to cover the costs of doing this study. You are entitled to request any details concerning this compensation from the Principal Investigator.

How do I indicate my agreement to be in this study?
By signing below, you understand:

- That you have read the above information and have had anything that you do not understand explained to you to your satisfaction.
- That you will be taking part in a research study.
- That you may freely leave the research study at any time.
- That you do not waive your legal rights by being in the study.
- That the legal and professional obligations of the investigators and involved institutions are not changed by your taking part in this study.
- That you agree to the data being stored as outlined in this information letter.

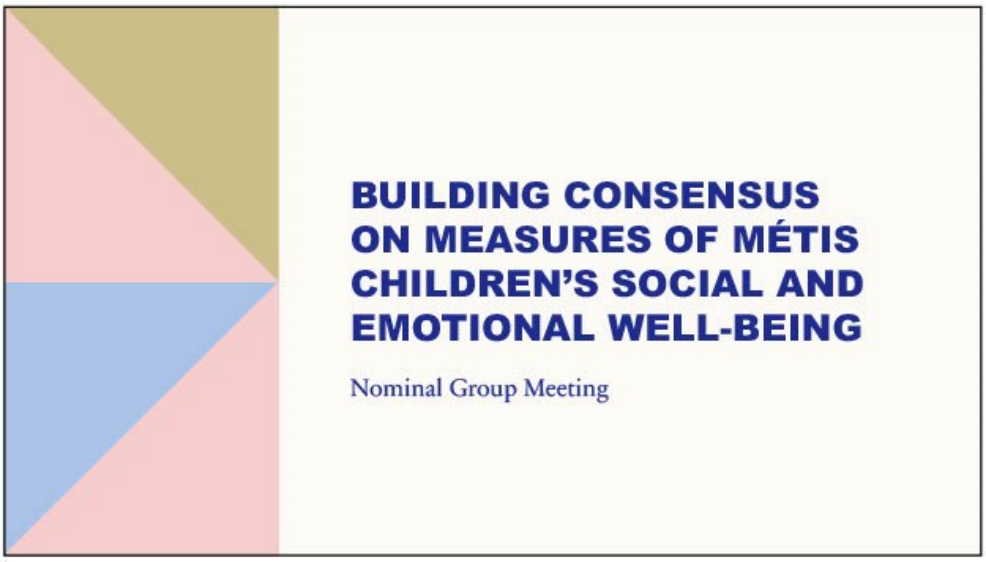
SIGNATURE OF STUDY PARTICIPANT:

_____
Name of Participant

_____ _____
Signature of Participant **Date**

Please keep a copy of this information letter and consent form for your records.

Appendix 12: Nominal group meeting presentation



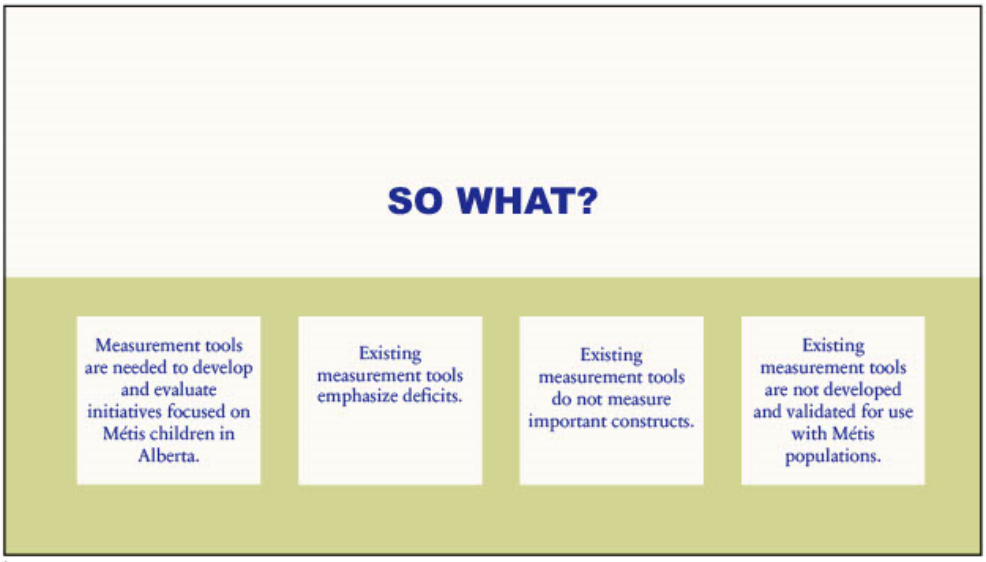
INTRODUCTIONS

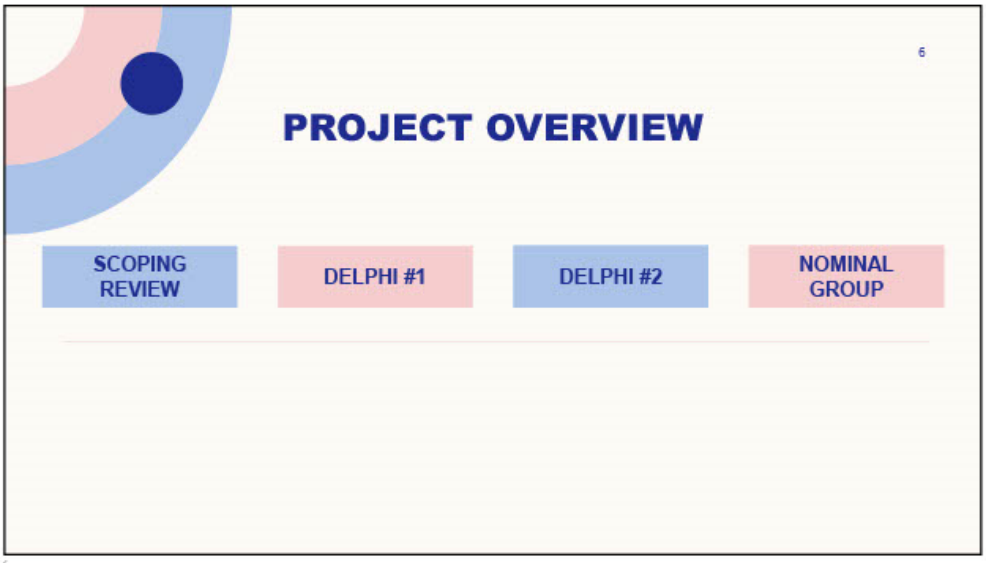
3

"Social and emotional well-being is a multidimensional concept of health that includes mental health, but that also encompasses other domains of health and well-being such as connection to land or 'country', culture, spirituality, ancestry, family, and community."

Gee et al., 2004 in "Working Together: Aboriginal and Torres Strait Islander mental health and well-being principles and practice"

4


SO WHAT?
Measurement tools are needed to develop and evaluate initiatives focused on Métis children in Alberta.
Existing measurement tools emphasize deficits.
Existing measurement tools do not measure important constructs.
Existing measurement tools are not developed and validated for use with Métis populations.


6
PROJECT OVERVIEW
SCOPING REVIEW
DELPHI #1
DELPHI #2
NOMINAL GROUP

SCOPING REVIEW

The aim of this scoping review was to identify, describe, and consolidate measures that were developed to assess the social and emotional well-being of Indigenous children in Australia, Canada, New Zealand, and the United States.

PROJECT OVERVIEW

SCOPING REVIEW	DELPHI #1	DELPHI #2	NOMINAL GROUP

- 30 documents
- 34 measures
- 66 constructs

DELPHI SURVEY

The aim of the two-round modified online Delphi survey was to build consensus among a group of "experts" on constructs that are important to the social and emotional well-being of Métis children aged 10 years or younger.

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DELPHI SURVEY PARTICIPANTS

- 12 parents and caregivers of Métis children aged 10 years or younger
- 12 organizational representatives and decision-makers with expertise on Métis children's well-being

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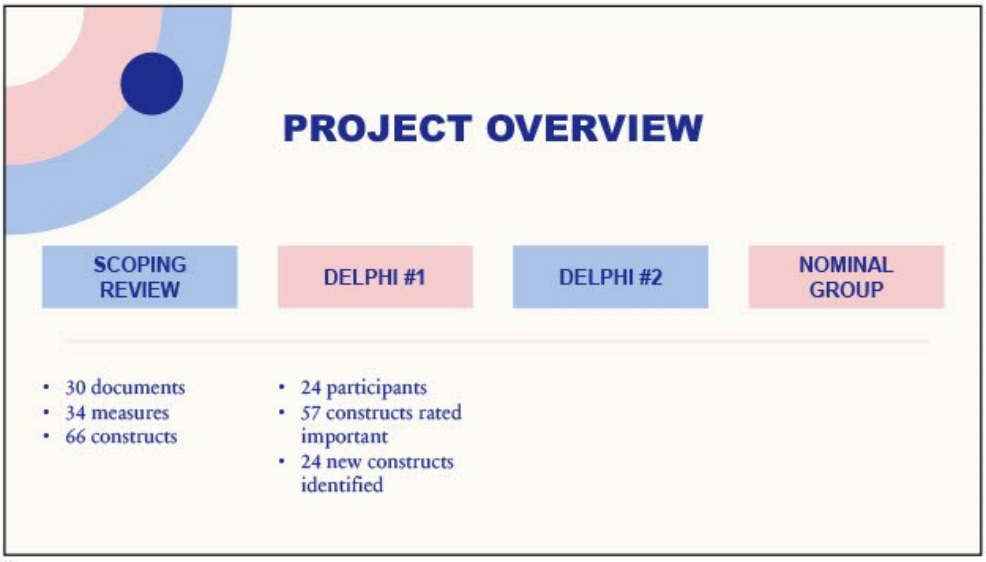
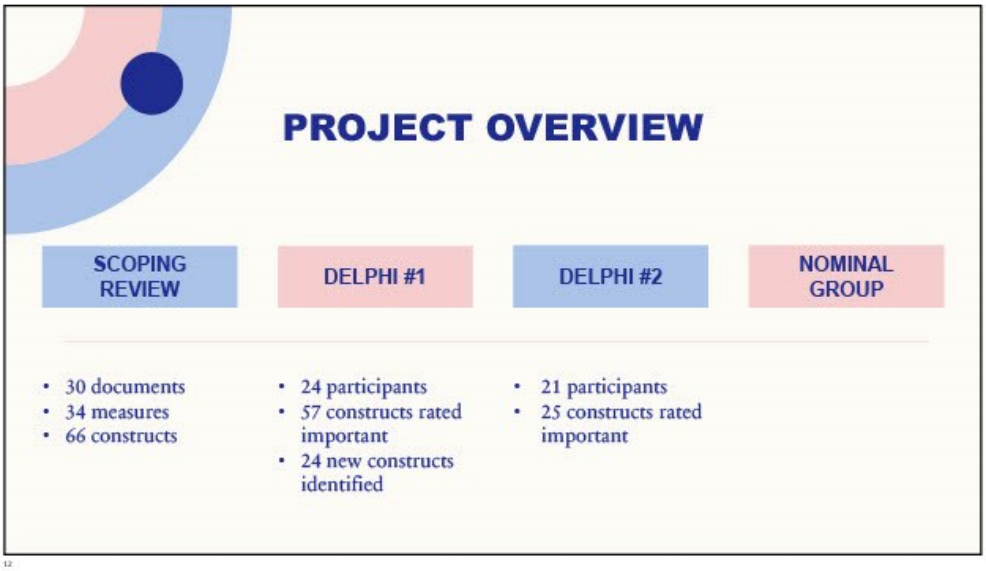

PROJECT OVERVIEW
SCOPING REVIEW
DELPHI #1
DELPHI #2
NOMINAL GROUP
• 30 documents
• 34 measures
• 66 constructs
• 24 participants
• 57 constructs rated important
• 24 new constructs identified

11


PROJECT OVERVIEW
SCOPING REVIEW
DELPHI #1
DELPHI #2
NOMINAL GROUP
• 30 documents
• 34 measures
• 66 constructs
• 24 participants
• 57 constructs rated important
• 24 new constructs identified
• 21 participants
• 25 constructs rated important

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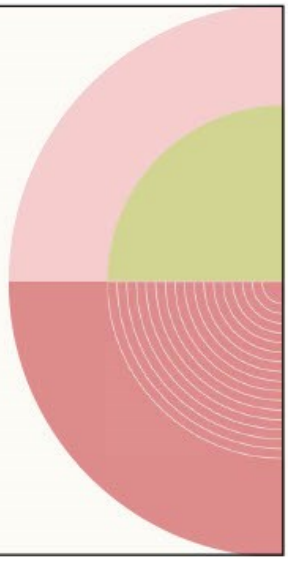
NOW WHAT?

The aim of the nominal group meeting is to identify constructs that are not only important to the social and emotional well-being of Métis children aged 10 years or younger, but that are also relevant to measuring the social and emotional well-being of Métis children within the context of the MNA.



13

REFLECTION QUESTIONS

What constructs align well with the work you do?

What constructs align well with your department's current programs and initiatives?

What constructs align well with your department's future visions?

14

MIND AND EMOTIONS

Construct	Median rating
Coping strategies	7
Emotional intelligence (e.g., ability to recognize emotions)	7
Feeling safe and loved unconditionally	7
Positive attitudes about the future	7
Reasons for living	7
Relationships with others	7
Resiliency (ability to thrive in challenging circumstances)	7
Sources of support	7
Stressful life experiences	7
Executive functioning skills (e.g., ability to plan ahead, ability to follow directions)	6
Goals for the future*	6
Personality traits (e.g., temperament)	6

REFLECTION QUESTIONS

In what ways, if any, did the results align with your expectations?

In what ways, if any, did the results surprise you?

REFLECTION QUESTIONS

What constructs align well with the work you do?

What constructs align well with your department's current programs and initiatives?

What constructs align well with your department's future visions?

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PHYSICAL BODY

Construct	Median rating
Access to food	7
Developmental milestones (e.g., toilet training)	7
Injuries requiring medical attention (e.g., broken bones)	7
Physical activity	7
Physical health concerns (e.g., chronic conditions)	7
Dental hygiene (e.g., teeth brushing)	6
Sleeping behaviours	6
Types of foods and beverages consumed, including traditional foods	6

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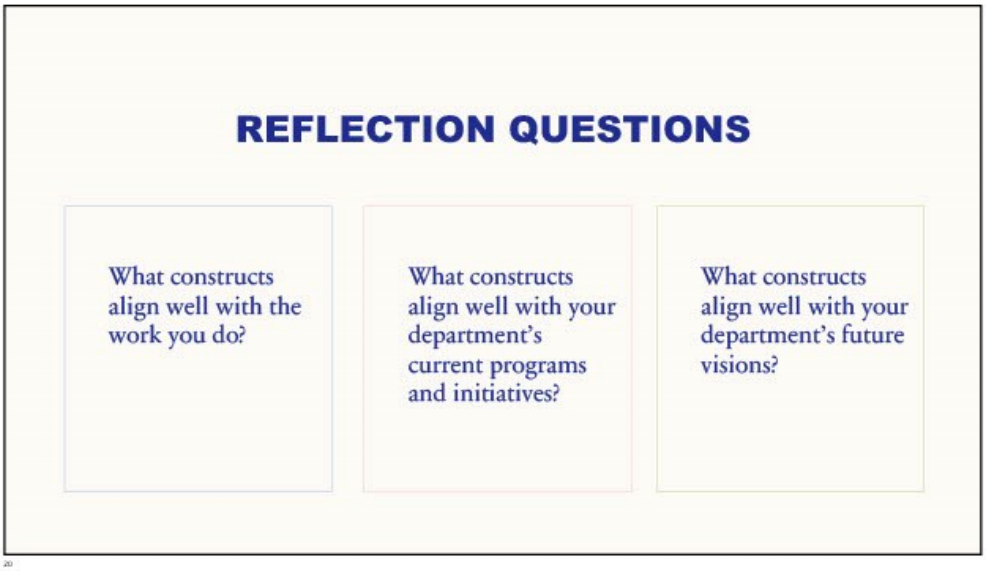
REFLECTION QUESTIONS
In what ways, if any, did the results align with your expectations?
In what ways, if any, did the results surprise you?

19


REFLECTION QUESTIONS
What constructs align well with the work you do?
What constructs align well with your department's current programs and initiatives?
What constructs align well with your department's future visions?

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CULTURE

Construct	Median rating
Awareness of the connections between individual well-being and the well-being of family, community, and the environment	7
Connection to Indigenous community	7
Connection to Indigenous identity	7
Holistic health and well-being, including emotional, mental, physical, and spiritual health and well-being	7
Participation in cultural practices	7
Participation in land-based practices (e.g., harvesting, on-the-land survival skills)	7
Participation in Métis celebrations	7
Support to understand Indigenous culture and history	7
Understanding of Métis culture and history	7
Exposure to Indigenous languages	6.5
Connection to land	6
Participation in spiritual practices	6
Perceptions of historical loss (e.g., loss of land)	6

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REFLECTION QUESTIONS

In what ways, if any, did the results align with your expectations?

In what ways, if any, did the results surprise you?

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REFLECTION QUESTIONS

What constructs align well with the work you do?

What constructs align well with your department's current programs and initiatives?

What constructs align well with your department's future visions?

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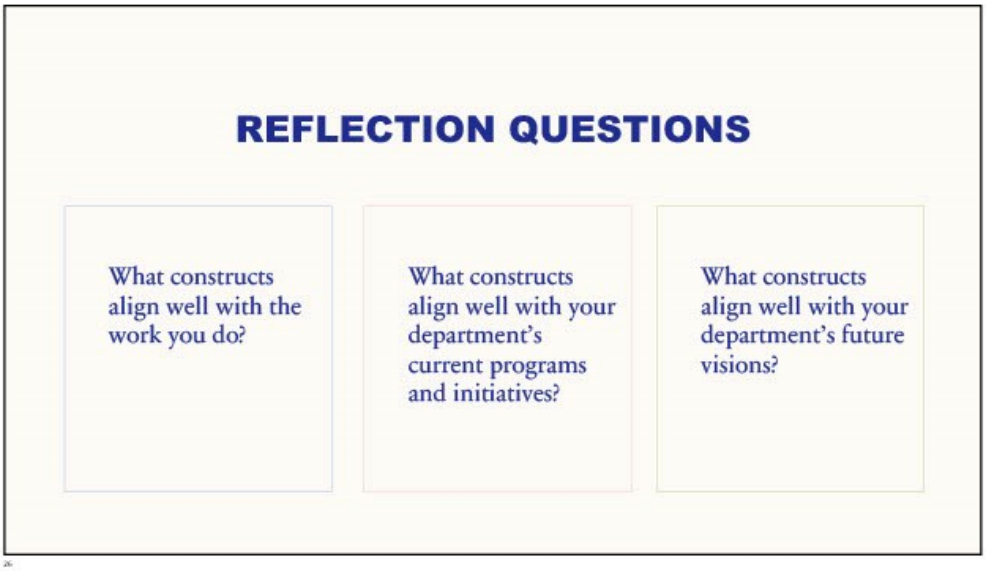
FAMILY AND KINSHIP

Construct	Median rating
Consideration of Indigenous culture and kinship in child apprehension cases	7
Family history of Children's Services involvement	7
History of family separation because of the Residential School System or Sixties Scoop	7
History of child apprehension (child being removed from the care of their parent/caregiver)	7
Involvement of extended family in caregiving	7
Participation in activities with family members or kinship	7
Perceptions of family and kinship interactions (e.g., spending time together)	7
Relationships with parents/caregivers	7

24

REFLECTION QUESTIONS
In what ways, if any, did the results align with your expectations?
In what ways, if any, did the results surprise you?


REFLECTION QUESTIONS
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What constructs align well with your department's current programs and initiatives?
What constructs align well with your department's future visions?

PARENTS AND CAREGIVERS

Construct	Median rating
Parent/caregiver access to parenting advice and support	7
Parent/caregiver connection to Indigenous identity	7
Parent/caregiver coping strategies	7
Parent/caregiver life satisfaction	7
Parent/caregiver identification of children as Métis	7
Parent/caregiver parenting practices (e.g., nurturing behaviours)	7
Parent/caregiver physical activity	7
Parent/caregiver physical health	7
Parent/caregiver relationships with others	7
Parent/caregiver resiliency (ability to thrive in challenging circumstances)	7
Parent/caregiver substance use	7
Family demographic characteristics (e.g., employment)	6
Financial security	6
Parent/caregiver experiences of discrimination and racism*	6

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REFLECTION QUESTIONS

In what ways, if any, did the results align with your expectations?

In what ways, if any, did the results surprise you?

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REFLECTION QUESTIONS

What constructs align well with the work you do?

What constructs align well with your department's current programs and initiatives?

What constructs align well with your department's future visions?

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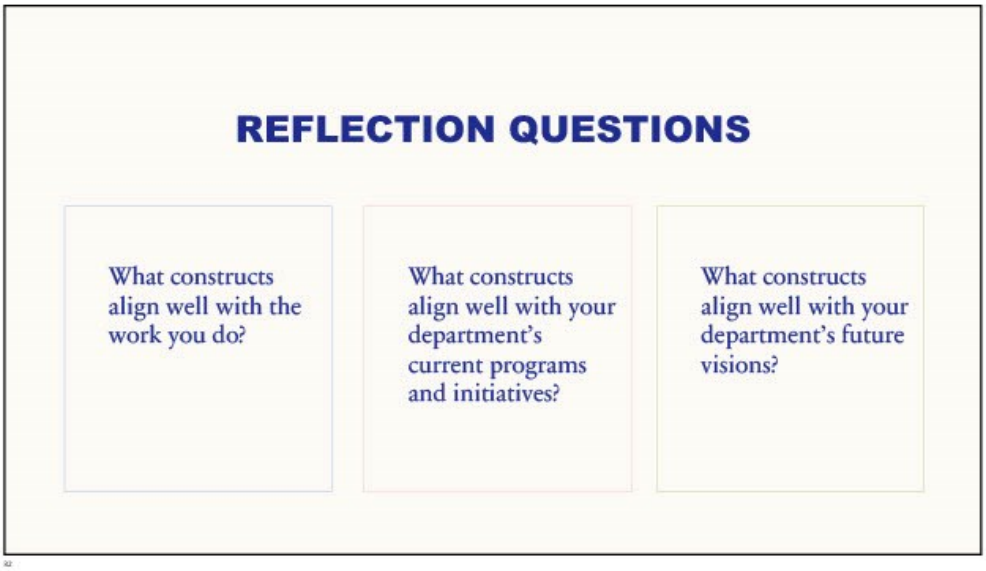
PARENTS AND CAREGIVERS, CONT'D.

Construct	Median rating
Parent/caregiver perceptions of child(ren)'s quality of life	7
Parent/caregiver perceptions of family and kinship interactions (e.g., spending time together)	7
Parent/caregiver perceptions of the importance of cultural practices	7
Parent/caregiver confidence in their parenting	6
Parent/caregiver perceptions of child(ren)'s friends	6
Parent/caregiver perceptions of other cultures, ethnicities, and races	6
Parent/caregiver perceptions of the importance of knowing Indigenous languages	6
Parent/caregiver perceptions of 2SLGBTQQIA+ (two-spirit, lesbian, gay, bisexual, transgender, queer, questioning, intersex, asexual, etc.) community	6

30

REFLECTION QUESTIONS
In what ways, if any, did the results align with your expectations?
In what ways, if any, did the results surprise you?


REFLECTION QUESTIONS
What constructs align well with the work you do?
What constructs align well with your department's current programs and initiatives?
What constructs align well with your department's future visions?

COMMUNITY

Construct	Median rating
Access to community services, including inclusive 2SLGBTQQIA+ services	7
Bullying	7
Community safety	7
Perceptions of other cultures, ethnicities, and races	7
Positive role models (e.g., Métis, 2SLGBTQQIA+)	7
Perceptions of opportunities in the community (e.g., things to do for fun)	6.5
Exposure to other cultures, ethnicities, and races	6
Participation in out-of-school activities	6
Perceptions of 2SLGBTQQIA+ community	6

REFLECTION QUESTIONS

In what ways, if any, did the results align with your expectations?

In what ways, if any, did the results surprise you?

REFLECTION QUESTIONS

What constructs align well with the work you do?

What constructs align well with your department's current programs and initiatives?

What constructs align well with your department's future visions?

COMMUNITY, CONT'D.

Construct	Median rating
Childcare access	7
Childcare cost	7
Expression of Indigenous identity at school	7
Medication access, including natural medicines	7
School characteristics (e.g., bilingual, urban)	7
School engagement	6.5
Medication use, including traditional medicines	6.5
Contact with healthcare professionals, including traditional healers	6
Contact with healthcare settings (e.g., hospitals)	6
School attendance	6

REFLECTION QUESTIONS

In what ways, if any, did the results align with your expectations?

In what ways, if any, did the results surprise you?

MAARSII, THANK YOU!

Ashton James
ajames@ualberta.ca