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Article abstract

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Methods: A community-based participatory research approach was utilized, which included a research advisory composed to employees from the organization that was partnered with. Both interviews and focus groups were held with members of the communities within the Robinson Superior Treaty Area, and the content of these was examined to determine indicators of wellbeing for children in these communities. The indicators that arose from this analysis made up the pilot version of the measure, which was administered to the parents or caregivers of children (n = 91) who were seen through the intake service for the organization. They were also administered the Child and Adolescent Needs and Strengths measure (Lyons et al., 1999).

Results: A principal components analysis was performed, which yielded three factors: (1) General Wellbeing, (2) Traditional Activities, and (3) Social Engagement.

Discussion: Involvement in traditional activities and engagement in culture were cited as fundamental indicators of wellbeing of First Nations children, which is consistent with the majority of the literature. The instrument that was created and evaluated represents one of few valid tools available to assess this.

Implications: The measure and process of creating this measure contributes to the literature on the significance of traditional activities for the wellbeing of Indigenous people.

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Abstract

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Methods: A community-based participatory research approach was utilized, which included a research advisory composed to employees from the organization that was partnered with. Both interviews and focus groups were held with members of the communities within the Robinson Superior Treaty Area, and the content of these was examined to determine indicators of wellbeing for children in these communities. The indicators that arose from this analysis made up the pilot version of the measure, which was administered to the parents or caregivers of children ($n = 91$) who were seen through the intake service for the organization. They were also administered the Child and Adolescent Needs and Strengths measure (Lyons et al., 1999).

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Keywords: Wellbeing, Indigenous, resilience, traditional activities, culture.

Introduction

Wellbeing is an important consideration when addressing the health of all persons, including children. In an attempt to improve health status, clinicians may utilize empirically-validated measures to determine both current indicators of wellbeing and also evaluate the success of any intervention. When working with Indigenous children, this pursuit is complicated by two factors: the differences in Indigenous definitions of wellbeing (as compared to Western definitions), and the focus of measures of the wellbeing of children on family dynamics or outcomes in adolescence (as opposed to current functioning; Amerijckx & Humblet, 2014; Ben-Arieh, 2007). Further, few researchers have examined the unique factors that contribute to the wellbeing of Indigenous children from the perspective of Indigenous peoples. Given these gaps in the literature and current measurement tools, our team set out to create a tool to measure the wellbeing of children in the Robinson-Superior Treaty District that was grounded in Indigenous knowledge and created in partnership with those who serve this population.

Conceptualizations of Wellbeing in First Nations Communities

While acknowledging diversity amongst Indigenous cultures, many promote a worldview that belonging or connectedness, cleansing, balance, empowerment, and discipline can improve mental health (CIHI, 2009). Belonging or connectedness refers to relations with family, culture, nature, the land, and spirits, while cleansing often refers to the healthy expression of emotions (CIHI, 2009). Balance can be exemplified by the medicine wheel structure and the harmony of the mental, physical, emotional, and spiritual dimensions of oneself (Adelson, 2005; CIHI, 2009; King et al., 2009; Reading & Wien, 2013). Within this understanding, health and illness do not only relate to biological functioning, but reflect the stability and coordination (or lack thereof) of the physical, emotional, mental, and spiritual aspects of oneself. In this conceptualization, one domain of health cannot be separated from another (Vukic et al., 2011). For example, the Anishinabek term "mno bmaadis", and the Cree term "miyupimaatisiiun", both roughly translate to "being alive well", but serve to represent the construct of health (Adelson, 1998; King et al., 2009). The Obijway term "aakozi" has been translated into English as 'sick,' but better understood as "out of balance" (Burgess, 2006; Fortier & Norrgard, 2002). Additionally, a person can experience "aakozi" within the individual physical, emotional, mental, and spiritual domains (Burgess, 2006; Fortier & Norrgard, 2002). As a result of these broader definitions, many Indigenous theories of wellness do not fit into a Western framework (Adelson, 2005).

Due to these differences, it is possible that objective indicators of wellbeing for majority culture (i.e., mainstream Canadian culture) do not accurately measure the wellbeing of Indigenous peoples in Canada, including those used in psychological assessments (Kant et al., 2014; Le Grande et al., 2017; Mushquash & Bova, 2007). Problematic language and inherent cultural biases in items are also issues (McShane & Hastings, 2004). Even "culture-free" tests often have components that require some understanding of the culture in which they were created, and were also created in Western constructions of mental health.

The Measurement of the Wellbeing of Indigenous Children in Canada

To date, there has been little research done in the measurement of Indigenous child wellbeing in Canada. Specifically, Jongen et al. (2019) conducted a review of measures of resilience in Indigenous youth used in Canada, Australia, New Zealand, and the United States, and found that only 5 of the 20 included measures evaluated cultural resilience.

One study was completed with children from Wikwemikong First Nation in Southern Ontario that resulted in The Aboriginal Children's Health and Well-Being Measure (ACHWM; Young et al., 2013). The authors of the original measure have published two additional studies using the ACHWM to refine the measure and improve use (Wabano et al., 2019; Young et al., 2017). Although not purported to be a measure of wellbeing or mental health, the Cultural Connectedness Scale (CCS; Snowshoe et al., 2015) is of measure of First Nations youths' identification with their culture. The authors suggest that the CCS is useful for research and as a tool, in order to link positive health outcomes to cultural identity for First Nations youth (Snowshoe et al., 2015).

Taken together, it is evident that measuring the wellbeing of Indigenous children is challenging. Tools validated for use with Western populations do not fully capture the construct of wellbeing for Indigenous populations and there are few measures created specifically for use with Indigenous children. Further, context-specific discrepancies may also render these tools less helpful when used with populations outside of the original sample. Therefore, it was determined that a measure created specifically for the measurement of wellbeing of First Nations children in the Robinson-Superior Treaty Area, in Ontario, Canada, was needed. This was accomplished through two studies with

unique objectives. The goal of Study I was to gather data from general community members and key informants regarding First Nations' definitions of child wellbeing; the purpose of this data collection was to inform item development for the measure. The goal of Study II was to utilize the indicators of wellbeing established through Study I to create a measure of wellbeing with this population, as well as validate this measure.

Method

Reflexivity

We are a large research team composed of both Indigenous and non-Indigenous individuals, including clinicians, faculty members, and administrators. All authors had some degree of involvement with the partner organization prior to the commencement of this project; this involvement ranged from student placements to full-time employment.

Study I

The qualitative data was collected in a manner that respected the preferences of the communities and individuals involved. The approach of the research team truly embodied the spirit of community-based participatory research (CBPR). This approach is recommended by the First Nations Information Governance Centre, which drafted the principles of Ownership, Control, Access, and Possession (OCAP™). The hallmarks of CBPR are the prioritization of community preferences, community control, and the dissemination to relevant parties (Drawson et al., 2017). Research ethics board approval was also obtained from the main institution associated with the project.

A set of 11 open-ended questions were developed for use in both the focus group with the general community and one-on-one interviews with key informants. These informants were often identified by the community contact people, and often considered to have some expertise or wisdom regarding children. Five additional open-ended questions were developed for use in only the one-on-one interviews.

Participants. Fifteen participants completed a one-on-one interview and, one focus group with 24 participants was facilitated. Across all participants, seven First Nations were represented.

Data collection. A qualitative approach was used during the interviews and focus group. All audio was recorded and transcribed from the interviews, with the exception of the focus group, since all participants did not consent to this. Both researchers also took process notes during data collection. The interviews and focus group were conducted in English (interpreters were offered, but not necessary) in a community setting, according to community norms and customs. A second set of meetings with interviewees and focus group participants was held, at a later date, to review results and verify themes that emerged in the data analysis. No changes to the data were made following these additional meetings and the results related to indicators of wellbeing were verified by the participants.

Qualitative analysis. To ensure that the tool accurately reflected the participants' contributions, the most inductive approach possible was chosen. A combined approach of thematic analysis and grounded theory was selected to analyze the qualitative data. Grounded theory would necessitate that the researchers were free of preconceptions about the wellbeing of the Anishinabek children in the Robinson-Superior Treaty Area (Charmaz, 2014). As the researchers are heavily immersed in both clinical work and research with Indigenous peoples in Canada (including Anishinabek people in the Robinson-Superior Treaty Area), this was not possible.

The inherent flexibility, the opportunity to explore overarching patterns/themes, and the atheoretical nature of thematic analysis made it appropriate for the current project (Braun & Clarke, 2014). Further, the goal of this analysis was not to develop a comprehensive theory or framework based on the data, but to create items for the measurement tool based on the themes. The approach outlined by Clarke and Braun (2014) was utilized and has six steps: (1) familiarizing yourself with the data and identifying items of potential interest; (2) generating initial codes; (3) searching for themes; (4) reviewing potential themes; (5) defining and naming themes; and (6) producing the report.

Study II

Generating items. Based on the themes from Study I, a pilot version of the First Nations Children's Wellbeing Measure to assess the mental wellbeing of First Nations children was created.

Participants. From March 2017 to October 2017, mental health intake workers at the partner organization administered the First Nations Children's Wellbeing Measure to the parents or caregivers of 91 children (ages 4 through 18) who were referred for mental health services. Prior to administration, the workers read aloud a script to children's parents or caregivers and verbal consent was obtained. If the child referred for service was 16 years or older, they were able to consent independently. These 91 children formed the convenience sample for the quantitative analysis.

The sample was nearly evenly split between genders (50.5% male), while the average age of the sample was 9.7 years (*SD* = 6.42). The vast majority of the sample identified as First Nations; one child was identified as Caucasian.

Results

Scale Development

Indicators of wellbeing were derived from focus groups and interviews: Traditional Activities (*n* = 45), Physical Activity *(n* = 18), Expression/Communication (*n* = 17), Social Engagement (*n* = 17), Self-Worth/Value/Esteem (*n* = 16), Positive Role Models (*n* = 12), Healthy Appearance (*n* = 11), History and Culture (*n* = 11), Mental Health as All-Encompassing (*n* = 11), Support (*n* = 11), Healthy Home Environment (*n* = 11), Structure and Routine (*n* = 10), Connection (*n* = 9), Spirituality (*n* = 9), Coping Skills (*n* = 8), Smiling/Laughing (*n* = 7), Safety (*n* = 6), Healthy Community (*n* = 3), Stability (*n* = 3), Well-Behaved (*n* = 3), Cooperative (*n* =2), Creativity (*n* = 2), Positive Outlook (*n* = 2), Purpose (*n* = 2), Responsibility (*n* = 2), Following Values (*n* = 1), Helpful (*n* = 1), Independence (*n* = 1), Insight (*n* = 1), and Thinking Through Consequences (*n* = 1). Based on the indicators that emerged in analysis and expertise of the research team, the focus of items was limited to 11 themes, which are conceptualized as domains of wellbeing: Traditional Activities; Physical Activity; Expression and Communication; Social Engagement; Self-Worth and Self-Esteem; Positive Role Models; Healthy Appearance; History and Culture; Structure and Routine; Spirituality; and Coping Skills.

Traditional activities. Many of the participants focused on the importance of traditional activities, and cultural ways of being and doing across all facets of a child's life:

> *It's a traditional aspect, so when I see a child who is able to, say, go to a pow-wow and dance, whether you have regalia or not, there's a reason why you're doing that. Also, they're connected and they have respect for the Creator. They're thankful for what they have, whether it be, you know, having dinner with your family or, um… like, they're humble, also having respect for your animals and, um, the trees, those kind of things.*

This code was broken down further into several sub-codes: Teachings (sub-codes Balance and the Seven Grandfather Teachings), Ceremony, Crafts, and Land-based Activities.

Teachings. Participants described teachings as an all-encompassing philosophy and way of life, as opposed to a simple practice. One participant stated that through instruction in teachings and traditional activities, the children of the community are "learning who they are as Anishinaabe kids".

Another participant spoke about how teachings are often not transferred from parents to children:

> *Sometimes our basic principles of life aren't taught on a day-to-day basis when you're living in crisis, because it's more important to… to wonder what we're going to eat today, because that's the sad reality is that we don't all have food in our cupboards on a day-to-day basis.*

Balance. The medicine wheel and the balance of the physical, mental, emotional, and spiritual domains of oneself was often brought up by participants:

> *We've done this with our kids where we've printed out blank medicine wheels. OK, how does your wheel look? If… if one of your wheels is… there's not a lot into it that… we look at it like a flat tire where you're stuck in the mud, and it may not feel like a big deal but it is; because if we're unbalanced, physically, mentally, emotionally, spiritually, we… we… we'll always be stuck until your… your circle is balanced, and that circle needs to go all the time, because every stage of our life we're learning something and we're not meant to stay idle.*

Seven Grandfather Teachings. Participants noted that the Seven Grandfather Teachings are utilized to ensure that children learn skills necessary for success in life: "Well, there are… our Seven Teachings says it all. Um, that's the ones that I… I use when teaching my kids life skills".

Respect. One participant highlighted that, "I think respect is the big one". Another also discussed not only respect for others, but respect for the self:

> *Um, respect is a big one, but it's not only, um, for other people. I think more importantly it's for yourself, and they need to… they need to know that how important they are and they need to… I guess they need to feel respected, um, in order to give that respect to other people.*

Humility. The importance of humility was emphasized as a key factor in maintaining relationships:

> *You know, those values right there I think should be embodied by… by everyone. You know, to me, I… when I think of the Seven Grandfather Teachings, I just… I think it's like kind of a set of values of how to treat other people; you know, by having that humility.*

Ceremony. This theme was viewed by participants as essential in the facilitation of personal growth: "And to go out and then do that ceremony and for them to receive their name, and… and then that's their foundation. That's their foundation that's going to build them into these strong men and women".

Ceremony was also noted in relation to the connection it provides to both culture and other community members:

> *For me, a healthy child is a child who is following their rites of passage. That… that's going to keep them balanced. Don't skip the important things. Teach their… teach their mothers the importance of keeping that placenta and doing that welcoming ceremony, like what… to be right in your family, but… and it's beautiful. When you see that baby being passed around from individual to say, you know what, I will be there when you want this drum, I… I will teach you your language. And going around, because that's the old ways and… and also remind us that it's not just mom and dad's role to look after this child, it's the community's role and it's the family role. And if mom and dad know that, it… it's easier to ask for help, right…?*

Crafts. Participants spoke about traditional crafts as a simple activity to teach children about their culture and also maintain cultural ways of being and doing: "… So we're trying to get people to come out and share that… with the younger kids because otherwise that's how things get lost… So we'll do that."

Land-based activities. Participants were able to explain that participating in land-based activities is not an important cultural practice, but also vital for wellbeing:

> *I mean, I find if you're outside, you feel better; you're… you know, there's less stress, there's… I think the bush is a great healing tool, but, uh, there's… you can always go out and find something new and learn something new, and… and that's, uh… it's a place to be, um, open and honest and free and it's a safe place…*

They also reported that children are able to succeed when they are connected to the land: "We always know that our children work best when they're… when we bring them into the bush. There's something about the land or there's something about the water, and they don't have enough of that".

Physical activity. Physical activity, and often organized sports, was frequently discussed by participants: "Sports in my community is a big one is sports, very, uh, competitive, um, right from baseball, hockey."

Expression and communication. Participants noted that children who can express and communicate their thoughts and feelings, particularly to adults, were considered to be well:

> *That child who can cry; that child that can tell you, you hurt my feelings; that child that said I don't like when you yell at me; that child that says I had a really good day today. To have that emotional vocabulary and to be able to communicate… yeah, and to speak of it, right, or to say I think I need… again, like I think I need to smudge; or, Mom, I think I need tea; Mom, can you make me some cedar tea because I'm struggling right now? That's an emotionally healthy child.*

Social engagement. Participants explained that, "If you have someone very outgoing and smiling and happy and positive, they're in balance", referring to the coordination of the four domains of physical, mental, emotional, and spiritual wellness. They also spoke of social engagement as a simple method to a child's wellness:

If they're out there, um, laughing and they're having a good time, you definitely know they're healthy. Uh, and yet kids that sit back and don't want to be involved and just don't have the energy, I guess, to do anything, then you know there's a problem, for sure.

While comfort level in social situations differs from child to child, one that is socially engaged is considered to be emotionally healthy and well:

They tend to be a little bit more outgoing or interactive or… or, um, some kids are naturally shy and that's… there's nothing wrong with that; but, um, I find kids that are not as emotionally healthy are… are more shy or they're introverted, they… you know, they don't want to be noticed, they don't want to… they don't want to be involved so…

Self-worth and self-esteem. Participants explained that a child is well if "he's just going out to play and he carries that confidence, that… and he's not worried about what the rest of the world is going to think", and if they are "comfortable [with] who they are". This behaviour is indicative of a sense of self-worth and self-esteem.

Positive role models. According to participants, children in their communities learn traditional activities through their positive role models (e.g., parents, grandparents, teachers, extended family members, elders):

It could be parent… parents, whether it's their parents, their grandparents or role models, um, through different things; through school, they learn that at school; they learn that at church; they learn that at pow-wows. There's always like pow-wows, there's always little teachings. Uh, stuff is taught… is taught like that through school. Um, I know for us, we do youth programming, and, uh, the youth programming is done in, uh, my community as well, so you learn from there. You learn from the elders and the traditional resource people.

Additionally, a broader definition of family (including positive role models) was also connected to the transmission of cultural values:

Um, it is important to have values, and you learn the values from your family. Um, I would say are, um… a lot of families learn their values from their teachers, right, or… or their family members, extended, um, the elders in the community; they will teach the kids, you know, respect and, um… it all comes from their traditional teachings.

Healthy appearance. Participants also noted that observers are able to determine a child's wellness by their appearance: "They have energy. You can tell by their skin, their hair, their teeth, just their physical appearance, um, and they're not tired". This construct appears to be related to not only self-care and hygiene, but also demeanor: "A healthy child would be one that… that would wake up and smile, be happy, sing, um, skip, no worries in the world, um, bright complexion, um, nice shiny teeth, um, just being how that… that at that age is supposed to be…"

History and culture. Participants' described children as being well when they engaged with their First Nations culture as a lifestyle as opposed to a standalone practice:

Um, it's one thing to learn your traditional ways, but it's… it's another to be able to incorporate it into everything that you do. If you're going to incorporate it into everything you do, you have to live it every single day and it's a huge, huge commitment.

Structure and routine. Participants described structure and routine, which provides a foundation for good habits to grow from, as an essential aspect of a child's wellness:

I think structure has a lot to do with it. If you don't have those structures, it's like any… anything you look at, if… if you don't have a good foundation, everything else will just not be there. It'll be crooked or it'll be unstable or some way or another. Like if… if you build a house or you build a car or anything that you build, it's got to have a good foundation.

Participants also noted that providing structure is often challenging for caregivers in their community because "a lot of families live in…day-to-day crisis is… is a norm for them…so …they don't understand personal boundaries".

This lack of structure also impacts a child's capacity to engage with their community and learn important values:

In my community, like… like they just run free like pretty much. There's no structure, right? So there's no real teaching of volunteer and what it means and, uh… and things like that, because I mean basically these kids are raising themselves... Just like I said, again, structure… structural-wise, right, taking care of yourself, uh, being home on a… at a reasonable time, and like there's nothing there.

Spirituality. When participants spoke about spirituality, they did not refer to a specific belief system, but rather the "sense or that understanding that there is something greater than oneself". This was contrasted with statements regarding specific practices, including those around First Nations beliefs.

Coping skills. Participants identified that children who are "able to handle some sort of crisis on their own and do it independently" are well. When a child is well they are also able to "learn that your… the sad and the losses that you do encounter are… are out there, right? But now you got to find the tools to overcome those… those, uh, losses and… and take the positives from them".

Quantitative Analysis

Suggestions from two senior graduate students with expertise in Indigenous mental health and two mental health workers were utilized to generate the next version of the questionnaire in which 29 items were retained. This version was used in the principal components analysis. All skewness statistics were within the acceptable range. One item was identified as being high in kurtosis. This item was regarding the child's ability to dress themselves; as all children in the sample were above the age of 6, and dressing oneself is an age-appropriate skill, this kurtosis was expected.

A principal components analysis was conducted to determine the underlying structure of the pilot measure. The dataset featured a ratio of 3:1 participants to items, and was therefore determined to be suitable for principal components analysis according to recommendations by Norman and Streiner (2008). The Kaiser-Meyer-Olkin and Bartlett's Test of Sphericity values were acceptable (Pallant, 2013). Five components with eigenvalues greater than one were detected, but following examination of the scree plot, it became evident that a three-factor model was most appropriate. Prior to running additional analyses, one item that did not load onto any of the three factors was removed from analyses. A total of 58.8% of variance was accounted for by the three-factor solution, with each factor contributing 39.9%, 12.4%, and 6.5%, respectively (see Table 1).

Table 1. Factor Loadings of the Principal Components Analysis

Factor 1	Factor 2	Factor 3
2. Respects themselves 3. Respects others in the community 5. Is truthful 6. Shows humility 7. Congratulates and celebrates others' successes 8. Does what is right, despite consequences 9. Shows love for friends/family/caregivers 12. Thinks carefully before acting 14. Keeps promises that they make 22. Expresses/vocalizes/communicates their feelings and needs (to caregivers) 23. Refrains from saying or doing things that will upset others 39. Takes care of themselves (physically; e.g., brushes teeth, bathes, dresses themselves) 25. Listens when being talked to 50. Has healthy coping skills to manage emotions 51. Identifies emotions that they are experiencing	1. Abides by/has experience with/has instruction in/has mentorship in the seven grandfather teachings 15. Attends traditional ceremonies and activities (ex. smudging, sweat lodges) 34. Knows what community they are from 35 Knows their spirit name or clan 43. Demonstrates an understanding of their First Nations history and culture 44. Explores their First Nations culture and history 45. Understands, speaks, or is interested their First Nations language 49. Demonstrates spirituality	33. Has pride in who they are 38. Has positive adult role models 17. Likes being on the land 18. Participates in physical activity, through formal or informal means (ex. playing in an organized sports league or playing outdoors) 27. Plays appropriately with friends the same age (cousins, at school, in the community)

Scale statistics. Scale statistics for each of the three factors were also examined using the threshold of .700 suggested by Nunnally (1978). For Factor 1 (General Wellbeing), internal consistency was very high (Cronbach's alpha = .950). Inter-item correlations between items were generally satisfactory, however 12 of the correlations were above the acceptable range (.25 to .65), ranging from .653 to .776. Upon further investigation, the majority of these correlations were quite close to the top end of the acceptable range (i.e., within .10 of .65). Removal of items with high inter-item

correlations did not improve Cronbach's alpha for the scale, therefore these items remain on the scale. The internal consistency of Factor 2 (Traditional Activities) was also high (Cronbach's alpha = .884) and included five inter-item correlations to be above the acceptable range. Results showed that Cronbach's alpha could be slightly improved (by .02) with the removal of one item ("Knows what community they are from"). Based on inspection of the inter-item correlations and corrected item-total correlation for this item (which yielded acceptable results), and the subtle differences that this item may detect compared to similar items, such as "Knows their spirit name or clan" or "Demonstrates an understanding of their First Nations history and culture", the decision was made to retain the item. Internal consistency was adequate (Cronbach's alpha = .762) and inter-item correlations for Factor 3 (Social Engagement) were acceptable, with the exception of the correlation between the items "Likes being on the land" and "Has positive adult role models" being slightly low (r = .234). Examination of the corrected item-total correlations yielded acceptable results for all items and it was determined that the removal of any item would not improve internal consistency, therefore all items were kept on the scale. The three factors derived from these analyses were related to General Wellbeing (Factor 1), Traditional Activities (Factor 2), and Social Engagement (Factor 3).

Factor 1 (General Wellbeing). Factor 1 has been designated as the General Wellbeing factor. The largest number of items (15) loaded onto this factor. As the majority of items that were developed from a Western lens and Western understanding of wellbeing loaded onto Factor 1, the research team anticipated that this factor would be highly correlated with all subscales of the Child and Adolescent Needs and Strengths measure (CANS; with the exception of the Family/Caregiver Needs subscale; Lyons et al., 1999).

Factor 2 (Traditional Activities). A total of eight items related to spirituality and First Nations tradition and culture from the First Nations Children's Wellbeing Measure (FNCWM) loaded onto Factor 2, which was subsequently labelled Traditional Activities.

Factor 3 (Social Engagement). Five items loaded onto Factor 3. Upon examination of the items, this scale was labeled Social Engagement; items related to physical activity, positive adult role models, and pride.

Convergent validity. The CANS (Lyons et al., 1999) was chosen to establish convergent validity of the new measure due to its psychometric properties (Anderson et al., 2003; Lyons et al., 1999). It has also been validated for use across cultures (including Indigenous Canadian cultures) and with children residing in rural communities (Kowatch, 2017; Moore & Walton, 2013). All six subscales of the CANS were utilized: Mental Health Needs; Risk Behaviours; Family/Caregiver Needs and Strengths; Functioning; Care Intensity and Organization; and Individual Strengths. The correlations for Factors 1 (General Wellbeing) and 3 (Social Engagement) were significant (at both $p < .05$ and $p < .01$ levels) and negative (with a range of r = -.224 to r = -.552), demonstrating that children with greater identified needs (according to the CANS) were also likely to have lower wellbeing scores (on the FNCWM). The relationship between the Individual Strengths subscale of the CANS (which is reversed-coded) and Factor 2 (Traditional Activities) was negative, as predicted. This indicated that a child who was more engaged in traditional activities and culture also possessed more strengths (both related to culture and not). The correlation between the CANS Functioning subscale and Factor 2 was negative, and trending towards significance (p = .081). The other CANS subscales (Mental Health, Risk Behaviours, Family/Caregiver Needs and Strengths, and Care Intensity) were not correlated with Factor 2. This lack of relationships may be due to many factors, including the wide range of disorders (including disorders understood to be more organic [e.g., psychosis] and those that can be highly influenced by environmental factors [e.g., anxiety or depression]) evaluated by the Mental Health subscale, and the infrequent endorsement of the Risk Behaviours subscale (leading to a floor effect). Further, the CANS Family/Caregiver Needs and Care Intensity subscales were not related to Factor 2, because a child's participation in traditional activities likely has little impact on their parents' abilities to care for them. Overall, the use of the FNCWM in the assessment of the wellbeing of First Nations children in the Robinson-Superior Treaty Area is supported by the convergent validity results.

Discussion

The present study created a measure of mental wellbeing for First Nations children, by first identifying indicators of wellness using a community-based participatory research approach. We generated items derived from indicators obtained through community interviews, utilized principal components analysis to create three scales, and assessed the convergent validity of this measure with a previous established measure of needs and strengths (CANS; Lyons et al., 1999). The most commonly identified indicator of wellness for First Nations children was related to

engagement in traditional activities. Among the 216 wellness coded responses provided by participants, 22% of indicators ($n = 45$) related traditional activities.

The inclusion of traditional activities within a measure of children's mental wellbeing is a unique contribution to previous research of Indigenous wellness, resilience, and mental health. Within these bodies of literature, traditional activities have been described as very important to the wellbeing of Indigenous children and adults, however, this study represents one of few attempts to psychometrically measure engagement in these activities. Although there are many other measures of children's strengths, areas of needs, and wellness available to date, few have been designed using a community-based participatory approach, grounded using a inductive scale developmental process that was guided by a research advisory. Although Factor 1 (General Wellbeing) and Factor 3 (Social Engagement) of the FNCWM included many items similar to existing measures of child wellbeing, the major contribution of the FNCWM to the field relates to Factor 2 (Traditional Activities). Such processes may improve the cultural representativeness of the measure for First Nations children and may increase the utility of it, particularly compared to other measures available at this time.

This study is a preliminary attempt to identify how specific facets of engagement in traditional activities can affect the wellbeing of Indigenous children, and thus can potentially broaden present day conceptualizations of resilience among Indigenous children and families. By creating the FNCWM, we have proposed a preliminary framework of traditional activities that communities have identified contribute to mental wellbeing, but ultimately, may also be used as a measure to identify protective factors in promoting overall wellness, and resilience for Indigenous children and youth. Facets of this scale have aligned with cultural conceptualizations of children and youth resilience, including having a positive cultural identity, and connectedness to family, culture, and land. For example, Bombay et al. (2010) found that pride related to First Nations identity was a protective factor against the effect that perceived discrimination has on depressive symptoms in adults. In their systematic review, Young et al. (2017) found that in 78% of included studies, Indigenous children with high self-esteem and/or identified with their own culture experienced better mental health outcomes and were more resilient. Therefore, the FNCWM item "Has pride in who they are" has important implications for health and wellbeing for Indigenous peoples. These facets of the FNCWM align closely with existing Indigenous-specific measures of resilience (Jongen et al., 2019), however also uniquely captures experiences related to mental wellbeing for First Nations children. The specialization of this tool can help inform how specific aspects of the medicine wheel (physical, mental, emotional, and spiritual wellbeing), can contribute to broader definitions of resilience. In studies of both Canadian adults and children, experiences of discrimination are related to poor physical and mental health outcomes (Pascoe & Smart Richman, 2009; Siddiqi et al., 2017; Young et al., 2017). If a positive view of one's self can buffer against these experiences of racism and discrimination, then fostering a child's self-perception (across several domains) may be considered to be an effective physical and mental health intervention, and can be protective factor to Indigenous mental wellbeing and/or resilience promotion.

The current scale also used culturally-relevant conceptualizations of components previously identified within children's wellness and resilience literature. For example, one item on the FNCWM asks about any positive adult role models in the child's life, not simply parental figures. This use of this broad language reflects the importance of many community members in a child's life and the wider definition of family for many Indigenous people (Assembly of First Nations & Health Canada, 2015; McShane & Hastings, 2004). The positive adult role models reflected in the scale item "Has positive adult role models" may provide an additional source of connection to culture, thereby enhancing self-pride (referenced in item 33) and also engagement with the indicators assessed in Factor 2 (Traditional Activities). Stuart and Jose (2014) found that high family connectedness was predictive of higher wellbeing in Indigenous Māori youth, regardless of the family structure (e.g., one-parent versus two-parent families). This finding may provide clarification regarding the relevance of the item "Has positive adult role models" to the wellbeing of First Nations children. In the Stuart and Jose (2014) study, family connectedness was not only conceptualized as a source of support (as is in majority culture), but also the vehicle by which cultural knowledge and activities are shared. Dockery (2020) also found that the children of Māori parents who placed an emphasis on passing down pride regarding Indigenous identity and knowledge of family history had better developmental outcomes.

Study Limitations and Future Directions

Based on the results, further examination of the FNCWM is warranted. The measure was revised prior to and after data analysis and will now include 28 items that load on three scales: General Wellbeing, Traditional Activities, and Social Engagement. Collection and analysis of additional quantitative data using this revised measure will provide added support for implementation. Additional exploratory principal components analysis and, following that, a

confirmatory principal components analysis should be conducted with more participants. Unfortunately, the sample size of this study ($n = 91$) was not large enough to utilize this design. Reanalysis of the convergent validity correlations with a larger sample may also be important, as some of these correlations were slightly low. Considering the uniqueness of the Traditional Activities factor, evaluation of the integration of only this scale may yield interesting results. This usage is supported by the psychometric properties of the scale.

Le Grande et al. (2017) identified the dearth of measurements designed for use, specifically, with Indigenous populations as a major contributor to the lack of evidence in relation to Indigenous mental health and relevant interventions. The measure created within the current project can be utilized for both clinical purposes, but also to conduct research with the ultimate goal of closing this evidence gap. Further research can explore the clinical utility of the FNCWM by assessing usability, feasibility, and preliminary efficacy of the measure with specific First Nations and service providers. Such research can explore the utility of the measure across various contexts.

Conclusion

The findings of this study augment the existing literature regarding the wellbeing of First Nations children. Involvement in traditional activities and engagement in culture were cited as fundamental indicators of wellbeing of First Nations children, which is consistent with the majority of the literature. The instrument that was created and evaluated represents one of few valid tools available to assess this. A community-based participatory research approach was utilized throughout the entirety of the project; this included a research advisory that oversaw the project and directed the development of the measure. To ensure that the needs of the clients, families, and organization were being fully explored and met, a range of research methods were used.

Overall, the relational nature of the items differs from the measures of child wellbeing that are currently available and reflects Indigenous conceptualizations of wellbeing, as well as recommendations from the Canadian Psychological Association regarding assessment (Assembly of First Nations & Health Canada, 2015; CPA, 2018). The FNCWM can also be used to identify facets of resiliency or weaknesses that a child may be experiencing, so that treatment can be directed appropriately. Lastly, the FNCWM can be utilized in further research efforts by the organization to ensure that their programs and services are effectively meeting the needs of children, families, and communities, and address the current evidence gap with regards to the wellbeing of Indigenous people in Canada.

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Conflict of interest

The authors have no conflict of interest to disclose.

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