

## Comments on Measuring Belonging as a Service Outcome

### Abstract

*Monitoring service performance related to social inclusion requires the ability to define and measure a sense of belonging. This paper aims to inform quality improvement monitoring in intellectual and developmental disabilities (IDD) services. Specifically, it provides information on how to monitor an important personal outcome, a sense of belonging. A literature review was conducted to examine existing measures of belonging and discuss their potential to monitor belonging in users of IDD services. A SUMMON search was performed to survey articles in the peer-reviewed scientific literature using the key search term "sense of belonging" between January 1, 1997 and July 17, 2011. Each measure of a sense of belonging was assessed within a framework for good performance indicators. Eighteen articles contained unique methods or tools for measuring a sense of belonging. To ensure appropriate and actionable information is collected, each indicator must be considered in relation to the purpose and programming provided by the organization, and which domains of belonging may be affected by the services offered. Further, it is recommended that a parsimonious set of questions that target relevant domains of a sense of belonging will provide enough information to evaluate a program or service, as well as identify areas for modification to improve outcomes.*

Social inclusion is at the heart of current legislation and policies for individuals with intellectual and developmental disabilities (IDD) in Ontario and exemplified in the *Services and Supports to Promote the Social Inclusion of Persons with Developmental Disabilities Act* (2008) (Cobigo et al., 2013; Ministry of Community & Social Services, 2008). Enhanced social inclusion is also a goal of services and programs targeted at individuals with disabilities (Cobigo & Stuart, 2010; Cobigo et al., 2013; Hall, 2009; Power, 2013).

A sense of belonging is a core dimension of social inclusion (Cobigo & Stuart, 2010; Cobigo, Ouellette-Kuntz, Lysaght, & Martin, 2012), a recognized basic human need and a right for all individuals (United Nations, 2007). The United Nations Convention on the Rights of Persons with Disabilities (2006) positioned the development of a sense of belonging as an outcome of disability related policy by stating "Recognizing ... that the promotion of the full enjoyment by persons with disabilities of their human rights and fundamental freedoms and of full participation by persons with disabilities will result in their enhanced sense of belonging" (United Nations, 2007). As a consequence, improving services for persons with IDD to enhance social inclusion requires the ability to monitor sense of belonging. For this to happen, there needs to be an understanding of what belonging means and how it can be measured.

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As a first step toward understanding how to measure a sense of belonging as an outcome of programs and services aimed at improving the social inclusion of persons with IDD, a review of the literature was conducted to summarize and critique the many different ways that a sense of belonging has been conceptualized and defined (Mahar, Cobigo, & Stuart, 2013). Based on this work, a comprehensive definition of a sense of belonging is proposed: “A subjective feeling of value and respect derived from a reciprocal relationship to an external referent that is built on a foundation of shared experiences, beliefs or personal characteristics” (Mahar et al., 2013). Feelings of belonging are fluid or dynamic, and may be influenced or modified by internal and external factors such as whether or not an individual *wants* to belong to the referent group, or systemic barriers that inhibit an individual from feeling they can belong (Mahar et al., 2013).

In this paper, we focus on the practicalities of measuring a sense of belonging as a personal service outcome. This review examines ways that a sense of belonging has been measured in the peer-reviewed literature, with the goal of informing the development of personal outcome measures for quality improvement monitoring of services and supports for persons with IDD.

## Method

### Literature Search Strategy

We conducted a literature review to provide an overview of the different measures of a sense of belonging that exist, and to understand their relevance to performance measurement for IDD services. We performed a SUMMON search to survey articles from disciplines in the peer-reviewed scientific literature using the key search term “sense of belonging” between January 1, 1997 and July 17, 2011. Similar searches were performed in Embase, Medline, Scholars Portal and Academic Search Complete using the same search term. Eligible articles were restricted to those published in English.

### Study Selection and Review Process

An article was included if it reported a quantitative measure of a sense of belonging. Selected papers either (1) developed a measure

of a sense of belonging (e.g., scale or indicator development), or (2) used a measure of a sense of belonging as a variable in a quantitative analysis. A sample of measures was selected to represent multiple definitions of a sense of belonging and selection of studies continued until a variety of different measures was identified. Where possible, the original citation for the development of the measure was accessed; when the original work was not available, the citing publication was included. The first author assessed eligible articles, and the other authors re-evaluated the final list of included articles against the inclusion criteria.

### Data Extraction and Synthesis

The first author recorded a general description of each study, including the reported definition of a sense of belonging, how the definition was operationalized in the study, and how the concept was measured (e.g., number of questions and type of questions).

To understand their relevance to quality improvement monitoring in IDD services, each measure of a sense of belonging was assessed within the framework for good performance indicators suggested in *The Handbook of Practical Program Evaluation* (Poister, 2010), which recommends using the following five main indicators:

- 1) supported by a sound methodology, (i.e., demonstrated as being valid and reliable);
- 2) meaningful and understandable to service users, service providers, and decision-makers;
- 3) balanced, comprehensive, and supported by a logic model or framework;
- 4) timely and actionable, (i.e., provided useful information to strengthen performance and enhance quality); and
- 5) practical and financially sound.

Poister (2010) also recommends avoiding indicators that incentivize performing to the measure at the cost of organizational goals, which he terms “goal displacement.” However, goal displacement was not considered as it was not referenced in any of the articles we included.

## Results

### Literature Search Results and Description of Included Tools

Over 8,000 unique citations were identified in the original literature search. These studies spanned a number of disciplines (e.g., nursing and education) and topics (e.g., social inequality, mental health, immigration, and citizenship).

Eighteen articles were selected containing unique indicators for measuring a sense of belonging and were included as examples for the purpose of this narrative review (see Table 1). These articles were primarily in the field of education. Four of the studies described the development and validation of multidimensional measures of a sense of belonging, while the remainder reported using a measure of belonging for quantitative analysis. Across all articles, the majority of questions developed and implemented to measure a sense of belonging included single or multiple yes/no questions, five-point likert scale questions, and few open ended questions.

### Evaluation According to the Framework for Good Performance Indicators

#### *Supported by Sound Methodology*

Good performance indicators should be associated with transparent and operational definitions of the outcome being measured. Of the 18 tools identified, six did not provide a referent definition of a sense of belonging. A definition is required to ensure consistency of measurement over time and to benchmark “like against like” across similar programs or services. A clear definition also allows for the evaluation of the validity of an indicator, or how well the indicator captures what it was set out to measure. For example, two measures captured experiences of participation through group membership or the number of relationships formed (Chow, 2007; Faircloth & Hamm, 2005). Although, they might be relevant personal outcomes to measure, they do not reflect feelings of fitting in, which are inherent to a genuine experience of belonging (Mahar et al., 2013).

Other tools were able to capture the qualitative aspect of value and feeling of belonging by asking questions such as “I feel that I am a member of the [blank] community” (Bollen & Hoyle, 1990), “My teachers care about how I am doing” (Faircloth & Hamm, 2005), “People here note when I’m good at something,” and “Other students take my opinion seriously” (Goodenow, 1993). These questions collect information on feelings of fit, value and respect in the context of a referent. The derived indicators are likely to have stronger face validity than would an overall question such as “Do you feel that you belong?” Use of a referent clarifies what the individual is being asked to comment on, and how that individual understands and responds to the measurement of the indicator. This is particularly true when interviewing or surveying persons with cognitive impairments who might find it challenging to answer an abstract question such as “Do you feel that you belong?”

Four articles that reported on the development of a measure for a sense of belonging performed factor analysis, a statistical method for understanding how well a set of questions measures an overall construct, and in this case a sense of belonging. None of the studies discussed the reliability of their indicators in evaluating changes in a sense of belonging over time, in various contexts, and with different evaluators.

The methodological quality of existing measures of a sense of belonging is not well documented. Future research should test and validate such measures, especially when used to capture the subjective experiences of persons with IDD. Persons with IDD should be involved in the development of such measures to enhance their meaningfulness and reliability.

#### *Meaningful and Understandable*

For an indicator or measure to be meaningful and understandable, key stakeholders should be involved in the development process to ensure that it provides pertinent information and fits with the purpose of the organization or program. Additionally, piloting measures with service users to ensure the questions are clear and understandable is also recommended. If users do not have the same understanding

Table 1. Description of Different Measures Used to Capture a Sense of Belonging

<i>Study</i>	Bollen & Hoyle, 1990
<i>Definition of "Sense of Belonging"</i>	A construct of perceived cohesion, a sense of belonging comprises both cognitive and affective elements. At the cognitive level, judgements of belonging include accumulated information about experiences with the group as a whole and with other group members. At the affective level, judgements of belonging include feelings that reflect the individual's appraisal of their experiences with the group and group members.
<i>Measurement Tool</i>	Perceived Cohesion Scale.
<i>Questions</i>	I feel a sense of belonging to [blank]. I feel that I am a member of the [blank] community. I see myself as part of the [blank] community.
<i>Study</i>	Chow, 2007
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	Questionnaire: Sense of belonging measured as a dimension of adaption. Five-point likert scale for each question ranging from strongly disagree to strongly agree.
<i>Questions</i>	I am very interested in issues, events, or affairs concerning Canada/homeland; I have a strong positive feeling about being Canadian; I have a strong sense of belonging to Canada; I feel a strong attachment towards my own ethnic group; I am active in organizations or social groups that include mostly people of my own ethnic group; I find it easy to make friends with Canadians who are not of my own ethnic group; I seldom spend time with Canadians who are not of my own ethnic group.
<i>Study</i>	Faircloth & Hamm, 2005
<i>Definition of "Sense of Belonging"</i>	A student's experience of belonging includes close relationships with school social groups, individuals and activities. Consider four domains of a sense of belonging: Bonding with teachers, having a place within the network of peer relationships, extracurricular involvement and perceived ethnic-based discrimination.
<i>Measurement Tool</i>	Questionnaire developed for study. Included questions aimed at understanding student perceptions of positive relationship with peers and teachers and activities at school. Five-point likert scales ranged from strongly agree to strongly disagree or from almost never to almost always.
<i>Questions</i>	Total number of friendship nominations (number of times the student's id number appeared as a nomination of top 5 closest friends within the school). Time spent in extracurricular activities (total number of hours per week). Bonding with the teacher (e.g., items: There is a teacher I could go to if I got into trouble; My teachers care about how I am doing). Perceived discrimination based on ethnic group membership (three items related to students perceptions of how often teachers, other adults at school or students were unfair to the student based on their ethnic background).

Table 1. Description of Different Measures Used to Capture a Sense of Belonging (continued)

<i>Study</i>	Goodenow, 1993
<i>Definition of "Sense of Belonging"</i>	Believe themselves to be welcomed, valued and respected by others there or have a sense of school membership, referring to not the technical enrolment but the individual's perception that others in the school are for them and that they count in the school
<i>Measurement Tool</i>	Psychological Sense of School Membership Scale (PSSM) – an 18-item scale that requires answering using a five-point likert scale. Questions refer to the following aspects of belonging: perceived liking, acceptance, inclusion, respect and encouragement in participation.
<i>Questions</i>	Most teachers at this school are interested in me; I feel like a real part of the school; People here notice when I'm good at something; Other students in this school take my opinion seriously.
<i>Study</i>	Hagerty & Patusky, 1995
<i>Definition of "Sense of Belonging"</i>	The experience of personal involvement in a system or environment so that persons feel themselves to be an integral part of that system or environment. Two critical attributes of sense of belonging: (1) valued involvement or the experience of being valued and needed, and (2) fit, the person's perception that his or her characteristics articulate with or complement the system or environment
<i>Measurement Tool</i>	Sense of Belonging Instrument – Psychological. Aims to address valued involvement using 18-items scored on a four-point likert scale.
<i>Questions</i>	If I died tomorrow very few people would come to my funeral. I often wonder if there is any place on earth where I really fit in.
<i>Study</i>	Hill, 2009
<i>Definition of "Sense of Belonging"</i>	Measured sense of belonging as connectedness, with connectedness being defined as the interrelatedness, intertwining and interlacing of the seven dimensions forming a circle and represent the worldview of Native American Culture (Lowe & Struthers, 2001).
<i>Measurement Tool</i>	Wellness Circles, An American Indian Approach Survey Questionnaire.
<i>Questions</i>	Do you feel connected to your community and satisfied with your life?
<i>Study</i>	Inkelas et al., 2004
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	National Study of Living-Learning Programs (NSLLP).
<i>Questions</i>	I feel a sense of belonging; I feel a member of the campus community; I feel comfortable on campus; I would choose the same college over again; My college is supportive of me.

Table 1. Description of Different Measures Used to Capture a Sense of Belonging (continued)

<i>Study</i>	Itzhaky, 1995
<i>Definition of "Sense of Belonging"</i>	Community belonging operationalized as three components: identification (pride in the community); involvement (willingness to invest personal effort); and loyalty (affection for and attachment to the community).
<i>Measurement Tool</i>	A number of questions combined to represent the overall construct of community belonging. Five-point likert scales were used for each question ranging from strongly disagree to strongly agree.
<i>Questions</i>	<p>Pride in living in the community.</p> <p>Pride that the children live in the community.</p> <p>Pride in the organizations of the community.</p> <p>Willingness to invest personal effort as a member of the community.</p> <p>Affection for and attachment to the community and a wish to remain a member of the community.</p>
<i>Study</i>	Kember et al., 2001
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	Scale developed for study. Five-point likert scales used ranging from definitely agree to definitely disagree.
<i>Questions</i>	<p>I feel a sense of belonging to my classmates;</p> <p>I am able to relate to my class/tutorial group;</p> <p>I feel that I have established a relationship with my class/tutorial group;</p> <p>I feel a sense of closeness with my tutor/lecturer;</p> <p>I am able to relate to my tutor/lecturer;</p> <p>I feel that I have established a relationship with my tutor/lecturer;</p> <p>I feel a sense of belonging to my department;</p> <p>I am able to relate to my department;</p> <p>I feel that I have established a relationship with my department;</p> <p>I feel a sense of belonging to my university;</p> <p>I am able to relate to my university;</p> <p>I feel that I have established a relationship with my university.</p>
<i>Study</i>	Krause & Wulff, 2005
<i>Definition of "Sense of Belonging"</i>	Sense of belonging to a congregation is shaped by the interplay between one's history with a congregation, support received from fellow church members, current levels of church attendance, and negative interaction with fellow parishioners.
<i>Measurement Tool</i>	US Congregational Life Survey. High score meant that they felt strongly that they belong in their place of worship.
<i>Questions</i>	Do you have a strong sense of belonging in this congregation?

Table 1. Description of Different Measures Used to Capture a Sense of Belonging (continued)

<i>Study</i>	Levett-Jones et al., 2009
<i>Definition of "Sense of Belonging"</i>	A deeply person and contextually mediated experience that evolves in response to the degree to which an individual feels (1) secure, accepted, included, valued and respected by a defined group, (2) connected with or integral to the group, and (3) that their professional and/or personal values are in harmony with those of the group. The experience of belongingness may evolve passively in response to the actions of the group to which one aspires to belong and/or actively through the actions initiated by the individual.
<i>Measurement Tool</i>	Belongingness Scale - Clinical Placement Experience (BES-CPE). *Adapted from the Belongingness Scale (Somers, 1999).
<i>Questions</i>	Measured belonging specific to four environments: (1) family, (2) friends, (3) work/school and (4) neighbourhood/community. Measured feelings, cognition and behaviours of major components of belongingness: Esteem (feeling secure, included, valued and respected by others) and connectedness (feeling part of or integral to the group, being accepted and fitting in).
<i>Study</i>	Ma, 2003
<i>Definition of "Sense of Belonging"</i>	Extent to which students feel personally accepted, respected, included and supported in the school social environment (Goodenow, 1993).
<i>Measurement Tool</i>	New Brunswick School Climate Survey, developed by staff based on a theoretical schema (Willms, 1992). Used 6 items to measure the construct of sense of belonging. Response choices were YES; yes, sometimes; no, NO.
<i>Questions</i>	I feel like I belong at this school; Often I feel awkward and out of place; I feel the teacher likes me; Often I feel lonely at school; I make friends at school easily; Other children seem to like me.
<i>Study</i>	Marsiglia, Kulis, & Napoli, 2003
<i>Definition of "Sense of Belonging"</i>	The extent of personal membership, respect and support that students feel in the school (Hagborg, 1998).
<i>Measurement Tool</i>	Survey developed for study. Five-point likert scale (strongly disagree to strongly agree).
<i>Questions</i>	I really feel that I belong in this school.

Table 1. Description of Different Measures Used to Capture a Sense of Belonging (continued)

<i>Study</i>	Salomone, Richmond, Morrow, & Hoffman, 2003
<i>Definition of "Sense of Belonging"</i>	Integration into the social and academic systems associated with postsecondary institutions, reflects a student's judgement of "fit," representing perceptions on the part of the student of shared values and support in the collegiate environment (Tinto, 1975; Tinto, 1987).
<i>Measurement Tool</i>	The questionnaire was developed from focus groups with students. Part 1 contained questions regarding demographic information. Parts 2 and 3 related to "sense of belonging" and explored peer relationship (Part 2) and faculty relationships (Part 3) for a total of 88 questions on two scales. Available responses: Completely true; mostly true; equally true and untrue; mostly untrue; and completely untrue.
<i>Questions</i>	I like knowing other people in my classes; I feel alone when I'm in class; I feel that faculty members would take the time to talk to me if I needed help; I feel that a faculty member would be sympathetic if I was upset.
<i>Study</i>	Stewart et al., 2009
<i>Definition of "Sense of Belonging"</i>	Can reflect experiences of being valued and needed or of feeling that one is congruent with other people, groups or environments (Hagerty & Patusky, 1995).
<i>Measurement Tool</i>	One item on a 110-item survey, developed from the qualitative section of the research.
<i>Questions</i>	If one means that you feel left out and ten means you feel accepted in your neighbourhood, what number between one and 10 comes closest to how you feel?
<i>Study</i>	Tartakovsky, 2008
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	Scale developed to measure belonging to a country by Roccas (1997) and used five-point likert scale for all questions (Roccas, 1997).
<i>Questions</i>	Being Israeli is an important part of my self-definition; When I talk about Israelis, I say "we" and not "they"; When Israelis are criticized, I take it personally; It is important for me to think about myself as an Israeli.
<i>Study</i>	Thomas et al., 2003
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	College Student Experiences Questionnaire. Contains three questions looking at relationships with peers, faculty and staff. These are rated on Likert scales that range from seven to one. Anchors to the scale are e.g., 7: Friendly, supportive, sense of belonging to 1: Competitive, uninvolved, sense of alienation.
<i>Questions</i>	Relationships with other students; Relationships with administrative personnel and offices; Relationship with faculty members.



Table 1. Description of Different Measures Used to Capture a Sense of Belonging (continued)

<i>Study</i>	Village, 2007
<i>Definition of "Sense of Belonging"</i>	Not specified.
<i>Measurement Tool</i>	Survey developed for study.
<i>Questions</i>	Which of these statements is most true of you? I feel entirely at home in my church OR I occasionally feel out of place in my church OR I feel I don't really belong in my church.

of the indicator as the service providers, the results will not represent the potential impact (positive or negative) of the program on their sense of belonging in any meaningful way. Important information on improvements or, conversely, negative consequences of the program or service may not be identified.

The articles identified in this review were primarily from the field of education. For most studies, the measurement of a sense of belonging was specific to a referent group (e.g., a church, employer, a country, a municipality, and an academic institution), and was undertaken with questions particular to the purpose of the organizations. For example, education studies explored a student's perceived belonging to an academic institution (e.g., relevance of extra-curricular activities, academic support, etc.); or measured an individual's sense of belonging to their group of peers within the institution, to their teachers, and other support staff or mentors. A sense of belonging was measured to understand how it played a role in academic achievement and retention, and additionally to understand how culture and ethnicity may mediate those relationships. None of the reviewed papers offered measures of belonging tested with persons with IDD. Therefore, their meaningfulness to assess how persons with IDD perceive their experience of belonging is unknown.

Measurement results that were based on more than one question or scales were often analyzed and reported as an overall summary measure of belonging, usually through a mean score. While this method of presenting results is useful in statistical analysis the scores themselves are not

meaningful in the context of improving the service or program. An additional eight measures of belonging simply asked whether or not the individual felt like they belonged in general or to a referent group (yes/no) (Table 1). This method of measuring a sense of belonging would not provide detailed enough feedback to monitor program effectiveness or to help identify target areas for improvement within the organization.

In summary, it is necessary to differentiate between measures of a sense of belonging that were (1) developed to specifically meet the purpose and goals of a particular group or organization that have no meaning in IDD services, from measures that (2) may be modified to fit the specific purpose of services and programs targeting a sense of belonging, and from those that (3) attempt to measure a general or overall sense of belonging that is not rooted in a referent group. For use in a service delivery setting, an ideal measure of a sense of belonging would be tied to the service or program itself and would also be one that could be used and compared across programs. Using our definition of a sense of belonging in the context of social inclusion outcomes for IDD services, a sense of belonging is a subjective construct that may not be observed or measured without the active input and participation in measurement from service users (Cobigo et al., 2013; Mahar et al., 2013).

### *Balanced and Comprehensive*

A sense of belonging is generally not the only indicator of interest when evaluating the effectiveness of services and programs to enhance social inclusion. While an overall measure of

belonging might limit the resource and time required for data collection, analysis and reporting, it would provide limited information on possible areas of improvement. To be comprehensive and balanced, the number of indicators must be reasonable and manageable, but also investigate the multiple dimensions of a sense of belonging thought to be affected by the program or service. Measures included in this review provide relevant questions about the person's feelings of connectedness (e.g., feeling like part of a group and fitting in), and to the ability to relate to his or her referent group (e.g., "I am able to relate to my tutor/lecturer") (Kember, Lee, & Li, 2001). However, none of the measures specifically investigated the role of shared experiences or beliefs, or the internal and external pressures creating barriers to belonging in their community or organization. Situating the indicator within a wider framework of service delivery or evaluation is often recommended through either a program logic model or a conceptual framework. Five of the 18 studies explicitly provided a framework for how the measurement of a sense of belonging fit within the scope of their evaluation.

### *Timely and Actionable*

Once an indicator is determined to have good methodological foundations and provide relevant information, the performance indicator should be assessed for its ability to provide actionable information to key stakeholders. One study (Hagerty & Patusky, 1995) developed a measure of a general sense of belonging that was not measured in relation to any particular group, community or place. There are merits to an instrument that can be generalizable to many different settings or services, irrespective of clientele, purpose of the organization, or evaluation question. However, in the evaluation of a service, measuring users' sense of belonging in the context of the service under evaluation is likely to be most useful, as it would be related directly to the effectiveness of the service or program and less abstract for the user answering the questions. By asking questions about a number of different service providers and service users with whom the individual may feel a sense of belonging (teachers, administrative staff, other students), the measures used by Thomas and colleagues (2003), Kember and colleagues (2001), and Levett-Jones and

colleagues (2009) provide actionable information about a student's fit within an education institution, including clues as to where a breakdown might occur, as well as target areas to follow-up or improve service provision (Kember et al., 2001; Levett-Jones, Lathlean, Higgins, & McMillan, 2009; Thomas, Kish, Kuh, Gonyea, & Muthiah, 2003).

Actionable information also relies on indicators of inputs and processes to reach the desired personal outcome. Only one measure of a sense of belonging attempted to incorporate physical or social factors that may influence an individual's sense of belonging or an individual's perceived ability to choose to belong (or not) to a particular referent group (Faircloth & Hamm, 2005). Faircloth and Hamm (2005) specifically asked whether perceived discrimination based on ethnic group membership occurred at school, and included this component in their overall score of a sense of belonging (Faircloth & Hamm, 2005).

Although these concepts appear to be abstract, they are elements that may be modified externally by the service provider to enhance a user's sense of belonging. Depending on the population being targeted by the service, and the characteristics of the target referent group for a service or program, the impact of a service on the individual's sense of belonging will likely be mediated by different factors. For example, if the program doesn't meet the person's needs and expectations, or if the person doesn't have the choice to be involved or not, it is unlikely that this individual will feel a sense of belonging. An individual may also lose their sense of belonging, or feel powerless to belong because of political structures, supporting policies, or environmental barriers. Inclusion of indicators of inputs and processes might be useful to better understand observed outcomes.

### *Practical Considerations and Cost*

Capturing belonging ranged from a single question on how connected an individual felt to a referent, to almost 50 items on a single instrument to create an overall score of belongingness. All measures were targeted at the individuals themselves and did not make use of proxy respondents. A number of tools involved only one question, "I feel a sense of belonging

to [blank]" or included this question as one of the components of their measure. This type of measurement is practical, as it does not overburden the users of a service with many, redundant questions and it could be easily benchmarked for quality improvement purposes (e.g., target goal of 90% of users who feel a sense of belonging to the community or referent group). However, as mentioned previously, if the user answers negatively to this single question, there is no additional information to understand which domain of the individual's sense of belonging requires intervention or change on the part of the service provider, rendering the responses non-actionable.

The number of indicators in total must also be balanced to represent all outcomes of the services provided, and while a sense of belonging has many domains, targeted questions for those elements most important to clients or most likely to be changed by programs and services should be used. In IDD services, it may be more practical to use responses from other individuals such as family members or caregivers to understand a user's feelings of belonging to a group or organization. These results may be less accurate or valid than receiving feedback from the users themselves, but may be required when the person with IDD has significant cognitive and/or communication impairments. The purpose of performance indicators is to create usable, actionable data for the improvement of service delivery. If the financial or practical restraints on the measurement of performance indicators results in the collection of poor quality data, the indicators are no longer able to meet their goals of evaluating the effectiveness of a program or service. A balance between having high quality, comprehensive methods to measure all domains of a sense of belonging and the reality of financial, time and other constraints specific to the IDD services population is required in the evaluation.

### *Ontario Perspective*

In a separate report on Quality Improvement and Developmental Services, three performance indicators were created related to belonging for services and programs in Ontario supporting individuals with IDD (Cobigo et al., 2013). The authors recommended that the percentage of persons with IDD reporting feeling

of belonging to their community be a quality indicator for the delivery of services, but they further refined their measurement by suggesting questions such as "Do people at [blank] help you out when you have a problem or feel upset?" and "Do you know people at [blank] who make you feel important?" to collect important, actionable information on belonging (Cobigo et al., 2013). These questions were suggested by users of IDD services consulted through the Multidimensional Assessment of Providers and Systems (MAPS; <http://mapsresearch.ca>) advisory structure, and comprised three groups of five to eight adults with IDD (Cobigo et al., 2013). Indicators related to feelings of value and fit with the community, as well as indicators to measure the impact of service processes on feelings of connectedness from the perspectives of the individual and their families were also suggested. The collection of information on these indicators would provide data on (1) the percentage of individuals who reported feeling valued in the community; (2) the percentage of families who reported that the adult is valued in community; and (3) the percentage of individuals (and families) who report a person-directed planning process has led to more community connections. Data on these indicators could be collected through surveys or interviews with the individuals with IDD and their families. While these indicators do not cover all domains, they provide important information on the user's sense of belonging, and an actionable understanding of the role of the program or service in contributing to this important outcome.

## Conclusions

The purpose of the review was to provide an overview of existing measures of a sense of belonging used in the peer-reviewed literature, to inform the development of personal outcome indicators in quality improvement monitoring activities. A sense of belonging is a complex construct to measure as an outcome of services and programs targeted to enhance social inclusion. Measuring and understanding how a service impacts an individual's perceived fit with their target community, and the fluidity and dynamism of feeling a sense of belonging is necessary; most importantly, it is possible.

This review identified that many different methods of measuring a sense of belonging already exist and much may be learned from these efforts. However, it is important to note that this review did not provide an exhaustive list of measures of a sense of belonging. For example, no measures specific to persons with IDD were identified; it is unclear whether this reflects a weakness in the review process or in the literature. Further, the review highlighted differences in the purpose of an indicator to measure a theoretical construct for research purposes (such as an aggregate score) versus an actionable item for the evaluation of performance. This review relied entirely on the peer-review literature, which has an academic focus, rather than on the “grey” or soft literature (e.g., government reports, service evaluations), which may be more likely to include measures directed for use in the real world. Future work should investigate the extent to which the “grey” literature touches on the measurement of belonging.

To make sure appropriate, actionable information is collected, the evaluator must consider each existing measure in relation to the overall purpose of the organization or service, and which of the domains of a sense of belonging may be affected by the program or service of interest. Ideally, a parsimonious set of questions that target each of the domains of a sense of belonging will provide enough information to evaluate the performance of a program or service, as well as identify areas for modification to improve outcomes.

## Key Messages From This Article

**Persons with disabilities:** It is important that you feel you belong to groups of people who make you feel important and help you out when you have a problem or feel upset.

**Professionals:** A sense of belonging is an important personal outcome of services and programs targeted to enhance social inclusion.

**Policymakers:** Monitoring quality improvement in services for persons with intellectual and developmental disabilities requires measures of their sense of belonging. A balance of accuracy in measuring the key elements of a sense

of belonging that truly touch on the personal aspects of this subjective concept with practical and reliable methodology that is sensitive to program changes over time is required.

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