Concept Mapping to Engage Individuals With Lived Experience

An Example From Developing a Measure of Reflective Supervision in Home Visiting

Introduction

Individuals with lived experience can provide essential input on research and measure development efforts, ensuring that they are relevant, practical, and useful. This experience can be personal or professional, coming from caregivers and families or their service providers. Engaging people with lived experience may present challenges, however. Organizations often face budget and time constraints, and individuals may grapple with transportation, time off work, or childcare.

Concept mapping offers a method for engaging individuals with lived experience in research and measure development using quantitative and qualitative methods. Additionally, recent developments in concept mapping allow for virtual data collection, which helps address barriers to participation. Concept mapping can also be more time- and cost-effective than traditional qualitative data collection and analysis.

About This Brief

The [SAS-HV project](#) features a three-phase process to develop and assess a measure of reflective supervision for the home visiting context: conceptualization, operationalization, and pilot testing.

This brief illustrates the use of concept mapping to engage individuals with lived experience in the first phase, conceptualization. Potential audiences include readers who wish to enhance the applicability and usefulness of research and measure development efforts (e.g., evaluators, researchers). Individuals who support, provide, or receive reflective supervision may also benefit.

This brief describes how concept mapping was used to engage individuals with lived experience when developing a measure of reflective supervision in early childhood home visiting. This work took place as part of OPRE's Supporting and Strengthening the Home Visiting Workforce (SAS-HV)

project (see sidebar). Therefore, it involved home visitors and supervisors working directly in home visiting. Project team members (we) share how concept mapping helped us gather and organize diverse input on key elements of reflective supervision. We summarize concept mapping and its main steps before presenting selected results, lessons learned, and considerations. We also summarize themes from discussions with participating supervisors to better understand their experience participating in concept mapping activities.

Overview of Concept Mapping

Concept mapping offers a structured approach to collect, analyze, and visually organize diverse views (Anderson & Slonim, 2017; Nabitz et al., 2017; Trochim & McLinden, 2017; van Bon-Martens et al., 2017; Vaughn et al., 2017). Researchers use concept mapping to identify themes among participants (Burke et al., 2005; Trochim, 1989) and to gauge the importance of those themes across groups. In doing so, researchers craft a shared understanding of abstract concepts to inform future action (Kane & Trochim, 2007; Sparr & Ryan, 2021).

The field of early childhood home visiting has some experience with concept mapping. Super et al. (2012) tried it to understand provider views on how best to support families to prevent child abuse. The Nurse-Family Partnership home visiting model used concept mapping to develop key components of fidelity (Black et al., 2015).

Concept mapping also provides a systematic, rigorous way for gathering the perspectives of providers, families, and others to inform measure development (Rosas & Camphausen, 2007; Rosas & Ridings, 2017; Soellner et al., 2017). Concept mapping has several benefits. First, mapping activities can occur in person or virtually, enabling teams to gather multiple perspectives quickly and across locations. Thus, the method is feasible, cost-effective, and efficient for

Key Terms

Concept mapping: A structured approach for gathering and visually summarizing individual and group perspectives.

Reflective supervision: Regular collaborative reflection between a home visitor and their supervisor that builds on a home visitor's use of their thoughts, feelings, and values in their work with families.

Key elements of reflective supervision: An important part of reflective supervision that adds value or contributes to improvement in outcomes. Concept mapping participants grouped and rated key elements.

Clusters: Groups of elements.

Relational maps: Visualizations that arrange elements according to how frequently participants grouped them together and participant ratings of the importance of individual elements.
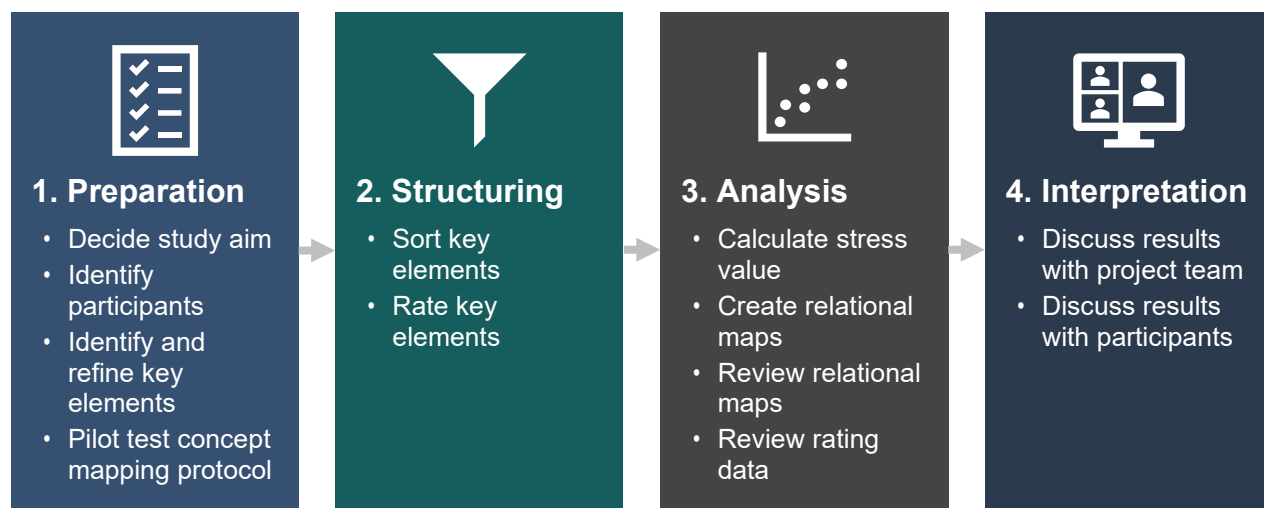
systematically collecting input from a large group of individuals who have firsthand experience with the topic of focus. Second, concept mapping analyzes and visually displays individual and group perspectives on a specific topic to provide better understanding and conceptualizations of abstract ideas or concepts with limited research. Finally, concept mapping yields a mix of both quantitative and qualitative data. This input gathering contributes to the relevance and applicability of programs, policies, or resources developed—including measures. For these reasons, we used concept mapping to incorporate provider voice into the SAS-HV measure development process.

How We Used Concept Mapping

We adapted Kane and Trochim's (2007) concept mapping process to include four steps, summarized in exhibit 1 and presented in more detail on the following pages.

Exhibit 1. Overview of SAS-HV Concept Mapping Process
Key steps include preparation, structuring, analysis, and interpretation.

1. Preparation	2. Structuring	3. Analysis	4. Interpretation
• Decide study aim • Identify participants • Identify and refine key elements • Pilot test concept mapping protocol	• Sort key elements • Rate key elements	• Calculate stress value • Create relational maps • Review relational maps • Review rating data	• Discuss results with project team • Discuss results with participants

Adapted from Kane and Trochim, 2007.

Step 1: Preparation

We completed four activities in preparation for the concept mapping process.
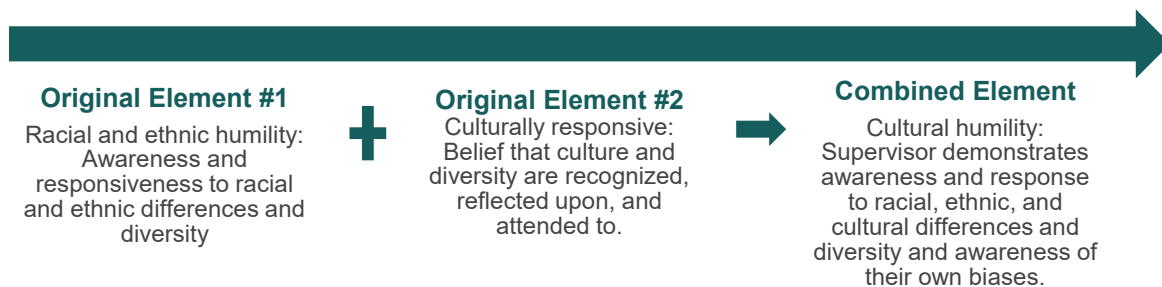
Decide study aim. We defined our aim as obtaining diverse perspectives on key elements of reflective supervision in home visiting and gauging the relative importance of each element.

Identify participants. To obtain diverse perspectives, we recruited providers (home visitors and supervisors) through an email announcement sent to the Home Visiting Applied Research

Collaborative's practice-based research network. Interested providers completed a screening questionnaire to provide information about themselves, their home visiting program, and their experience with reflective supervision. We selected a nonrandom sample of providers, focusing on representation across race, ethnicity, home visiting model, and community (e.g., tribal, nontribal communities).

Identify and refine key elements. We used a [literature and measure review](#) completed in an earlier project phase to create an initial list of key elements of reflective supervision.[1] We then sought feedback and input from a small working group of home visitors, supervisors, researchers, and model representatives to refine the list. Refinements included simplifying or clarifying language used to describe key elements, collapsing elements to avoid duplication (exhibit 2), separating elements to improve clarity and comprehension, and adding elements to better capture racial and ethnic humility and responsiveness to signs of supervisee trauma.

Exhibit 2. Example of Collapsing Elements to Avoid Duplication

Original Element #1
Racial and ethnic humility: Awareness and responsiveness to racial and ethnic differences and diversity

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Original Element #2
Culturally responsive: Belief that culture and diversity are recognized, reflected upon, and attended to.

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Combined Element
Cultural humility: Supervisor demonstrates awareness and response to racial, ethnic, and cultural differences and diversity and awareness of their own biases.

Pilot test concept mapping protocol. We invited home visiting supervisors to weigh in on revised key element descriptions and instructions for concept mapping activities. These supervisors also completed structuring tasks (described in next section) and gave feedback on their experiences and suggestions for improvement.

Step 2: Structuring

Using a web-based platform,[2] we asked providers to sort and rate 58 key elements. We also collected information on participant demographics, role (i.e., supervisor, home visitor), and home visiting model(s) implemented.

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[1] We adapted concept mapping steps to obtain input on a list of key elements identified in an earlier project phase; traditional concept mapping includes participants generating ideas in response to a prompting statement during a brainstorming step.

[2] For this project we used the web-based platform Groupwisdom to collect and analyze data. Similar relational maps can be created using statistical software such as SAS or SPSS to perform multidimensional scaling and hierarchical cluster analysis.

Sort key elements. We asked participants to sort key elements of reflective supervision into groups that made sense to them. Participants "dragged and dropped" elements into groups on their computer screens. They also named each group to describe what the elements within had in common.

Rate key elements. For each element, we asked participants to respond to the following question: "How essential is this element for reflective supervision sessions in the home visiting context?" Participants used a Likert rating scale ranging from 1 to 5, with 1 being "not essential, does not need to be part of reflective supervision sessions," 3 being "somewhat essential, should be part of at least some sessions," and 5 being "absolutely essential, should be part of almost all reflective supervision sessions."

Step 3: Analysis

We analyzed the sorting and rating data collected in the structuring task using a web-based platform. This involved four steps.

Calculate "stress" value. We calculated a stress value based on the sorting and rating data. Stress values indicate whether elements are grouped together often enough to generate maps with potential cluster solutions. A stress value indicates how well a given solution fits the data.

Create relational maps. After calculating the stress value, we prepared four types of relational maps using the web-based platform:

- *Point map*, which displayed each element as a single, numbered point; point placement varied based on how often elements were grouped together (e.g., close placement reflected frequent grouping).
- *Point rating map,* in which the point for each element was formatted (shading and height) to show its average importance rating.
- *Cluster map*, in which individual elements were grouped into clusters based on how often they were placed together; the software assigned clusters a name based on how participants labeled their own groupings.
- *Cluster rating map,* in which each cluster was formatted (shading and height) to show the average importance rating of elements within each cluster.

Review relational maps. We then examined the point map to examine elements that participants frequently grouped together. Next, we reviewed the cluster maps, which showed a series of cluster solutions based on how frequently participants grouped elements together. Through an iterative process we identified a 12-cluster solution that made the most sense conceptually based on our understanding of reflective supervision and similarities among elements within the clusters.

Review rating data. In addition to looking at groupings of elements, we examined participants' rating data. We first looked at the point rating map, which provided average ratings for individual elements to find which were rated highest and lowest. Next, we reviewed the cluster rating map, which offered average ratings for groupings of elements within each cluster. Finally, to identify potential differences in perspectives regarding which elements are most important, we compared how participants with different roles (i.e., supervisors, home visitors) rated elements.

Step 4: Interpretation

Concept mapping includes two types of interpretation: preliminary interpretation of results by an internal project team and group interpretation by those who completed the sorting and rating activities (Kane & Rosas, 2017).

Discuss results with project team. The project team held two preliminary interpretation meetings to decide on an optimal cluster solution (i.e., 12 clusters), discuss and revise software-assigned cluster names, and prepare for group interpretation meetings with participants. During the first meeting, analysts presented participant demographics, preliminary relational maps, rating data, and subgroup comparisons. We focused the second meeting on preparing for the group interpretation meetings. Topics included how to structure the meetings to elicit feedback and what materials to give participants.

Discuss results with participants. We facilitated three group interpretation meetings with 19 home visitors and supervisors who participated in concept mapping activities. In each meeting, we presented the relational maps and rating data. We also shared the proposed 12-cluster solution, including the elements within each cluster and the preliminary cluster names. We asked participants to weigh in on—

- The name of each cluster
- Whether the cluster made sense to them, based on the elements grouped within
- Whether they were surprised by any of the elements within the cluster
- Whether they saw their perspective or experience reflected in the cluster and in the relational maps more broadly
- Why and how specific clusters and elements were essential for reflective supervision in the home visiting context

For clusters with elements rated 3.5 out of 5 or less, we asked participants to share their thoughts on the rating and to reflect on why it may be viewed as "less essential." Later in the brief, we share key themes identified during group interpretation meetings.

Selected Results

In this section we share selected results from our concept mapping activities to illustrate use of this method, before summarizing lessons learned and considerations. Consistent with the aims of this brief, we focus primarily on the perspectives of providers (home visitors and supervisors).

Participant Information

Providers demonstrated interest in taking part in the measure development process. Within 2 weeks of the initial recruitment announcements, more than 100 providers completed the screening questionnaire. A total of 34 providers participated in concept mapping activities. Participants implemented the Healthy Families America, Parents as Teachers, Early Head Start Home-Based

Exhibit 3. Providers' Ethnicity, by Role

Option, Nurse Family Partnership, Baby TALK, and Nurses for Newborns models. Most participants (70 percent) identified as White, 18 percent identified as Black, and 12 percent identified as another race. Approximately 10 percent of participants identified as Hispanic or Latino (see exhibit 3).
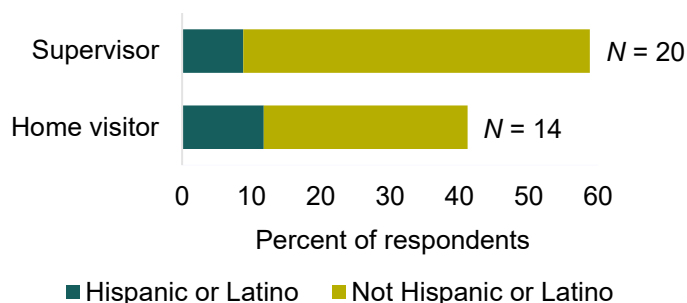
Participant Sorting and Rating of Key Elements

On average, participants sorted the 58 key elements of reflective supervision into 8 groupings (the range spanned 3 to 18 groupings). The number of elements within each group varied from as few as 1 to as many as 21. Participants also varied in how they approached the sorting activity. Some participants sorted elements according to when they might occur during a single supervision session, whereas others sorted elements by when they might occur over the course of a supervisory relationship. Still others sorted elements according to their function, such as elements that support home visitor professional development or those that promote reflection.

Most participants (71 percent) gave the following 11 elements a rating of 5—that is, they were deemed absolutely essential for almost all supervision sessions:

- Supervisor and supervisee interactions are authentic and display a sense of trust, reliability, and consistency.

- Supervisor and supervisee feel secure and protected to discuss vulnerable situations in the context of the supervisory relationship and supervision sessions.

- Supervisor and supervisee interactions are respectful and show appreciation of people, ideas, traditions, and values without judgment.

- Supervisor and supervisee interactions are compassionate and display sympathy, empathy, and concern.

- Supervisor and supervisee interactions are supportive and encouraging.

- Supervisor demonstrates awareness and respect of racial, ethnic, and cultural differences and diversity and awareness of their own biases.

- Supervisor protects against interruptions, such as turning off their phone and email, closing the door, or putting up a "do not disturb" sign.

- Supervisor is fully present, listening deeply and demonstrating full attention to the supervisee.

- Supervisor listens actively, demonstrating verbal ("uh-huh" or "go on") and nonverbal cues (nodding).

- Supervisor acknowledges and validates supervisee's emotions and feelings.

- Supervisor communicates warmth and sense of caring through tone, verbal, and nonverbal behaviors.

Relational Maps Displaying Element Groupings and Ratings[3]

As discussed earlier in this brief, we created a point rating map (see exhibit 4) to reflect how participants grouped and rated the key elements of reflective supervision. Each numbered point on the map represents an element. Elements near one another were sorted together frequently. In addition, above each point there are between 0 and 5 layered crescent shapes. More crescents indicate higher average ratings for that element.

As shown in exhibit 4, elements are grouped more densely on the right side of the map than on the left, indicating these elements were grouped together frequently by participants. Participants also rated elements on the right side of the map higher in terms of how essential they are for reflective supervision in home visiting.

We then created a cluster rating map (see exhibit 5) to display the cluster solution we selected based on participant sorting and rating data. The 12 clusters represent groups of elements found near one another on the point map because participants frequently grouped them together. The map shows preliminary cluster names based on group names created by participants during the structuring task. The map also depicts the average ratings of elements within each cluster, with more levels and darker shading indicating higher average ratings. Again, the elements and clusters displayed on the right-hand side had the highest average ratings.

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[3] Note that relational maps present data from all concept mapping participants, not just providers. Concept mapping participants also included researchers and measure developers (total of nine) with subject matter expertise in reflective supervision. Data from all participants were used to inform next steps in terms of measure revisions to address clarity. Data were also compared by participant role to better understand differences in perspectives by participant role.

Exhibit 4. Point Rating Map for Key Elements of Reflective Supervision

More crescents convey that a given element was rated more "essential," on average.

REF	RATING VALUES
1	2.85 to 3.27
2	3.27 to 3.69
3	3.69 to 4.11
4	4.11 to 4.53
5	4.53 to 4.95
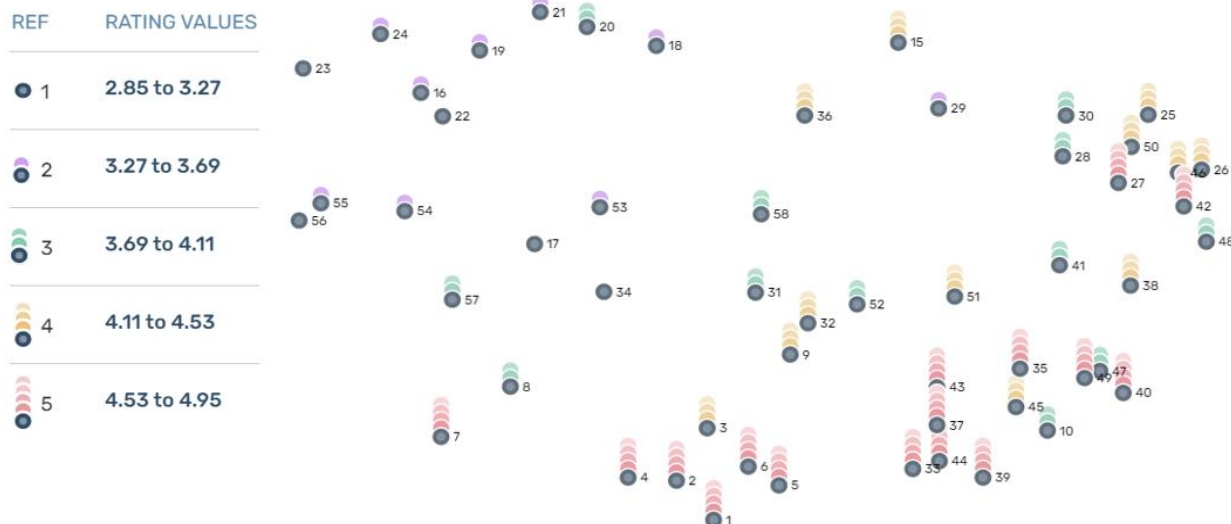
Exhibit 5. Cluster Rating Map for Key Elements of Reflective Supervision

Layers and shading convey ratings of importance for elements within clusters.

REF	VALUE
1	3.20 to 3.51
2	3.51 to 3.83
3	3.83 to 4.14
4	4.14 to 4.45
5	4.45 to 4.76
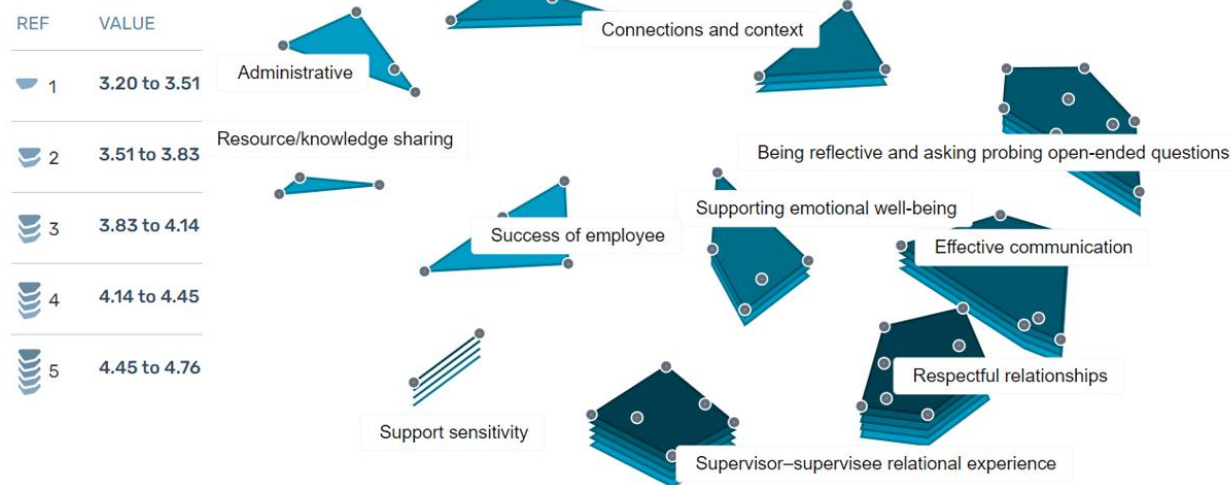
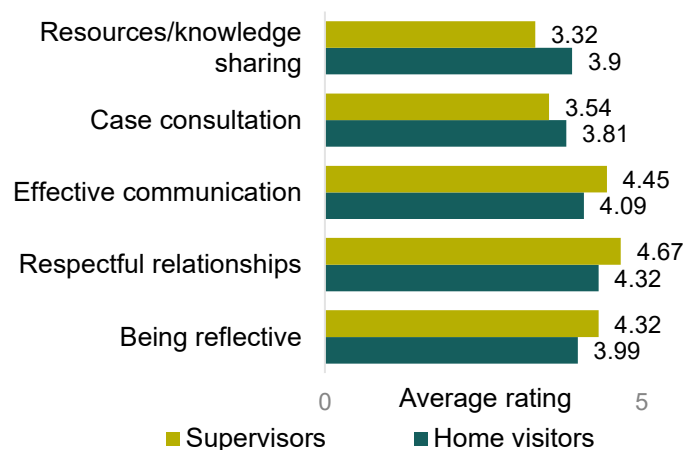The 12 clusters, in order of average ratings of elements within the cluster, included—

1. **Supervisor–supervisee relational experience:** Includes elements focused on authentic, respective, compassionate, supportive, and encouraging interactions.

2. **Respectful relationships:** Includes elements focused on supervisor following home visitor lead, acknowledging and validating home visitor, and withholding judgment.

3. **Effective communication:** Includes elements focused on supervisor active listening, providing space for the home visitor, and rephrasing to confirm understanding.

4. **Being reflective and asking probing open-ended questions:** Includes techniques supervisor uses to prompt home visitor exploration of thoughts, feelings, and observations.

5. **Support sensitivity:** Includes elements focused on supervisor awareness of racial, ethnic, and cultural differences and diversity.

6. **Supporting emotional well-being:** Includes elements focused on supervisor acknowledging and promoting exploration of home visitor mental health and well-being.

7. **Connections and context:** Includes elements focused on examining how contextual considerations impact home visitor's work with families.

8. **Case consultation:** Includes elements focused on discussing a specific family, caregiver, or child.

9. **Relationship dynamics:** Includes elements focused on discussing relationships and contextual factors influencing the nature of relationships.

10. **Success of employee:** Includes elements focused on supervisor providing information and resources to support home visitor self-care and well-being**.**

11. **Resources/knowledge sharing:** Includes elements focused on supervisor providing information and resources to support families and home visitor professional development.

12. **Administrative:** Includes elements focused on discussing administrative topics such as model and program requirements, program policies, and logistics.

Comparison of Home Visitor and Supervisor Ratings

We observed slight differences in average ratings of elements within clusters based on participants' role (exhibit 6).[4] For example, home visitors rated elements within two clusters—resources/knowledge sharing and case consultation—slightly higher than did supervisors. In contrast, supervisors rated three clusters—effective communication, respectful relationships, and being reflective—slightly higher than did home visitors.

Exhibit 6. Average Home Visitor and Supervisor Ratings of Five Example Clusters

Cluster	Supervisors	Home visitors
Resources/knowledge sharing	3.32	3.9
Case consultation	3.54	3.81
Effective communication	4.45	4.09
Respectful relationships	4.67	4.32
Being reflective	4.32	3.99

Average rating (0 to 5)
■ Supervisors ■ Home visitors

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[4] Based on general patterns of findings; we did not test for statistical differences due to the small sample size.

Group Interpretation Meetings

We held three group interpretation meetings with providers to discuss relational maps and cluster solutions. Just over half of participating providers (*n* = 19) attended one of the meetings. Across the group interpretation meetings, providers (home visitors and supervisors) generally agreed that 8 of the 12 clusters were conceptually meaningful—that is, that they could see how elements within those clusters grouped together.

Providers shared the reasons behind some of their higher and lower ratings of how essential elements were to reflective supervision. Some said they rated elements focused on relational components highly because they view relationships as the core of reflective supervision; some rated elements lower if they occur mostly at the start of a supervisory relationship or less frequently than other elements. One example of an element described as being used less frequently is "discussion of the nature and dynamics of the supervisory relationship." Providers also described why they gave one element—"discussion of the dynamics of power, privilege, and culture in relationships"—a low rating despite finding it essential. They noted that such conversations are difficult and may not happen as often as they should in reflective supervision.

Findings suggest that variations in ratings reflected different approaches and perspectives. For example, whereas some providers shared that giving or receiving resources to support families was essential in reflective supervision, others noted this was appropriate on an "as-needed" basis. Still others felt that resource-related activities were more fitting for a staff meeting or training than for reflective supervision. Providers also acknowledged the influence of organizational and personal factors on their ratings. Examples include expectations from their home visiting model, level of supervisor training or experience, and personal biases or preferences. Similarly, the individual needs of a home visitor may affect the extent to which a given element is "essential." New home visitors, for example, may need more direct teaching and concrete resources than their more experienced colleagues. Finally, providers characterized some elements as too "clinical" or "aspirational" to rate highly in the home visiting context in the absence of more training on effective use.

Perspectives of Supervisors Who Completed Concept Mapping Activities

After the group interpretation meetings, we invited all participants to take part in a separate small group meeting to share their experiences engaging in the concept mapping activities. Three supervisors volunteered. All reported a positive experience overall, reflected by the following themes and illustrative quotes.

Supervisors appreciated the opportunity to share their firsthand experiences with researchers. They were also excited to engage with other providers during group interpretation meetings. They enjoyed listening and learning from others' experiences and perspectives, particularly when it came to shared experiences.

> Engaging with others was my favorite part. It made the elements come to life. I especially liked hearing from people who had different roles or experiences from me, as that helped broaden my understanding of what supervision was and how it is administered in other organizations. (Supervisor 1)

Supervisors felt the concept mapping activities increased their awareness and understanding of key elements of reflective supervision—in turn, positively affecting their work with home visitors. Although supervisors reported feeling initially overwhelmed by the number of key elements and their distinctions, they also described the list as informative.

> I questioned whether or not I use all of these elements. It made me reflect on what kind of supervisor I am and what kind of supervision I'm providing (administrative, clinical).… I also reflected on whether or not the time spent in supervision is beneficial for the home visitor. (Supervisor 2)

> When I started as a supervisor, I focused more heavily on administrative tasks: billing, dosage, nuts and bolts of home visiting. By doing that I missed the aspects of the relationship, and I had a home visiting team that was burned out and didn't trust me, with high turnover. Rating these elements helped to shift my focus, which was really helpful. (Supervisor 3)

Lessons Learned and Considerations

We learned several lessons while conducting concept mapping activities, organized here by step. Within each step, we include considerations for others interested in using concept mapping to engage individuals with lived experience.

Preparation

We found that preparation was key to ensuring a smooth process that led to relevant, useful findings. During preparation, we identified and refined the list of elements before sorting and rating activities. We engaged in an iterative process with multiple rounds of feedback to clarify wording and reduce the number of elements. We worked to translate clinical, theoretical, and academic concepts into meaningful language for providers and to reduce the complexity and burden of concept mapping activities. Examples of decisions to reduce burden for participants include sending the list of elements to participants in advance and refining how elements were displayed in the software.

Potential considerations include the following:

Obtain input from a smaller group of individuals with lived experience to refine language and pilot test concept mapping activities. Make sure individuals have time to carefully review the language and terminology used in concept mapping activities so they are meaningful and accessible to all participants.

To reduce participant burden, plan to be flexible when implementing concept mapping activities. Consider individuals' facilitators and barriers to participation, and send items in advance of concept mapping activities, especially items that will be sorted and rated during concept mapping. Some participants may prefer to have a physical copy to manipulate before completing sorting and rating activities electronically or to refer to while completing the activities. Display items for sorting and rating in a way that is pleasing to the eye and easy to manage and thus minimizes participant burden.

Structuring

We discovered that most participants were unfamiliar with sorting a long list of complex elements. Many did not find the process intuitive. Some participants asked how they should sort the elements and how many groupings to use. Because we were interested in understanding *their* perspectives, we were hesitant to respond. We decided to provide sorting examples for unrelated topics (e.g., foods, activities). This approach provided guidance without influencing how participants sorted the elements of reflective supervision. For the rating activity, we asked participants to reflect on two dimensions of each element: the extent to which the element is deemed essential and whether it should be part of none, some, or all sessions. Using a single item to capture two dimensions minimized burden, yet we found it somewhat difficult to interpret the responses because it was difficult to tease apart the relative weight participants placed on each dimension.

Potential considerations include the following:

Provide sorting examples and demonstrations on unrelated topics. This step can help participants understand how they might sort elements for the focal topic, while reiterating the importance of gathering *their* perceptions and thoughts on similarities or differences between elements.

Use a rating statement that assesses only one dimension of each element. To facilitate interpretation of rating data, ensure that the rating statement assesses a single dimension, such as importance OR frequency of use.

Analysis

Analyzing and reviewing relational maps and cluster solutions draws on existing theory, conceptualizations, and research. This information guides preliminary decisions to be discussed during interpretation. We found it helpful to compare findings to the conceptualization of reflective supervision developed earlier in the SAS-HV project. To better understand nuances in rating data, we compared average ratings of elements and clusters by provider (i.e., home visitor, supervisor). Doing so raised new but important questions regarding why home visitors and supervisors differ in the extent to which they value specific elements. A larger sample size would have permitted us to compare ratings by additional characteristics (e.g., participant race and ethnicity, home visiting model[s] implemented).

Potential considerations include the following:

Compare sorting data to existing theories, conceptualizations, and research evidence. Concept mapping does not provide a "correct" cluster solution based on how participants group elements; rather, it generates several possible cluster solutions. Reference existing theory, conceptual understandings, and research to guide and inform discussions on which cluster solution fits best for the focal topic.

Review rating data by participant characteristics to examine differences in perspectives. Individuals with lived experience with a particular topic may have varying perspectives that are influenced by roles, demographic characteristics, and other contextual factors. To enable comparisons, identify and collect data on personal characteristics and other factors that may influence how participants rate elements. Also consider the sample sizes needed to ensure comparisons in rating data can be made between participants based on the identified characteristics.

Interpretation

We held our first group interpretation meeting and then revised our approach to increase participant sharing and focus discussion on areas with the most variation in the data. For example, we began subsequent meetings with participant reflections on completing concept mapping activities. We also focused the discussion on selected clusters and elements for which there was less agreement across participants or less alignment with our earlier conceptualization of reflective supervision.

Group interpretation meetings helped us better understand how elements are implemented in the home visiting context and how they may relate to one another. We learned that some elements that were deemed essential were not expected to be used in every session. For example, some elements might be essential to include at the beginning of a supervisory relationship, and others might be essential to include every few sessions. This insight prompted us to consider adding a

temporal dimension to our conceptual model and measure. Group interpretation meetings also helped us see how elements may be used differently in home visiting compared with other contexts. Finally, we gained insight as to why home visitors more than supervisors may prioritize certain aspects of reflective supervision.

Potential considerations include the following:

Allow sufficient time to test plans for group interpretation meetings and adjust as necessary. Build in a delay after the first meeting to implement changes intended to (1) help participants feel comfortable sharing their thoughts in a group setting and (2) prioritize content for group discussion and interpretation.

Use findings from analysis and interpretation to guide next steps and decision making. Group interpretation meetings are an opportunity to delve into the data and discover nuances that may have been missed during analysis.

Conclusion

We found concept mapping to be a feasible, cost-effective, and efficient method for systematically gathering input from a large group of providers on key elements of reflective supervision in home visiting. Using quantitative data, we were able to consider the individual perspectives of participants with different roles and backgrounds, and from different home visiting models, and then visually organize their collective views. We were also able to gather a more nuanced qualitative understanding of different perspectives through a series of group interpretation meetings. Results helped us better understand how reflective supervision is implemented in practice in the home visiting context. The results also corroborate and extend findings from our earlier literature review (about elements of reflective supervision that are deemed most essential) and inform which elements to prioritize in measure development.

Concept mapping is a systematic and rigorous process that is useful for engaging individuals with lived experience. Analysis of concept mapping data creates visualizations of group perspectives to inform conceptualizations and give insight on focal topics that are not well understood, are abstract in nature, or have limited existing research. This effort contributes to research and measure development efforts that are relevant, practical, and useful for intended beneficiaries and end users.

References

Anderson, L. A., & Slonim, A. (2017). Perspectives on the strategic uses of concept mapping to address public health challenges. *Evaluation and Program Planning, 60*, 194–201.

Black, K. J., Wenger, M. B., & O'Fallon, M. (2015). Developing a fidelity assessment instrument for nurse home visitors. *Research in Nursing & Health, 38*(3), 232–240.

Burke, J. G., O'Campo, P., Peak, G. L., Gielen, A. C., McDonnell, K. A., & Trochim, W. M. (2005). An introduction to concept mapping as a participatory public health research method. *Qualitative Health Research, 15*(10), 1392–1410.

Kane, M., & Rosas, S. (2017). *Conversations about group concept mapping: Applications, examples, and enhancements*. Sage.

Kane, M., & Trochim, W. M. (2007). *Applied social research methods series*: *Vol. 50. Concept mapping for planning and evaluation.* Sage.

Nabitz, U., van Randeraad-van der Zee, C., Kok, I., van Bon-Martens, M., & Serverens, P. (2017). An overview of concept mapping in Dutch mental health care. *Evaluation and Program Planning, 60*, 202–212.

Rosas, S. R., & Camphausen, L. C. (2007). The use of concept mapping for scale development and validation in evaluation. *Evaluation and Program Planning, 30*(2), 125–135.

Rosas, S. R., & Ridings, J. W. (2017). The use of concept mapping in measurement development and evaluation: Application and future directions. *Evaluation and Program Planning, 60*, 265–276.

Soellner, R., Lenartz, N., & Rudinger, G. (2017). Concept mapping as an approach for expert-guided model building: The example of health literacy. *Evaluation and Program Planning, 60*, 245–253.

Sparr, M., & Ryan, K. (2021). *A study design exploring virtual service delivery in home visiting*. Health Resources and Services Administration, U.S. Department of Health and Human Services.

Super, C. M., Mavridis, C., & Harkness, S. (2012). Education and training of home visitors and supervisors for child abuse prevention. *Applied Developmental Psychology*.

Trochim, W. M. (1989). An introduction to concept mapping for planning and evaluation. *Evaluation and Program Planning, 12*(1), 1–16.

Trochim, W. M., & McLinden, D. (2017). Introduction to a special issue on concept mapping. *Evaluation and Program Planning, 60*, 166–175.

van Bon-Martens, M. J., van de Goor, I. A., & van Oers, H. A. M. (2017). Concept mapping as a method to enhance evidence-based public health. *Evaluation and Program Planning, 60*, 213–228.

Vaughn, L. M., Jones, J. R., Booth, E., & Burke, J. G. (2017). Concept mapping methodology and community-engaged research: A perfect pairing. *Evaluation and Program Planning, 60*, 229–237.

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