



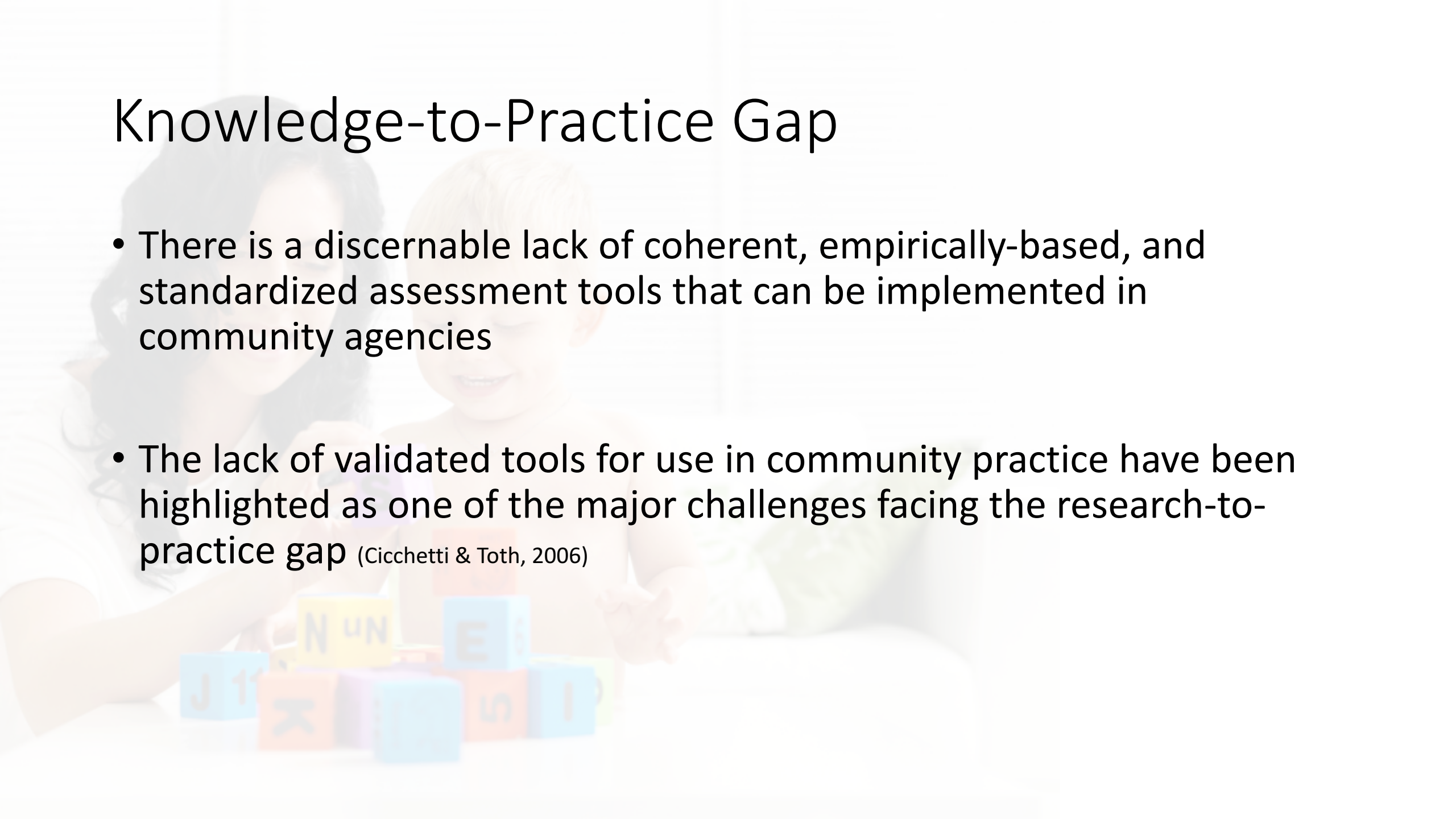
# Validation, Training, and Implementation of the AMBIANCE Assessment Tool for Use in Applied Settings with Families at High Social-Risk

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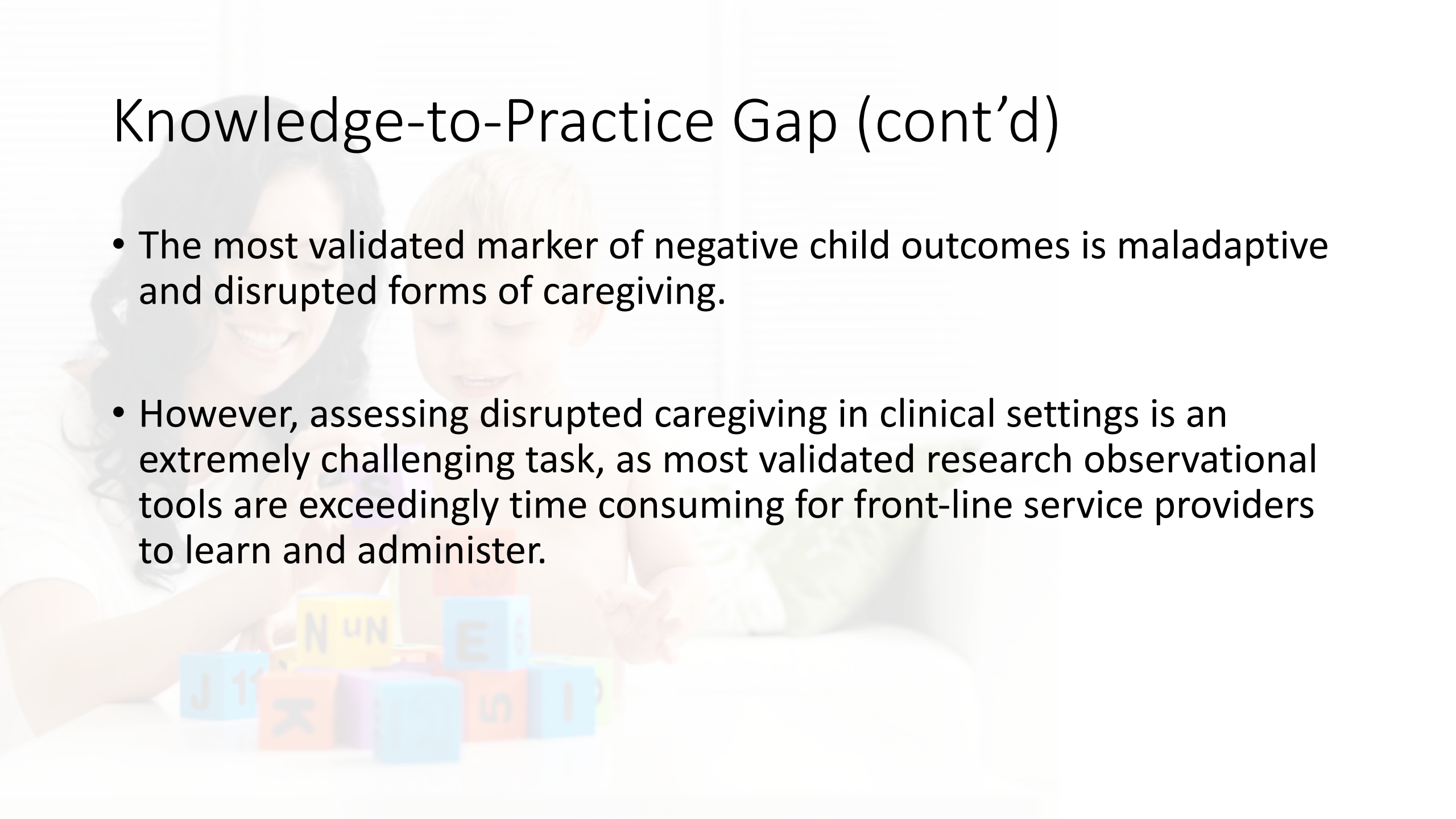
# Knowledge-to-Practice Gap

A faded background image showing a woman and a young child sitting on the floor, playing with colorful alphabet blocks. The woman is on the left, looking towards the child, and the child is on the right, smiling and holding a block. The blocks are scattered around them, with some stacked. The overall scene is bright and warm, suggesting a positive learning environment.

- There is a discernable lack of coherent, empirically-based, and standardized assessment tools that can be implemented in community agencies
- The lack of validated tools for use in community practice have been highlighted as one of the major challenges facing the research-to-practice gap (Cicchetti & Toth, 2006)

# Knowledge-to-Practice Gap (cont'd)

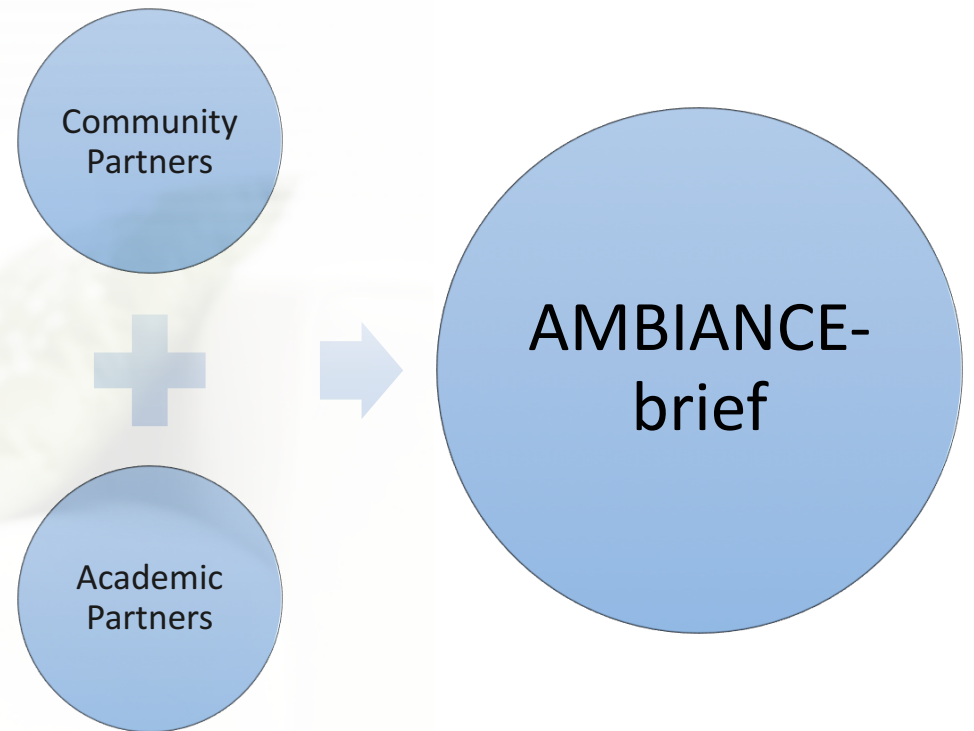
- The most validated marker of negative child outcomes is maladaptive and disrupted forms of caregiving.
- However, assessing disrupted caregiving in clinical settings is an extremely challenging task, as most validated research observational tools are exceedingly time consuming for front-line service providers to learn and administer.





# An Attempt to Bridge the Gap!

- Together with academic and community-based partners, the proposed project will bridge the research-to-practice gap by generating a brief version of an existing observational measure of disrupted caregiving - i.e., the AMBIANCE-brief



# AMBIANCE

- **Atypical Maternal Behavior Instrument for Assessment and Classification** (Bronfman, Madigan, & Lyons-Ruth, 2004-2009)
  - Associated with infant disorganization ( $r = .35$ ) (Madigan, Bakermans-Kranenburg et al., 2006).
  - Stable over time periods ranging from 10 to 72 months ( $r = .56$ ;  $k = 3$ ,  $N = 203$ ) (Madigan, Bakermans-Kranenburg et al., 2006).
  - Has strong predictive validity, predicting behavior problems from toddlerhood to age 20 years (Dutra et al., 2009; Lyons-Ruth et al., 2013; Madigan et al., 2007; Shi et al., 2012)

# Atypical Maternal Behavior Instrument for Assessment and Classification (AMBIANCE)

AMBIANCE Dimension	Description	Examples
1. Affective Communication Errors	Contradictory communications or failures to respond to clear infant cues, especially cues for comfort	<ul style="list-style-type: none"> <li>• Leaving infant to cry on the floor without response</li> <li>• Blocking infant affect</li> </ul>
2. Role Confusion	Behavior that prioritizes parent's needs over the infant's needs	<ul style="list-style-type: none"> <li>• Asking for reassurance/ affection from the infant</li> <li>• Sexualized behaviors toward the infant</li> </ul>
3. Disorientation	Behavior that appears frightened, dissociated, or affectively odd	<ul style="list-style-type: none"> <li>• Unusual changes in pitch and intonation of voice</li> <li>• Unchanging 'flat' affect</li> <li>• Stiff or awkward body postures when interacting with infant</li> </ul>
4. Negative-intrusive behavior	Behavior that is frightening or threatening, communicates hostile attitude, or interferes with infant's ongoing directions	<ul style="list-style-type: none"> <li>• Rough handling of the infant</li> <li>• Negative attributions about the infant</li> </ul>
5. Withdrawal	Behaviors that communicate reluctance to interact fully with the infant	<ul style="list-style-type: none"> <li>• Quick pick-up and put-down when infant is distressed</li> <li>• Interacting silently with the infant</li> </ul>

# The Challenge

- The AMBIANCE has been strongly validated, however:
  - Becoming a certified AMBIANCE coder requires approximately 80 hours of training and reliability testing
  - The scoring process takes approximately 60 minutes per 3-5 minute interaction
- Benefits of observational measures
  - More strongly associated with child outcomes (Fearon et al., 2010; Madigan et al., 2013)
  - Less susceptible to social desirability effects (Abidin et al., 2013)
  - Ecologically valid (Sroufe et al., 2005)

# Addressing the Challenge

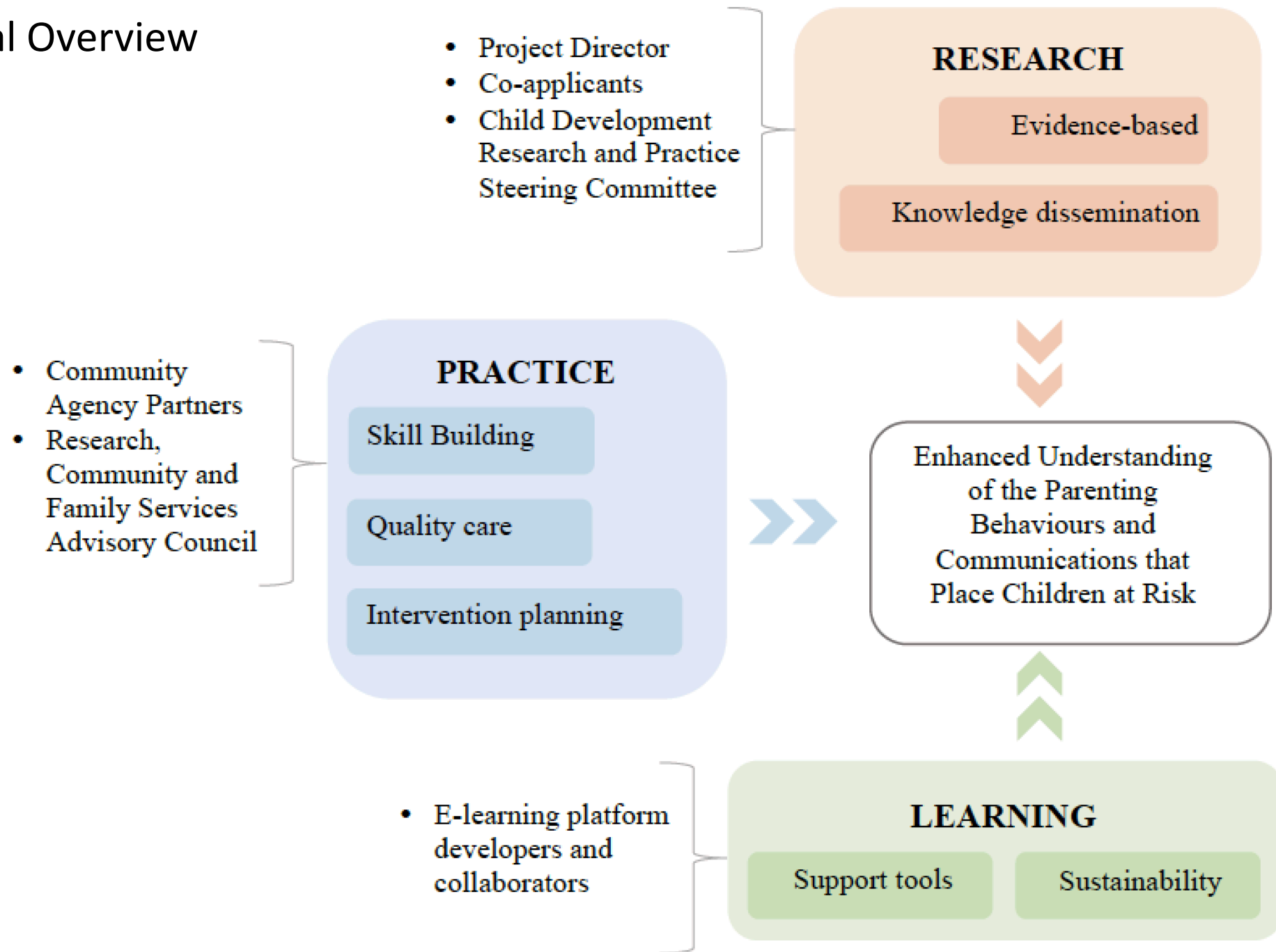
- The development of a brief assessment tool for disrupted caregiving is an ideal target for a research-community partnerships
- In order for the AMBIANCE to be useful in community agencies, it must
  - Be psychometrically sound
  - Provide useful information
  - Be easy to administer and score



# Academic and Community Partners

	Alberta	Ontario	Quebec
Partnering Community and Family Services Agencies	The Brenda Strafford Society for the Prevention of Domestic Violence (Calgary)	Family and Children's Services of Guelph & Wellington County (Guelph)	Centre Intégré Universitaire de Santé et de Services Sociaux du Centre-Sud-de-l'Île-de-Montréal (Montréal)
		The Therapeutic Family Care Program (Durham, Highland Shores, Kawartha-Haliburton)	Centre Intégré Universitaire de Santé et de Services Sociaux de la Capitale nationale (CIUSSS-CN) (Quebec City)
		The Children's Aid Society of Toronto Child Welfare Institute	
Partnering Academic Institutions	University of Calgary	University of Guelph	Université Laval, Université du Québec à Montréal

# Conceptual Overview



# Study Objectives

## 1. Generate and refine the AMBIANCE-brief

- 343 video-taped observations from existing data sources that have already been coded using the AMBIANCE
  - Item Response Theory trait models to analyze > 150 behavioural items
  - Preliminary results: 45 disrupted caregiving latent traits (analogous to factor-based dimensions) that contain the most information relative to full set of AMBIANCE items
    - See Haltigan et al., SRCD poster 1-003 (Thursday 9:45-11am)
- Refine AMBIANCE-brief
  - Distribute to partner agencies with request for feedback on contents/feasibility
  - Pilot test on 15 parent-child interactions at Guelph agency

# Study Objectives

A background image showing a woman with long dark hair and a young child sitting on a light-colored surface, playing with colorful alphabet blocks. The woman is looking down at the blocks, and the child is also looking at them. The blocks are in various colors (blue, yellow, orange, purple) and have letters and numbers on them. The overall scene is bright and focused on the interaction between the caregiver and the child.

## 2. Assess the concurrent validity of the AMBIANCE and AMBIANCE-brief

- 300 previously-collected 3-5 minute caregiver-child interactions at 12, 24, 36 months from high-risk adolescent and/or maltreating caregivers
  - Caregiver behaviour coded by independent graduate student observational coding teams using each measure



# Study Objectives

A woman with long dark hair is smiling and playing with a young child. They are sitting on a light-colored surface, possibly a table or floor, and are surrounded by colorful alphabet blocks. The woman is holding a block with the letter 'N' and the child is holding a block with the letter 'E'. The background is a bright, out-of-focus indoor setting.

3. Determine the predictive validity of the AMBIANCE-brief, in regards to its ability to predict markers of negative child outcomes, such as:

- Disorganized attachment
- Behavioral outcomes
- Neuropsychological outcomes

# Study Objectives

## 4. Test the acceptability and feasibility of the tool through use in the partnering agencies

### a. Training (5 hours)

- Overview of disorganized attachment, AMBIANCE-brief, disrupted caregiving

### b. Evaluation (2 hours)

- Practitioners watch, analyze, code, and score 8 clips (3-5 minutes each)
- Effectiveness evaluated by consensus rating approach

### c. Feedback

- Questionnaire assessing clarity and content of training material to determine likelihood of use in practice
- Open-ended questions for suggestions, recommendations

# Study Objectives

A woman with long dark hair is smiling and looking at a young child. They are sitting on a light-colored surface, possibly a table or floor, and are playing with several colorful alphabet blocks. The blocks are in various colors (blue, yellow, orange, purple) and have letters on them. The woman is holding one block, and the child is reaching for another. The background is a plain, light-colored wall.

## 5. Build and develop computer software tools for training and dissemination

- Online training modules to enhance accuracy of assessments (Chafouleas et al., 2015)
  - Mirrors the training components discussed previously (training, evaluation, feedback)

# Summary

- The lack of validated tools for use in community practice has been highlighted as a challenge facing the research-to-practice gap
- The AMBIANCE is anchored in attachment research and possesses strong psychometric properties
  - Provides an excellent platform for scaling to widespread use
- The present project aims to address the community-identified need for empirically-supported observational assessment tools of caregiving
  - To be successful, a collaborative approach is required



# Acknowledgements

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