A group of four young children, two boys and two girls, are sitting on a wooden bench outdoors. They are all smiling and appear to be engaged in a playful activity. The background shows a building with white shutters and a red door. The image is slightly faded to allow the text to be read clearly.

Preschoolers' attitudes and behavior toward peers with disabilities in inclusive settings

Soo-Young Hong, Ph.D.

Child, Youth and Family Studies

Thanks to...



- **Attitudes Study**

- Kyong-Ah Kwon, Ph.D., Georgia State University
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- Ruth Staples Child Development Laboratory teachers and children
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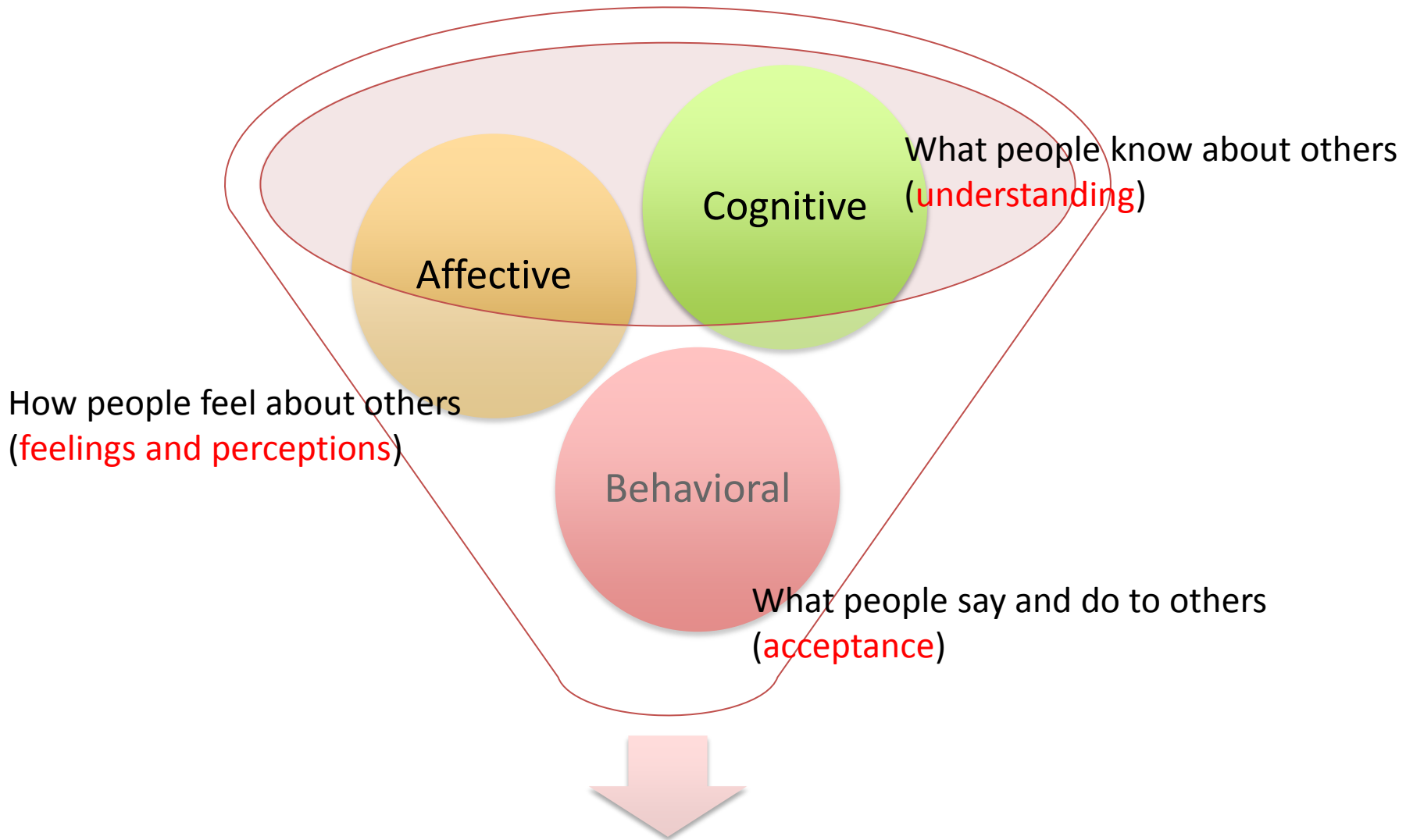
- **Behavior Study**

- Deila Steiner, Ph.D., LPS Director of Federal Programs
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- Dawn Wright, LPS Disability Specialist
- ExCITE classroom teachers and children
- Jungwon Eum, M.S., CYAF Ph.D. student (data collection and management, data collection coordination, coding system development and revisions)
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- Elizabeth Milhouse, CYAF undergraduate student (coding system revisions)

Background

- Children with disabilities tend not to be included in activities even in inclusive classrooms, and this, in turn, affects their development and learning (Odom et al., 1999).
- In inclusive preschool classrooms, the odds that children with disabilities will enhance their social skills increase when they have opportunities to interact with typically developing peers (Guralnick et al., 2007).
- However, children with disabilities do not get to interact frequently with typically developing children partly because they tend not to initiate or maintain social interactions with typically developing children (Odom et al., 2006).

- Children as young as preschool ages often display favoritism toward a group of peers who shares similar characteristics, displaying a negatively biased view and relative discrimination towards peers with characteristics they perceive as different from their own (e.g., Castelli et al., 2007).
- However, their attitudes toward others, which usually start to be formed at early ages, might be most malleable during preschool years.



Attitudes toward Others

(Trandis, 1971; Vignes et al., 2009)

Factors Related to Children's Attitudes

Children's prior contact and experience with people with disabilities

(e.g., Diamond, 2001; Favazza & Odom, 1997)

Parents' attitudes toward people with disabilities and inclusion

(e.g., Nikolarazi & de Reybekiel, 2001; Okagaki et al., 1998; Peck et al., 1992)

Children's Attitudes toward Peers with disabilities

Activity context where children need to make decisions

(e.g., Diamond & Tu, 2009; Diamond, Hong, & Tu, 2008)

1. Attitudes Study

- Association among three dimensions of children's attitudes toward peers with disabilities (i.e., understanding, feelings, acceptance) and their prior contact and experience with people with disabilities
- Association between activity context and types of disabilities and children's acceptance of peers with disabilities
- Association between parents' attitudes and children's attitudes toward peers with disabilities

Participants

- 94 typically developing preschoolers and their parents, mostly mothers (48 girls)
- 23% of the children were enrolled in a classroom where there was at least one child with a disability.
- 90% of the mothers had a bachelor's or higher degree and worked at least part-time.
- The majority of the sample was European American (75.5%).

Measures

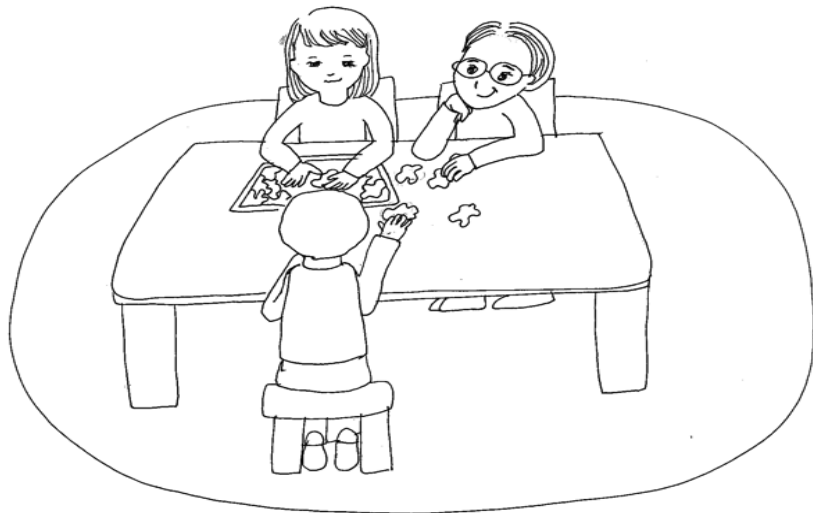
- Parent questionnaire
 - Demographic information
 - Child's prior contact and experience with people with disabilities
 - Attitudes toward people with disabilities
 - Scale of Attitudes Toward Disabled Persons (Antonak, 1982): 19 items, -3 to +3 (recoded to 1 to 6), $\alpha=.83$
 - Attitudes toward inclusion
 - Opinions Relative to Mainstreaming Scale (Larrivee & Cook, 1997): 30 items, -3 to +3 (recoded to 1 to 6), $\alpha=.94$

Measures

- **Child interview**
 - Primary Student Survey of Handicapped Persons (PSSHP; Esposito & Peach, 1983) - modified
 - **Understanding** (e.g., tell me everything you know about a person with a disability): 0 to 5
 - **Feelings and perceptions** (e.g., are people with disabilities a lot like you or a lot different from you? Why?): 0 to 6
 - **Prior contact and experience** with people with disabilities (e.g., do you have a neighbor with a disability?): 0 to 7

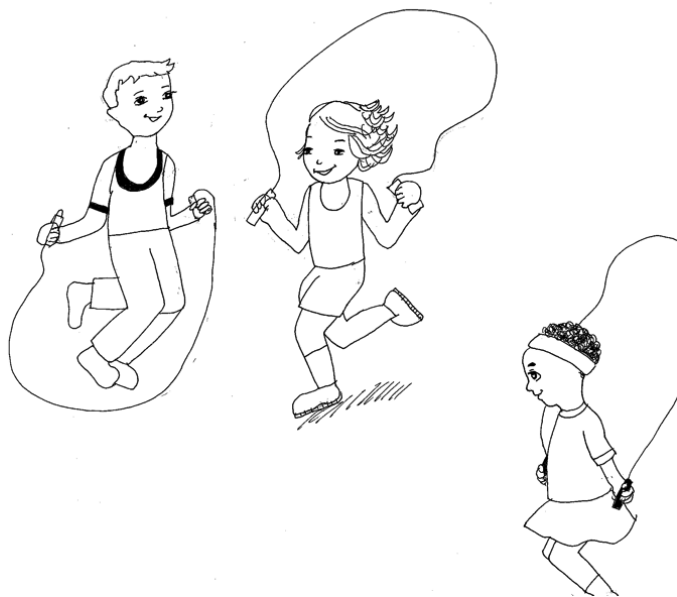
Measures

- Child interview
 - Acceptance vignettes with matching drawings
 - 4 activity contexts
 - 2 contexts where disability interferes with the activity
 - 2 contexts where disability does not interfere with the activity
 - 2 types of disabilities
 - Child who cannot walk
 - Child who cannot see
 - Acceptance possible range = 0 to 8



Look at this picture. Let's pretend that you are playing with other children in the classroom. You are putting puzzle pieces together with other children. Here is Sarah. She is in a wheelchair because she cannot walk. Sarah wants to play with you. She said, "Can I play with you?"

What would you say to Sarah? Why?



Look at this picture. Let's pretend that you are jumping rope on the playground. You are jumping rope with other children. Here is Nate. He uses this cane because he cannot see. Nate wants to play with you. He said, "Can I play with you?"

What would you say to Nate? Why?

Descriptive Statistics

<i>Variables</i>	<i>N</i>	<i>Min</i>	<i>M (SD)</i>	<i>Max</i>
C Age in months	93	36.00	54.63 (7.35)	68.00
C Understanding	94	.00	2.28 (1.50)	5.00
C Feelings/Perceptions	94	.00	1.62 (1.16)	5.00
C Acceptance	93	.00	5.28 (2.72)	8.00
C Experience	94	.00	2.06 (1.32)	6.00
P Age in years	93	22.00	36.17 (6.51)	60.00
P ATPD Total	94	3.05	5.02 (0.58)	6.00
P ATI Total	94	2.17	4.70 (0.71)	5.93

Note. C = Child; P = Parent; ATPD = Attitudes Toward People with Disabilities (possible range = 1 to 6); ATI = Attitudes toward Inclusion (possible range = 1 to 6)

Results

	Age	Understanding	Feeling/Perception	Acceptance	Experience
Age					
Understanding					
Feelings/Perceptions		.22*			
Acceptance					
Experience		.24*	.25*		

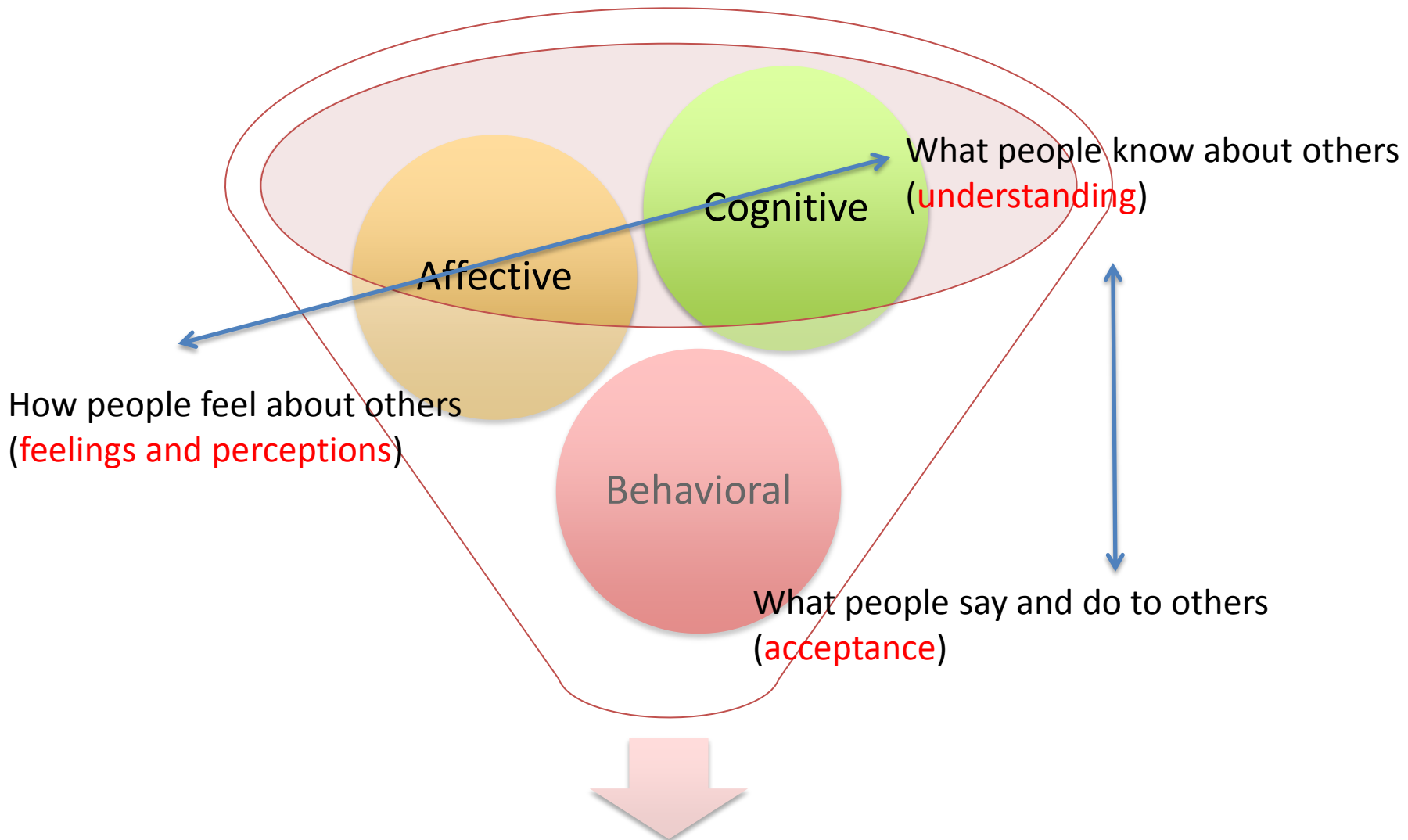
- Association between children's attitudes and parents' attitudes toward people with disabilities or toward inclusion = *ns*.
- Parent employment status was positively associated with children's feelings and perceptions about people with disabilities ($r = .21, p < .05$).
- The significant associations stayed significant even after controlling for child's age and gender.

Results

- Role of **activity context** and **type of disability** in predicting **acceptance**
 - 2 X 2 repeated measures ANOVA with covariates (children's understanding, prior contact and experience, and children's feelings and perceptions)
 - **Activity context** ($F(1,86)=5.66, p=.02, \text{partial } \eta^2=.06$)
 - When disability did not interfere with ongoing activities = higher acceptance score
 - **Children's understanding about people with disabilities** ($F(1,86)=5.28, p=.03, \text{partial } \eta^2=.06$)
 - Higher-level understanding = higher acceptance score

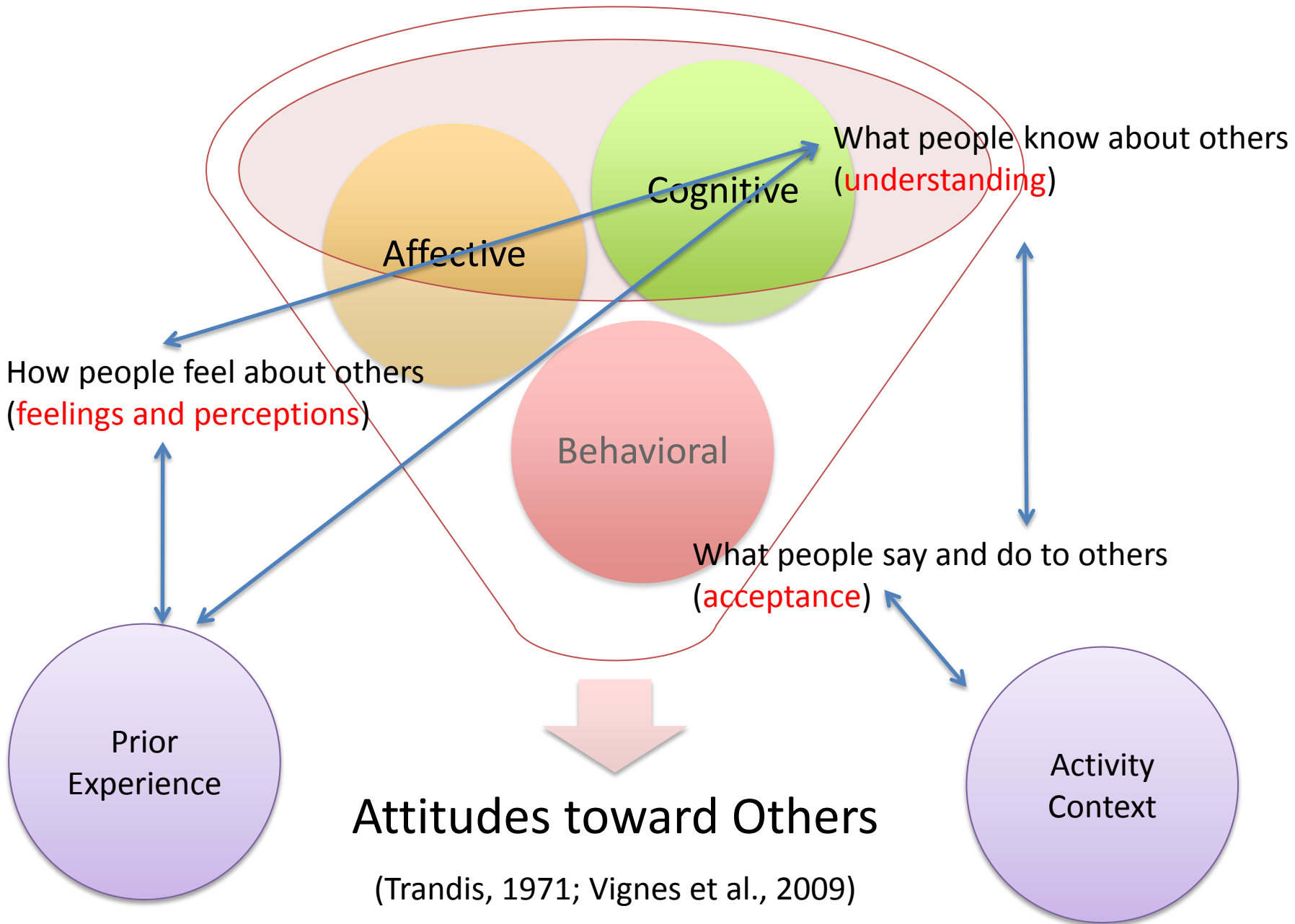
Results

- Parents attitudes were not associated with children's attitudes toward peers with disabilities!
 - Parents' explicit vs. implicit attitudes (Castelli et al., 2007)
 - Older vs. younger children (Roberts & Lindsell, 1997; Rosenbaum et al., 1988)



Attitudes toward Others

(Trandis, 1971; Vignes et al., 2009)



Factors Related to Children's Attitudes

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Teachers' attitudes, teacher preparation, and classroom environment

(e.g., Favazza & Odom, 1997; Jeon & Perterson, 2003; Mulvihill et al., 2002)

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BEHAVIOR!!



Children's Attitudes toward Peers with disabilities

Activity context where children need to make decisions

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(e.g., Favazza & Odom, 1997; Jeon & Perterson, 2003; Mulvihill et al., 2002)

2. Behavior Study

- We do not know much about **typically developing children's actual behavior and talk** toward peers with disabilities that may or may not reflect their attitudes toward them.
 - **When and where** do children without disabilities interact with peers with disabilities? And what is the **nature and type** of social interactions?
 - What do **teachers** do to promote the interactions between children with and without disabilities when the opportunities occur?

Participants

- 16 children without disabilities (8 girls; mean age = 55.19 months) from 6 half-day inclusive preschool classrooms (ExCITE classrooms)
- 6 teachers with at least a BA degree in Inclusive ECE and 3 to 15 years of early childhood teaching experience
- Each class contained many children from low-income families and at least 3 to 5 children with identified disabilities.

Measures

- Coding systems developed to record children's and teachers' behavior and talk and classroom context
 - Observations occurred during *free play, small group, transitions/meals/snack times, and outdoor play.*
 - Behavior and talk were observed for 20 seconds and coded for 30 seconds for the entire class time except large group time (approx. 3 hours per child)
 - Teacher behavior and talk promoting social interactions between children with and without disabilities were coded when teachers were within 3 feet from the target child.

Measures

- Coding categories
 - Context (*e.g., indoor or outdoor classroom*)
 - Nature of Activity (*e.g., child-directed, transitions*)
 - Type of Activity (*e.g., large building blocks*)
 - Group Composition (*e.g., target child with 1 adult + 1 peer*)
 - Type of Social Play (*e.g., engaged with 1 peer*)
 - Nature of Peer Interaction (*e.g., asks simple questions, joins or invites peer, seeks or receives help*)
 - Teacher Behavior and Talk (*e.g., comments, suggests, or questions, refers to peer*)

Inter-coder percent agreements = 75 to 100%

Preliminary Results

Children's Behavior and Talk

- Children with disabilities were present within 3 feet from typically developing (TD) children for 50% of the time observed. However, the TD children interacted with their peers with disabilities for only 6% of the time observed.
- Children with disabilities were less likely to be present within 3 feet from TD children during free play time ($r = -.58^*$).
- TD children exhibited more interactions with peers with disabilities while playing with Legos and small toys ($r = .56^*$) and during daily routines/transitions ($r = .53^*$).
- TD children used 'Describes' most frequently when interacting with peers with disabilities ($M = 16.19\%$).

Preliminary Results

Teachers' Behavior and Talk

- On average, teachers encouraged TD children to interact with their peers with disabilities for 6% of the time observed (range = 0 to 26%).
- Teachers were more likely to encourage interactions between children with and without disabilities while children were playing with large building blocks ($r=.55^*$).
- Teachers used 'Comments, Suggests, or Questions' most frequently when trying to promote interactions between children with and without disabilities ($M=2.4\%$; range=0 to 16%).

Future Directions

- Classroom environment, teaching attitudes and practices, and teacher preparation in relation to children's attitudes toward peers with disabilities
- Eco-behavioral analysis with children's behavior as a unit of analysis to examine the co-occurrence of behavior, context, and teacher support