



The Differential Timing of Familial and Individual Influences on the Development of Emotion Knowledge across Early Childhood

Sara R. Berzenski¹, Tuppett M. Yates²

California State University, Northridge¹, University of California, Riverside²



Background

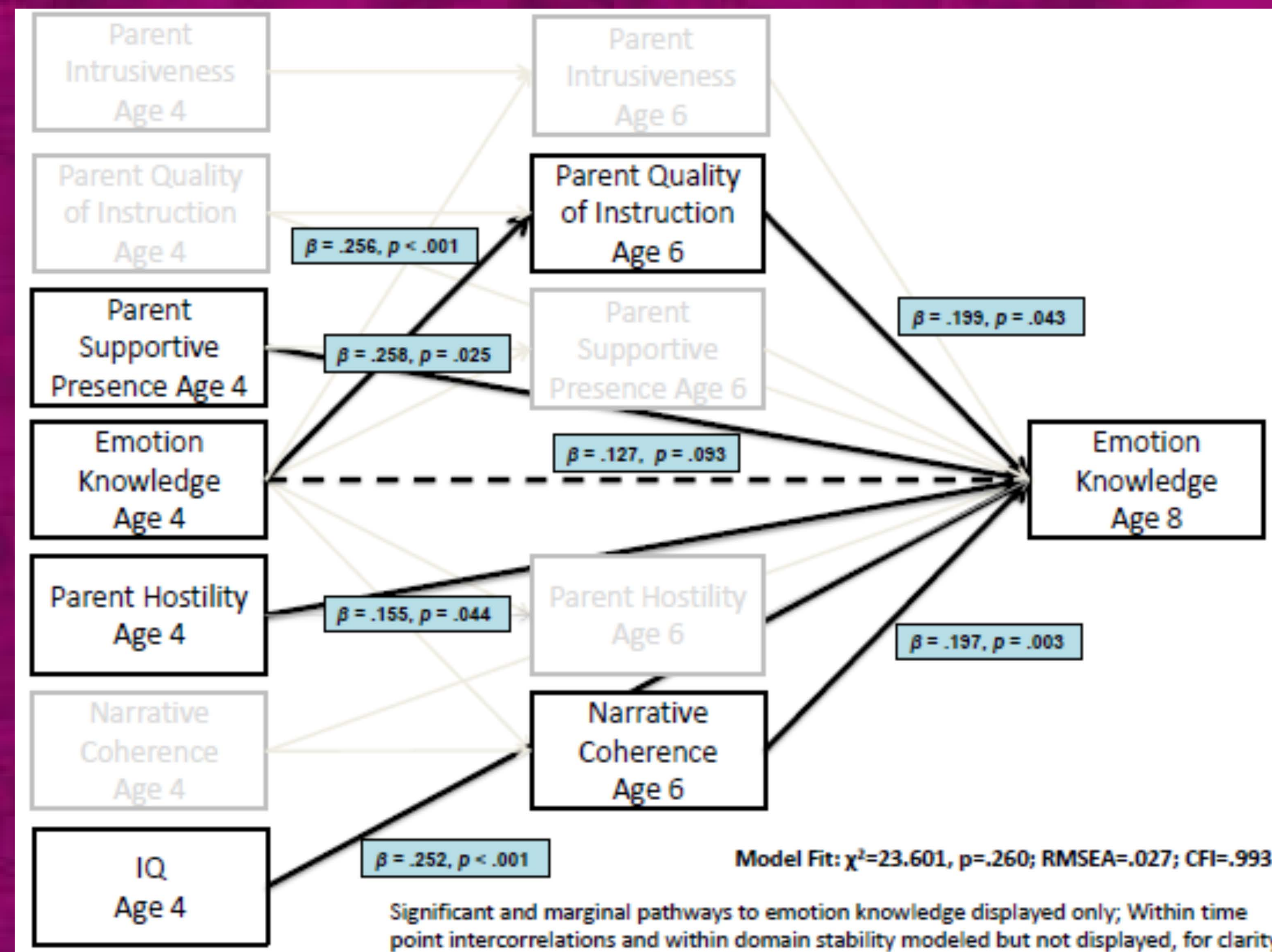
- Emotion knowledge, the ability to perceive and understand emotions, is a building block by which children make sense of the world and how to interact with it. This skill supports positive peer relationships, behavior, and academics (Izard et al., 2001; Trentacosta & Fine, 2010).
- Children's emotion knowledge skills begin to emerge around age two and improve across childhood (Denham, 1998; Saarni, 1990). However, individual differences in the growth of emotion knowledge reflect the diverse influences on this developmental process.
- At the family level, models of emotion socialization indicate that direct coaching, parents' reactions to emotional displays, and the emotion climate of the family influence emotion competence (Morris, Silk, Steinberg, Myers, & Robinson, 2007).
- At the individual level, emotion knowledge is associated with verbal ability and autobiographical memory (Izard et al., 2001; Wang, 2008). Therefore, it follows that children's ability to make sense of relational experiences and integrate emotion into their narratives in an organized fashion (i.e., narrative coherence; Robinson et al., 2003) may further scaffold emotion knowledge development.
- Due to the preponderance of concurrent associations between these factors in the literature, the present study sought to evaluate both the salience of each specific influence and the timing of these effects on the growth of emotion knowledge over time, controlling for initial levels.

Method

- Participants were part of a longitudinal study following 250 ethnically diverse children (50% female) annually from ages 4-8.
- Emotion knowledge (KEI; Kusche, 1984) was assessed at ages four and eight (possible range 0-120).
- Parenting was observed during teaching tasks adapted from Block & Block (1980) using 7-point ratings of supportive presence, intrusion, hostility, and quality of instruction ($ICC_{AverageAge4}=.765$, $ICC_{AverageAge6}=.775$).
- Narrative coherence was assessed at ages four and six with the MacArthur Story Stem Battery (MSSB; Bretherton, Oppenheim, et al., 1990). A coherence composite was based on logical event sequences and conflict resolution in response to six story stems ($ICC_{Age4}=.847$, $ICC_{Age6}=.868$).
- The path model controlled for initial levels of all predictors and child IQ (WPPSI-III; Wechsler, 2002), and used maximum likelihood estimation.

Results

- Emotion knowledge increased from age four ($M = 77.20$, $SD = 13.87$) to eight ($M = 109.46$, $SD = 9.25$).
- Furthermore, emotion knowledge was related to concurrent parenting and narrative coherence at age four as expected (Table 1).
- In explaining emotion knowledge at age eight (Figure 1), caregivers' supportive presence and hostility at age four had direct positive effects over and above their influence from age six.
- In contrast, contributions of caregivers' quality of instruction and children's narrative coherence were most salient at age six, beyond levels at age four.



Key References

- Denham, S. A. (1998). Emotional development in young children. *The Guilford series on special and emotional development*. (Vol. 260). New York, NY, US: Guilford Press.
- Izard, C., Fine, S., Schultz, D., Allison, M., Ackerman, B., & Youngstrom, E. (2001). Emotion knowledge as a predictor of social behavior and academic competence in children at risk. *Psychological Science*, 12(1), 18-23.
- Morris, A. S., Silk, J. S., Steinberg, L., Myers, S. S., & Robinson, L. R. (2007). The role of the family context in the development of emotion regulation. *Social Development*, 16(2), 361-388. doi: 10.1111/j.1467-9507.2007.00389.x
- Saarni, C. (1990). *Emotional competence: How emotions and relationships become integrated*. University of Nebraska Press.
- Wang, Q. (2008). Emotion knowledge and autobiographical memory across the preschool years: A cross-cultural longitudinal investigation. *Cognition*, 108, 117-135. doi: 10.1016/j.cognition.2008.02.002

Table 1.

Bivariate Correlations among Study Variables at Age Four

	1.	2.	3.	4.	5.
1. Emotion Knowledge	--				
2. Parent Supportive Presence	.222 ***	--			
3. Parenting Intrusion	-.211 **	-.573 ***	--		
4. Parenting Hostility	-.040	-.546 ***	.413 ***	--	
5. Parenting Quality of Instruction	.284 ***	.784 ***	-.583 ***	-.343 ***	--
6. Narrative Coherence	.331 ***	.071	-.122 #	-.038	.193 **

*** $p < .001$, ** $p < .01$, * $p < .05$, # $p < .10$

Discussion

- This study advances beyond evidence of concurrent relations between emotion knowledge, parenting, and narrative coherence, to begin to explain the timing of specific influences on the development of this skill.
- The effects of caregivers' supportive presence and hostility at age four on emotion knowledge at age eight suggest both positive *and* negative caregiver displays early in development were associated with emotion knowledge growth.
- Conversely, caregivers' quality of instruction was most salient at age six, beyond levels at age four. This suggests that, dependent on timing, direct emotion coaching makes an additional contribution to emotion knowledge growth beyond other parenting influences.
- The significance of narrative coherence indicates that the individual ability to make sense of emotional experiences is also important, particularly at age six.
- Thus, influences on emotion exposure appear to set the stage for emotion knowledge development in preschool, while influences on processing are more crucial in later childhood.**



Acknowledgements

- This work was supported by a grant from the National Science Foundation, Developmental and Learning Sciences (ID 0951775), and a California State University, Northridge New Faculty Research Support Award.
- Data were collected at the Adversity and Adaptation Lab, University of California, Riverside (PI: Tuppett Yates).

