

Using latent transition analysis to test bidirectional effects between parenting and children's emotion regulation

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Background

- Maternal parenting practices are known to profoundly influence the development of children's emotional regulation (ER) development across the first years of life.
- Although it is established that children's development influences parenting, few studies have examined **bidirectionality** between parenting and ER, particularly across time.
- No studies have utilized **person-centered approaches to delineate bidirectional mechanisms** between parenting and children's development.

The focus of present study is to demonstrate the use of a novel application of latent transition analysis to the study of bidirectional effects, specifically, those between profiles of parenting and children's ER:

- Do styles of parenting differentially influence children's ER skills?
- Does this vary by developmental age?
- Does children's ER impact stability and change in parenting style?
- Does this effect vary by developmental age?

Method

Sample

N = 2876, mother-child dyads (14-, 24-, 36-months and pre-k)
Data from a large, longitudinal multi-site evaluation of Early Head Start.

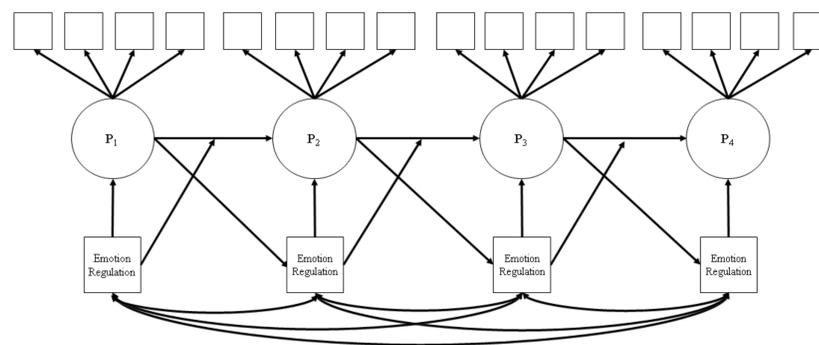
Measures

Observed parenting: maternal sensitivity, stimulation of cognitive development, positive regard, detachment, intrusiveness, negative regard were observed via videotape during a free play task between parent and child at all four waves. Scores ranged from 1-7.

Emotion regulation: Observed by researcher with *Bayley Behavior Rating Scale* (Waves 1-3) and *Leiter-R* (Wave 4).

Analytic Plan

- Latent Transition Analysis in Mplus 7.3.
- Tested invariance of profile structures across time
- ER was added as covariate, predictor, and outcome in single model.
- Controlled for child sex and site.



Results

Latent Profiles

- Supportive (72.1 – 86.7%)
- Good enough (9.9 – 24.5%)
- Harsh (0.7 – 2.3%)
- Detached (1.0 – 5.1%)

Profiles at 14- and 24-months were invariant.

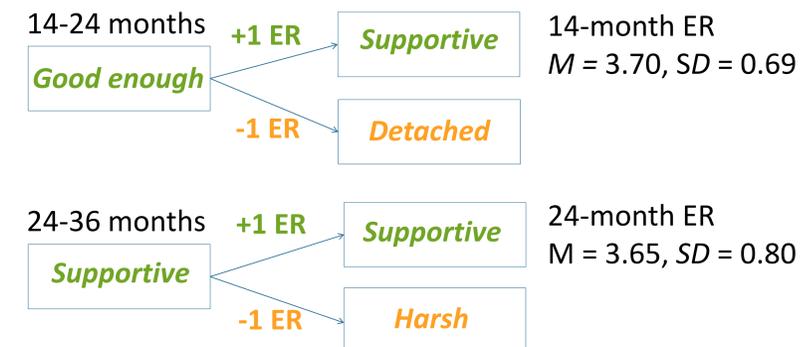
Profiles at 36-months and Pre-k were invariant.

Table 1. Standardized means (M) for 24-, 36-months, and pre-k ER by earlier parenting profile

	M	SD
14-month parenting	24-months ER	
Supportive	0.20 _{abc}	.04
Good enough	-0.15 _a	.05
Harsh	-0.31 _b	.15
Detached	-0.27 _c	.08
24-month parenting	36-months ER	
Supportive	0.05 _{abc}	.03
Good enough	-0.08* _a	.07
Harsh	-0.31 _b	.14
Detached	-0.20 _c	.09
36-month parenting	Pre-k ER	
Supportive	0.01* _a	.02
Good enough	0.03* _b	.04
Harsh	-0.17*	.22
Detached	-0.60 _{ab}	.15

Results

Child effects



Discussion

Results indicated that children reinforced positive parenting, and promoted it in toddlerhood. Children had little influence on Harsh parenting, or on movement out of Detached parenting. The influence of these parenting styles on children's ER were unidirectional.

Conclusions

- This study highlights **the utility of LTA** for studying bidirectional effects with person-centered methods.
- Able to examine how **bidirectional effects vary by subgroup and across time.**
 - Children's ER skills reinforced and altered parenting differently by developmental age.
 - Supportive parenting's influence on children's regulation waned with time.

Future Directions

- Methods: Examining **how transitions influence an outcome.**
- Research: Probing **influence of harsh parenting on children's ER**, particularly given stability and change in parenting style membership.

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