

## Introduction

- Prior investigations have examined the influence of parent characteristics on infant negative emotion and regulation (1-4).
- Although several studies have noted that positive emotionality (PE) emerges and increases through the first year of life (5, 6), few studies have focused on the implications of parent characteristics for developing infant PE.
- Understanding factors influencing early development of PE is important given links between low PE and depression (7-9).
- Maternal positive affect (PA) and depression may be among the most likely attributes to influence developing infant PE.
- Prior research suggests that maternal depression may influence developing infant PE via two different pathways:
  - A history of diagnosed maternal depression has been associated with fewer displays of child PE (10).
  - Current maternal depressive symptoms have also been associated with diminished PE and engagement in children (11,12).
- Maternal PA may also influence developing infant PE as it is most proximal to infant PE (10, 13).
- The purpose of the present study is to examine the effects of a history of maternal depression, current maternal depressive symptoms, and maternal positive affect on trajectories of infant PE from 4 to 12 months of age.

## Hypotheses

- Consistent with previous research (8), it was anticipated that infant PE would increase over the first year of life.
- After accounting for income-to-needs (above/below poverty line) we anticipated that infants with mothers with a history of depression, higher levels of current depressive symptoms, and lower PA would display initially lower PE and trajectories characterized by lower slopes (i.e., slower growth).

## Method - Participants

- 156 primary caregivers, identifying as mostly Caucasian (92.4%), with 4 month old infants
- Mean annual family income = \$61,072.37 (range \$8,000 – \$130,000); income-to-needs range = .334 – 7.952
- Mothers' mean age = 30.31 (range 20.00 – 40.00)
- Mothers' mean years of education = 15.17 (range 10.00 – 25.00)

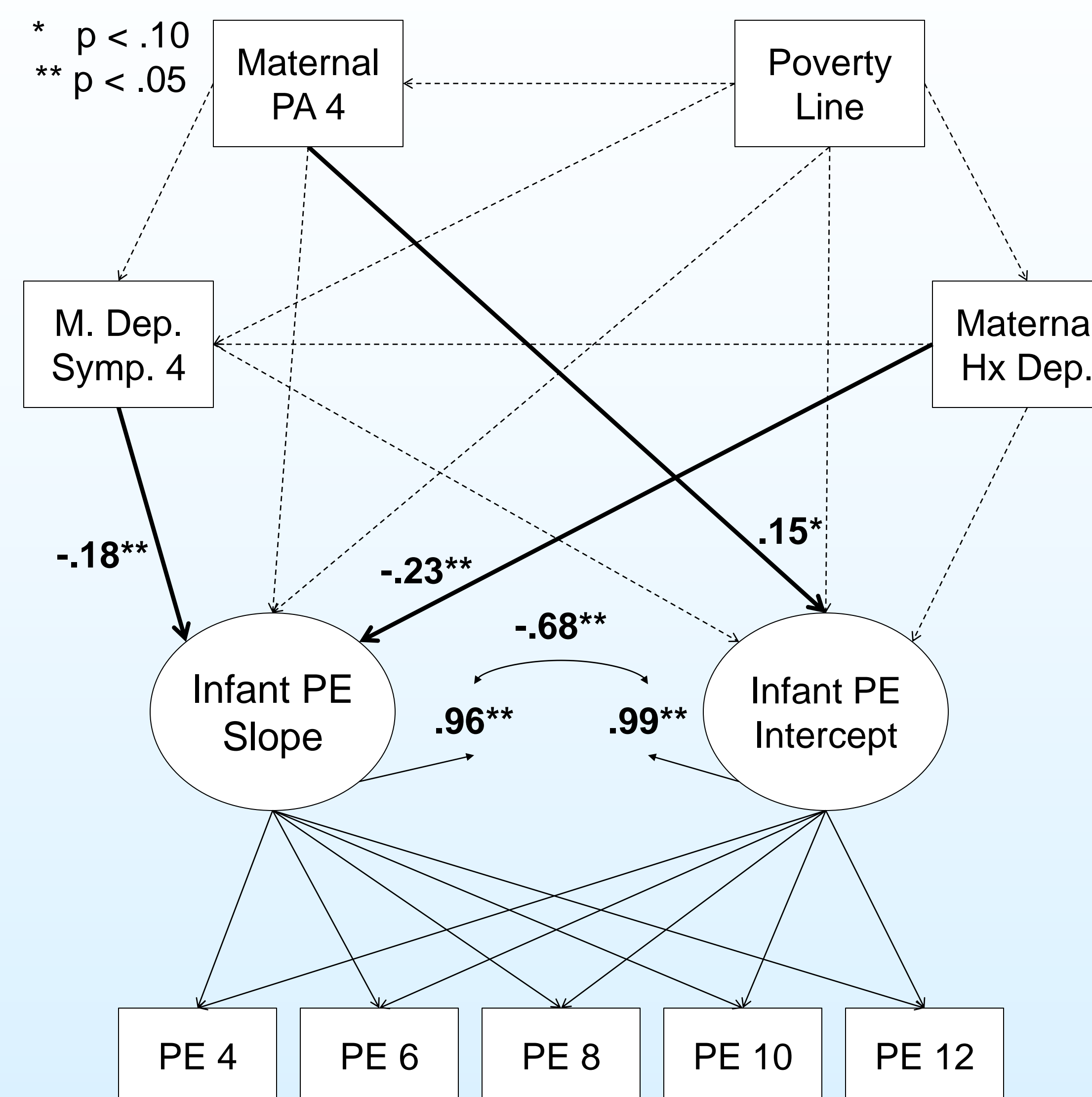
## Measures

- Maternal PA – Adult Temperament Questionnaire (ATQ,14)
- Maternal current symptoms of depression – BDI-II (15)
- Maternal history of depression – Respondent report of depression history obtained as part of demographics
- Infant PE – Infant Behavior Questionnaire-Revised (IBQ-R, 16)
- Poverty line (above/below) was determined based on income-to-needs ratios. Ratios  $\leq 2.0$  were considered below the poverty line and ratios  $> 2.0$  were considered above the poverty line.

## Method - Procedure

- Mothers completed the ATQ, BDI-II, and demographics form at the initial assessment, when their infants were 4 months of age.
- Maternal caregivers completed the IBQ-R, including scales associated with the PE factor, when their infants were 4, 6, 8, 10, and 12 months of age
- All questionnaires were mailed to families and were completed within +/- 1 week of each assessment point
- Families were compensated with \$10 for each completed assessment

## Results



Dashed lines indicate non-significant associations.

- Controlling for poverty line, the latent growth model was an adequate fit,  $X^2(21) = 45.43$ ,  $p < .05$ ; AIC = 3.43; RMSEA = .08; CFI = 1.00
- Consistent with expectations, infant PE increased from 4 to 12 months of age, Slope = 3.59,  $z = 4.69$ ,  $p < .05$ .
- Maternal history of depression and current maternal depressive symptoms negatively predicted the slope of infant PE
- A trend for maternal PA to predict the intercept of infant PE was supported.

## Conclusion

- Findings emphasize the independent contributions of a maternal history of depression and current maternal depressive symptoms to infant PE development.
- History of depression and current depressive symptoms might influence infant PE through different mechanisms, such as genetic contributions and/or parent-infant interactions, or post-partum depression may influence development differently than depression experienced prior to delivery
- In light of the tripartite model of depression/anxiety (7-9), both a history of and current maternal depressive symptoms may contribute to the development of child internalizing problems by affecting development of PE early in life.
- These findings also extend existing work (e.g., 10) by demonstrating that the effects of maternal depression (current symptoms and history) may only emerge when examined across time and adds to work demonstrating effects of the maternal depression on infant PE

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