



Impact of Postpartum Factors and Continued Stressors on Toddler Behavioral Inhibition

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Background

- High levels of behavioral inhibition (BI) in toddlerhood have been associated with adverse mental health outcomes in childhood and adolescence.
- Poor maternal-infant bonding and maternal depression have been linked to lower maternal sensitivity—a risk factor for increased BI.
- Little is known about how specific postnatal stressors are associated with toddler behavioral inhibition and whether there are sensitive periods for postnatal stressors.

Aim 1: Does BI differ as a function of sensitive periods of postnatal factors?

- Hypothesis: There will be a sensitive period at 6M for stress and sleep.

Aim 2: Does toddler BI differ as a function of change or consistency in maternal postnatal factors?

- Hypothesis: Sustained exposure to high levels of parenting stress, low social support, and poor sleep quality will be associated with higher maternal-rated child BI at 30-month.

Methods

Participants & Procedures

- 68 mother-infant dyads enrolled in the BEE Study at UNC-Chapel Hill from pregnancy through childhood
- Mothers self-administered questionnaires when children were 6 and 30-months old

Postnatal Stressors

- Pittsburgh Sleep Quality Index (6M & 30M)
- Parenting Stress Index Short Form (6M & 30M)
- Questionnaire of Social Support (6M & 30M)

Toddler Outcome

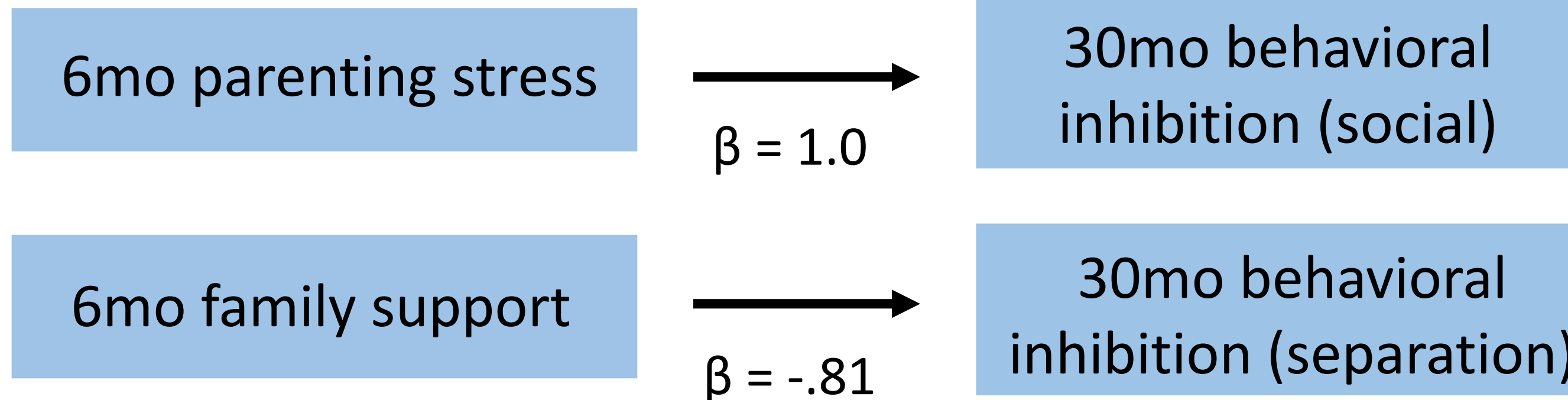
- Behavioral Inhibition Questionnaire (30M)
 - Separation, social, and total domains

Results

Analysis: Multiple linear regressions in SPSS, controlling for maternal education and age, child age and sex

Aim 1: Does behavioral inhibition differ as a function of sensitive periods of postnatal factors?

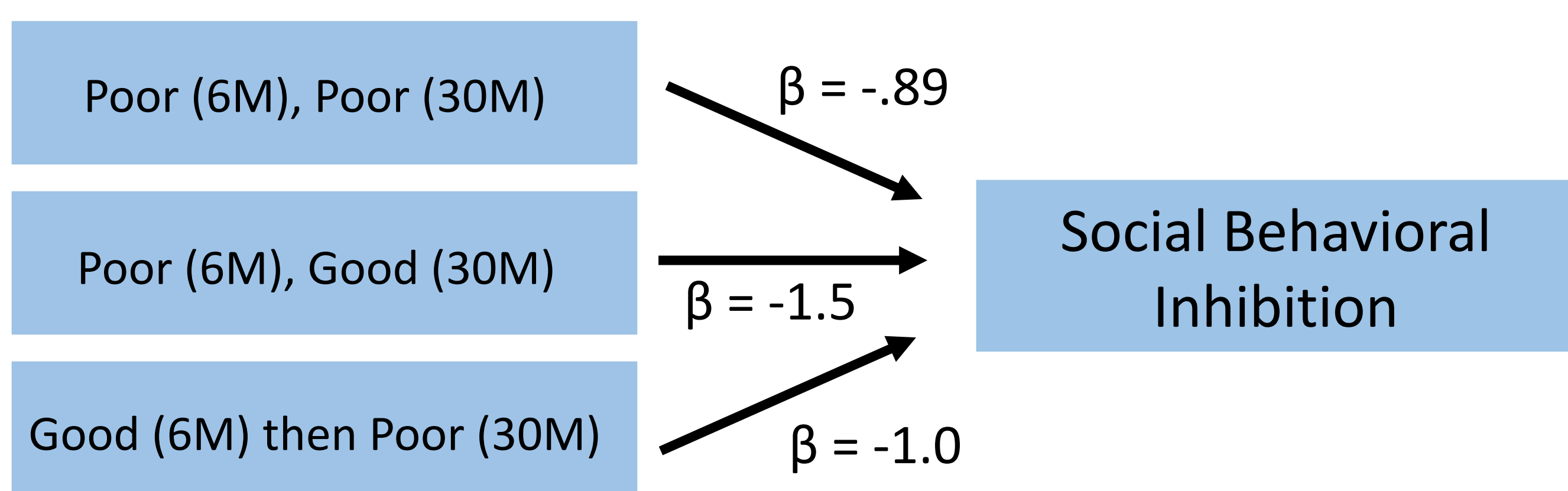
- Controlling for the maternal postpartum stressor at the other timepoint
- Presenting significant unstandardized effects



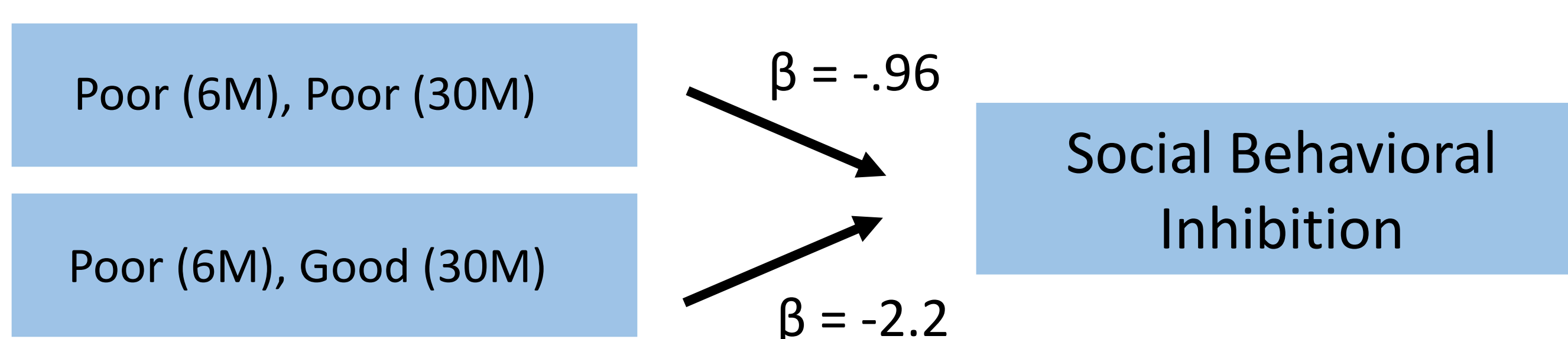
Aim 2: Does toddler behavioral inhibition differ as a function of change or consistency in maternal postnatal factors?

- Moms were dichotomized into either low or high maternal postpartum stressors at 6M and at 30M
- Reference group was moms with low levels of the maternal postpartum stressor (i.e., low-low stress)

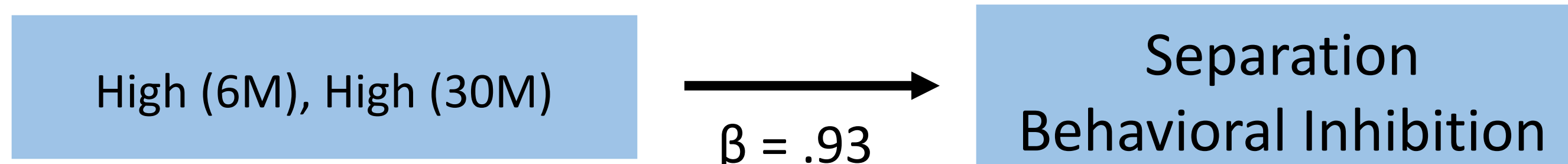
Maternal Sleep



Maternal Family Support



Maternal Parenting Stress



Discussion

- Early postpartum (6-months) was a sensitive period for maternal parenting stress and family support for toddler behavioral inhibition.
- Poor maternal sleep at any time point was associated with lower levels of social behavioral inhibition.
- High stress at both timepoints across infancy and toddlerhood is associated with increased toddler separation inhibition.
- Low support at both time periods and low support only at 6-months and then high support at 30-months were associated with decreased toddler social inhibition.



Implications

- The outcomes should be used to tailor interventions during the postpartum period as the maternal factors are modifiable.
- Future research should focus on studying behavioral inhibition more in-depth.



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