

Does Treatment for Maternal Depression Impact Child-Directed Speech?



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Background

Maternal Depression

6% of 0-2 year old's and 9% of 10 year old's have mother's who experience depressive symptoms

Further, maternal depressive symptoms have shown to be most severe in a child's 3rd and 5th year of life

Maternal depressive symptoms have been related to...

↓ Positive parenting practices

↑ Negative parenting practices

↓ Child-directed speech (CDS)

Higher, more variable pitch



Frequent repetition

CDS

Lengthened speech

Overemphasized vowels

Increased positive affect

Preschoolers have been found to prefer CDS yet, research within this age range is **extremely limited**

Characteristics of CDS are believed to emerge spontaneously however, have been found to be **attenuated in mothers experiencing symptoms of depression**

Increased risks for **language acquisition difficulties** and **reductions in language ability** has been found in children of mothers with depression

Demographics

The sample consisted of 27 mothers who met the criteria for a Major Depressive Episode (MDE) and their 2 to 5 year old child

Methodology

Hypotheses

- 1) A **significant relationship** between **maternal depression and attenuated properties of CDS** will be found, including but not limited to, decreased pitch variability, lack of vowel exaggeration, slower responses, reduction in positive affect, and minimization of prosody.
- 2) An **increase in the use of CDS**, including an amplification of its properties will be observed **after going through the BRIDGE program**. We expect to see an increase in pitch variability, exaggerated vowels, quicker responses, positive affect, and emphasized prosody.

Procedure

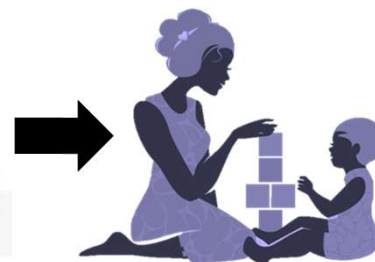
Mothers underwent a 20-week parenting program that utilized Dialectical Behavior Therapy Skills (DBT) called **Building Regulation in Dual Generations (BRIDGE)**

- Objective: Treat maternal depression while building on skills to improve the quality of the interactions between a mother and her child

Mother-child dyads participated in a Zoom assessment pre and post treatment that included a stressful matching task for the child, followed by a **play-time period** where mothers were instructed to soothe their child in any way they deemed appropriate. The play time portion is being coded for amount of CDS exhibited.



Stressful task



Video Coding

Videos are being segmented and coded using Elan 5.9. Maternal speech that is directed to a child is being coded for the following characteristics...

- **Short responses**
 - 1-2 words
- **Repetition**
 - Mother is repeating the bulk of what the child said
- **Elaborative/Collaborative Response**
 - Mom praises the child
 - Mom elaborates on an activity they are doing together
- **Disconnected/Control response**
 - Mom redirects or changes the activity/topic
 - Mom talks about something unrelated to the activity
 - Mom gives instructions on how to do something
- **Unclear**
 - unknown what type of response
- **Pitch variability and frequency**

Analytic plan

- Repeated Measures Analysis
 - CDS pre vs post treatment
 - Depressive symptoms pre vs post treatment
- Multivariate Regression Analysis
 - Do changes in symptomology predict changes in CDS across domains?

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We are open to ideas and suggestions!
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