

SSS24063: Influence of maternal childhood trauma and perceived stress on mothers' negative communication

Presented by Lim Zhi Min

Supervised by Assoc Prof Setoh Pei Pei, Ms. Johanna Ruess, Ms. Meryl Yu, Dr. Serene Siow

1. Background

- Childhood trauma is associated with reduced emotional understanding and regulation (Dvir et al., 2014).
- Hence, mothers with childhood trauma may have heightened emotional responses, which are associated with harsh or impulsive verbalisations during conflicts.
- Negative maternal communication is crucial to study because children often model their parents' behaviours, including communication styles (Kunkel et al., 2006). Thus, it can shape children's communication, with negative styles linked to lower sociometric status among peers (Putallaz, 1987).
- Moreover, current life stress can worsen the negative health effects of certain childhood traumas (Sachs-Ericsson et al., 2009), suggesting that **stress** may also moderate the relationship between **childhood trauma** and socio-emotional outcomes, such as **negative communication**.
- Understanding these dynamics is important because improving maternal communication can potentially enhance child social outcomes.

Research Gaps:

- Heavy reliance on cross-sectional designs and self-reported communication
- Current research linking adverse childhood events and communication quality focus largely on communication between romantic partners

Research Questions:

- What is the relationship between maternal childhood trauma and maternal negative communication?
- Is the relationship between maternal childhood trauma and maternal negative communication **moderated** by mothers' perceived stress?



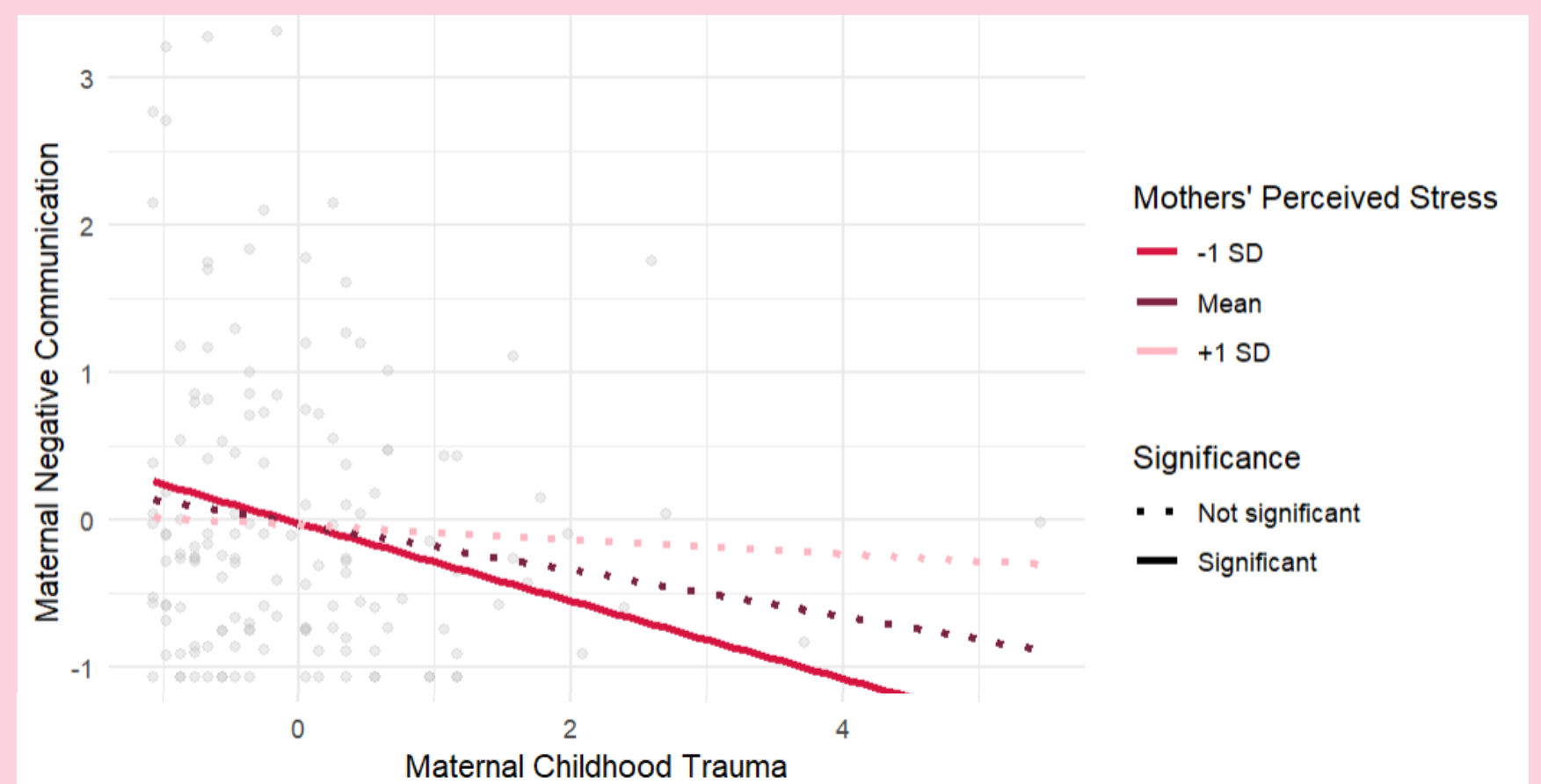
2. Methodology

Participants: 145 mother-adolescent dyads from Growing Up in Singapore Towards healthy Outcomes (GUSTO), a comprehensive birth cohort study

Key Construct	Definition	Measure
Predictor: Maternal childhood trauma (Child's age 4.5)	Occurs when an event during childhood overwhelms someone's ability to cope psychologically (Cloitre et al., 2006)	Self-reported by mothers with the Childhood Trauma Questionnaire (Bernstein et al., 2003), (1 = Never True to 5 = Very Often True) <ul style="list-style-type: none">Emotional Abuse, Physical Abuse, Sexual Abuse, Emotional Neglect: $\alpha \geq 0.77$Physical Neglect*: $\alpha = 0.49$ * Removed from composite score due to low Cronbach's alpha level
Moderator: Mothers' perceived stress (Child's age 10)	The degree to which an individual appraises situations in their life as stressful (Cohen et al., 1983)	Self-reported by mothers with the Perceived Stress Scale (Cohen & Williamson, 1988), (0 = Never to 4 = Very Often) <ul style="list-style-type: none">$\alpha = 0.72$
Outcome: Maternal negative communication (Child's age 14.5)	Negative verbal communication, including interruption, disagreements, put-downs, and coercion (Eisenberg et al., 2008)	Mother-adolescent dyads discussed personally relevant conflict topics in the Conflict Resolution Task , and maternal negative communication was coded using Dedoose. <ul style="list-style-type: none">The Intraclass Correlation Coefficient calculated from 29 videos independently coded by two raters = 0.928

3. Results

A **bootstrapped moderated regression** (1,000 resamples) was used to examine whether maternal perceived stress moderates the relationship between maternal childhood trauma and negative communication.



- All variables were standardised ($M = 0$, $SD = 1$). Negative values indicate scores below the sample mean, while positive values indicate scores above the sample mean.
- Regression lines represent bootstrapped estimates, as bootstrapping was used due to non-normality (Shapiro-Wilk test, $p < 0.001$). Scatterplot points reflect actual standardised data.
- When mother's perceived stress is added as a moderator, the **main effect** of maternal childhood trauma on mothers' negative communication was **significant**, with higher childhood trauma associated with lower negative communication (95% confidence interval [-0.251, -0.004]).
- The **interaction** between maternal childhood trauma and mothers' perceived stress was **significant** (95% confidence interval [0.007, 0.191]).

4. Discussion

When mothers were low in perceived stress, having higher childhood trauma predicted less use of negative communication with their adolescent.

- Challenge the assumption that childhood trauma is always associated with negative communication
- Maternal childhood trauma may reduce willingness to speak up during conflicts with her adolescent, as early trauma is linked to low self-esteem and anxiety (Muldoon et al., 2019), potentially hindering assertiveness

However, when perceived stress levels were average or high, we found no significant relationship between negative communication and childhood trauma history.

- The emotional pressures from higher levels of stress may override the influence of trauma history in shaping mothers' negative communication
- Aligns with existing literature linking elevated parental perceived stress to increased judgment, heightened reactivity, and critical parenting (Barreto et al., 2024)

Limitation & Future Directions:

- Perceived stress at children's age 10 and measures acute, rather than chronic stress
- Future research can examine the mechanisms linking maternal childhood trauma to reduced negative communication and its applicability to fathers

Acknowledgements: The GUSTO study has been led by the National University of Singapore, National University Hospital, KK Women's and Children's Hospital, and Singapore Institute for Clinical Sciences (SICS). We would like to thank Prof. Michael Meaney, lead investigator of the SICS neurodevelopment team. The study is supported by the National Research Foundation (NRF) under the Open Fund-Large Collaborative Grant (OF-LCG; MOH-000504) administered by the Singapore Ministry of Health's National Medical Research Council (NMRC) and the Agency for Science, Technology and Research (A*STAR). In RIE2025, GUSTO is supported by funding from the NRF's Human Health and Potential (HHP) Domain, under the Human Potential Programme.