Parenting Stress among Mothers of Young Children in Singapore: Focusing on the Role of Maternal Self-Control

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Parenting Stress

Parenting stress:

- Stress occurs when internal or external demands exceed personal competence (Lazarus & Folkman, 1984).
- Parenting stress is the difficulty parents perceive while raising their children in the context of their commitment to the parenting roles (Abidin, 1992, 1995, 1997).

Negative impacts of parenting stress:

- Dysfunctional parenting, poor quality of parent-child interactions, problems in family functioning, and problems in child behavior and socioemotional development (Abidin, 1992; Rodgers, 1993; Rodgers, 1998)

How to reduce parenting stress?

- Available resources to parents (e.g., personality traits, knowledge about parenting, personal experiences, economic and psychological well-being)
- Self-efficacy (perceived control over life events) is related to a lower level of parenting stress (McGroder, 2000).
- Self-control is an important capability to regulate emotion and behavior that can predict psychological well-being, health, and wealth (Moffitt et al., 2011).

Whether and how parental self-control may help reduce parenting stress is less clear.

Parenting Stress Model

(Abidin, 1992)

Parenting stress is influenced by:

- **Socioeconomic characteristics:** e.g., education level and low family income
- **Environmental challenges and stressors:** e.g., daily hassles and major life events
- **Family characteristics**: e.g., having more children in the family (Lavee et al., 1996; McBride, 1991; Östberg, Hagekull, & Wettergren, 1997)
- **Parent psychological well-being:** e.g., parents' psychological distress (e.g., depressive symptoms) is a risk factor for parenting stress (Abidin, 1995), and predicts later parenting stress (He et al., 2020).
- **Family functioning**: poorer marital quality (Lavee et al., 1996), parent-child relationships
- **Child behavior**: e.g., insecure child attachment (Hadadian & Merbler, 1996; Jarvis & Creasey, 1991; Robson, 1997; Teti, Nakagawa, Das, & Wirth, 1991) and child difficult temperament (Gelfand, Teti, & Fox, 1992; Hagekull & Bohlin, 1990; Östberg & Hagekull, 2000)

Family Stress Model

(Conger et al., 2000; Yeung et al., 2002)

- Socioeconomic disadvantages (e.g., low income) lead to more problems in child behavior (e.g., conduct problems and emotional symptoms)
- Mediators: economic strain → parental emotional distress (e.g., depressive symptoms) → problems in family functioning (e.g., family conflicts, punitive parenting)

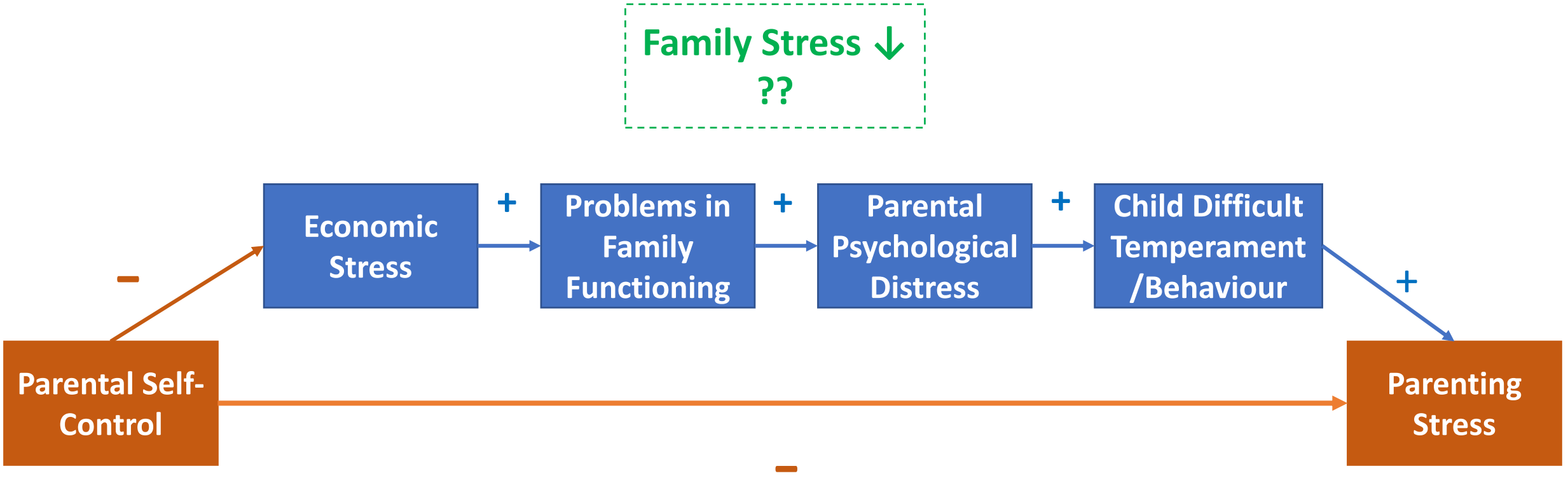
- Child temperamental difficulties can in turn intensify parents' experience of stress related to their parenting role (e.g., Östberg & Hagekull, 2000)
- Family stress model may explain how parenting stress is influenced

Personal Resources: Self-control

Parental self-control may alleviate parenting stress by reducing family stress:

- **Reduces economic stress**: able to manage their financial matters more appropriately, e.g., in a future-oriented manner
- **Facilitates functional family interaction**: able to handle caregiving hassles more effectively, resolve family conflicts in a functional manner
- **Promotes parental psychological well-being:** able to regulate their emotions more effectively, and experience less psychological distress.
- **Nurtures positive child temperament:** child and parent characteristics develop over time as a result of reciprocal influences (Sameroff, 1975; Sameroff, 2009).
  - Maternal self-control may be related to greater child effortful control (i.e., the ability to shift and focus attention, inhibit impulses and/or perform socially favorable behavior);
  - Lower maternal emotional distress may be related to the child's lower negative affectivity (i.e., the tendency to experience negative emotions such as sadness and anger across time and situations).

Proposed Model



Method

- **Project: Singapore Longitudinal EArly Development Study (SG LEADS)**
- Wave I data: collected between November 2018 and August 2019
- Participants: A subset of a large nationally-representative sample in Singapore; 1,518 mothers of young children aged 24-47 months old
- Mother demographics: biological mother; currently married; average age 34.8 years (*SD* = 4.51, *range*: 19-49)
- During a home visit, mothers self-administered a set of questionnaires on parenting stress, family processes, and child temperament.

Measures

Outcome

- **Parenting Stress:** The 4-item Aggravation in Parenting Scale. E.g., "*I find that taking care of my child(ren) is much more work than pleasure*" and "*I feel trapped by my responsibilities as a parent/caregiver*"). Self-reported on a 5-point scale from 1 (*not at all true*) to 5 (*completely true*). Average score indicated parenting stress (Cronbach's α = 0.81).

Predictor

- **Self-Control:** Measured by 3 positively-keyed items (e.g., "*I refuse things that are bad for me*"), and 7 negatively-keyed items (e.g., "*Sometimes I can't stop myself from doing something, even if I know it is wrong*" and "*Pleasure and fun sometimes keep me from getting work done*"), on a 5-point scale that ranges from 1 (*Not at all like me*) to 5 (*Very much like me*). We reversed the scoring of the 7 negatively-keyed items, and then calculated the average score of the 10 items to indicate self-control (Cronbach's α = 0.76).

Controls

- **Family demographics:** number of children (< 18 years) in the family
- **Mother demographics:** age, education attainment, number of marriages, length of the current marriage
- **Child demographics:** age, gender

Measures

Family Stress Mediators

- **Economic Stress:** measured by one single item about whether the family usually has money left over at the end of month [1=*some money leftover*, 2=*just enough to make ends meet (just enough to cover all expenses)*, 3=*not enough to make ends meet (not enough to cover expenses)*].
- ***Family Conflicts:*** measured by five items on how family members resolved conflicts, including four items on dysfunctional resolution (e.g., "*fight a lot*", "*throw things*", "*hit each other*" and "*criticize each other*"), and one item on functional resolution (i.e., "*calmly discuss problems*"), on a 4-point scale that ranges from 1 (*strongly disagree*) to 4 (*strongly agree*). We reversed scoring for the item about positive resolution. Average score of the five items was then created to indicate family conflicts (Cronbach's α = 0.74).
- ***Disagreements between Parents on Child Rearing:*** measured by six items on the disagreements with spouse on child rearing, such as on how to raise children, how mother spent money on children, how much time spouse spent with children, and how much time spouse spent with his own friends, on a 4-point scale (1=*never*, 4=*often*). Average score indicated disagreements (Cronbach's α = 0.84).
- ***Psychological Distress:*** measured by the 6-item Kessler Screening Scale for Psychological Distress (K-6; Kessler et al., 2002) on how often they felt "*nervous*", "*hopeless*", "*restless*", "*sad*", "*worthless*", and "*everything was an effort*" in the past week, on a 5-point scale from 1 (*all of the time*) to 5 (*none of the time*). Scores of six items were reversed and then averaged to indicate psychological distress (Cronbach's α = 0.86).
- ***Marital Satisfaction:*** mothers rated to what extent their relationship with spouse was happy, warm, rewarding and satisfying, on a 6-point scale (1=*not at all*, 6=*completely*) with 4 items. Average score was computed (Cronbach's α = 0.98).
- ***Child Temperament.*** The Early Childhood Behavior Questionnaire Very Short Form (ECBQ-VSF; Putnam et al., 2006) was further shortened to measure temperament of very young children aged 2 to 3 years.
  - Negative affectivity was assessed by 6 items such as how often the child became sadly tearful or had a temper tantrum when told "no", and how often the child got easily irritated while having trouble completing a task.
  - Effortful control was measured by 5 items such as how often the child could stop forbidden activity when told "no", and how often they could wait patiently for a desirable item was asked to, and so forth.

Statistical Analysis

- **Structural Equation Modeling (SEM)** was performed on Mplus version 7.31 (Muthén & Muthén, 1998-2017).
- All analyses were conducted with weighted data.
- The robust maximum likelihood (MLR) method was used for estimating parameters.

- **Baseline Model:**
- Predictor: maternal self-control
- Outcome: maternal parenting stress
- Controls: mother, child and family demographics (i.e., mother's age and education, number of marriages, length of the current marriage, child's age and gender, number of children in the family)

- **Full Model: Baseline Model + Family Stress Mediators**
- Mediators: economic stress, family interactions (i.e., family conflicts, disagreements with spouse on child rearing, and marital satisfaction), maternal psychological distress, and child temperament (i.e., effortful control and negative affectivity)

Results

Step 1: maternal self-control showed a negative bivariate correlation with parenting stress (β = -0.82, SE = .050, $p < .001$). R^2 = 20.6% ($p < .001$).

Step 2: after entering control variables, maternal self-control remained a significant predictor of a lower level of parenting stress (β = -0.83, SE = .051, $p < .001$). R^2 = 21.5% ($p < .001$).

Step 3: family stress mediators were entered. Maternal self-control still had a direct effect on parenting stress (direct effect: β = -0.39, *SE* = .059, $p < .001$), and this relationship was mediated by an array of family stress constructs (total indirect effect: β = -0.47, *SE* = .041, $p < .001$). R^2 = 37.9% ($p < .001$).

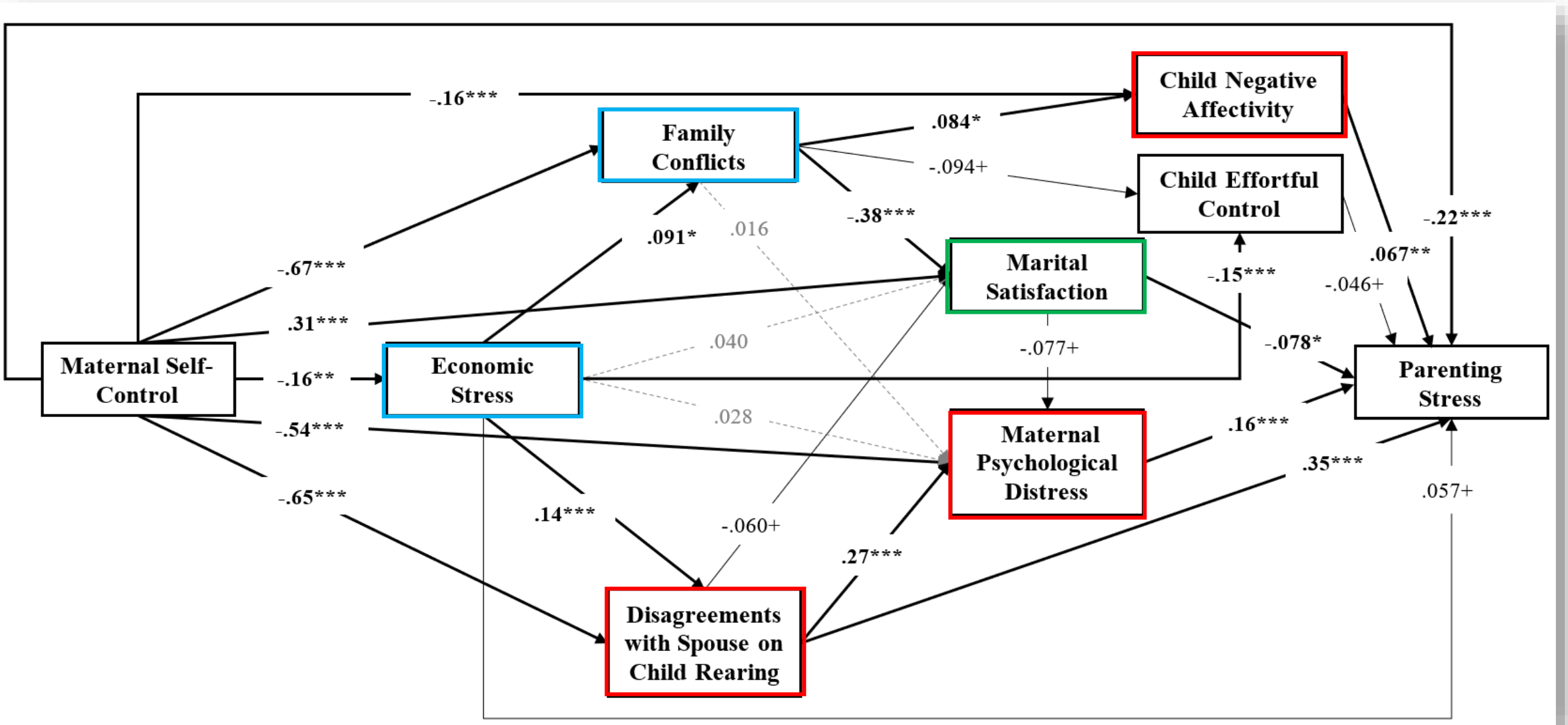
Table 2. Standardized Effects of All Variables on Parenting Stress

	Parenting Stress
Maternal self-control	-.39***
Economic stress	.057+
Family interaction	
Family conflict	.005
Disagreement on child rearing	.35***
Marital satisfaction	-.078*
Maternal psychological distress	.16***
Child temperament	
Effortful control	-.046+
Negative affectivity	.067**
Mother demographic (controls)	
Age	.021**
Education Attainment	.018
Number of marriages	-.021
Length of the current marriage	-.005
Family demographic (controls)	
Number of children	.020*
Child demographic (controls)	
Age	-.004
% Girls	-.009

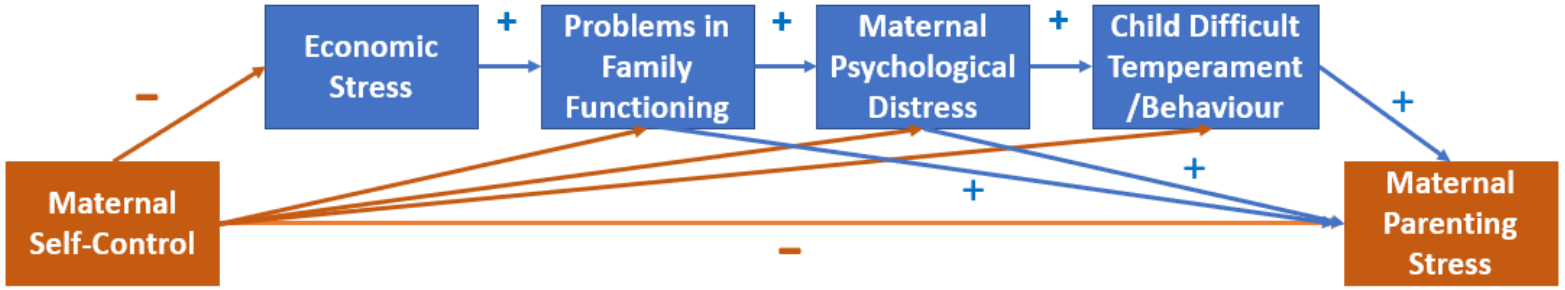
Note. ***$p < .001$; **$p < .01$; *$p < .05$; +$p < .10$.

Full Model

(RMSEA = 0.068, 90% *CI* [0.060, 0.076]; CFI = 0.95; SRMR = 0.035)



Discussion



- Consistent with the family stress model, **economic stress** was suggested to be a **risk factor** for family conflicts, disagreements between parents on child rearing, and difficulties in child temperament/behaviour (e.g., low effortful control).
- **Family Stress Model** worked as the **mediating** pathways linking maternal **self-control** to a lower level of **parenting stress**.
- Having stronger self-control to inhibit impulse responses and perform socially desirable behaviour may help **reduce economic strain** (when socioeconomic status was controlled for), and minimize the negative impacts of economic stress on family processes, emotional well-being, and child difficult temperament, which are contributors to parenting stress.
- The relation of maternal self-control to less parenting stress was mediated by (1) fewer disagreements with spouse on child rearing, (2) a lower level of maternal psychological distress, (3) a higher level of marital satisfaction, and (4) a lower level of child negative affectivity.
- Maternal self-control had a direct positive effect on family functioning, maternal psychological well-being, and positive child term parament, all of which can in turn reduce parents' experience of stress related to their parenting responsibilities.

Implications and Future Directions

Theoretical implications:

- Helped illustrate the complex mechanism underlying parenting stress
- Highlighted the positive role of self-control in promoting parental mental health, family functioning, and positive child behavior
- Extended the classic theories of parenting stress and family stress by revealing the mediating role of the family stress constructs in the relationship between personal psychosocial resources and parenting stress

Practical implications:

- Resilience-based intervention: self-control is an important capacity that can maintain mental health or even achieve more adaptive outcomes (instead of becoming mentally ill or dysfunctional) after experiencing adversity or daily hassles.

Future directions:

- Longitudinal analysis of the causal direction of the influences of parental self-control on family processes, psychological well-being, and child outcomes, which further influence parenting stress.
- Data collection: implicit measures, biomarkers, behavioural measures, observations.

Thank You!