

Parents' behavioural response to conflict

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Introduction

- Parental behaviours are important for child development, with inequality beginning at home (Kalil, 2014)
- In particular, parental **reaction** to conflict situations has been found to have an effect on child human capital (Hanisch et al., 2014; Gee, 2016)
- In this paper, we focus on the **instantaneous reaction of parents to conflict situations**, by looking at how parents react when their 2-3 years old child has a temper tantrum

Related Literature

- Economists usually assume that parents are **rational individuals** who choose their optimal parenting strategy by maximising an utility function, under some constraints (Lundberg et al., 2009; Cosconati, 2011; Doepke and Zilibotti, 2017)
- Recent evidence from the behavioural economics literature has recognized that parents act with **subjective rationality** relying on their own beliefs (Cunha, 2014; Boneva and Rauh, 2017)
- An example of **deviation from the rational model** of parenting is the impulsive and "in the moment" reaction of parents to conflict situations, which exists when:
 - ▶ parents have no perfect self-control (Gennetian et al. 2016)
 - ▶ the psychic cost (or mental effort) of interacting with the child is high (Burton et al., 2002; Cobb-Clark et al., 2018)

What we do

- We analyse the instantaneous reaction of parents to conflict situations (temper tantrums) with their children and investigate how parents' behaviours depend on parents' and child's characteristics ▶ Tantrums
- We measure conflict situations by using information from **time use diaries** on the occurrence of **temper tantrums for 2-3 years old** toddlers
- As measures of parents' reaction, we focus on two activities that have been found to have a direct effect on child development, i.e. **reprimanding** and **comforting** the child

- We use **time diaries** from the second wave of the Longitudinal Study of Australian Children (LSAC) to construct a panel dataset ▶ Time diaries
- We have information from two days (a weekend day and a working day) and we split the day in three equally long periods, e.g. morning (6-10am), afternoon (11am-3pm) and evening (4-8pm)
- We identify whether (and how many) episodes of temper tantrum the child had using information on whether the child was:
 - ▶ crying, being upset, having tantrum
 - ▶ arguing, fighting
 - ▶ destroying things, creating mess

Parents' Behavioural Response: Definition

- As parental investments, we measure whether/how long
 - ▶ parents **reprimand** their child
 - ▶ parents **hug, comfort, cuddle** their child
- We define the reaction as:
 - ▶ **moderate** (up to 15 minutes)
 - ▶ **extreme** (more than 15 minutes)

Table: Descriptive Statistics of Tantrum Episodes

| | Mean | Std Dev. | Min | Max |
|------------------------------|--------|----------|-----|-----|
| Tantrum (working day) | 0.3039 | 0.4601 | 0 | 1 |
| Tantrum (morning) | 0.1041 | 0.3054 | 0 | 1 |
| Tantrum (afternoon) | 0.0984 | 0.2979 | 0 | 1 |
| Tantrum (evening) | 0.1853 | 0.3887 | 0 | 1 |
| Tantrum (weekend day) | 0.3131 | 0.4639 | 0 | 1 |
| Tantrum (morning) | 0.1098 | 0.3127 | 0 | 1 |
| Tantrum (afternoon) | 0.1186 | 0.3234 | 0 | 1 |
| Tantrum (evening) | 0.1700 | 0.3757 | 0 | 1 |

Table: Descriptive Statistics of Parents' Behaviour

| | Full sample | | Treated (tantrum) | | Controls | |
|-----------------------|-------------|-----------|-------------------|-----------|----------|-----------|
| | Mean | Std. Dev. | Mean | Std. Dev. | Mean | Std. Dev. |
| Moderate reprimanding | 0.0581 | 0.2340 | 0.2218 | 0.4156 | 0.0334 | 0.1798 |
| Extreme reprimanding | 0.0230 | 0.1499 | 0.0972 | 0.2963 | 0.0118 | 0.1080 |
| Moderate comforting | 0.1315 | 0.3380 | 0.2324 | 0.4225 | 0.1163 | 0.3206 |
| Extreme comforting | 0.2099 | 0.4073 | 0.3352 | 0.4722 | 0.1910 | 0.3931 |

Empirical Strategy

- We exploit **differences in the timing of the tantrum**, by comparing parent's behaviour before and after conflict situations and before and after normal situations
- This allows us to apply a difference-in-difference methodology, which is equivalent to a **child FE model**:

$$I_{i,p,d} = \alpha_0 + T_{i,p,d}\beta_0 + \sum_{k=1}^4 T_{i,p,d} \cdot d_i^{P,k} \beta_k + T_{i,p,d} \cdot \mathbf{X}_i \gamma + D_{i,p,d} \lambda_{p,d} + \eta_i + \nu_{i,p,d}$$

$I_{i,p,d}$: parental reaction; $T_{i,p,d}$: tantrum episode; P_i : set of dummies for parenting styles; \mathbf{X}_i : set of parents' and child's characteristics; $\mathbf{D}_{i,p,d}$: set of dummies capturing period (morning, afternoon, evening) and day (working day vs weekend); η_i : child-parent fixed effect; $\nu_{i,p,d}$: idiosyncratic error term

- Because of the fixed effect, **we are controlling for all time-invariant factors**, e.g. parenting style, child socio-emotional skills, household composition

Parents behaviours and child development

- Parental reaction to conflict situations, such as tantrum episodes, has been found to be important in **explaining socio-emotional development** of children later in life (Halligan et al., 2013; Hanish et al., 2014)
- Analysing the association between parents' reaction to a tantrum when children are 2-3 and children's skills (socio-emotional, cognitive and health) when they are 4-5, we find that:
 - ▶ **Moderate reprimanding** is associated with **higher skills**
 - ▶ **Extreme reprimanding** and **no reprimanding** are equally **bad** for the child
 - ▶ Child's skills are higher when parents **moderate comfort** her, followed by **extreme comforting** (each of which is better than no comforting)

Main Results

| | (1) Reprimanding moderate | (2) Reprimanding extreme | (3) Comforting moderate | (4) Comforting extreme |
|--------------|---------------------------------|--------------------------------|-------------------------------|------------------------------|
| Tantrum | 0.163*** (0.006) | 0.071*** (0.004) | 0.080*** (0.009) | 0.107*** (0.011) |
| Constant | 0.052*** (0.005) | 0.015*** (0.003) | 0.131*** (0.007) | 0.280*** (0.008) |
| Time dummies | ✓ | ✓ | ✓ | ✓ |
| No. children | 2,277 | 2,277 | 2,277 | 2,277 |

Heterogeneity By Mother's Characteristics

| | (1) Reprimanding moderate | (2) Reprimanding extreme | (3) Comforting moderate | (4) Comforting extreme |
|----------------------------------|---------------------------------|--------------------------------|-------------------------------|------------------------------|
| T | 0.099*** (0.025) | 0.047*** (0.016) | 0.026 (0.036) | 0.141*** (0.042) |
| T * warmth | -0.003 (0.015) | 0.006 (0.010) | 0.007 (0.022) | 0.005 (0.026) |
| T * hostility | 0.025* (0.014) | 0.010 (0.009) | 0.039* (0.021) | -0.076*** (0.023) |
| T * inductive reasoning | 0.025* (0.015) | 0.027*** (0.009) | 0.040* (0.022) | -0.012 (0.025) |
| T * over-protective | -0.033** (0.014) | 0.007 (0.009) | 0.031 (0.021) | 0.022 (0.023) |
| T * university degree | 0.041*** (0.014) | -0.018** (0.009) | -0.020 (0.021) | -0.016 (0.024) |
| T * psych. distressed (moderate) | -0.010 (0.029) | -0.012 (0.018) | -0.043 (0.043) | -0.026 (0.049) |
| T * psych. distressed (high) | 0.117** (0.059) | 0.109*** (0.037) | -0.153* (0.088) | 0.246** (0.100) |
| T * full-time employed | 0.043* (0.022) | 0.010 (0.014) | 0.014 (0.033) | 0.028 (0.037) |
| T * part-time employed | 0.035** (0.015) | 0.010 (0.009) | 0.005 (0.022) | 0.025 (0.025) |

Notes. Models include a set of time dummies. T is also interacted with household and child characteristics. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$.

Exploring the Effect of Psychological Distress

- Psychologically distressed mothers are more likely to over-react by deviating from their parenting style if they have:
 - ▶ a **low level of education**
 - ▶ a **conflict relation** with their partner

| | Reprimanding moderate | Reprimanding extreme | Comforting moderate | Comforting extreme |
|---|-----------------------|----------------------|----------------------|---------------------|
| <i>Level of education</i> | | | | |
| T | 0.094*** (0.025) | 0.048*** (0.016) | 0.025 (0.037) | 0.139*** (0.042) |
| T * degree | 0.035** (0.014) | -0.010 (0.009) | -0.020 (0.022) | -0.005 (0.025) |
| T * psych. distress (high) | -0.218*** (0.080) | 0.272*** (0.051) | -0.199* (0.120) | 0.350** (0.137) |
| T * psych. distress (high) * degree | 0.717*** (0.117) | -0.349*** (0.075) | 0.099 (0.175) | -0.222 (0.199) |
| <i>Conflict relationship with the partner</i> | | | | |
| T | 0.094*** (0.025) | 0.040** (0.016) | 0.021 (0.037) | 0.146*** (0.042) |
| T * psych. distress (high) | 0.292*** (0.094) | -0.073 (0.060) | -0.411*** (0.141) | 0.294* (0.160) |
| T * argumentative rel. | 0.015 (0.015) | 0.025*** (0.009) | 0.023 (0.022) | -0.021 (0.025) |
| T * psych. distress (high)* conflict | -0.290** (0.120) | 0.283*** (0.076) | 0.407** (0.179) | -0.069 (0.204) |

Conclusions

- In this paper we have analysed how parents react to conflict situations with their children and whether their behaviour depends on parents', child's and household characteristics
- We have found that among other factors, mother's psychological well-being plays an important role:
 - ▶ Psychologically distressed mothers tend to over-react, by spending more time both reprimanding and comforting the child
 - ▶ This effect is driven by mothers having an argumentative relationship with their partner and it is amplified for mothers with a low level of education
- Given this evidence, it may be important to introduce measures aimed at supporting parents and improving their relationship

Future work

- We also find that boys are more likely to be extremely reprimanded than girls
- The differences in parents reactions to tantrum by child gender may depend on different factors
- Future research is needed to understand whether this is due to gender bias or differences in children behaviours

Thank you for your attention!

Heterogeneity by child and household characteristics

| | (1) | (2) | (3) | (4) |
|-----------------------------------|-----------------------|----------------------|----------------------|---------------------|
| | Reprimanding moderate | Reprimanding extreme | Comforting moderate | Comforting extreme |
| T | 0.099*** (0.025) | 0.047*** (0.016) | 0.026 (0.036) | 0.141*** (0.042) |
| Children characteristics | | | | |
| T * boy | 0.012 (0.013) | 0.017* (0.009) | -0.056*** (0.020) | 0.010 (0.023) |
| T * low socio-emotional skills | -0.047** (0.021) | 0.057*** (0.014) | -0.053* (0.032) | 0.006 (0.036) |
| T * low learning skills | -0.020 (0.019) | -0.029** (0.012) | 0.042 (0.029) | -0.037 (0.033) |
| Household characteristics | | | | |
| T * household income (bottom 20%) | 0.024 (0.017) | -0.036*** (0.011) | -0.033 (0.026) | -0.027 (0.029) |
| T * younger children in the hh | 0.053*** (0.016) | -0.012 (0.010) | 0.041* (0.024) | -0.012 (0.027) |
| T * older children in the hh | 0.004 (0.015) | -0.005 (0.010) | 0.033 (0.022) | -0.020 (0.026) |

Notes. Models include a set of time dummies. T is also interacted with parents' characteristics. *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Results: Second Stage

| | Gross motor skills | Socio-emotional skills | Learning skills |
|-------------------------|---------------------|------------------------|---------------------|
| Reprimanding (moderate) | 1.759*** (0.578) | 0.958 (0.618) | 0.819 (0.594) |
| Reprimanding (extreme) | -0.336 (0.905) | -0.329 (1.010) | 0.663 (0.778) |
| Comfort (moderate) | 0.124 (0.561) | 1.454** (0.581) | 1.762*** (0.620) |
| Comfort (extreme) | 0.542 (0.535) | 1.170** (0.572) | 1.006* (0.515) |
| Uninvolved | -1.576** (0.755) | -1.501** (0.762) | -1.934** (0.757) |
| Authoritarian | -0.193 (1.104) | 0.444 (1.260) | 1.267 (0.993) |
| Permissive | -0.0325 (0.785) | 0.423 (0.835) | -2.016** (0.841) |
| Constant | 100.6*** (0.584) | 100.6*** (0.650) | 101.9*** (0.605) |

Results: Tantrums as Random Shocks

| | Tantrum | | Tantrum |
|------------------------------|---------------------|----------------------------------|----------------------|
| High school | 0.048 (0.032) | Hours childcare (q =2) | -0.046 (0.054) |
| Certificate | 0.026 (0.027) | Hours childcare (q =3) | -0.035 (0.052) |
| Degree | 0.006 (0.029) | Hours childcare (q=4) | -0.080 (0.055) |
| Postgraduate degree | 0.061* (0.031) | Formal childcare | 0.056 (0.050) |
| Uninvolved | 0.035* (0.019) | Informal childcare | 0.029 (0.052) |
| Authoritarian | 0.059** (0.030) | Socio-emotional skills (normal) | -0.053* (0.030) |
| Permissive | -0.000 (0.021) | Socio-emotional skills (top 15%) | -0.125*** (0.034) |
| Boy | -0.006 (0.016) | Motor skills (normal) | -0.019 (0.025) |
| House ownership | -0.022 (0.020) | Motor skills (top 15%) | -0.063** (0.029) |
| Financial hardship (=2) | -0.012 (0.026) | Learning skills (normal) | -0.027 (0.025) |
| Financial hardship (=3) | 0.029 (0.046) | Learning skills (top 15%) | -0.042 (0.031) |
| Full-time | -0.067** (0.031) | Psychological distressed (m) | 0.115 (0.088) |
| Part-time | -0.025 (0.019) | Constant | 0.426*** (0.050) |
| N. children in the household | -0.000 (0.009) | | |

