PARENTAL SEPARATION AND CHILDREN'S PHYSICAL HEALTH

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Background

- Considerable increase in family structure diversity and family instability in industrialized countries
- Vast literature on the consequences for children's educational attainment, cognitive skills, social and emotional problems
  - Negative consequences
  - Selection

Background

- Fewer studies consider the relationship between family structure/parental separation and children's physical health (e.g. BMI, obesity, asthma):
  - E.g. Bzostek and Beck (2011); Schmeer (2012)*; Chen, et al (2010); Yannakoulia, et al (2008); McConly, et al (2011); Cavanagh et al (2014); Sigle-Rushton (2012)
- On average, parental separation is associated with worse health outcomes for children
- Yet, evidence is still limited, largely based on cross-sectional studies and on the U.S.

Motivations

- We should know more about the link between parental separation and child health because:
  - Findings from the US research may not be transferable
  - Parental separation, by changing the amount and type of resources available in the family, could affect children's health trajectories negatively
  - Evidence suggests that health status during childhood is a strong predictor of health and social and economic success later in life

Our aim and contribution

Aim:

- Answer the question of **whether** and eventually **how** parental separation influences children's physical health trajectories

Contribution:

- UK context, high-quality longitudinal data
- Carefully consider the **process** of separation
  - Short term and medium term effects
  - Pre-separation period
- Explore potential mechanisms

Health Measures: Child BMI, overweight & obesity

- Relevance
  - Markers of adiposity
  - Overweight associated with a range of negative health and social outcomes
  - Weight changes beyond the extremes also matter since they may be indicators of emotional distress associated with separation

How may family instability influence BMI?

Direct:

- reduction of parent's economic and time resources for consuming healthier and home-prepared food, exercise and physical activity opportunities
- Disruption and chaos (at least temporarily) might affect routines and schedules in the household.

Indirect:

- Stress, emotional problems might affects eating patterns

The Millennium Cohort Study

- U.K. longitudinal cohort study, representative of the U.K. population
- Around 19000 children born in the U.K. around the year 2000
- Rich information on children's development and health and on their families
  - E.g. indicators of SES, child health and risk factors
- 5 Sweeps of data have been collected – 9 months, 3, 5, 7 and 11 years old

Sample

- We select:
  - Children whose parents are married/cohabiting at Sweep 1 (9 months) and Sweep 2 (3 years)
  - Single births, natural parent is the main interviewee, complete data on all variables
- BMI
  - Measured at Sweeps 2,3,4 and 5
- Parental separation can occur between
  - Sweeps 2-3, 3-4 and 4-5
- N=7149

Method (Vuri & Sanz-de-Galdeano 2007, Pronzato & Aassve 2013)

- Child/Individual fixed effects
  - Control for time-invariant heterogeneity
    - Alleviate selection issues
    - Child's characteristics
- Dummy variables:
  - Separation: separated in Sweep x *but* not in x-1
  - Short term effects: separated in Sweep x *and* x-1
  - Medium-term effects: separated in Sweep x *and* x-1 *and* x-2
  - Pre-separation period
- Control for risk factors

Variables

- Child's BMI
  - Change over time; for boys and girls: standardized BMI
  - Overweight/obesity
- Partnership status
  - Asked at each Sweep
  - Separation/divorce
- Risk factors - mechanisms
  - HH income – OECD adjusted equivalized scale
  - Parent's depression
  - Indicators of family routines: child's TV watching & regular bedtime
  - Step parent

Results: Descriptive Statistics

When separation occurs	%
Sweep 2 – Sweep 3	29.9
Sweep 3 – Sweep 4	26.4
Sweep 4 – Sweep 5	43.8

Results: Descriptive Statistics

Mean difference in BMI (with 95% CI)	Always cohabiting	Experience separation in between Sweeps
Sweep 3 – Sweep 2	-.54 (-.58 to -.49)	-.45 (-.62 to -.29)
Sweep 4 – Sweep 3	.18 (.14 to .23)	.36 (.18 to .55)
Sweep 5 – Sweep 4	2.43 (2.35 to 2.51)	2.96 (2.74 to 3.18)

Preliminary Results: BMI

	Basic Model	With Interactions	With risk factors
Separation	0.10***		
Pre-separation	0.014		
Short-term separation	0.14***		
Medium-term separation (sweep 2-3)	0.15***		
Separation * sweep 3-4			
Separation * sweep 4-5			
Short term separation * Sweep 3-4			

Preliminary Results: BMI

	Basic Model	With Interactions	With risk factors
Separation	0.10***	0.045	
Pre-separation	0.014	0.018	
Short-term separation	0.14***	0.095**	
Medium-term separation (sweep 2-3)	0.15***	0.12***	
Separation * sweep 3-4		0.028	
Separation * sweep 4-5		0.10**	
Short term separation * Sweep 3-4		0.058	

Preliminary Results: BMI

	Basic Model	With Interactions	With risk factors
Separation	0.10***	0.045	0.046
Pre-separation	0.014	0.018	0.018
Short-term separation	0.14***	0.095**	0.097**
Medium-term separation (sweep 2-3)	0.15***	0.12***	0.12***
Separation * sweep 3-4		0.028	0.031
Separation * sweep 4-5		0.10*	0.097*
Short term separation * Sweep 3-4		0.058	0.053

Preliminary Results: overweight-obese

	Basic Model	With risk factors
Separation	0.046	
Pre-separation	0.018	
Short-term separation	0.097**	
Medium-term separation (sweep 2-3)	0.12***	

Preliminary Results: overweight-obese

	Basic Model	With risk factors
Separation	0.046	0.012
Pre-separation	0.018	-0.011
Short-term separation	0.097**	0.035**
Medium-term separation (sweep 2-3)	0.12***	0.037*

Conclusions

- Preliminary findings suggest:
  - Parental separation might negatively affect BMI
    - If separation occurs when the child is older
  - Separation as a process
    - Some of evidence of short and medium term effects of separation
  - Limited explanatory role of the mechanisms considered when looking at BMI

Next

- Variation in change following separation!
- Different specifications for BMI
  - Percentiles, quintiles etc.
- Timing of separation
- Cohabitation vs. marriage
- Explore a wider set of risk factors to explore the potential mechanisms
  - Limited set of controls in Sweep 2

Thank you!