



Growing up in a One-Parent Family: The relationship between family structure and child outcomes

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Preliminary Findings

Research funded by the *Irish Research Council for Humanities and the Social Sciences* and the *Family Support Agency*



Introduction

- Main focus is on the link between family structure and child outcomes
- Little research on the impact of lone-parenthood on children in Ireland
- The impact of lone-parenthood is believed to operate through a number of mechanisms; income, education, time, stress etc
- Recent baby boom has lead to an increase in the *number* of births occurring outside of marriage
- Recent figures from Eurostat show nearly a quarter of Irish children live in one-parent homes (23.2% 2008)



Research Aims

Selection Bias.

The factors that make single parenthood more likely also have direct effects on child outcomes of interest.

- To present unbiased estimates of the effects of growing up in a one-parent family on a range of child outcomes at age 9 (for today, we focus on education)
- Make comparisons across different types of one and two-parent families

Can the relationship between family structure and children's wellbeing be explained by selection effects?



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Method

Propensity Score Matching

- Estimate the “counterfactual group” to adjust for selection bias. In the simplest case, estimates the level of an outcome, such as educational attainment, that a child would have reported had he/she had two-parents living together rather than one-parent.
- It is possible to estimate this counterfactual by matching cases that are similar on confounding factors, but differ on the focal independent variables.
- Cases were matched on multiple characteristics (a priori and fixed) of both the PCG and child.



Family Types

| Family Type Primary Caregiver (father n=37) | N | % |
|---|-------------|------------|
| Missing Marital Status | 158 | 0.77 |
| <i>No-partner</i> | | |
| Separated | 331 | 3.86 |
| Divorced | 109 | 1.27 |
| Widowed | 50 | 0.58 |
| Never Married | 468 | 5.86 |
| <i>Partnered</i> | | |
| Married (Control group) | 6949 | 81.76 |
| Separated | 66 | 0.77 |
| Divorced | 37 | 0.43 |
| Widowed | 5 | 0.06 |
| Never Married | 395 | 4.63 |
| Total | 8568 | 100 |



Child Outcomes

Academic achievement:

- Drumcondra reading (vocabulary) and Maths tests
- Completed in group-settings within the school
- Tests developed for Irish school children

School Attendance:

- Number of days absent from school (teachers report)

Family wellbeing:

- Equivalised household annual income



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Some socioeconomic differences

| PCG | One-parent (%) | Two-parents (%) |
|--------------------------------|-----------------------|------------------------|
| Mean age | 36.9 | 40.2 |
| Degree or higher | 20.3 | 26.9 |
| Not religious | 7.2 | 13.7 |
| Foreign born | 17.9 | 15.7 |
| Smoked | 25.0 | 11.2 |
| Alcohol | 35.5 | 39.5 |
| Study Child | | |
| Birth order (1 st) | 53.9 | 40.5 |
| Birth weight (KG) | 3.4 | 3.5 |
| Breastfed | 42.4 | 52.3 |
| Parent Prison | 2.8 | 0.3 |

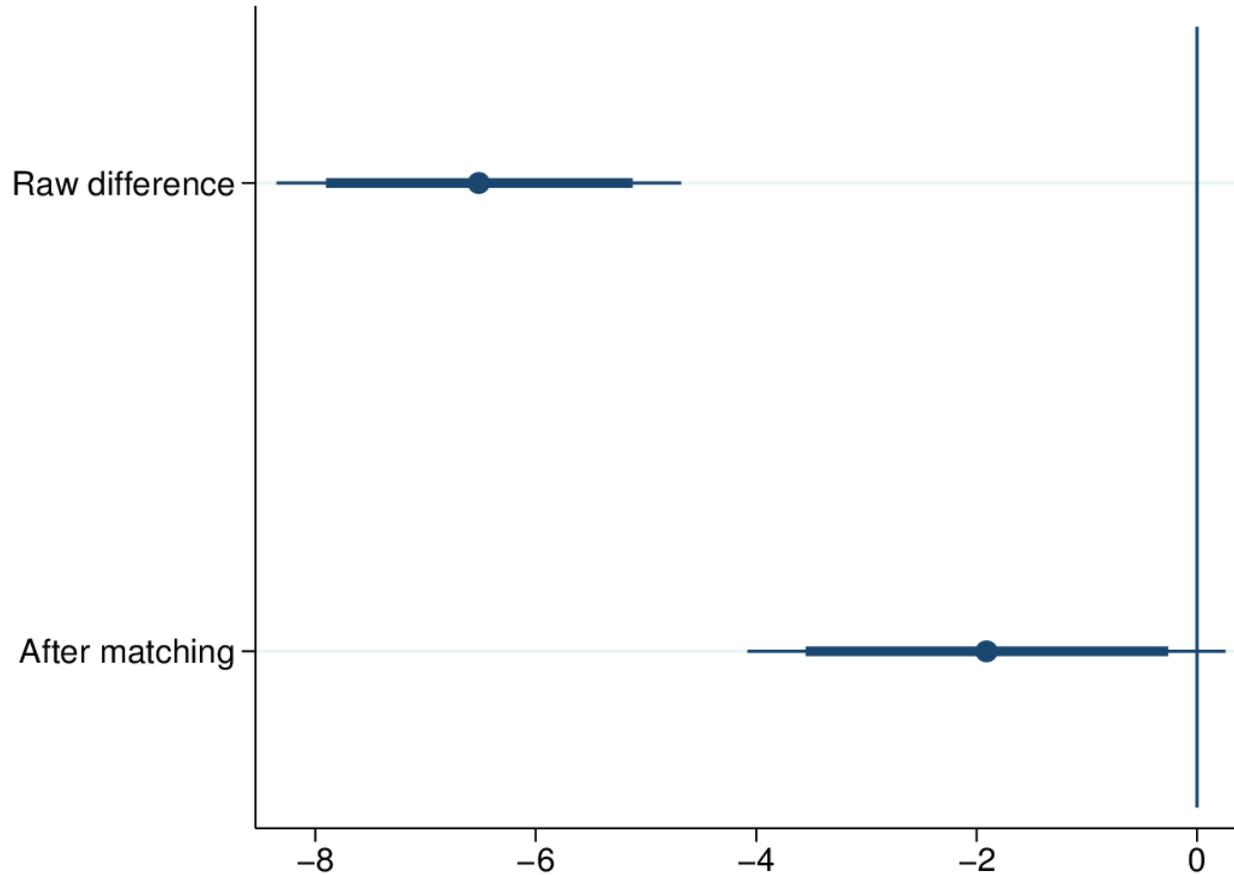


Reduction in Bias

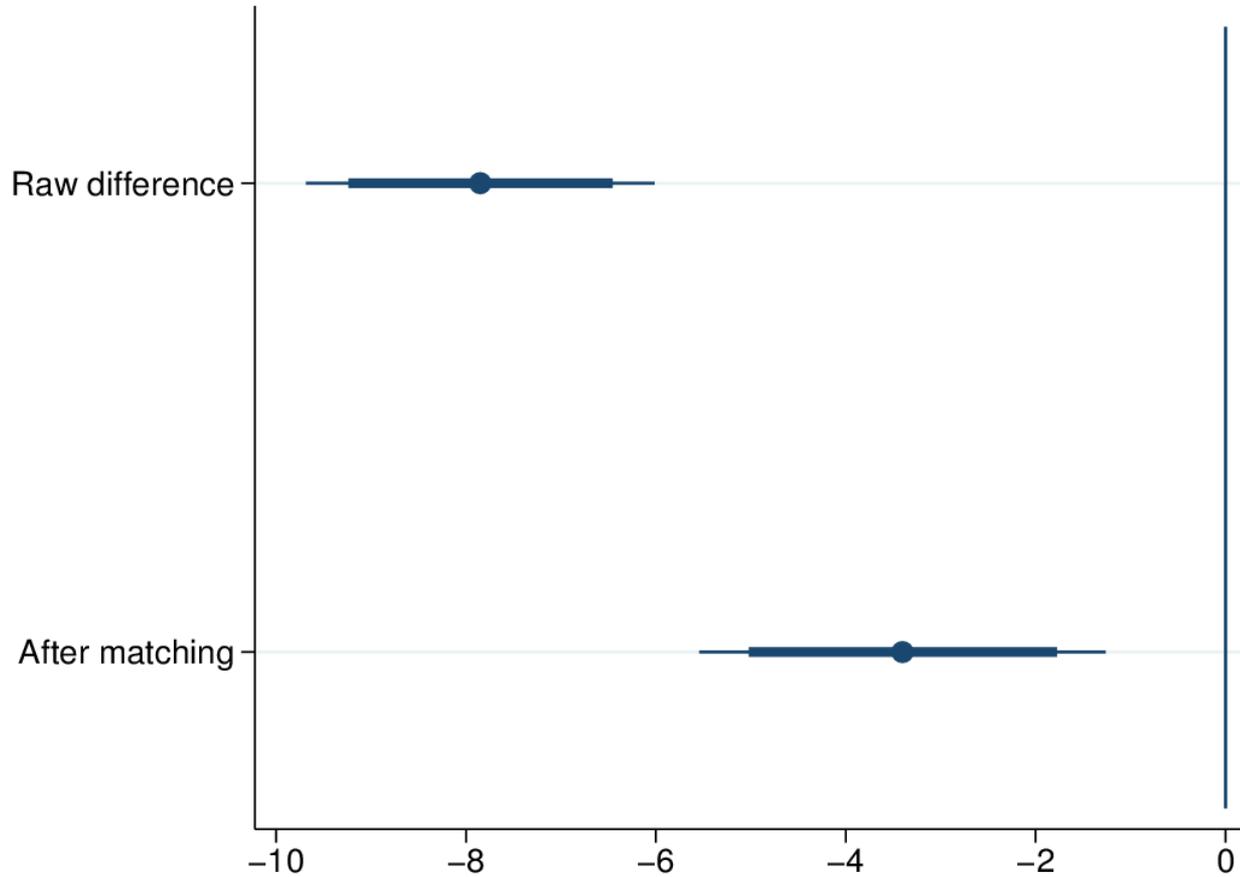
| PCG | % | SC | % |
|-------------------|----------|-----------------------|-----------------|
| Age | 96.6 | Gender | 52.2 |
| Height | 91.0 | Aged 10 | 43.1 |
| No Religion | 79.5 | Birth weight | 91.1 |
| Religiosity | 97.5 | Birth timing: early | 98.7 |
| Higher Education | 97.8 | Delivery mode (SA) | 84.8 |
| Native language | -109.6 | Perinatal ICU | 74.7 |
| Citizenship | 17.5 | Breastfed | 96.9 |
| Birth country | 19 | Country birth | 42.7 |
| Chronic illness | 96.1 | Birth order | 93.4 |
| Smoked | 91.3 | Parent prison | 62.0 |
| Alcohol | 92.6 | Full data | <i>n</i> = 8568 |
| Deprived in youth | 94.4 | Matched sample | <i>n</i> = 8041 |



Drumcondra Reading (PCT)



Drumcondra Maths (PCT)



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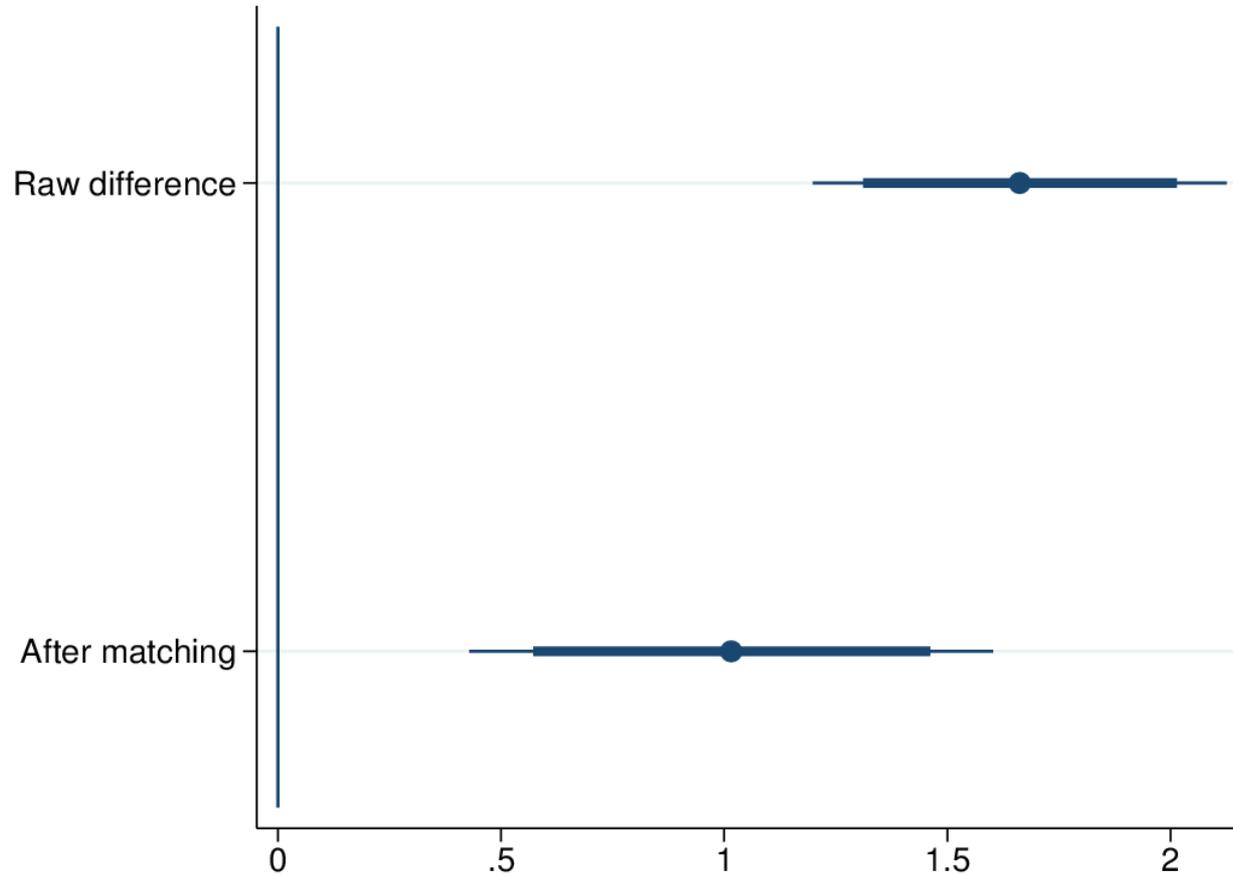


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IRCHSS

Number days missing from School



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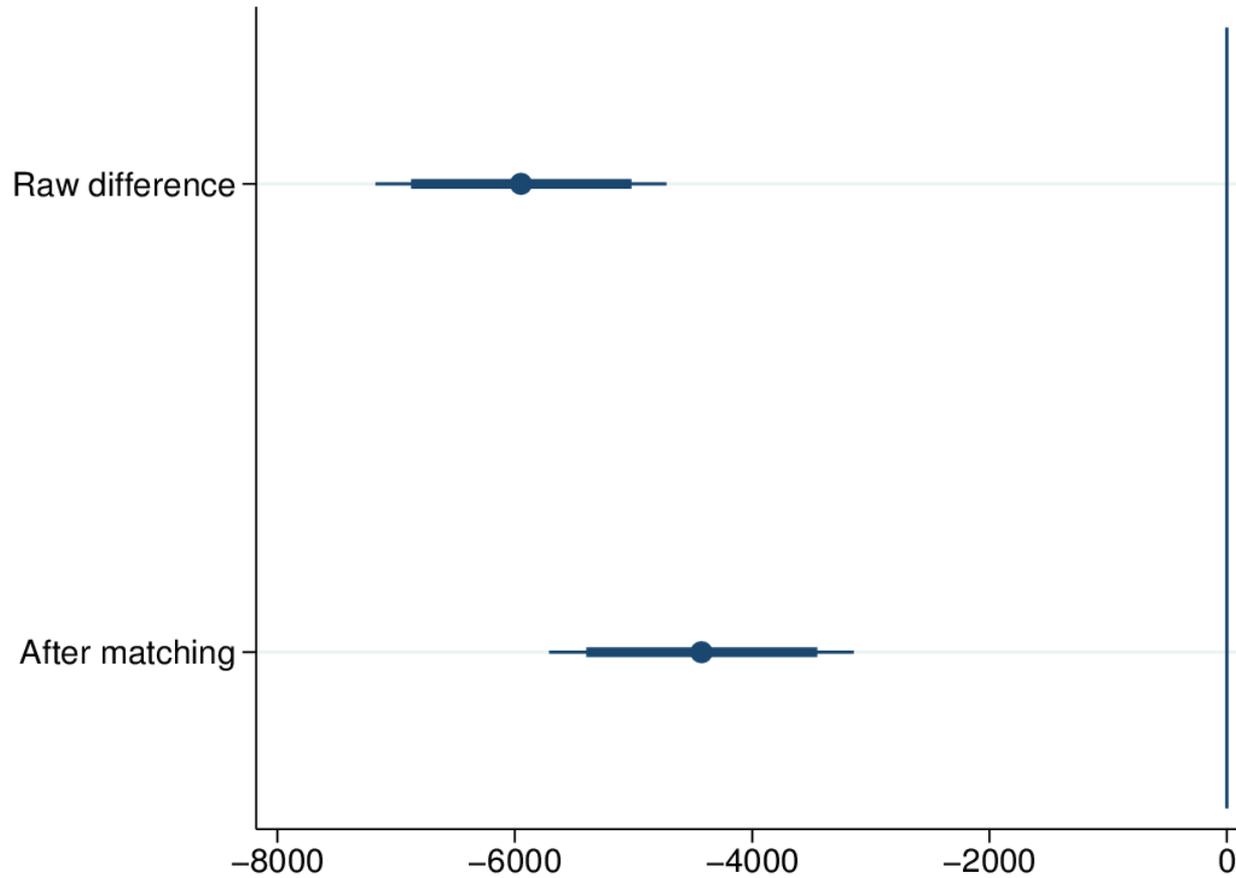


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IRCHSS

Family Wellbeing: Income

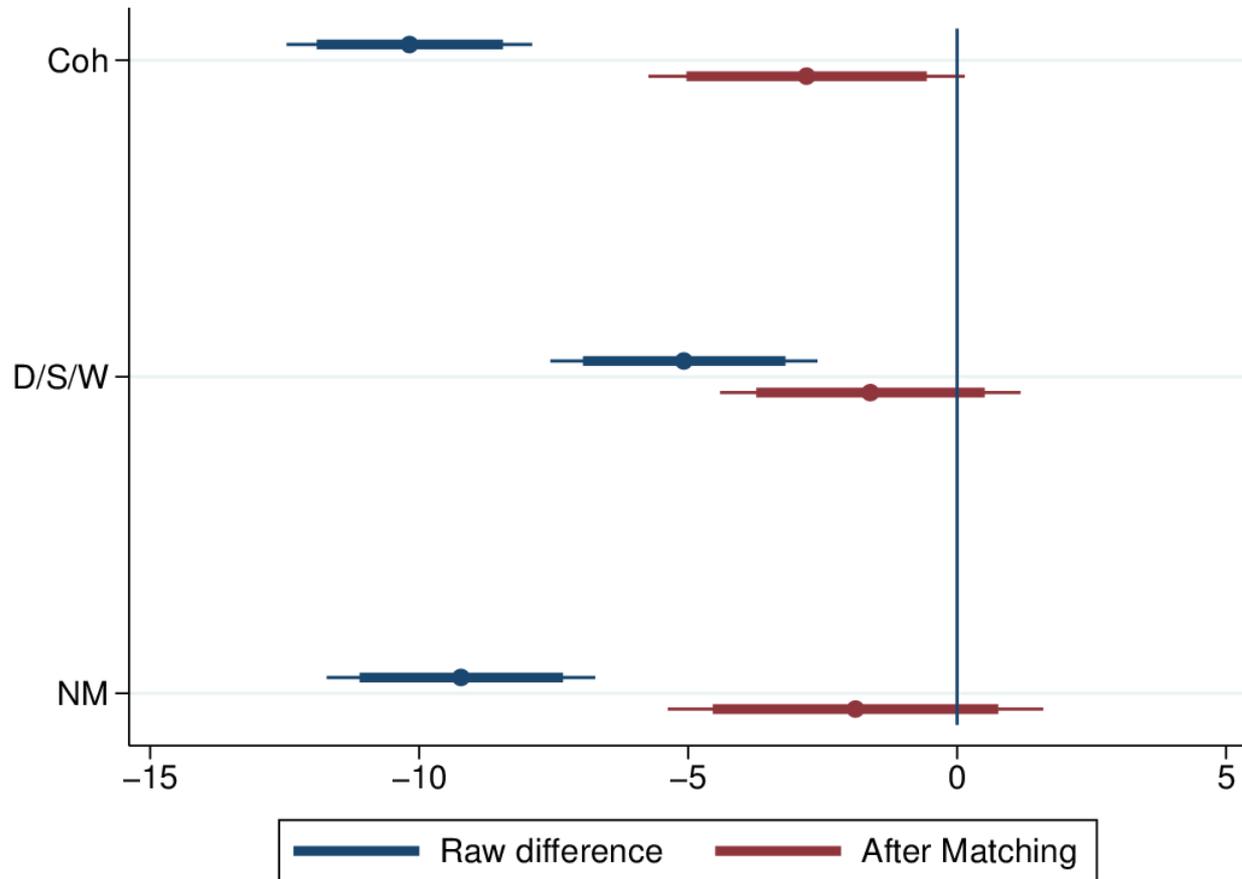


Socioeconomic differences (%)

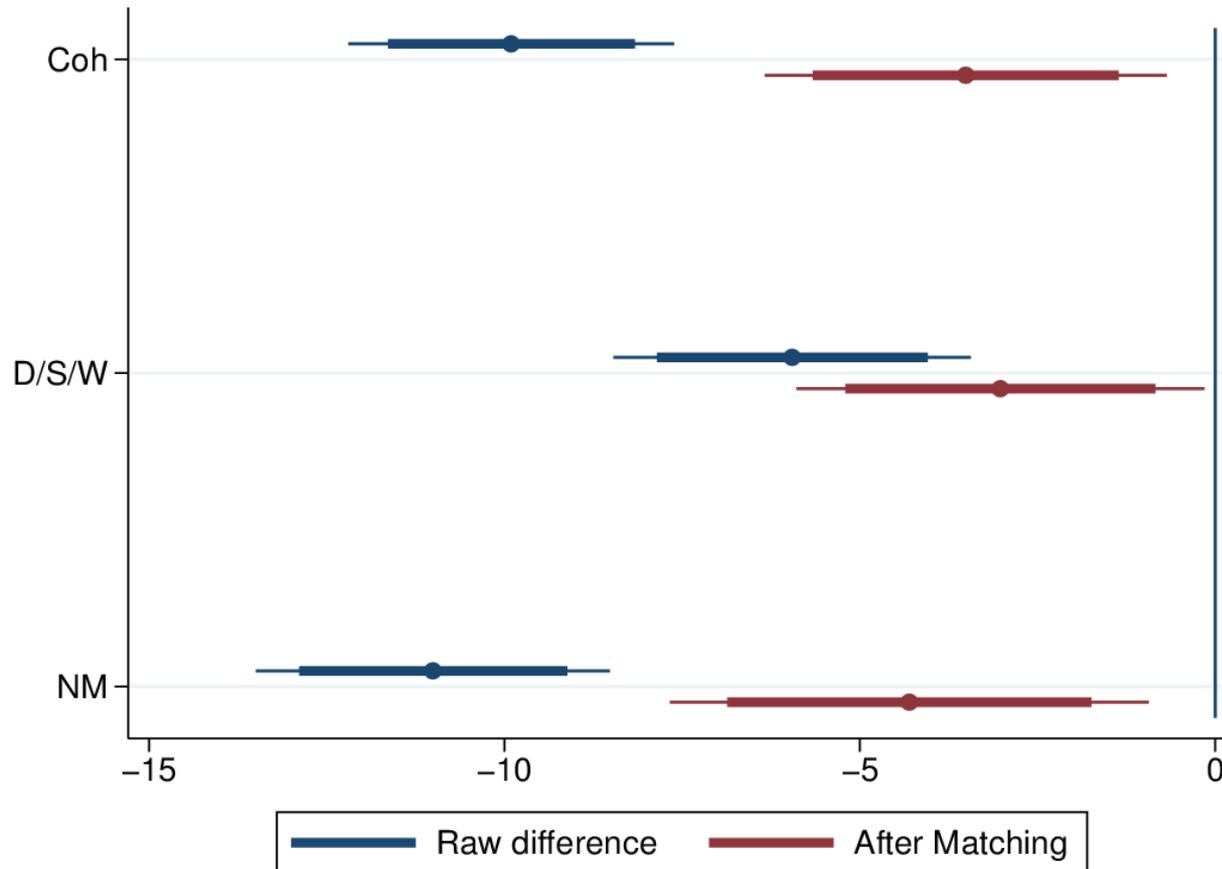
| | Two-parents: | | One-parent: | |
|--------------------|----------------|-------------------|----------------------|--------------|
| PCG | Married | Cohabiting | Never-married | S/D/W |
| Mean Age | 40.5 | 35.4 | 33.9 | 40.1 |
| Degree or high | 27.9 | 14.3 | 16.5 | 24.0 |
| Not religious | 6.0 | 17.2 | 17.73 | 9.59 |
| Foreign born | 15.8 | 17.7 | 14.2 | 21.8 |
| Smoked | 10.0 | 25.1 | 28.9 | 21.0 |
| Alcohol | 39.4 | 39.1 | 35 | 35.9 |
| Study Child | | | | |
| Birth weight kg | 3.5 | 3.4 | 3.5 | 3.3 |
| Breastfed | 53.5 | 35.7 | 34.7 | 50.3 |
| Parent Prison | 0.2 | 1.4 | 4.2 | 1.4 |
| First Born | 39.2 | 56.7 | 70.9 | 36.5 |



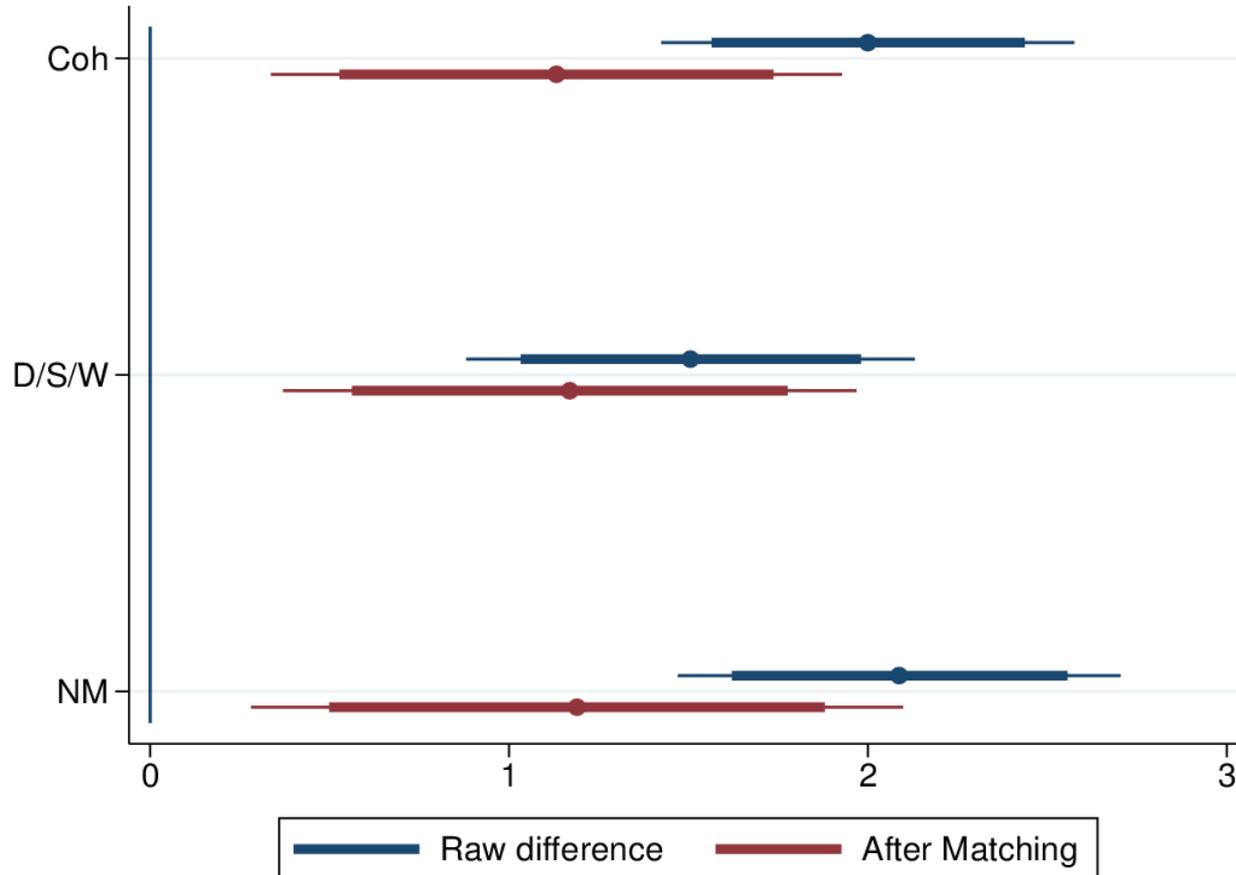
Drumcondra Reading (PCT)



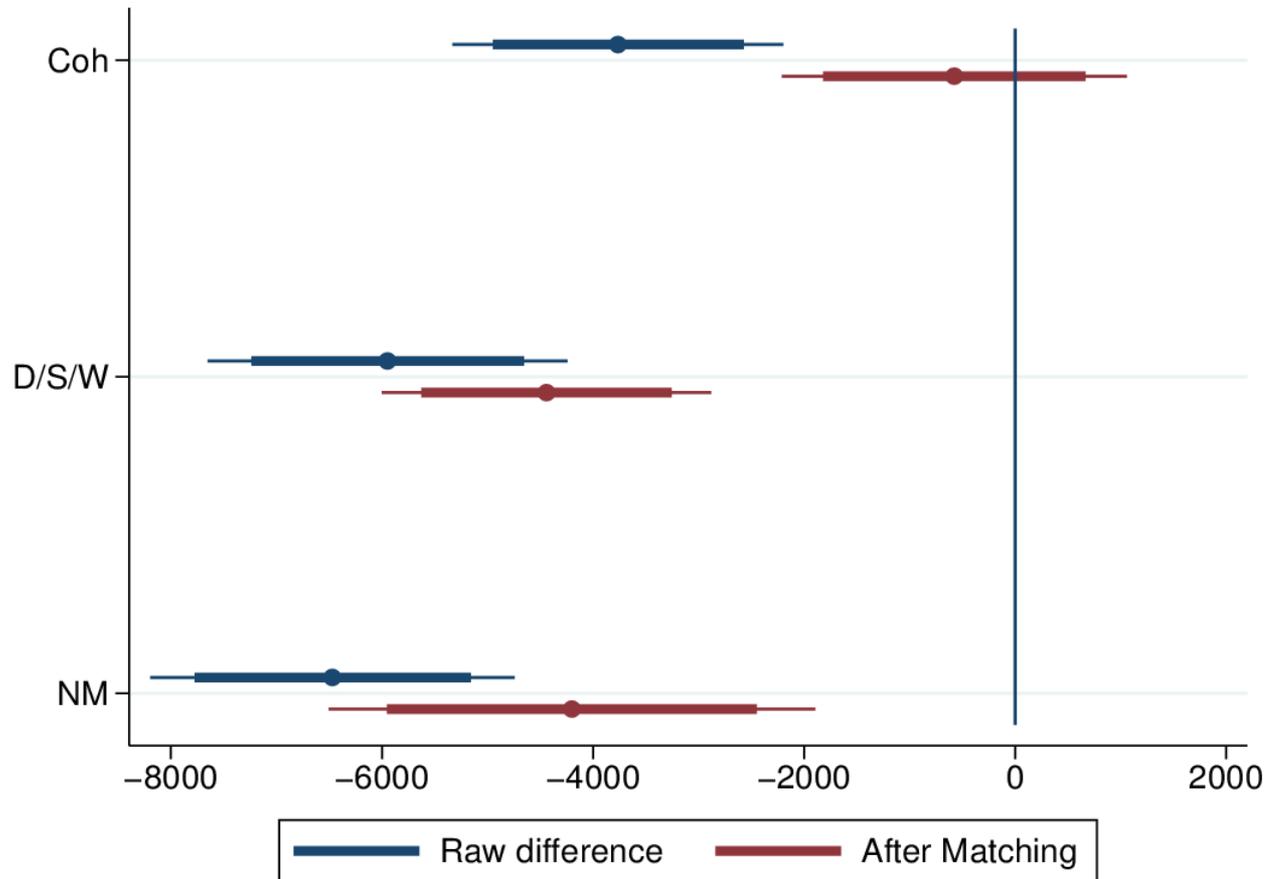
Drumcondra Maths (PCT)



Number days missing from School



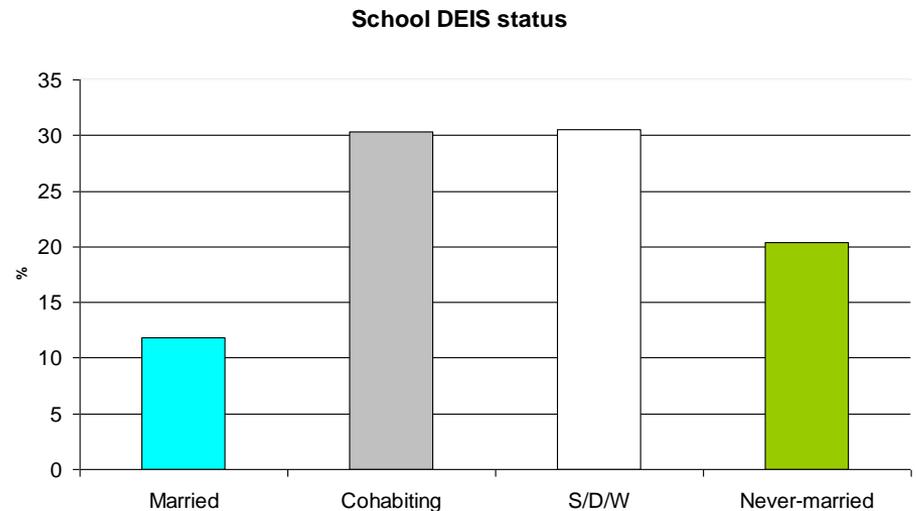
Family Wellbeing: Income



Limitations

School Sampling

- Just over 25% of 9 year olds from one-parent families go to a disadvantaged school compared to 13% in two-parent families.



Controlling for School Effects

Previous estimates are unbiased but inefficient

Children with cohabiting parents:

Although there are no significant income differences between married versus cohabiting couples once we take account of selection bias and school effects, there are significant differences in children's score and school attendance.

Children who have experience marital breakdown or death of a parent:

Children from these one-parent families perform significantly worse in maths tests but not reading tests (borderline) and have significantly lower rates of school attendance.

Children from never-married one-parent families:

Taking account of school effects, we find significant differences in reading and maths scores, and schools attendance rates are lower for this group when compared to children in a married parental setting.



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Conclusions

- Basic comparisons of child outcomes across one versus two-parent families are misleading.
- Yes, differences in children's development are evident, but once we control for selection bias the size of the effect was reduced.
- There is a complex interplay of factors at work which the data allow us to explore e.g. the interplay between lone-parenthood, poverty, deprived neighbourhoods and school selection.
- This represents a benchmarking exercise as the true potential of the data will be realised once these children are followed over time.
- In terms of PSM, the benefits of the approach were not fulfilled given the limited number of confounding variables available at this stage.



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