Childhood socio-economic inequalities
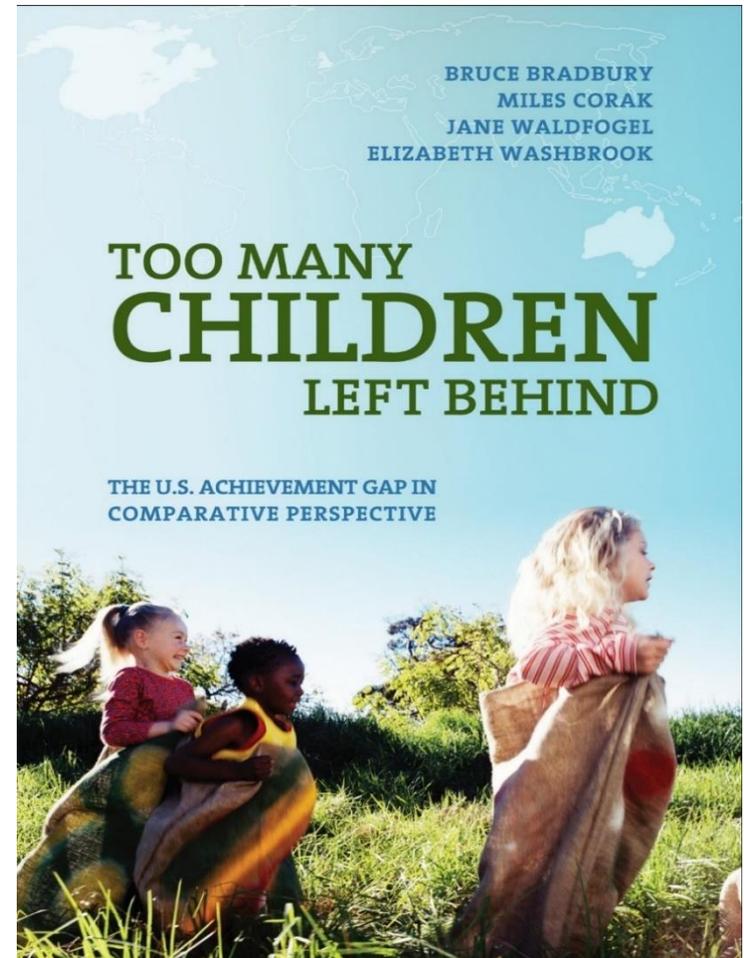Comparing the UK, the US, Canada and Australia

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University of Bristol

A cross-national perspective on early SES gaps

Whole industry devoted to international comparisons at **older ages** – analysis of PISA, PIRLS and TIMSS

No large-scale datasets collect comparable achievement outcomes on children below age 10, or follow children longitudinally

Our project draws on **four national birth cohort studies** that follow children from age 4/5 (at the latest) to the end of primary school (or beyond)

BRUCE BRADBURY
MILES CORAK
JANE WALDFOGEL
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TOO MANY
CHILDREN
LEFT BEHIND

THE U.S. ACHIEVEMENT GAP IN
COMPARATIVE PERSPECTIVE

Outline

- How do **SES achievement gaps** compare across our four countries at the time of school entry?

- What do inequalities in the **resources available to children** from families, schools and the state look like across countries?

- How do the **initial gaps evolve** over the primary school years? How much of the gaps at age 11 can be 'attributed' to disparities that existed at the time of school entry?

The cohorts

	US	UK	Australia	Canada
Dataset	ECLS-K (Early Childhood Longitudinal Study – Kindergarten Cohort)	MCS (Millennium Cohort Study)	LSAC-K (Longitudinal Study of Australian Children – Kindergarten Cohort)	NLSCY (National Longitudinal Study of Children and Youth)
Mean age at "age 5" assessment	5.7 years	5.2 years	4.9 years	4.9 years
Year of age 5 assessment	1998	2006	2004	1996-1999
Analysis sample size	8,370	11,762	3,940	4,346

Measuring parental SES

Parental education – highest qualification held by a parent co-resident with the child at age 5
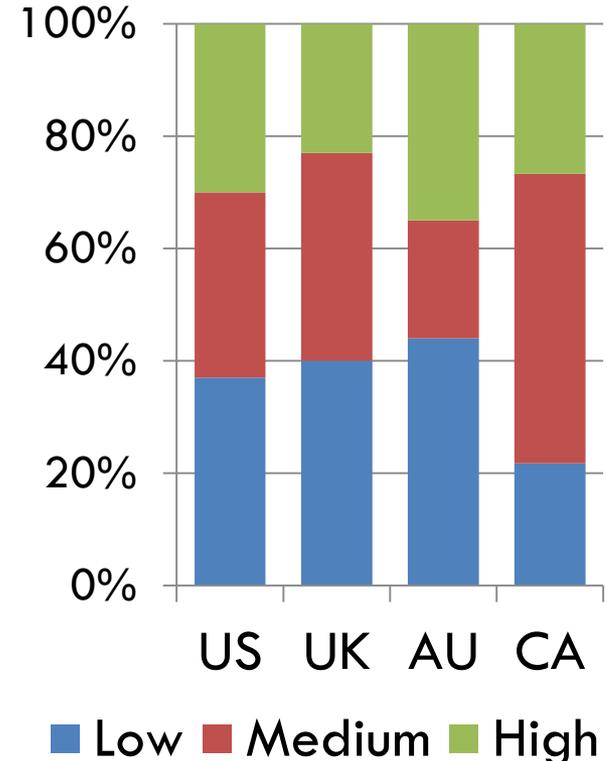
Definition:

Low = GCSE A-C (Level 2) or less

Medium = A-level, HE below degree

High = Bachelors degree or more

(Harmonized to US high school/some college/4 year college degree)

Distribution of parental education, by country

Measuring outcomes

Each country used different tests to assess language/reading and maths skills at different ages

We standardize these measures (into z-scores) so that we can make comparisons over time and over countries

Not comparing **levels** across countries but **gaps**

- Difference in the outcomes of the average low SES and average high SES child in each country

SES gaps in age 5 language outcomes
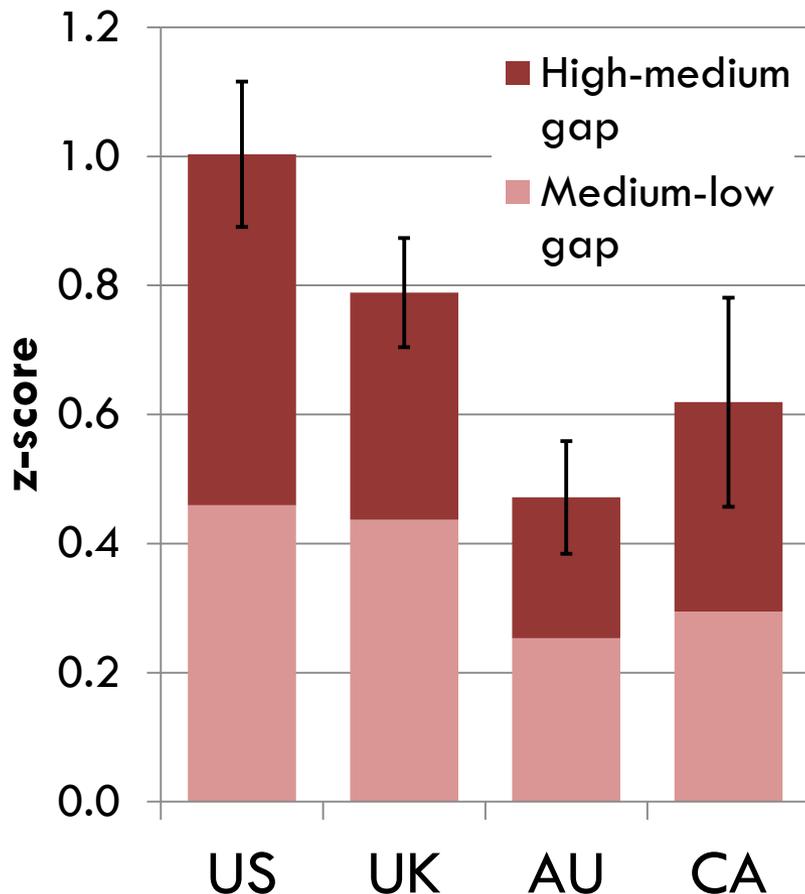
The overall height of each bar is the **total SES gap** – the difference in the mean scores of **high and low SES** children
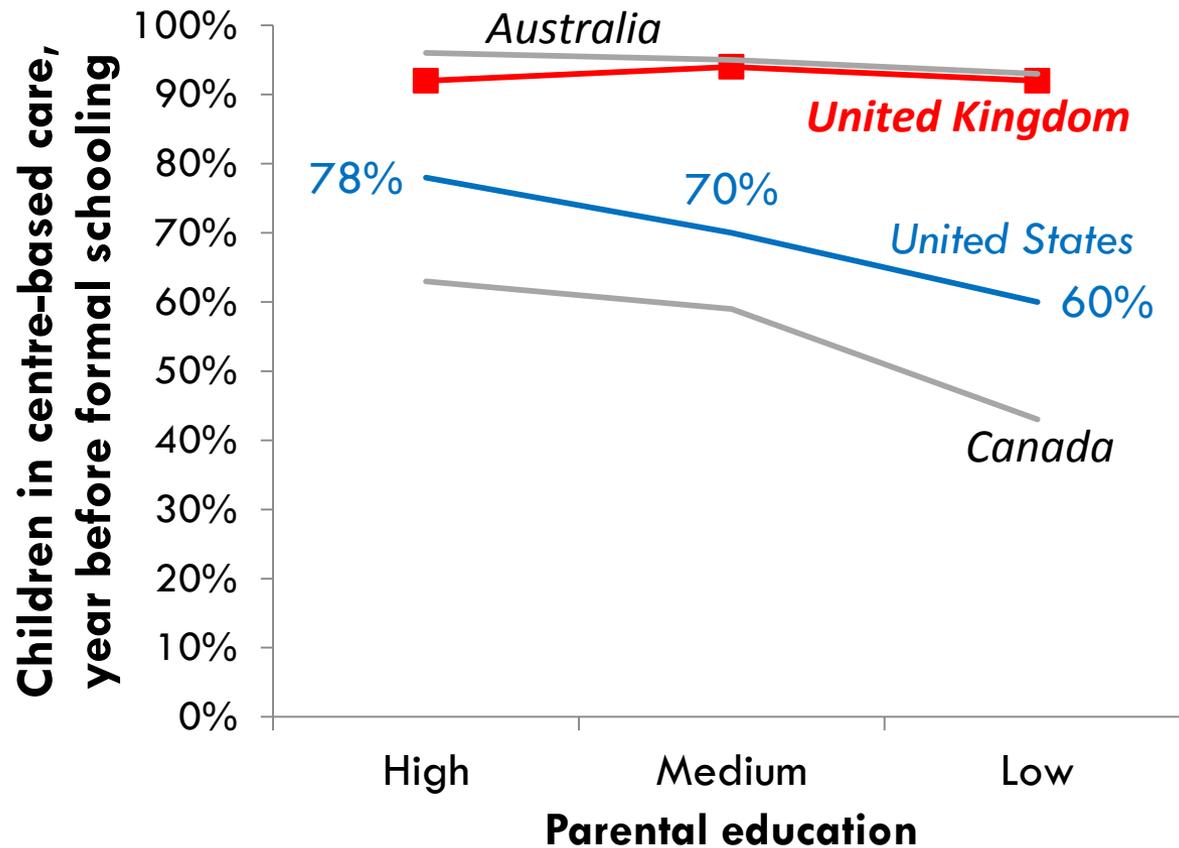
The total gap is made up of:

☐ The gap between **medium and low SES** children (lighter bars)

☐ The gap between **high and medium SES** children (darker bars)

Error bars show 95% confidence intervals around the total high/low gap

Why do we see these cross-country differences?

- Inequalities exist in the resources available to children in all countries in a multitude ways
  - Parental capital: health, demographic characteristics
  - Interaction of labour market and state supports for family: Children's access to parental (non-work) time, family income and early childhood education and care

- In many (but not all) respects inequalities are sharper in the US

- More generally the patterns are complex
  - Each country looks good in some respects and poor in others
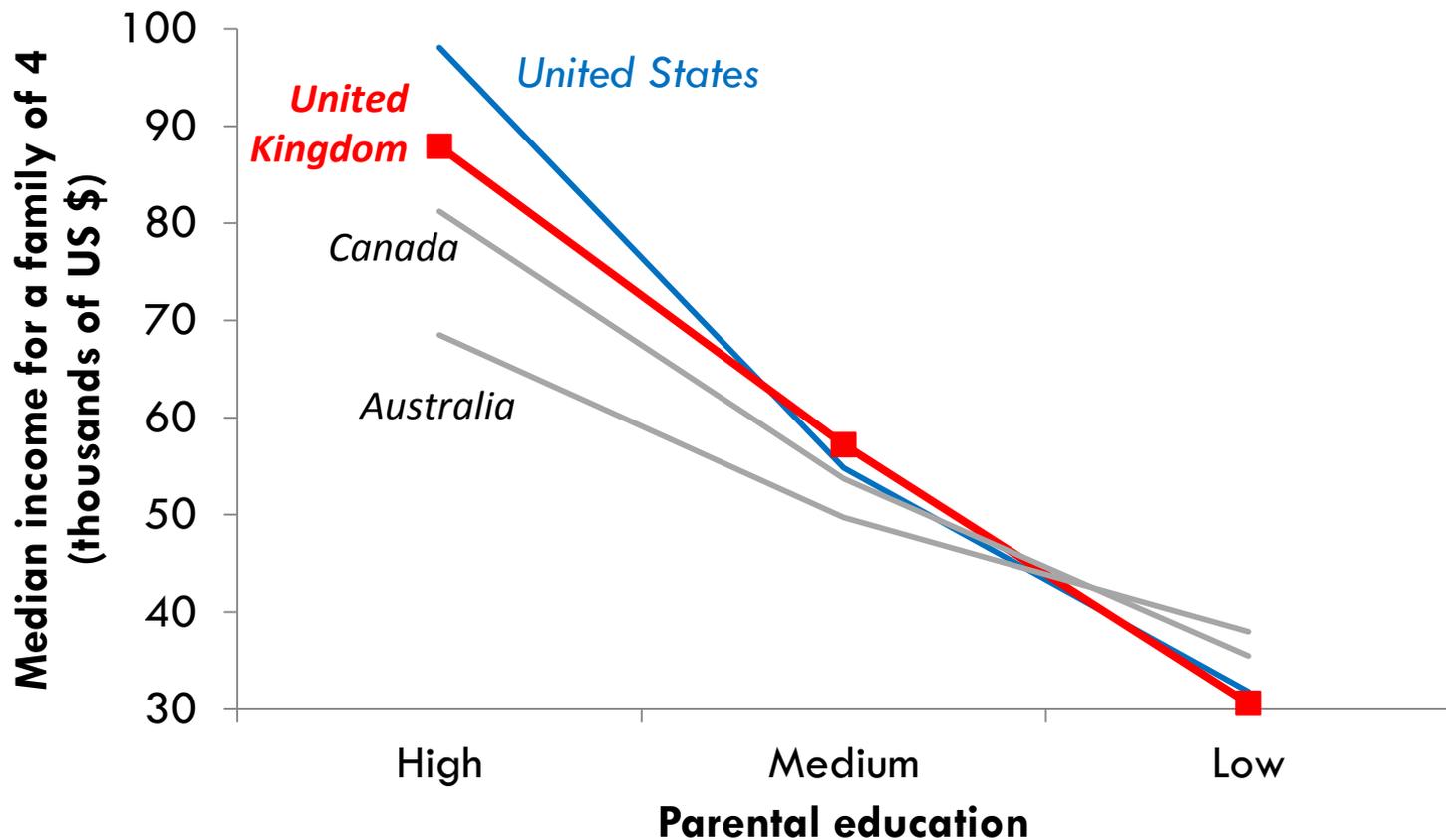 - With a sample of just four countries, conclusions must be tentative!

Exposure to centre-based child care/education is graded by SES in the US … but in Canada too

Children in centre-based care, year before formal schooling

Australia

United Kingdom

78%

70%

United States

60%

Canada

Parental education: High — Medium — Low

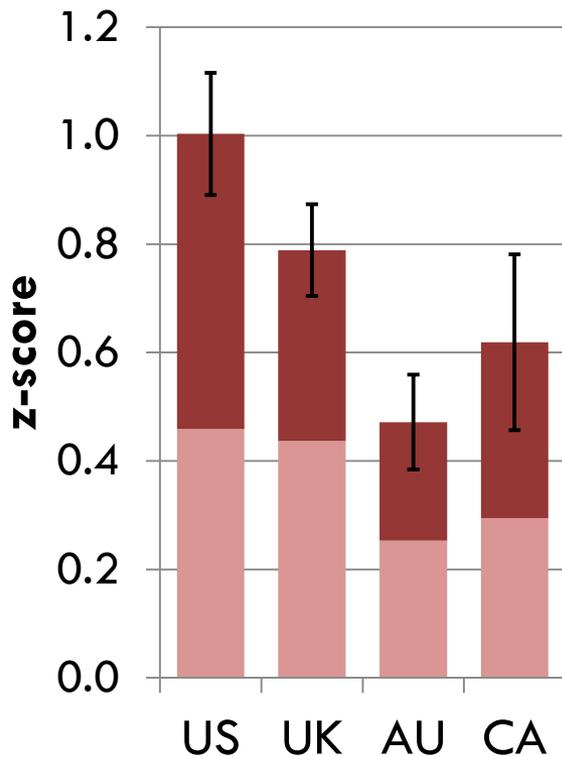# Low SES children are 'compensated' by greater maternal time at home in all countries apart from the US
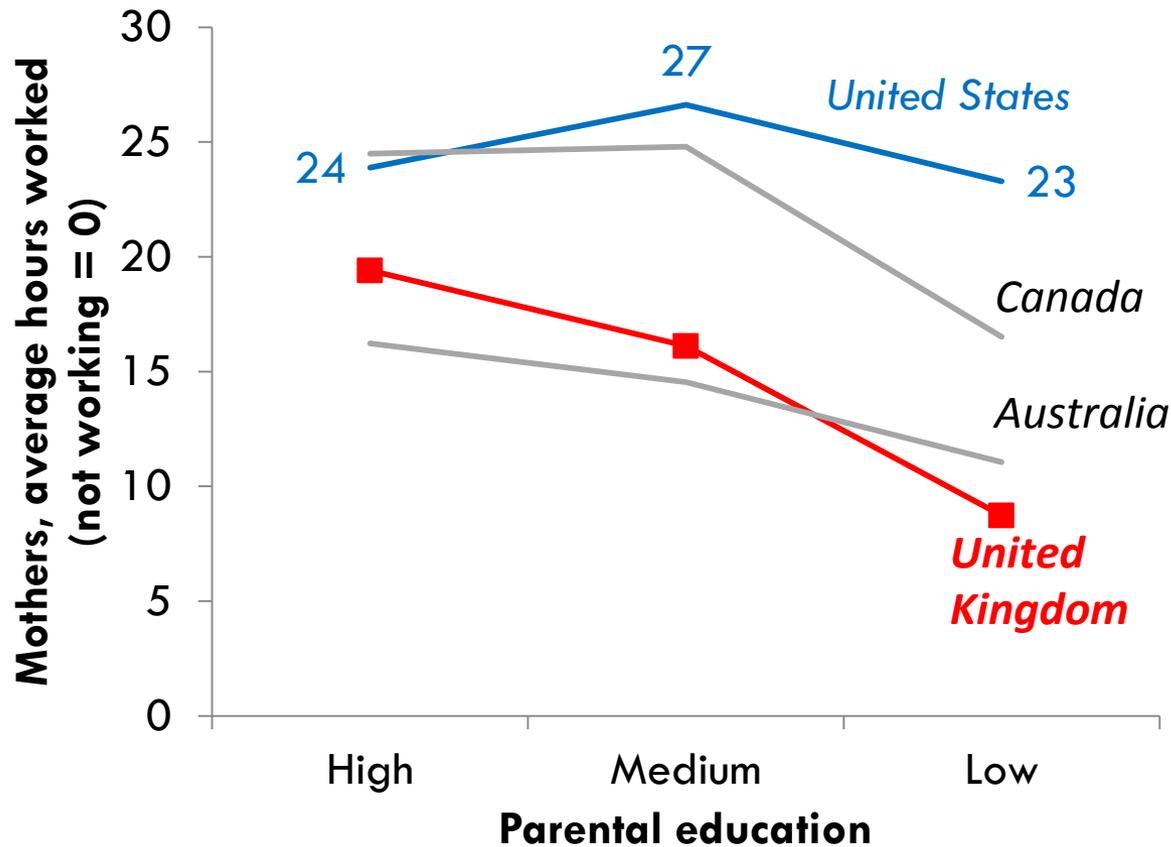
In the US, incomes of high SES families are three times greater than those of low SES families

The evolution of SES gaps from 5 to 11

AGE 5

AGE 11

z-score

Math   Reading/ language

US   UK   AU   CA

US   UK   AU   CA

Light-shaded bars are medium/low SES gap. Dark-shaded bars are the high/medium SES gap. **The overall height of the bar is gap between high and low SES children.**
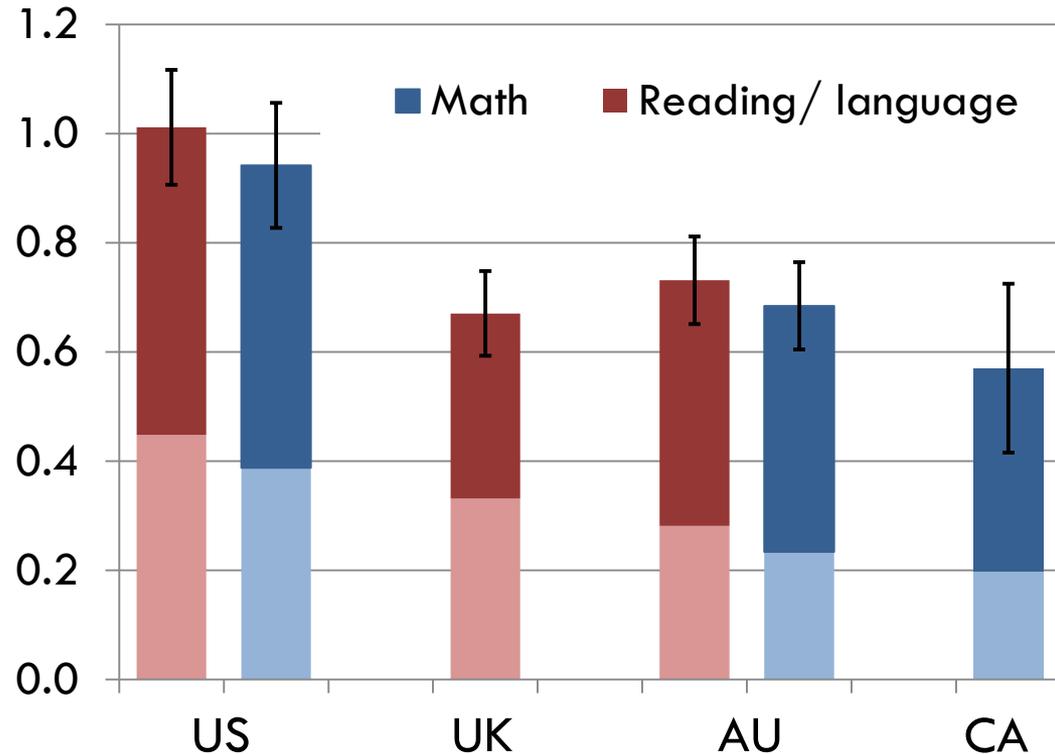
The evolution of SES gaps from 5 to 11
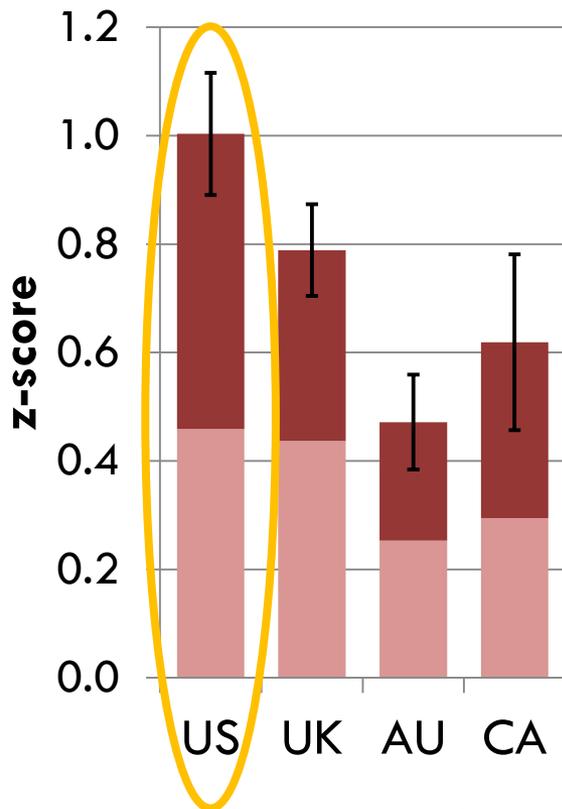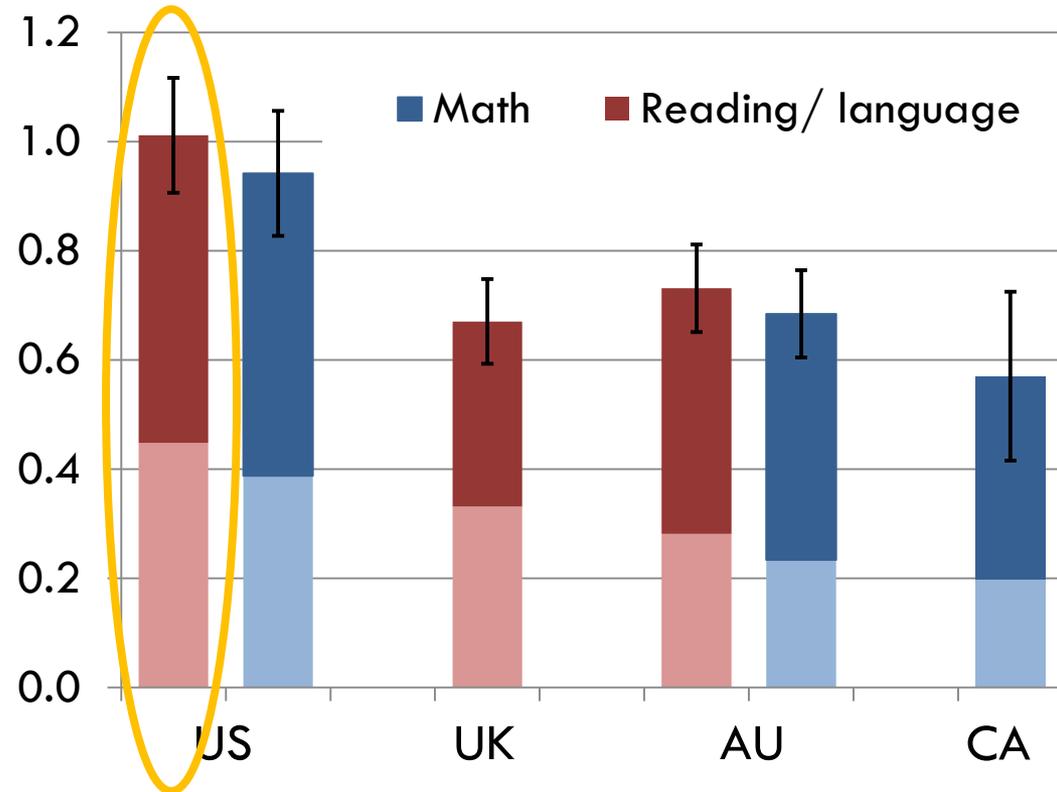
## AGE 5

AGE 11

Light-shaded bars are medium/low SES gap. Dark-shaded bars are the high/medium SES gap. **The overall height of the bar is gap between high and low SES children.**

Is it "all over" by age 5?

- SES gaps in mean test scores change little between 5 and 11

- Does this mean that if we could eliminate gaps at age 5 all would be well? All our attention should be on the preschool period?

- Our analysis shows that in an **'SES-neutral' world** post-age 5, gaps would **shrink** by around one-third by age 11

- Put another way, perfect equality at age 5 would NOT eliminate inequalities at 11 because other forces are operating to push low- and high-SES children apart during the primary school years

On average, low SES children fall behind higher SES ones with identical starting achievement, wherever they begin
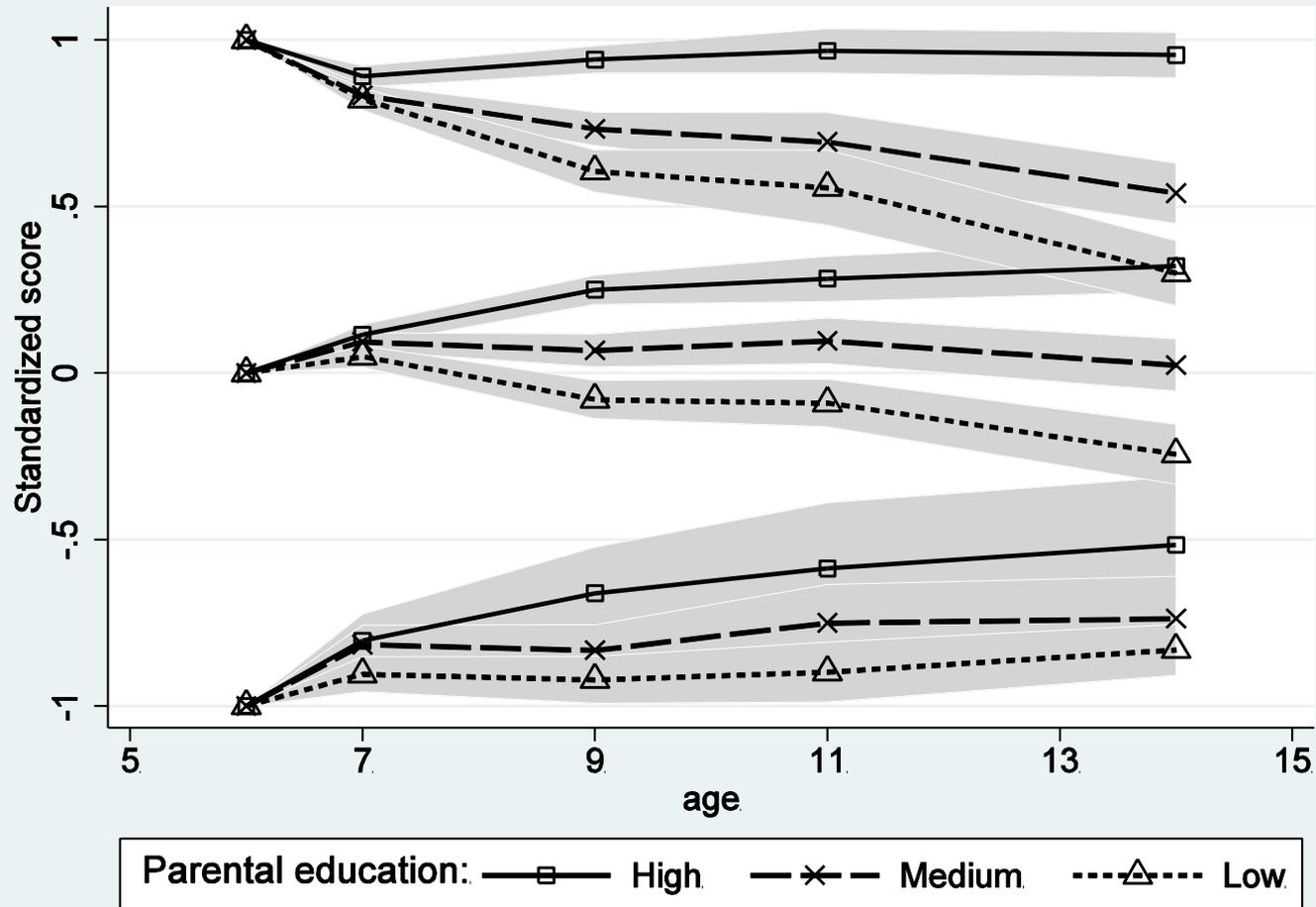
US data on reading scores (but the same pattern applies in the UK)

Conclusions

□ Inequalities present at school entry are crucial factor behind inequalities later on in the school years (though they are not everything)

□ Gaps are larger in the US than elsewhere at school entry, and remain so through to the end of primary schooling

□ In the US, greater inequality in incomes and other family resources is compounded by differential access to preschool education

Conclusions

- For this cohort (born in 2001), the UK's record might be described as "average" – better than the US, but not as good as Australia and Canada

- The US case is a stark warning that a "slide backwards" in terms of resources devoted to low SES families is likely to have effects on social mobility

- But even standing still involves failing millions of low SES children (Australia and Canada are not immune from this argument either)

Conclusions

□ Inequality in child outcomes is a reflection of the degree of inequality in many factors inside and outside the family

□ The balance between them, and the way this plays out for children, differs in complex ways across countries.

□ No one factor is either necessary or sufficient for limiting achievement gaps in outcomes

Conclusions

- We advocate three types of policies that need to work together in conjunction, building on what each country already has in place

- Providing more support for early learning
  - Evidence-based parenting programmes for families with infants and toddlers
  - High-quality affordable preschool education for all

- Raising incomes for the poor and near-poor
  - Minimum wages, tax credits, parental leave policies

- Improving the quality of teaching and learning in schools
  - Recruiting and supporting effective teachers for all
  - Initiatives to support the highest standards for low SES pupils

Thank you...

- To all the children and families who took part in the surveys
- To my co-investigators, Jane Waldfogel, Bruce Bradbury and Miles Corak
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- To the Russell Sage Foundation for their generous support
- And to you for listening!