

The role of income and income status on well-being in parents and children

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About me and my PhD work

- ESRC-funded PhD student at the University of Manchester, 2012-2015
 - Supervised by Professor Tarani Chandola, Dr Kingsley Purdam (both Cathie March Institute of Social Research), Professor Alex Wood (Psychology Department)
 - Passed with minor corrections, December 2015
- Alternate format PhD (PhD by publication)
 - Four empirical papers exploring the roles of income and social status on well-being among UK parents and children
 - Two published, one under review, one in preparation
 - All papers used the Millennium Cohort Study
- Now Postdoctoral Research Fellow in Sociology, Centre for Social Investigation, Nuffield College, University of Oxford

Income and Social Rank Influence UK Children's Behavioral Problems: A Longitudinal Analysis

Published in *Child Development*, 2016

Background: Child mental health inequalities

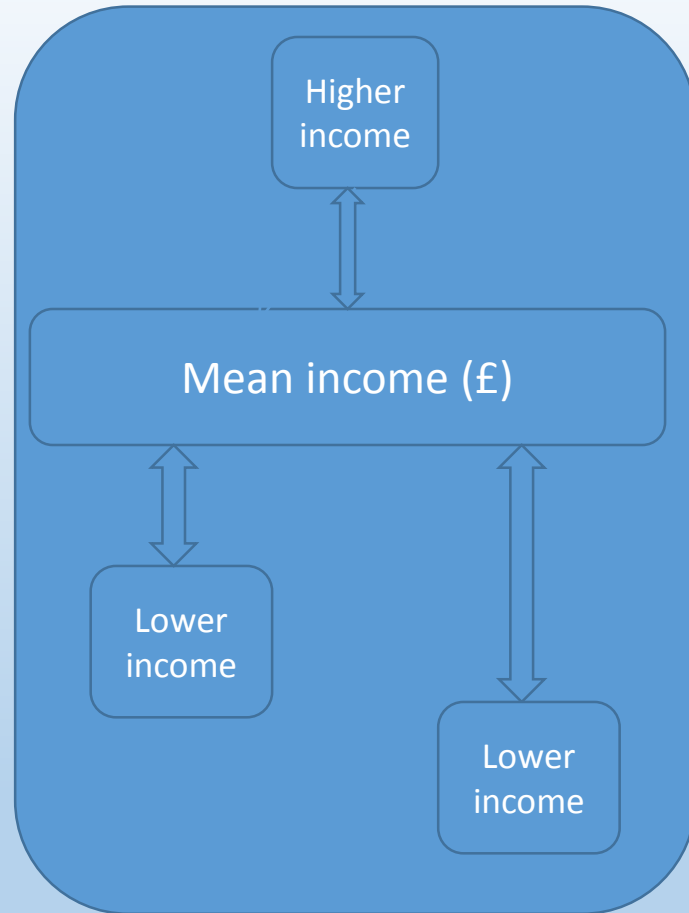
- In 5-10 year-olds, mental disorders are nearly three times as prevalent in the poorest (12.3 per cent) than the richest UK children (4.5 per cent) (Green *et al.*, 2005)
- International review of 55 studies reported that socioeconomically disadvantaged children are 2-3 times more likely to experience mental health problems (Reiss, 2013)

Background: Underlying pathways

- ***Material deprivation hypothesis***: Low incomes are bad for health because of limited spending power for items including housing, food, leisure activities
- ***Psychosocial hypothesis***: Income acts as a proxy for social status. Material goods are important not for themselves but what they represent. Income-based status comparisons induce anxiety (Layte & Whelan, 2014) and psychosocial stress (Dickerson & Kemeny, 2004), compromising mental health

Background: How are social comparisons made?

1. Distance to the mean income of the group



2. Income rank



Background: Income, status and health in children

- Little research on income, status and child health
- Research on relative income and child health is confined to newborns (Lhila & Simon, 2010; Reagan *et al.*, 2007) and adolescents (Elgar *et al.*, 2013)
- Among adolescents aged 11-17, relative and ranked affluence were associated with psychosomatic symptoms and related more closely to mental health at lower levels of absolute affluence (Elgar *et al.*, 2013)
- The ability to accurately judge status (Tudor, 1971) and the social patterning of the stress response (Lupien *et al.*, 2000) develop during childhood
- Social processes operating in adults may not be evident in children

Research questions

1. Do previously reported relationships between income rank and adult mental health also extend to children's behavioral problems?

Hypothesis: Children's behavior will relate more strongly to income rank than absolute income or distance from the mean

2. Does income interact with other indicators of socioeconomic advantages in its effect on children's behavioral problems?

Hypothesis: Low incomes will be more detrimental to children experiencing multiple disadvantage while high incomes will buffer these effects

3. Do associations between income and behavior vary across behavioral dimensions?

Hypothesis: Income will be more important to externalising (conduct problems, hyperactivity) than internalising (emotional symptoms, peer relationships)

Methods: Data and variables

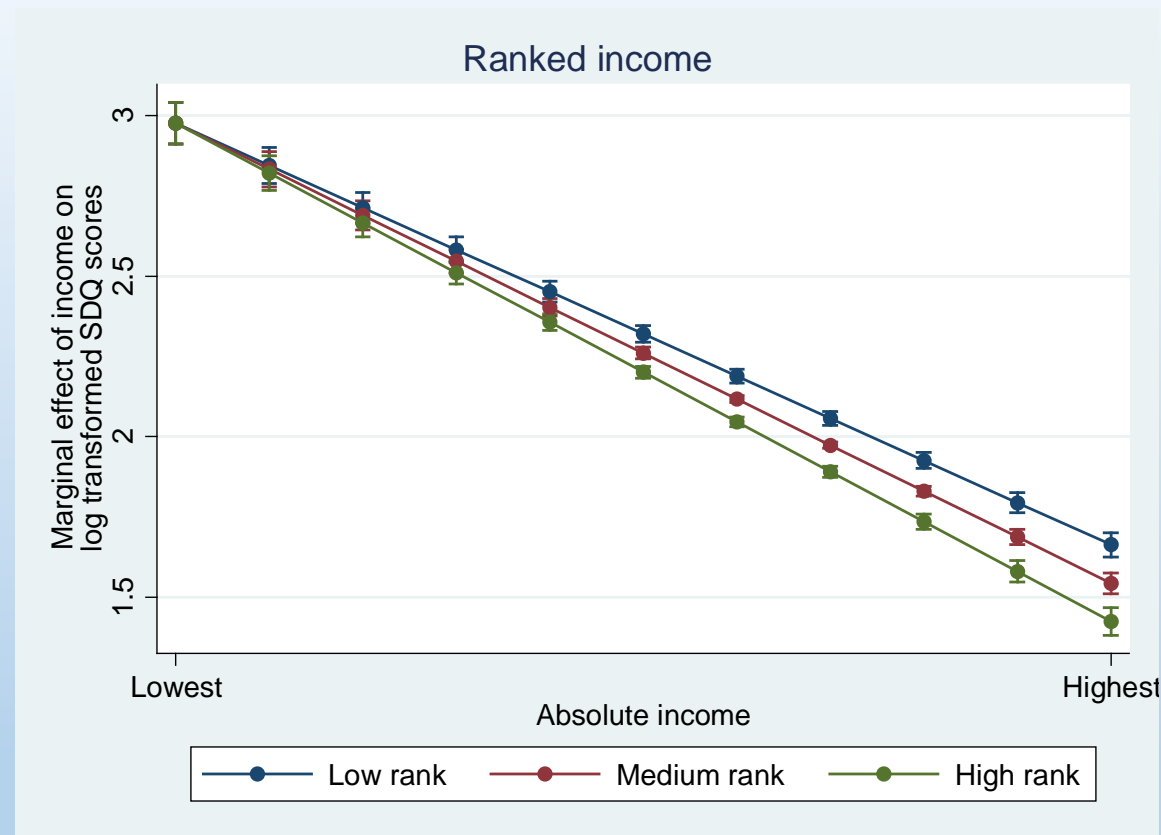
- MCS data from waves 2-5 when children were 3-12 years old
 - 52,956 observations from 16,532 children across four time-points
- Explanatory variables:
 - Absolute equivalised household income
 - Income rank: ordinal income position within the region
 - Distance from the regional mean
- Outcome variables:
 - Strengths and Difficulties Questionnaire (SDQ) scores
 - Internalising and externalising sub-scores

Methods: Analyses

- Longitudinal panel models used to predict SDQ scores from income variables, controlling for covariates
- Comparing how well each income variable predicts behavioural problems provides insight into the underlying mechanism
- Also interested in interaction between income and socioeconomic characteristics to determine the potential influence of multiple disadvantage
- Plus, do results vary for internalising and externalising problems?

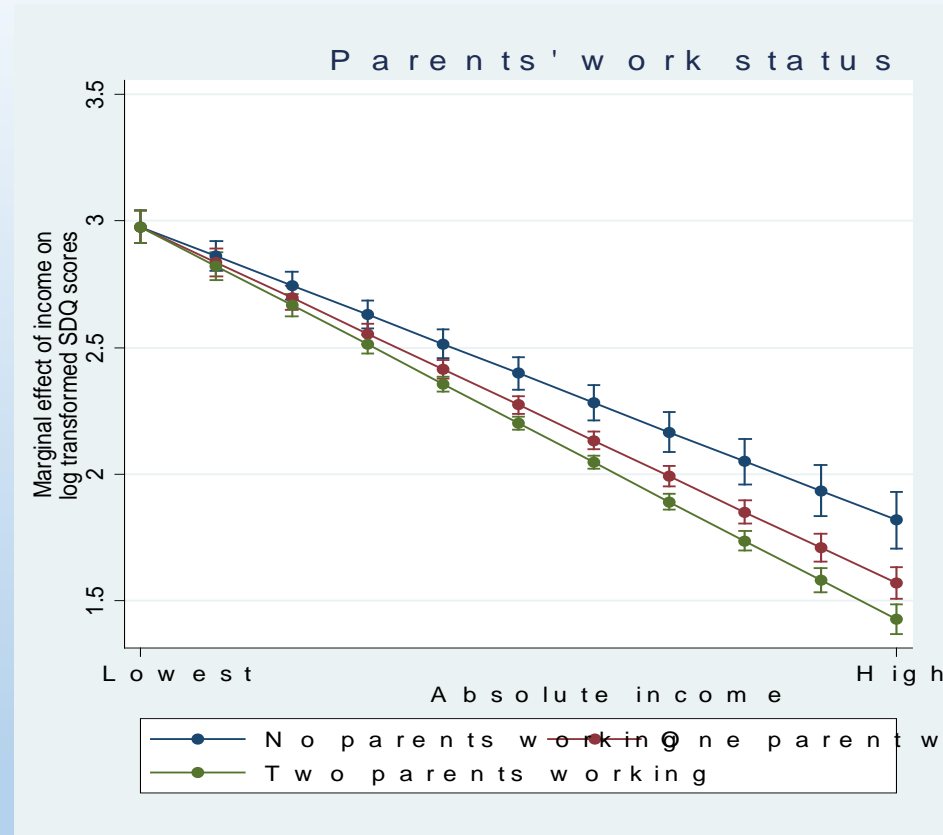
Results: Effects of income on behaviour

Higher income rank was associated with lower SDQ scores (better behaviour) in children with high incomes but not among low-or middle-income children



Results: Effects of income and disadvantage

Increasing incomes were particularly beneficial to behavior in children living in families with working parents



Discussion

All research questions were partially supported:

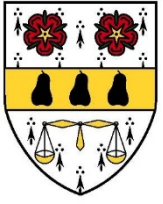
- **Research question 1:** income rank was associated with behavior in high-income children only
- **Research question 2:** income was more important to children living in dual-earner families. The effects of income on behavior was not affected by parents' educational qualifications
- **Research question 3:** all results were replicated across the SDQ subscales and for externalising and internalising, but were stronger for externalising

Discussion

- The negative impact of status comparisons were more important to behavior in wealthier children
 - This is consistent with evidence from parents (Garratt *et al.*, 2016) but contradicts results from adolescents (Elgar *et al.*, 2013)
- Higher incomes conferred greater behavioural improvements to children living in dual-earner households
 - Suggests influence of multiple disadvantage
- Replication across internalising and externalising dimensions
 - Suggests that these opposing dimensions have similar determinants

Using the MCS: A researcher's experience

Hooray!	Grumble!
HUGE sample size	Some methodological justifications lack detail
Good documentation and support	Data structure are different in waves 1-4 and 5
Great selection of economic and social variables	Timescale of data release can slip
Nationally representative, plus deprived and ethnic minority boost samples	Compromises due to pressures on questionnaire space
Some data prep and cleaning (plus imputation)	Data prep and cleaning are not perfect



Thank you for listening!

Any questions?

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