

Sleep and child development – findings from the UK Millennium Cohort Study

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Millennium Cohort Study (MCS)

- Sample drawn from all live births in the 4 countries of the UK during 2000-2002
- Clustered at the electoral ward level with oversampling
- 19,244 households
- Home interviews with parents and cohort members and teacher reported measures
- 6 sweeps deposited: 9 months and 3, 5, 7, 11 & 14 years

Data

Sleep markers

Bedtimes & regularity – parent report, ages 3, 5, 7, 11

Bed & wake times, sleep problems – self report, age 14

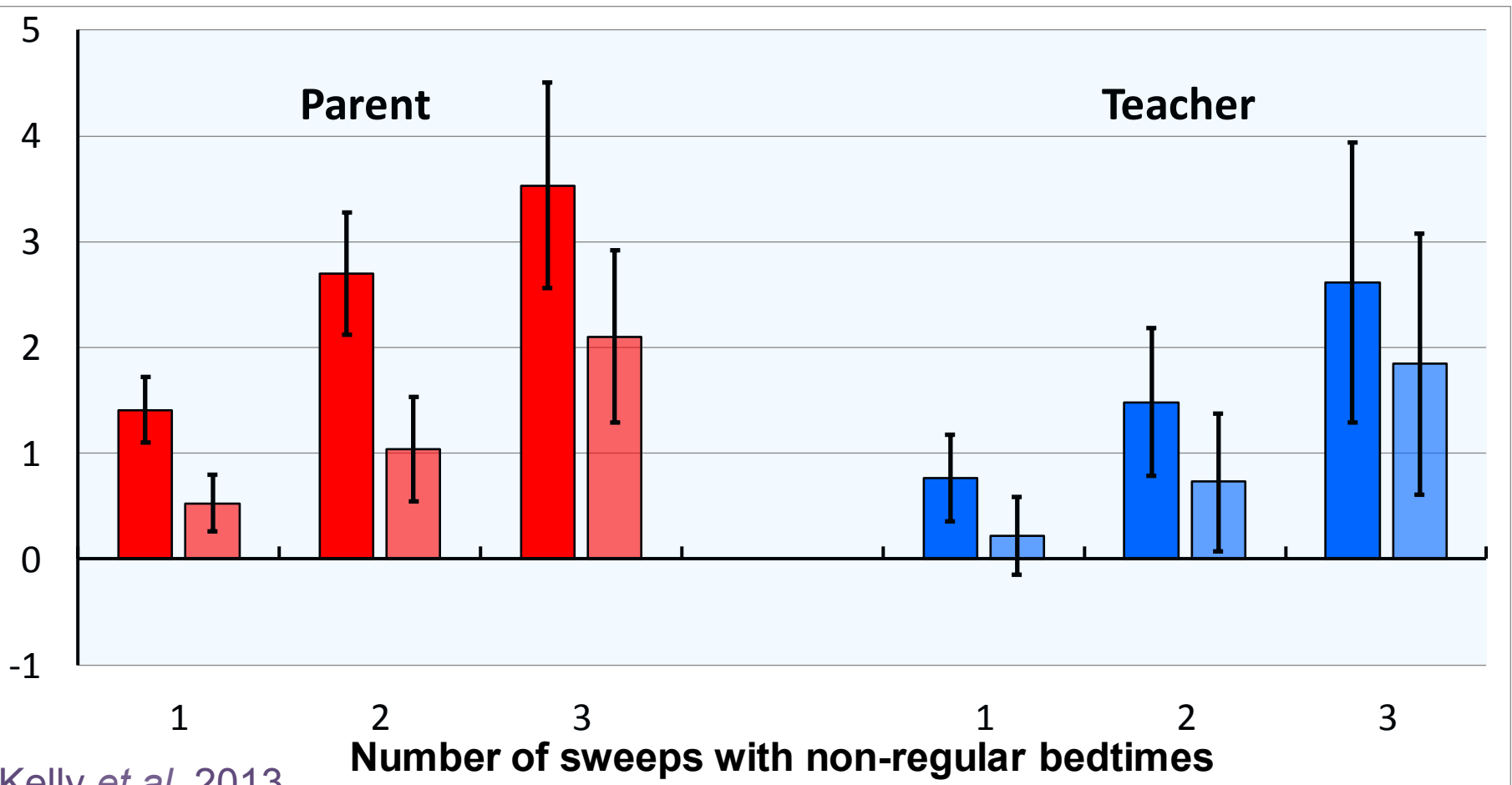
Child development markers - ages 3 through 14

Socioemotional difficulties – parent and teacher

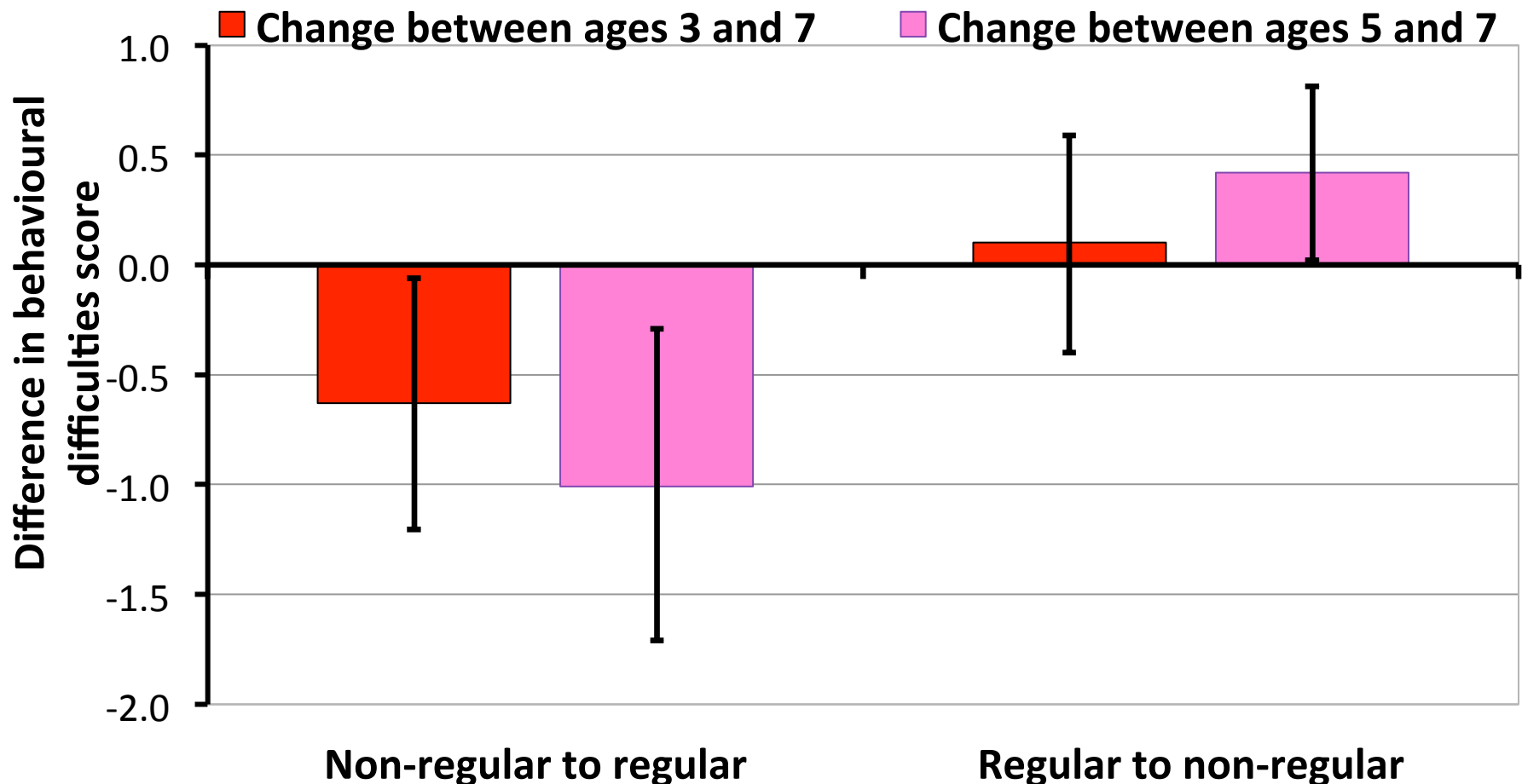
Cognitive functioning

Height, weight, fat mass

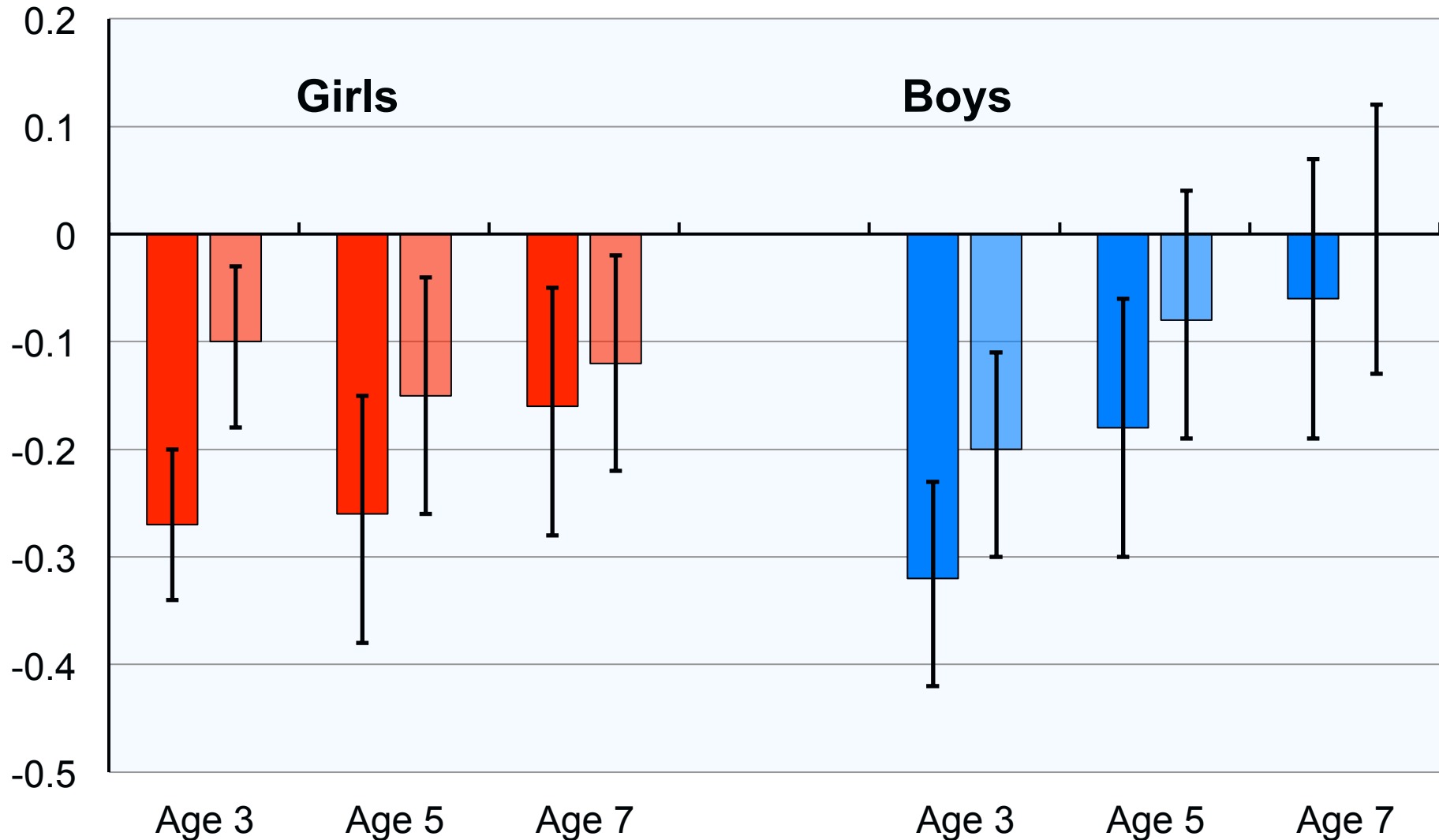
Cumulative effects, regression coefficients for SDQ total difficulties scores at age 7, by non-regular bedtimes throughout early childhood, ref = always regular bedtime.



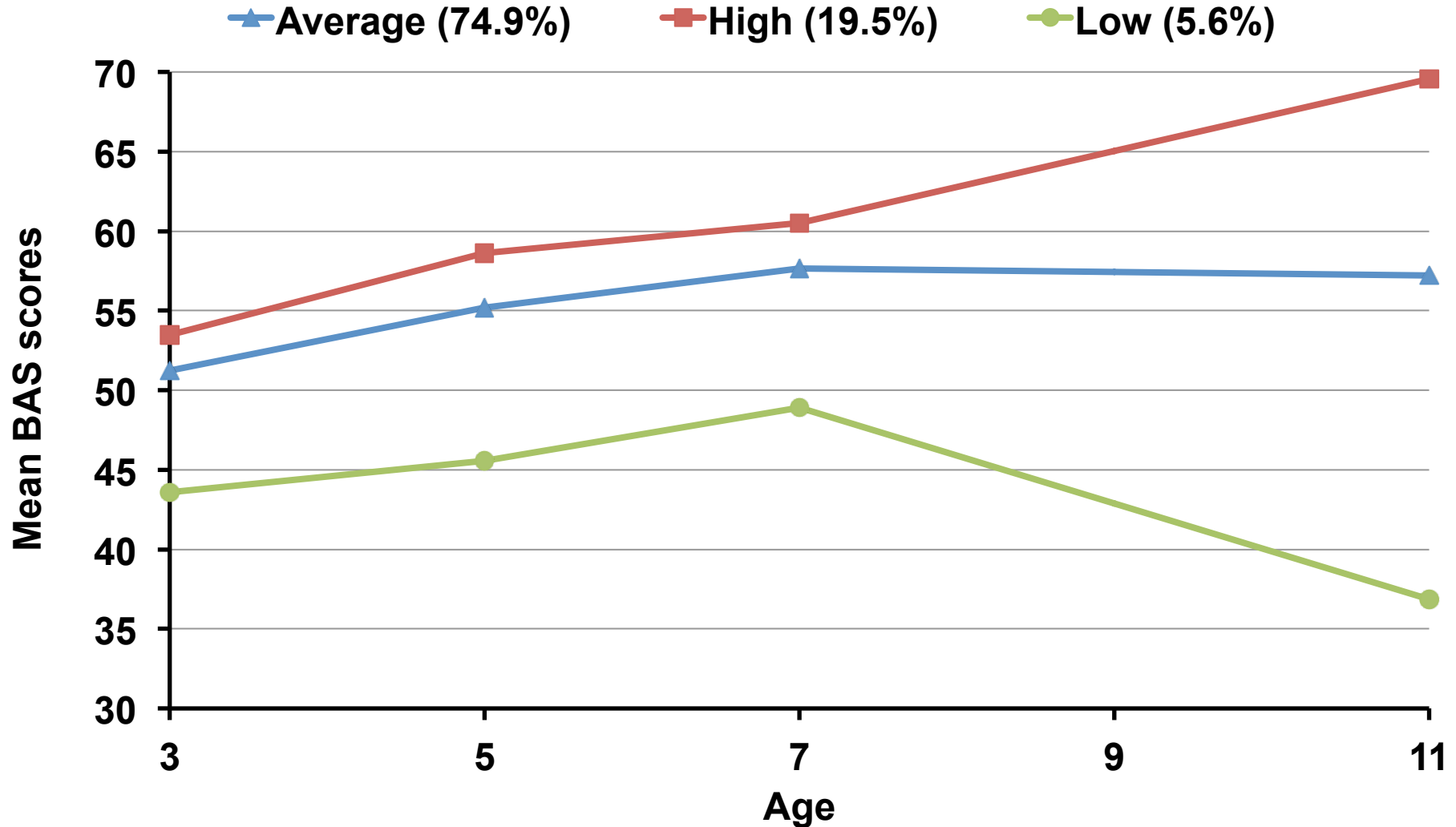
The effects of changes in the regularity of bedtimes on behavioural difficulties scores



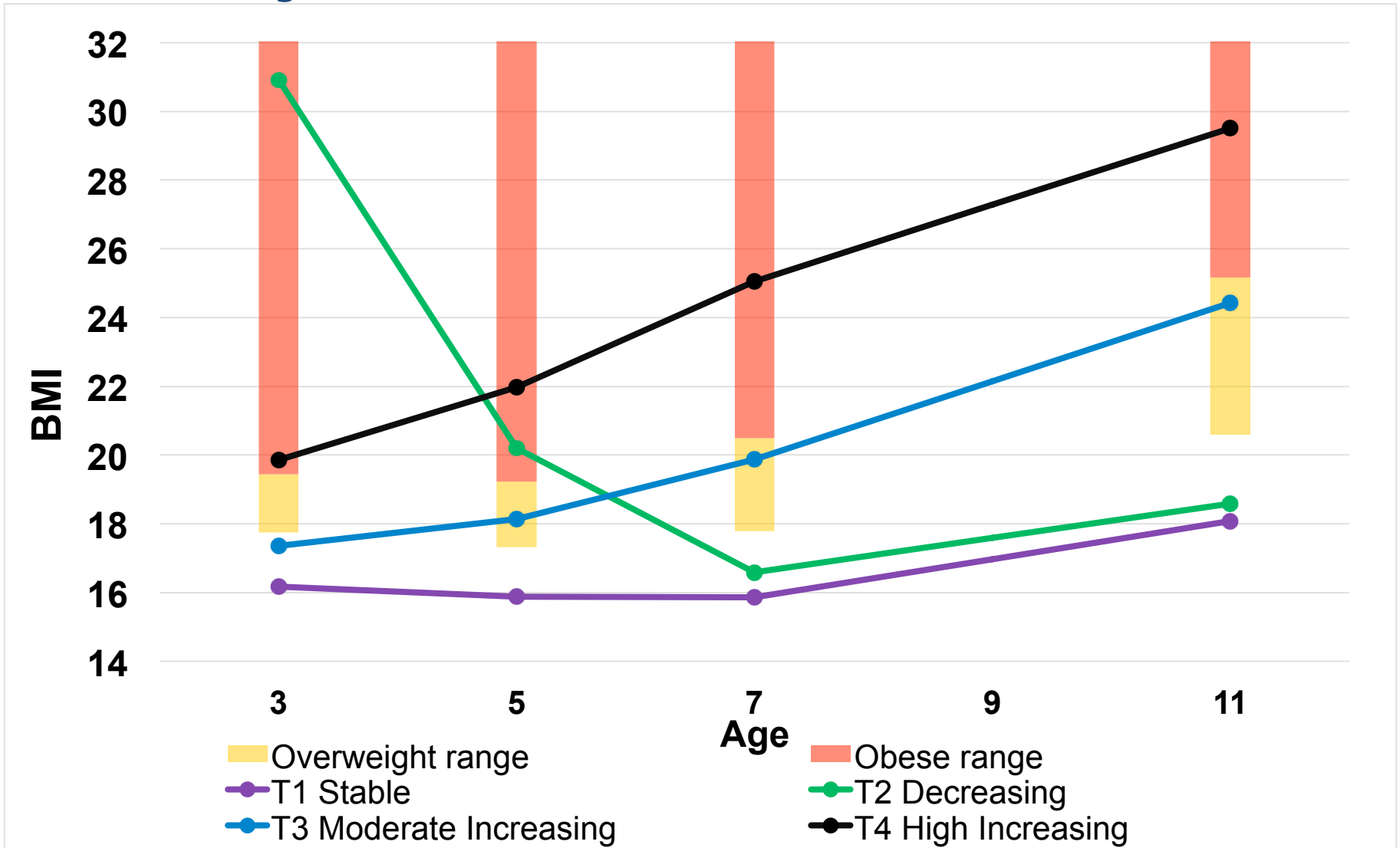
Sensitive periods - regression coefficients for verbal ability scores at age 7, by non-regular bedtimes.



Longitudinal Verbal Profiles



BMI trajectories in childhood



Conclusions and next steps

- Large population representative surveys reveal associations between sleep schedules and children's socioemotional wellbeing, cognitive function and risk of overweight and obesity.
- Some evidence of reversibility – further work to tease out causal direction of relationships e.g. for socioemotional wellbeing and overweight and obesity
- Investigate role of sleep problems on the pathway between social media use and depressive mood among young people



Bridging social and biological sciences

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