

# Development: physical, cognitive and social

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# What is Child Development?

Child development refers to the ordered emergence of interdependent skills of sensori-motor, cognitive-language, and social-emotional functioning. This emergence depends on and is interlinked with the child's good nutrition and health. *As A World Fit for Children* states, "...children should be physically healthy, mentally alert, emotionally secure, socially competent and ready to learn."

UNICEF 2006

# Developmental perspective

Domains of human development:

- Physical and sensori
- Cognitive and language
- Social and emotional

**What are the influences on  
early child development?**

# Adolescence

The period from the onset of puberty to that of an independent role in society

# Puberty transitions

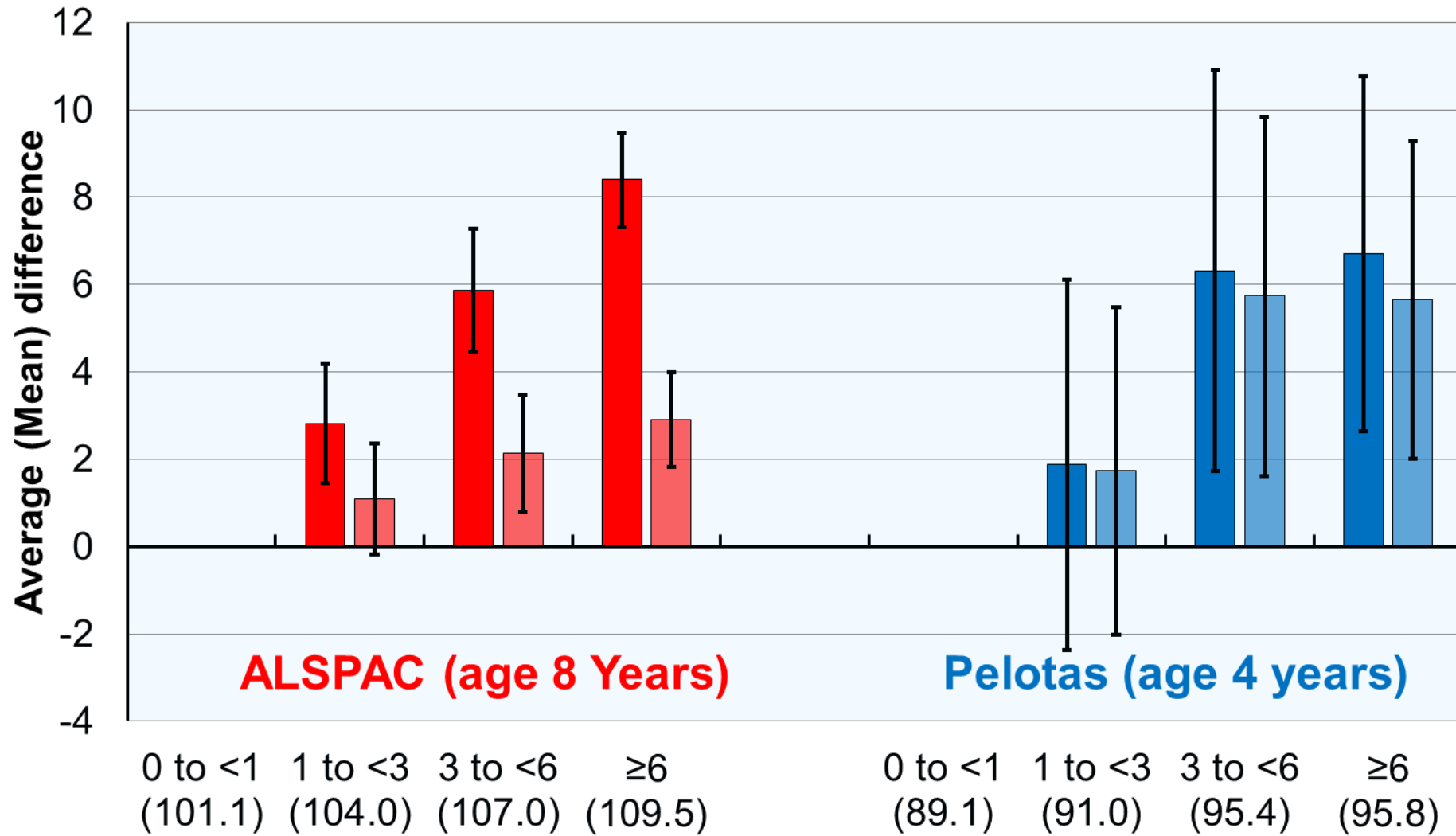
- Physical – stature, sexual characteristics
- Physiological – endocrine
- Psychological – autonomy, identity, decision making, social relationships

# **What are the influences on adolescent health and wellbeing?**

# Social transitions

- Leaving education
- Entering employment
- Leaving parental home
- Partnership and/or family formation

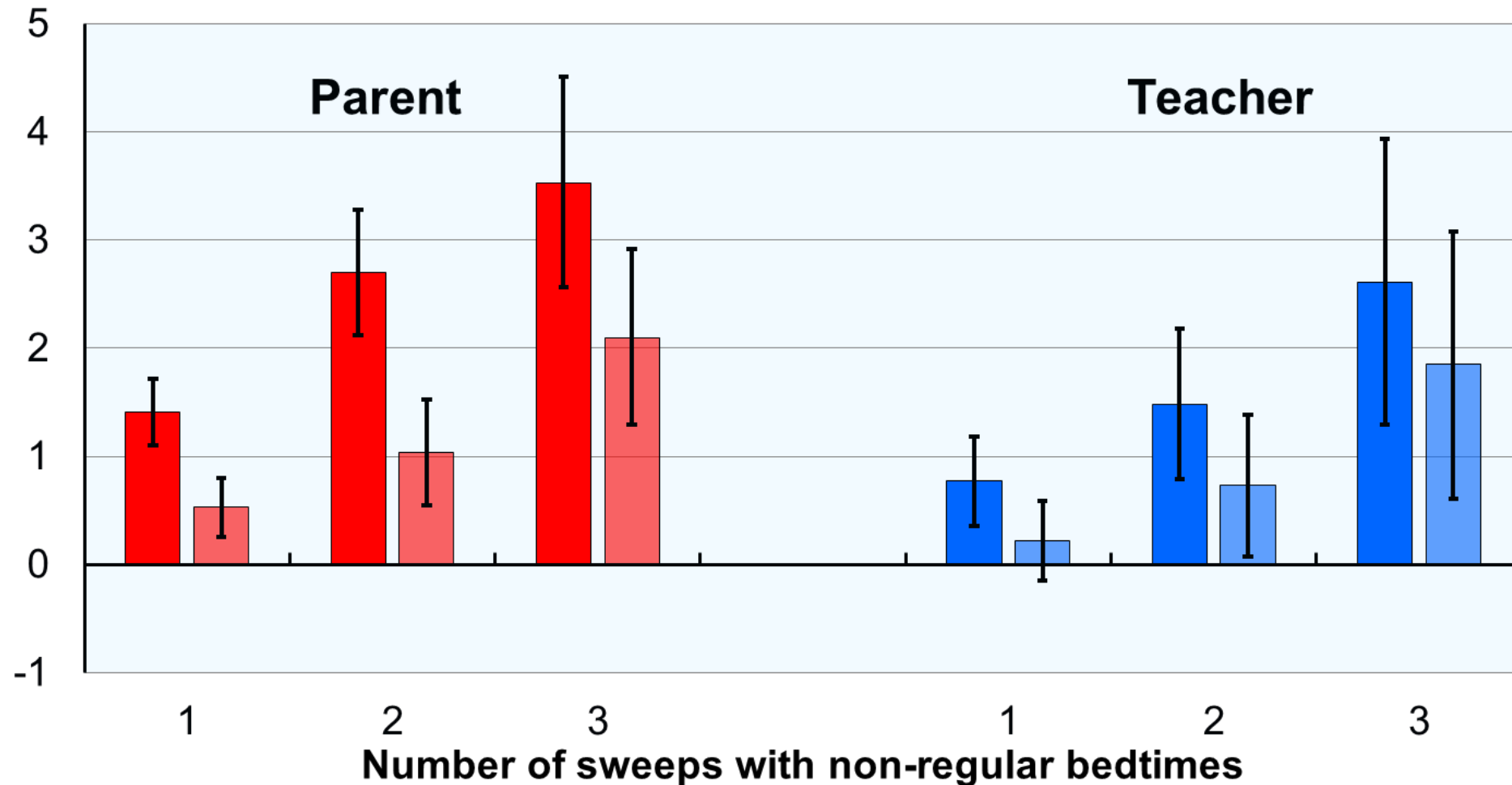




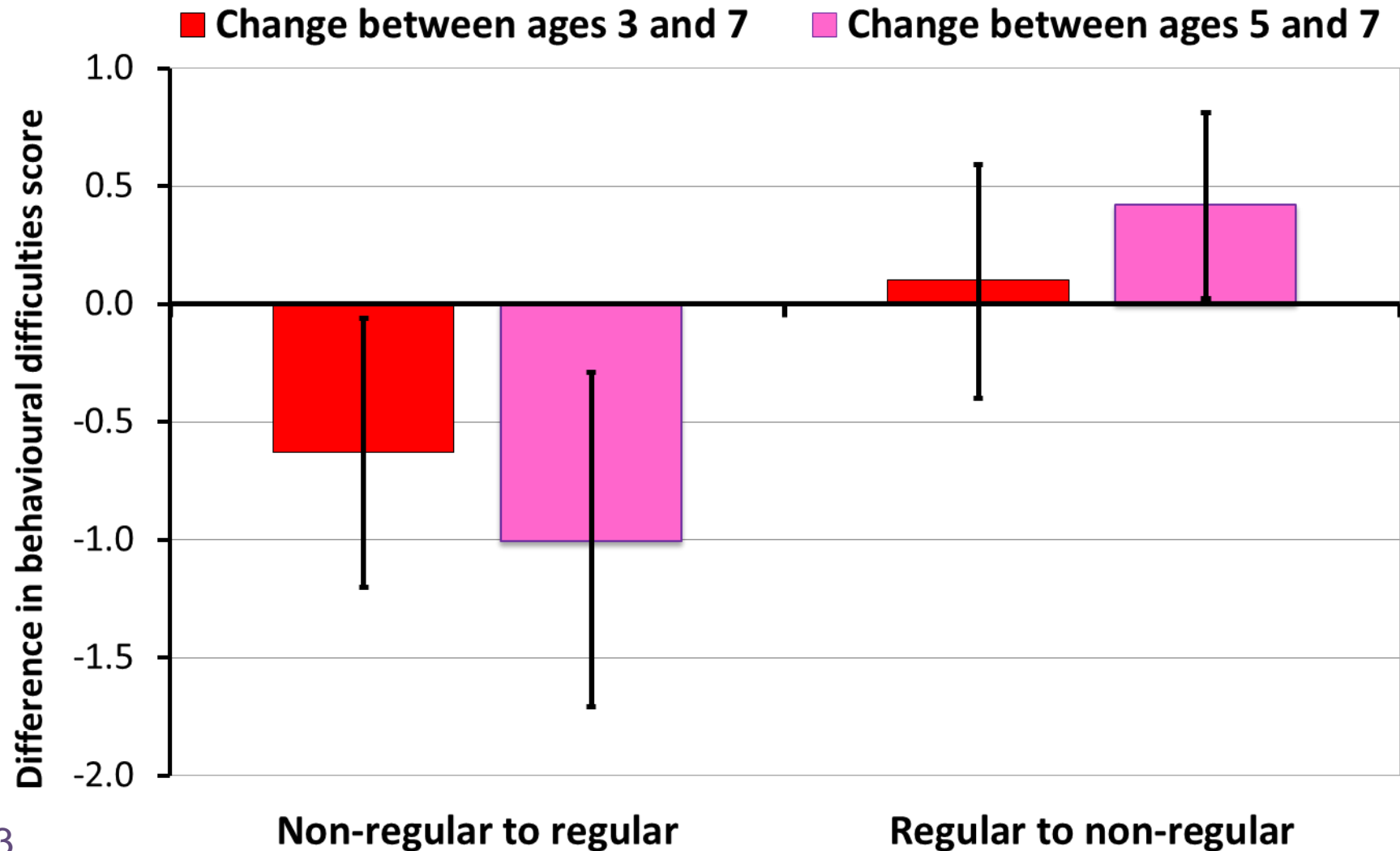
**Duration (months) of breastfeeding (Mean IQ score)**

Adjustment for: child sex, family income, maternal & paternal education, family occupational social class

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, difference in differences



## Longitudinal data resources

### **Birth Cohort Studies:**

**National Survey of Health & Development (NHSD)  
(born in 1946)**

**National Child Development Study (NCDS) (born in  
1958)**

**British Cohort Study (BCS) born in 1970**

**Avon Longitudinal Study of Parents and Children  
(ALSPAC) 1990-1992**

**Millennium Cohort Study (MCS) born in 2000-2001**

**Born in Bradford (BiB) born 2007-2011**

### **Panel Studies:**

**Understanding Society (UKHLS)**

**British Household Panel Study (BHPS)**

**English Longitudinal Study of Ageing (ELSA)**

**Health, Alcohol and Psychosocial factors in Eastern  
Europe (HAPIEE) Study**

**Occupational cohorts: Whitehall II (Stress and Health  
Study)**

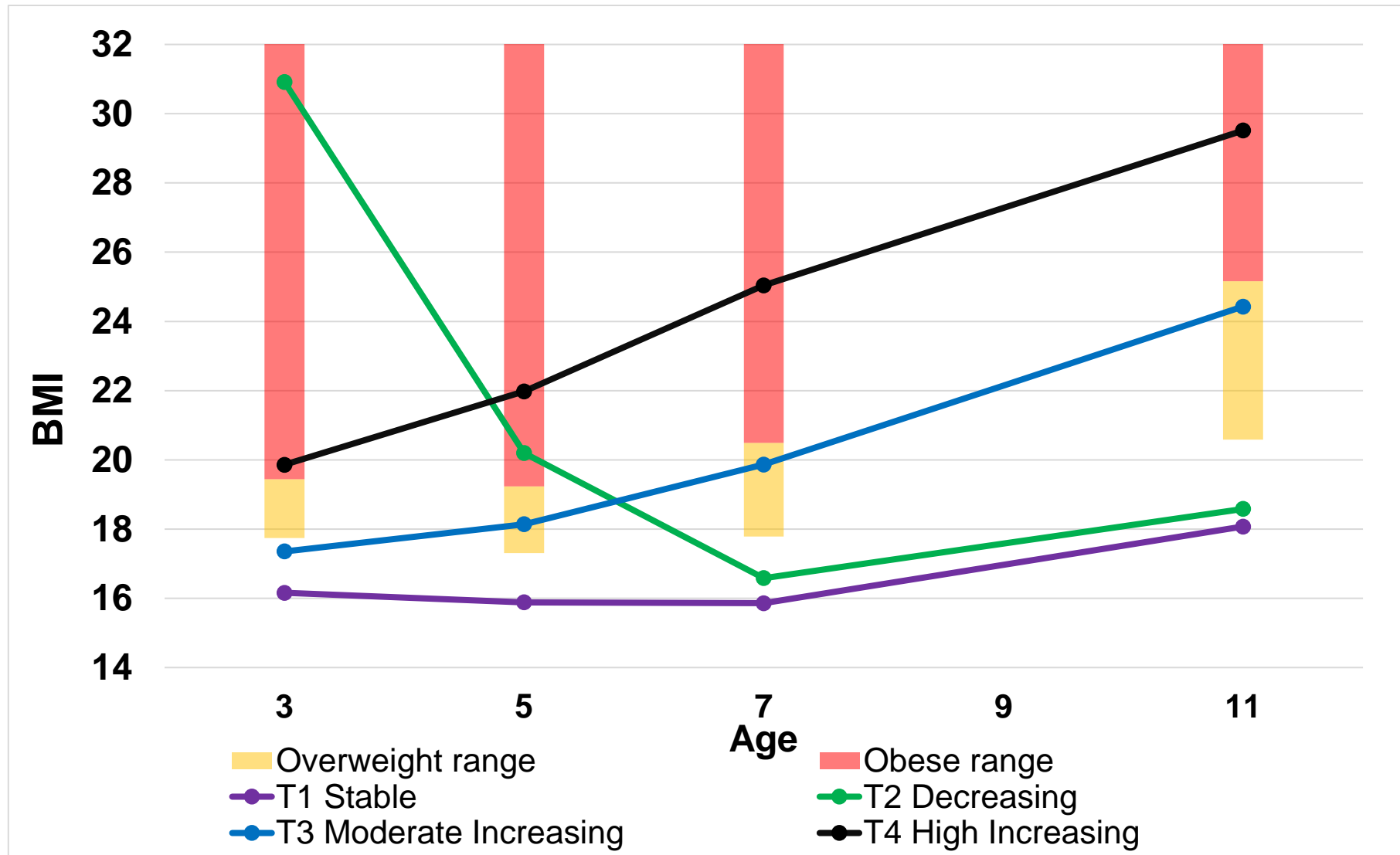
**Twin studies: Gemini: Health and Development in  
Twins**

**Regional: Southall and Brent Revisited (SABRE)**

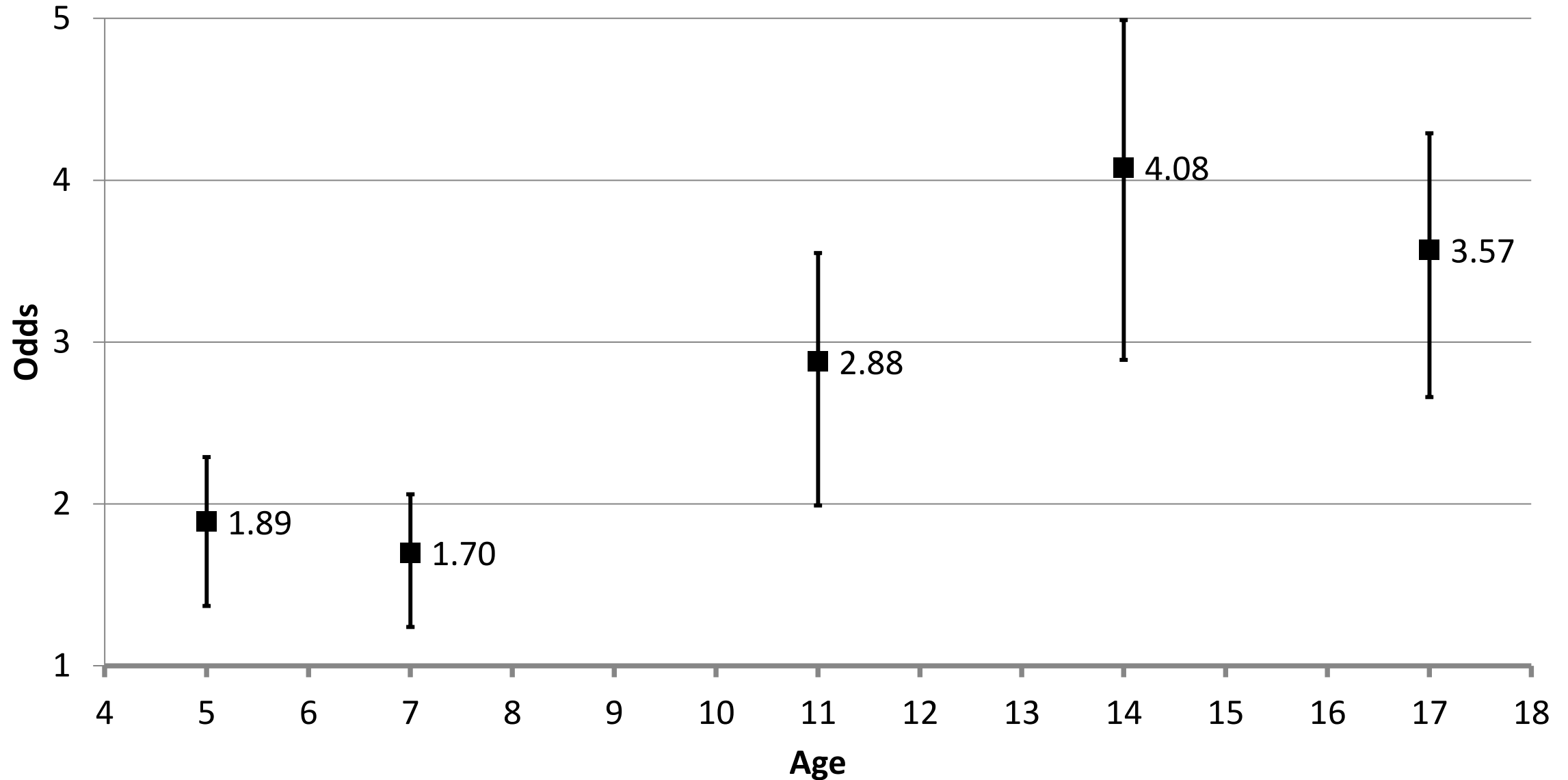
**ONS Longitudinal Study (LS)**

**UK Biobank**

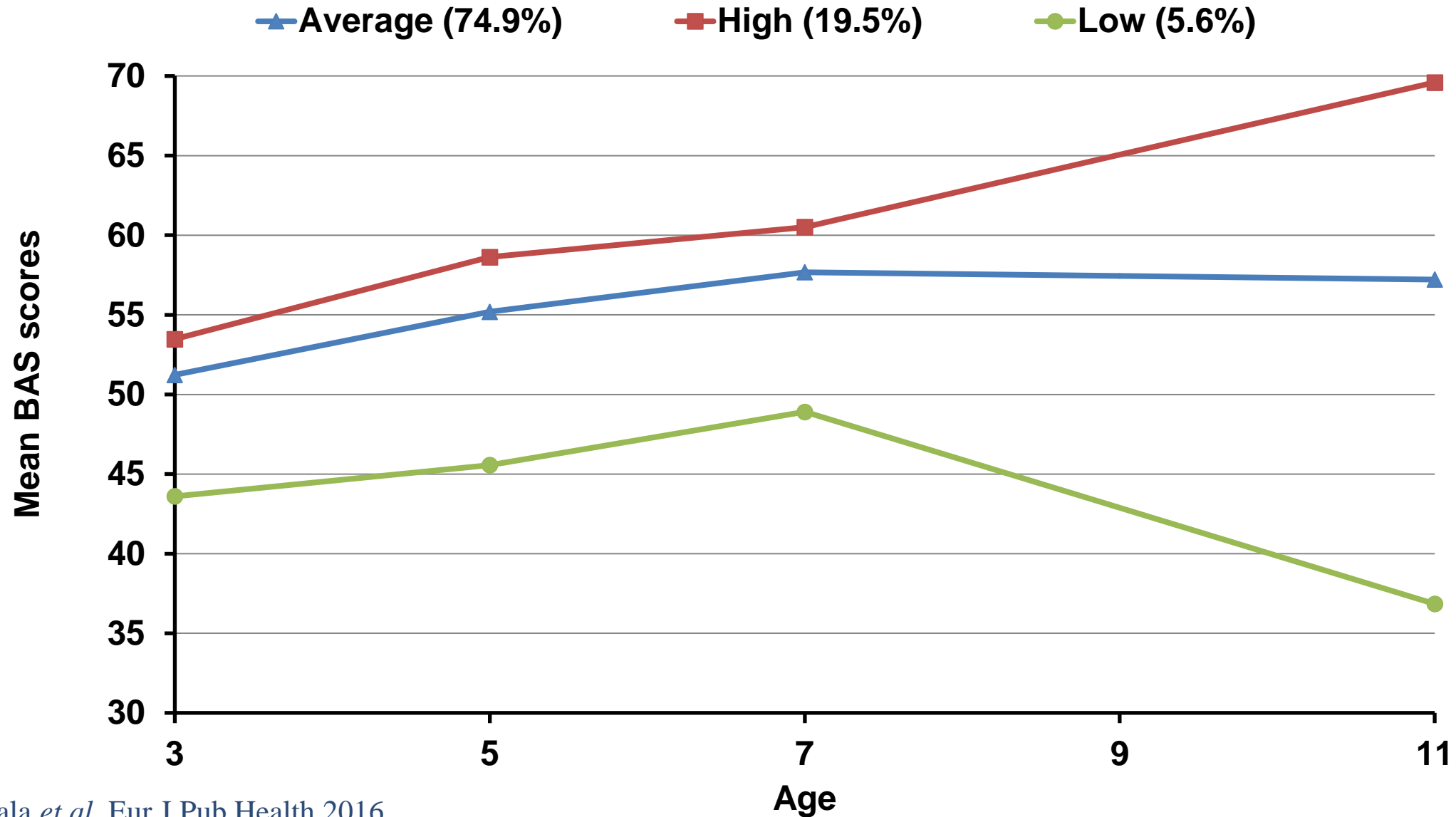
# BMI trajectories in childhood



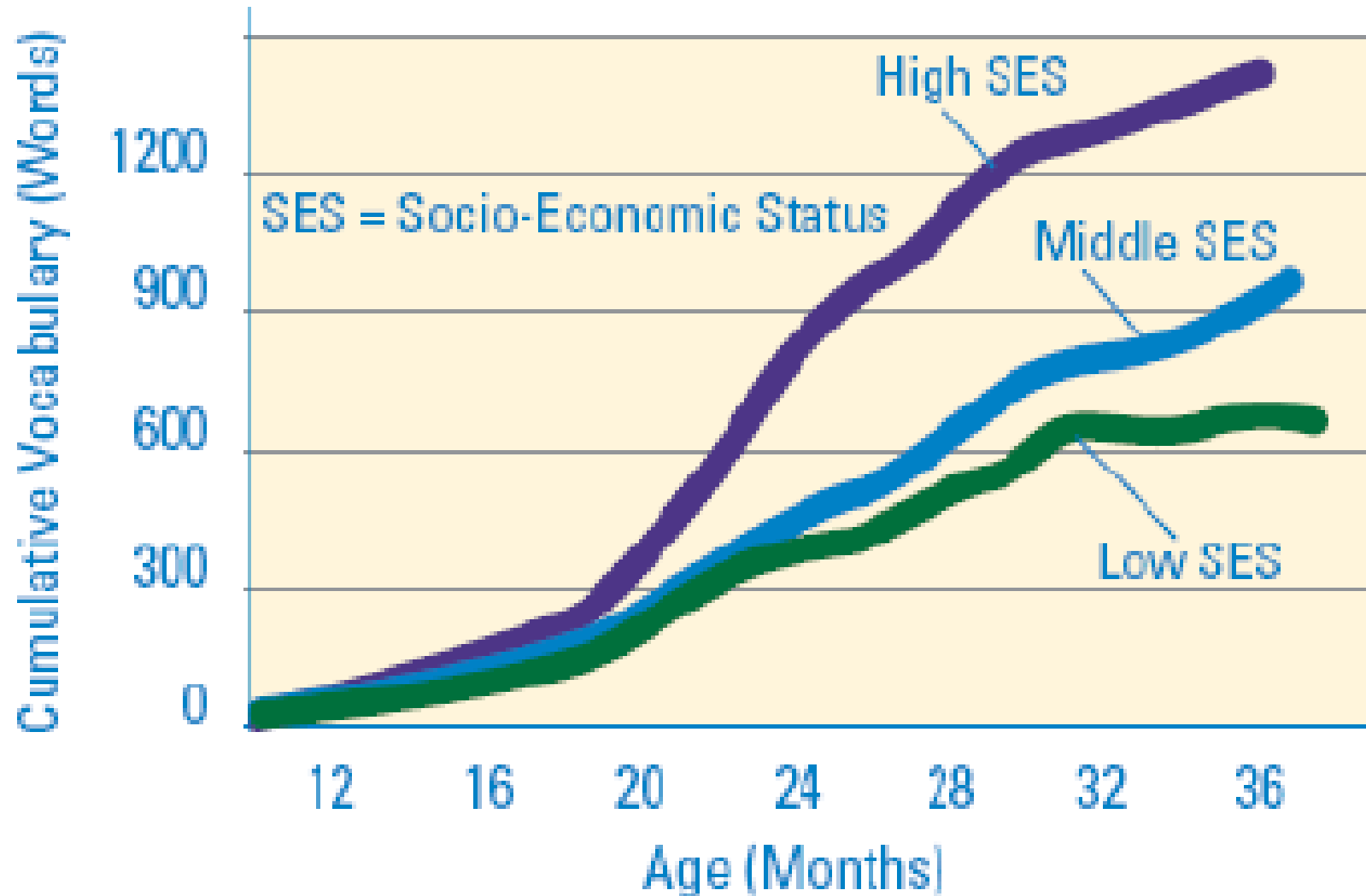
# Inequalities in obesity, poorest vs richest



# Longitudinal Verbal Profiles

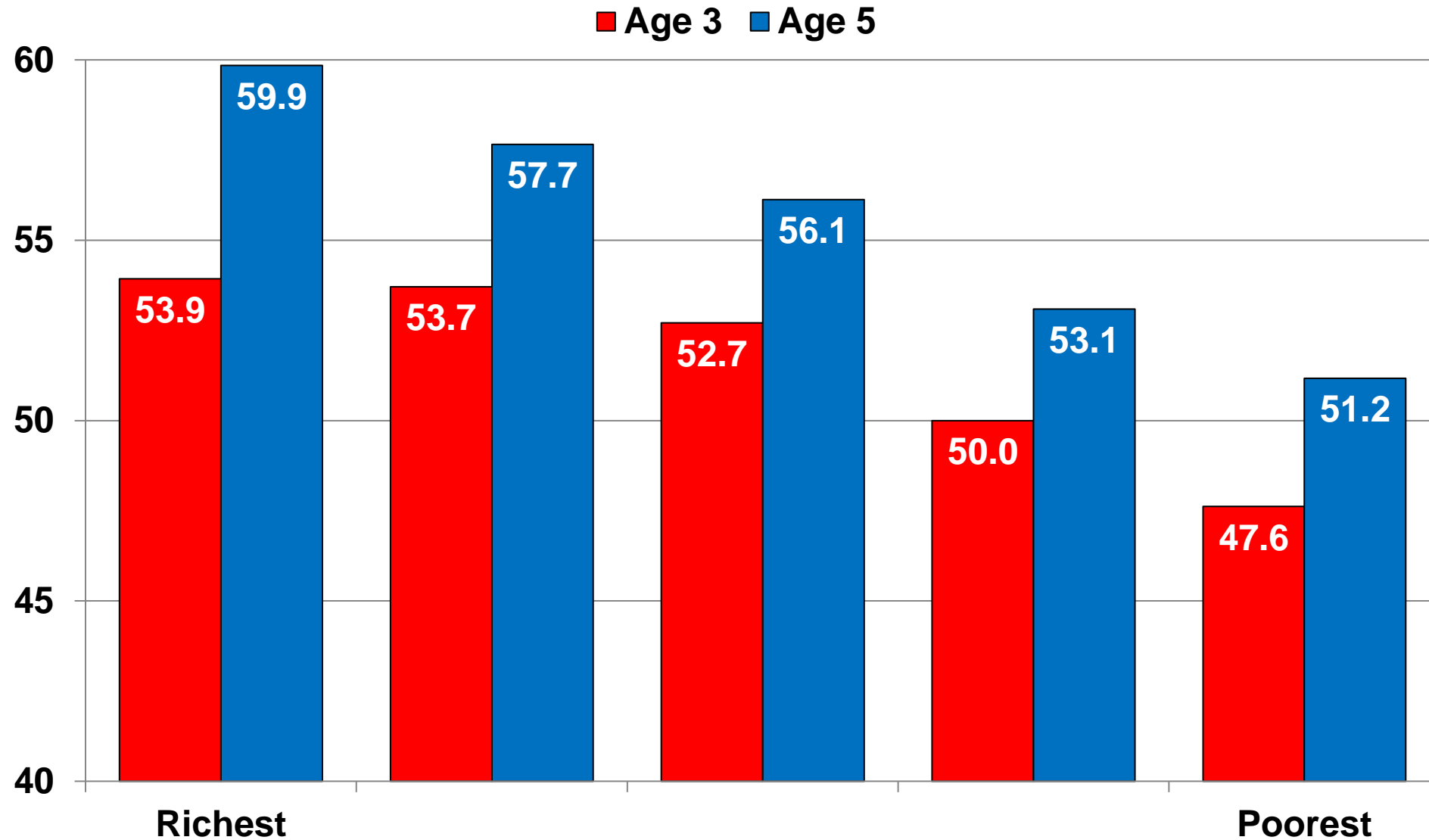


# Inequality starts early

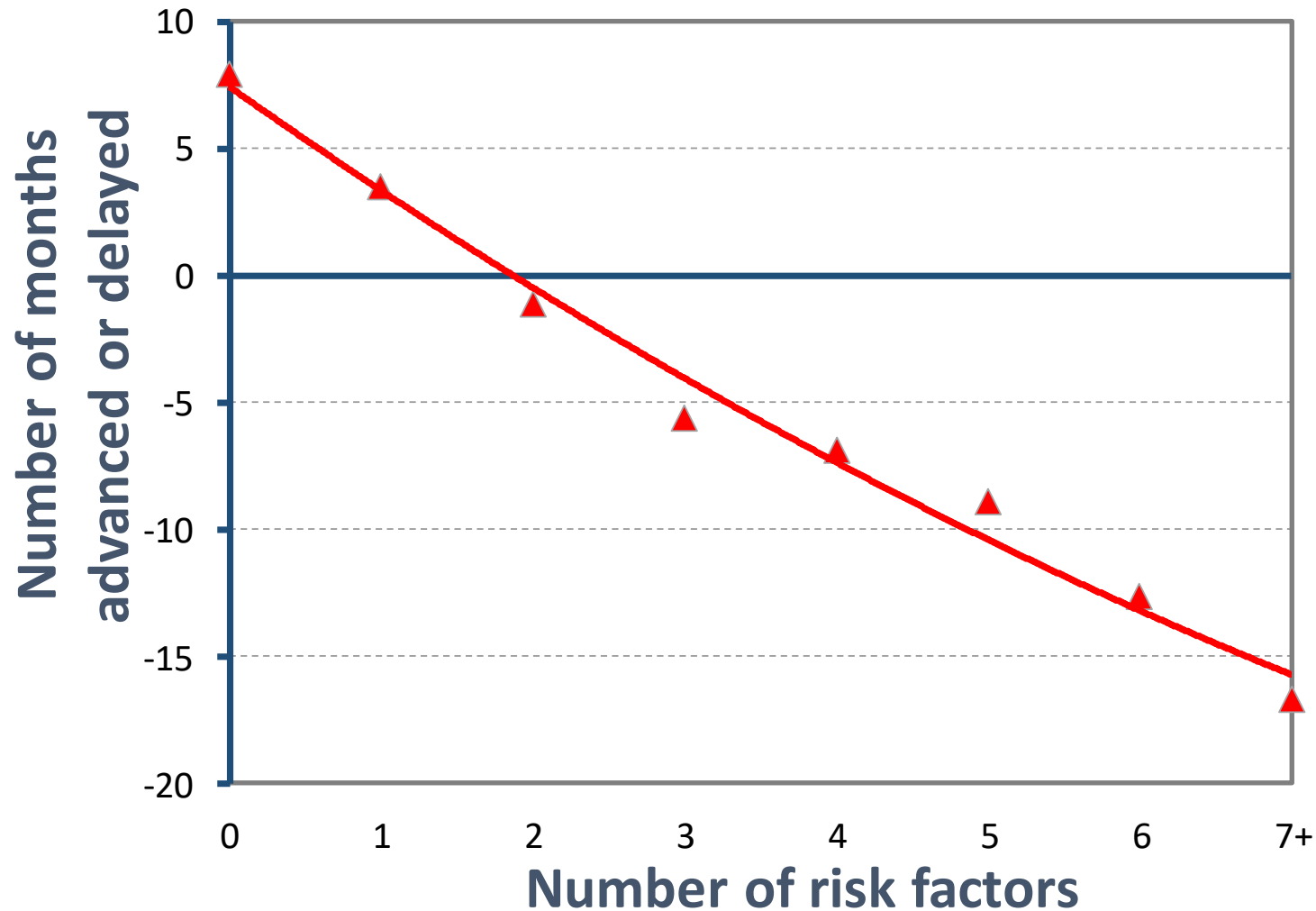




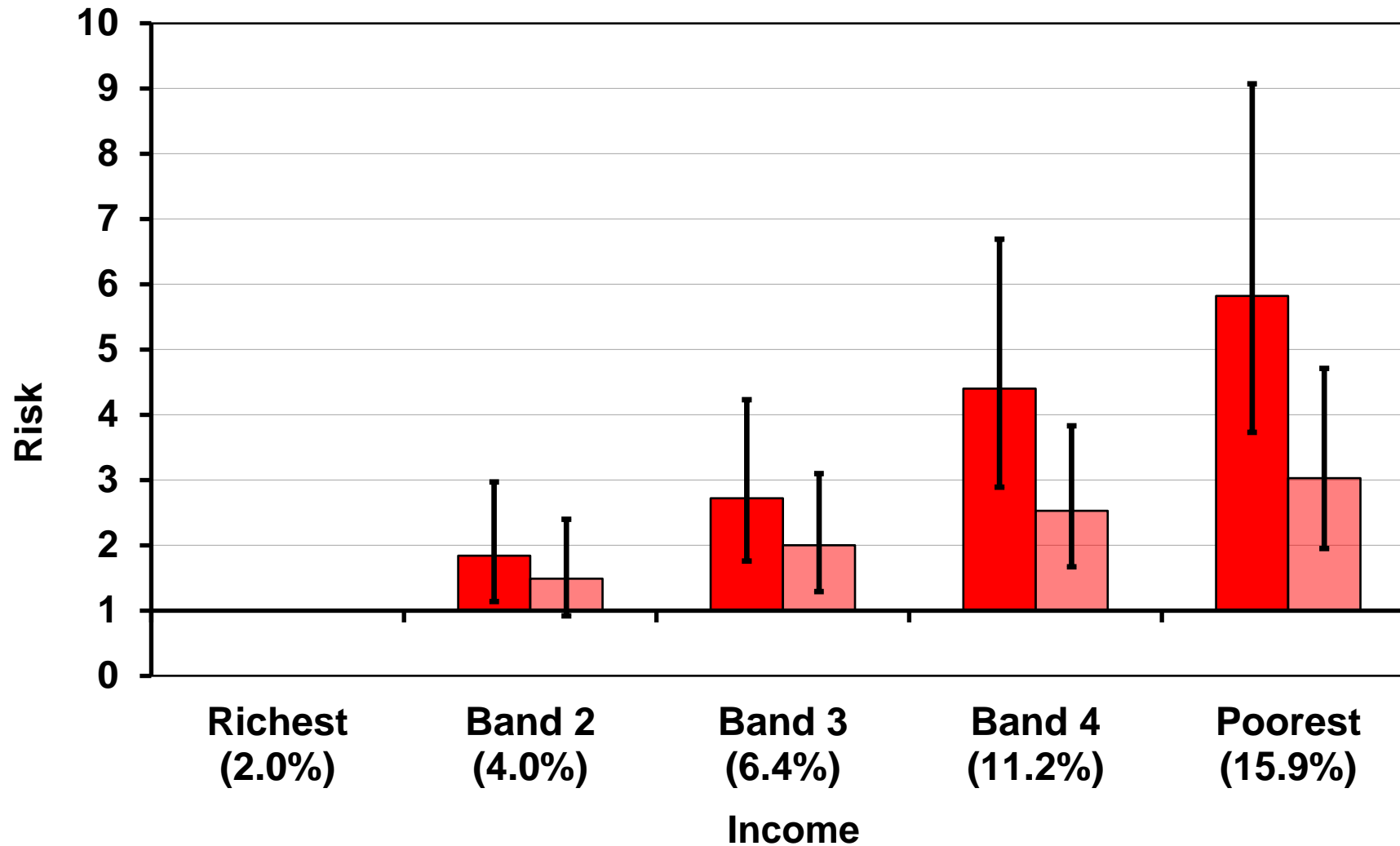
# Verbal ability at ages 3 & 5 by family income



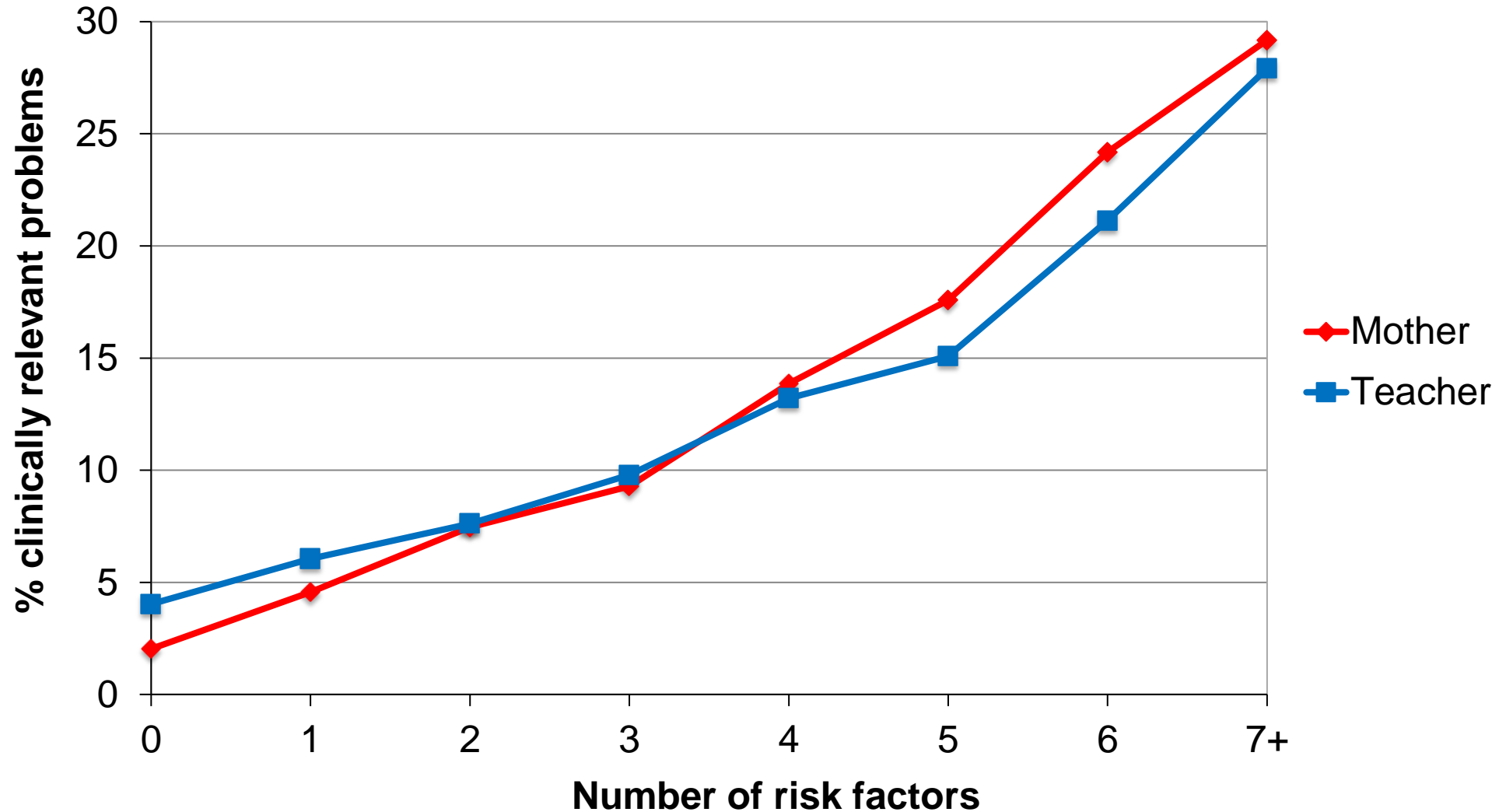
# Verbal months ahead or behind at age 7 by number of risk factors



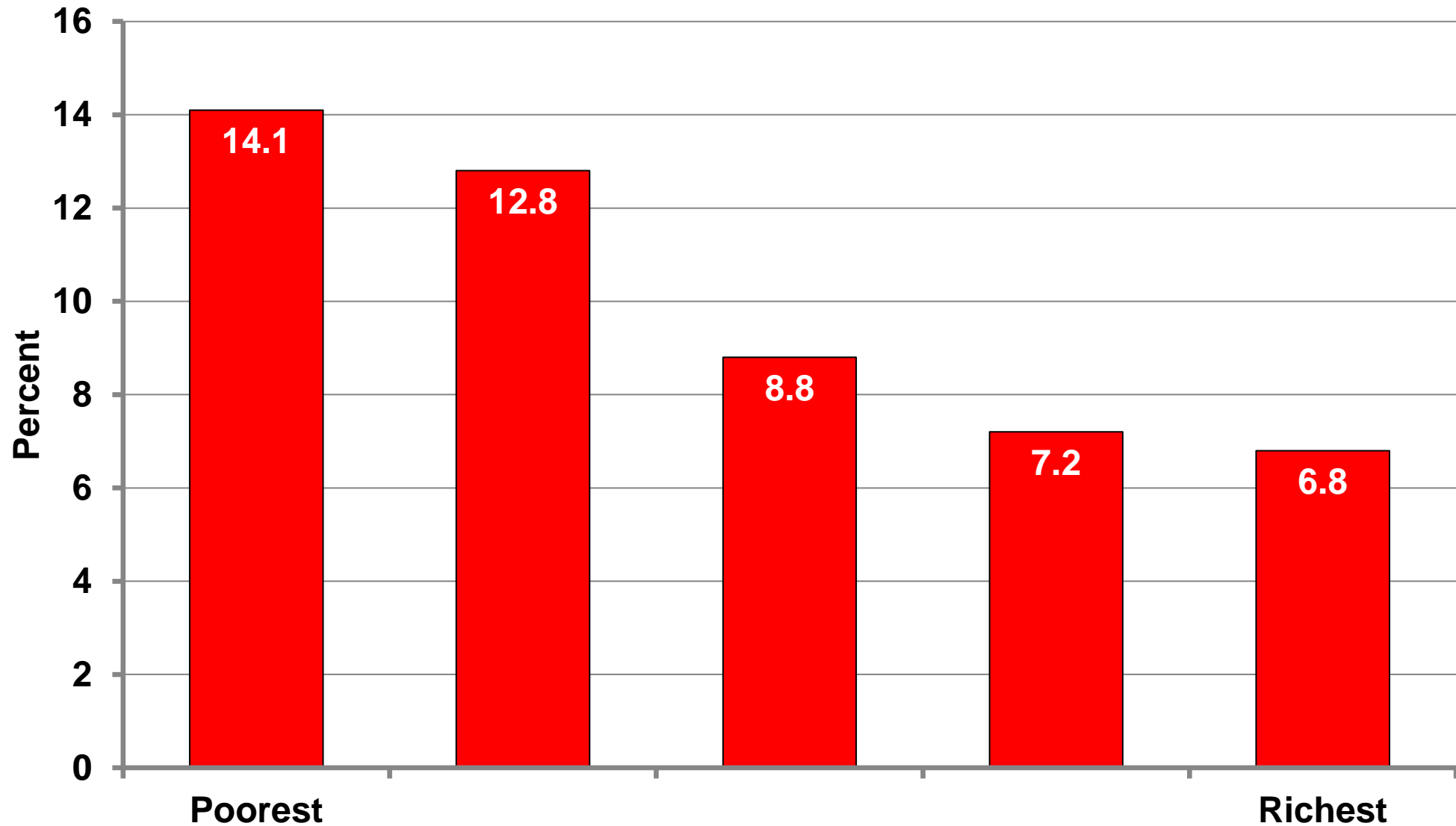
# Income gap in the risk of socioemotional difficulties at 5 years of age



# Clinically relevant behavioural problems at age 7, by number of risk factors



## Early menarche (by age 11) by family income



## Recent decades - marked changes in health and wellbeing:

- Alcohol consumption, smoking, teenage pregnancy rates have declined
- Screen based media use, overweight and obesity and poor mental health have increased

## Summary

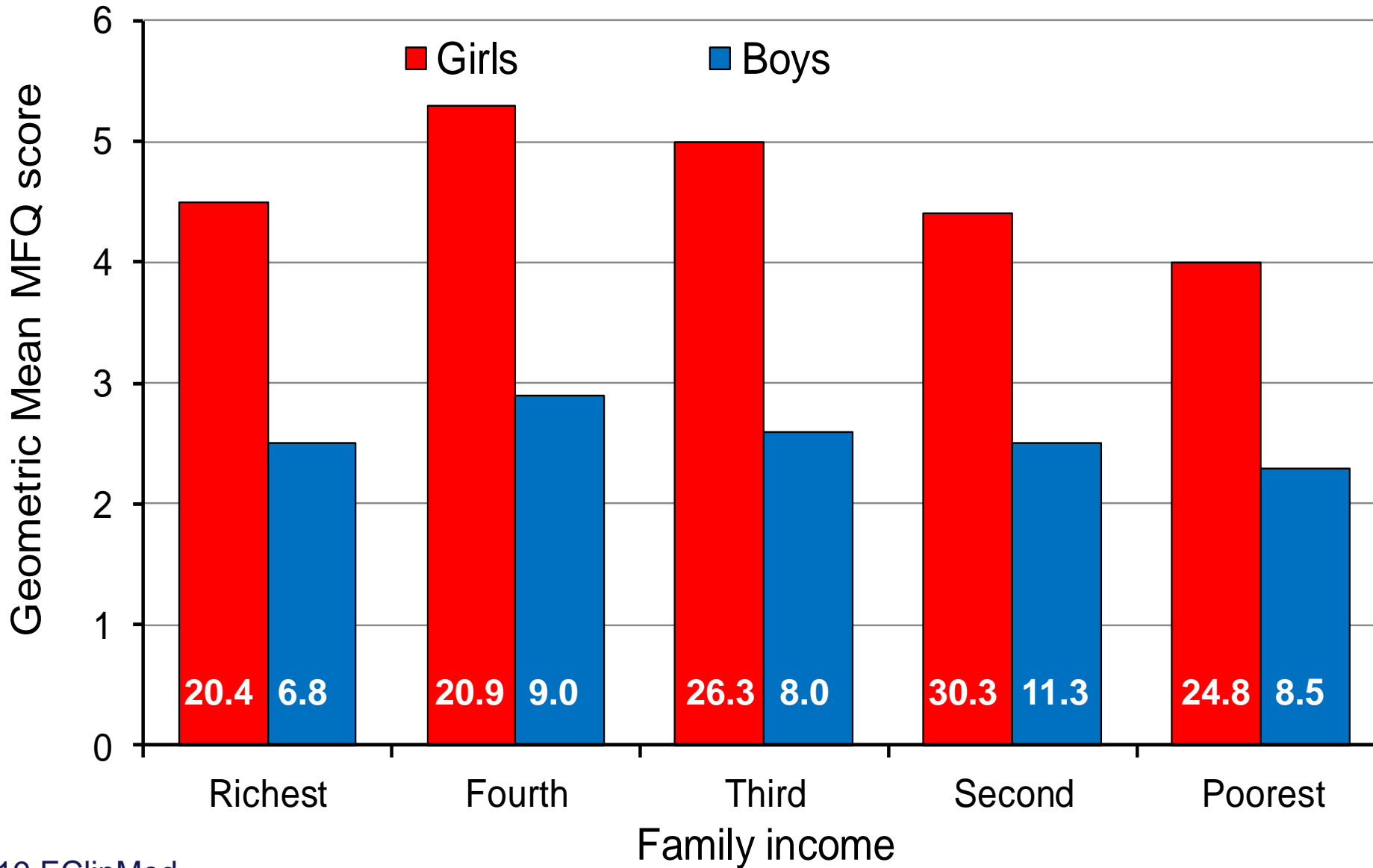
- Child and adolescent health and development matters – now and for the future
- Stark socioeconomic inequalities are evident and these start early
- Structural factors shape ‘intermediary’ environments: behavioural, material, psychosocial
- To give every child and young person a good start in life - action is needed on intermediate and structural influences

# Health behaviours by income quintile among youth (Age 14, MCS)

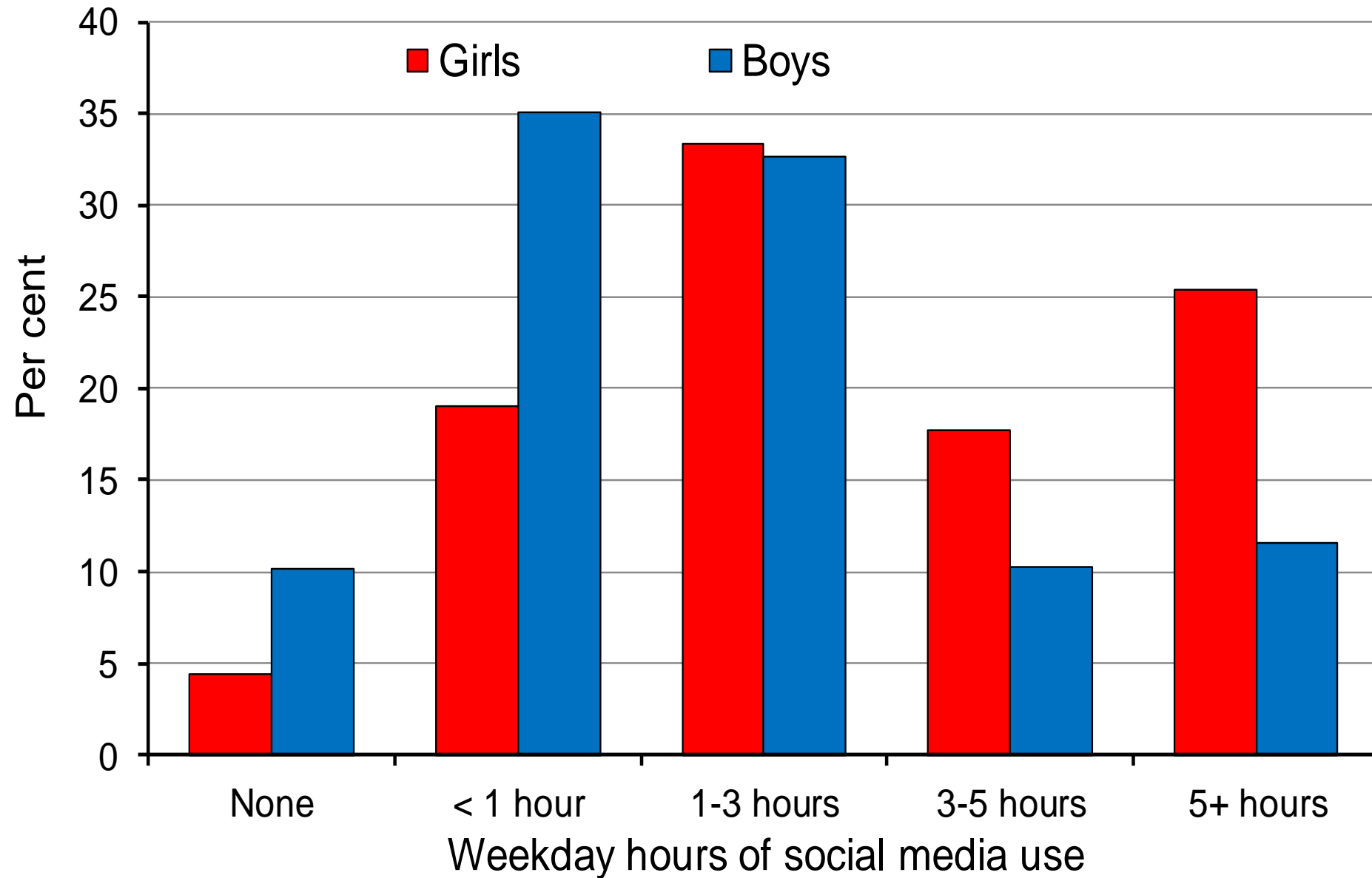
	Richest	2	3	4	Poorest
<b>Heavy drinking (All)</b>	7.0	9.0	10.7	10.2	7.1
<b>Heavy drinking (current drinkers)</b>	15.1	18.9	22.1	22.3	23.5
<b>Ever smoked</b>	8.7	11.4	14.7	21.4	20.1
<b>Any illicit drug use</b>	2.6	3.6	5.5	6.6	5.4
<b>Physical activity</b>					
5+ days	41.3	38.4	36.8	35.8	35.5
3-4 days	36.7	34.9	32.7	32.4	30.6
1-2 days	18.9	23.2	26.7	26.5	27.6
None	3.0	3.6	4.5	5.4	6.3



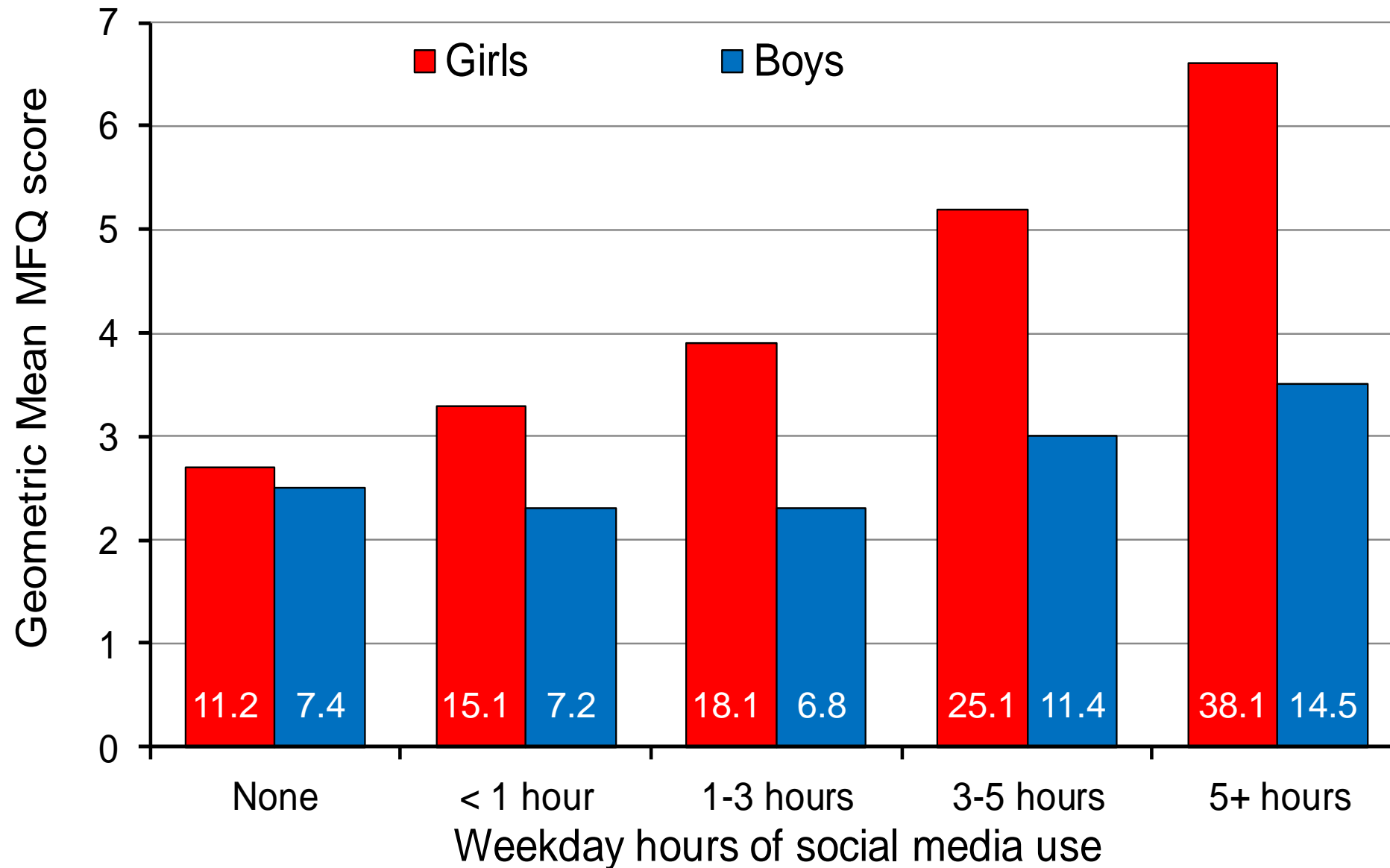
# Depressive symptoms by family income

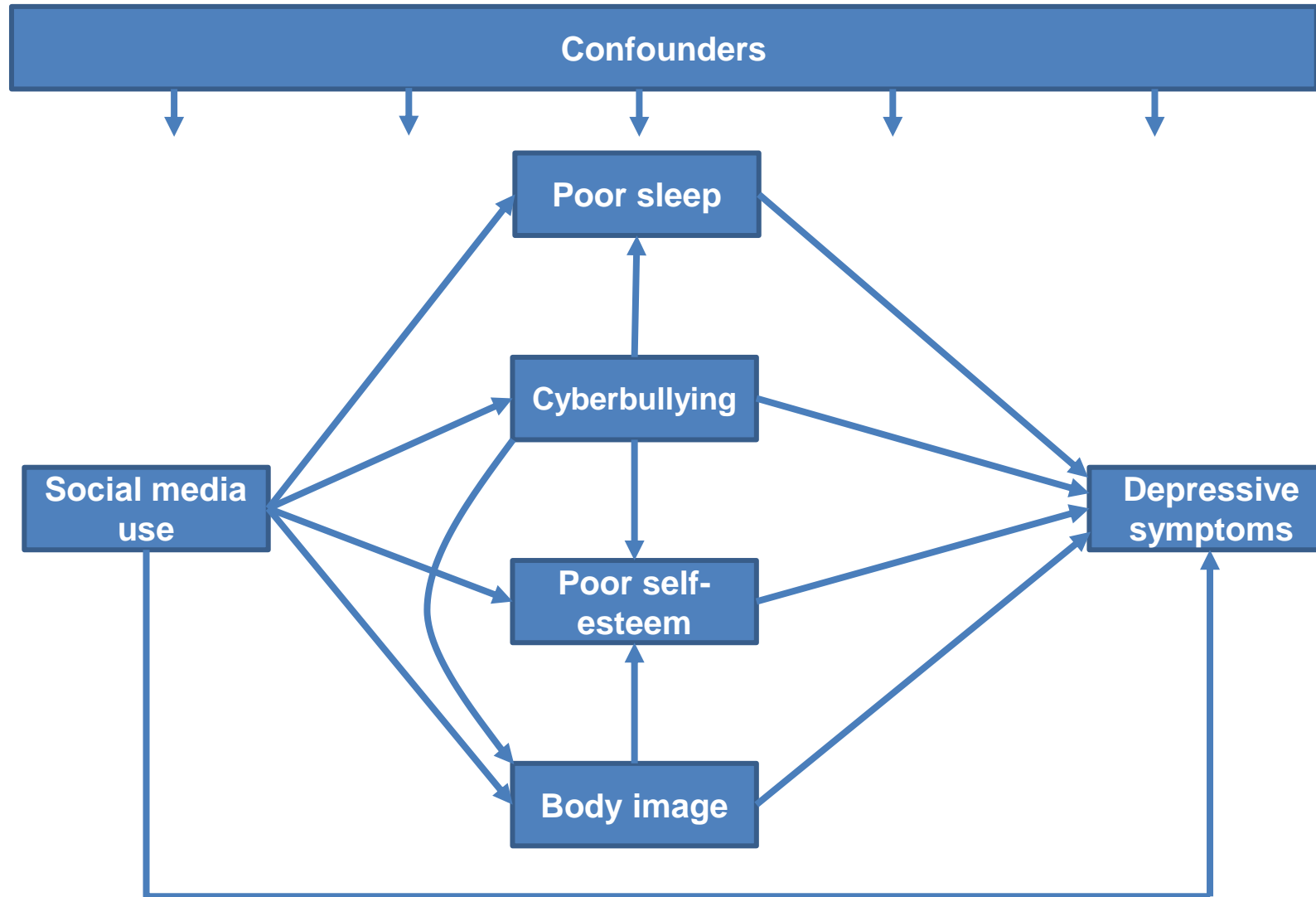


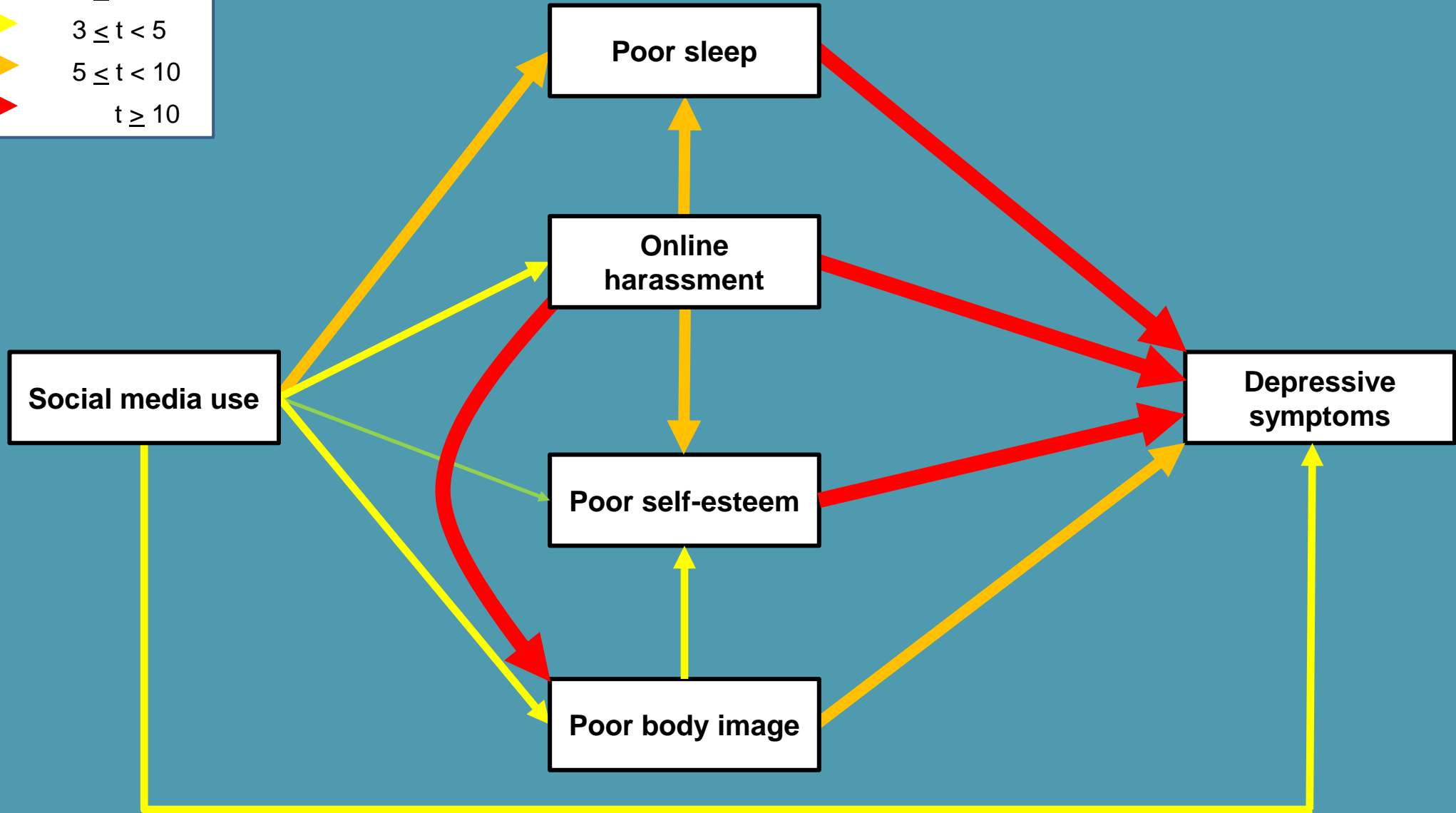
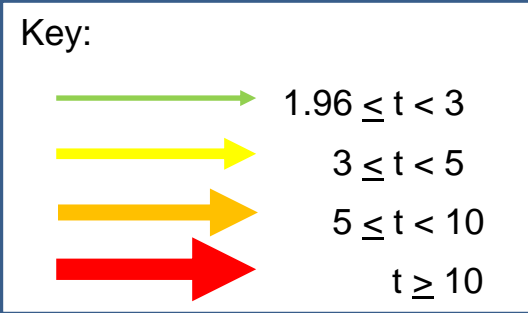
# Prevalence of weekday hours of social media use



# Depressive symptoms by social media use

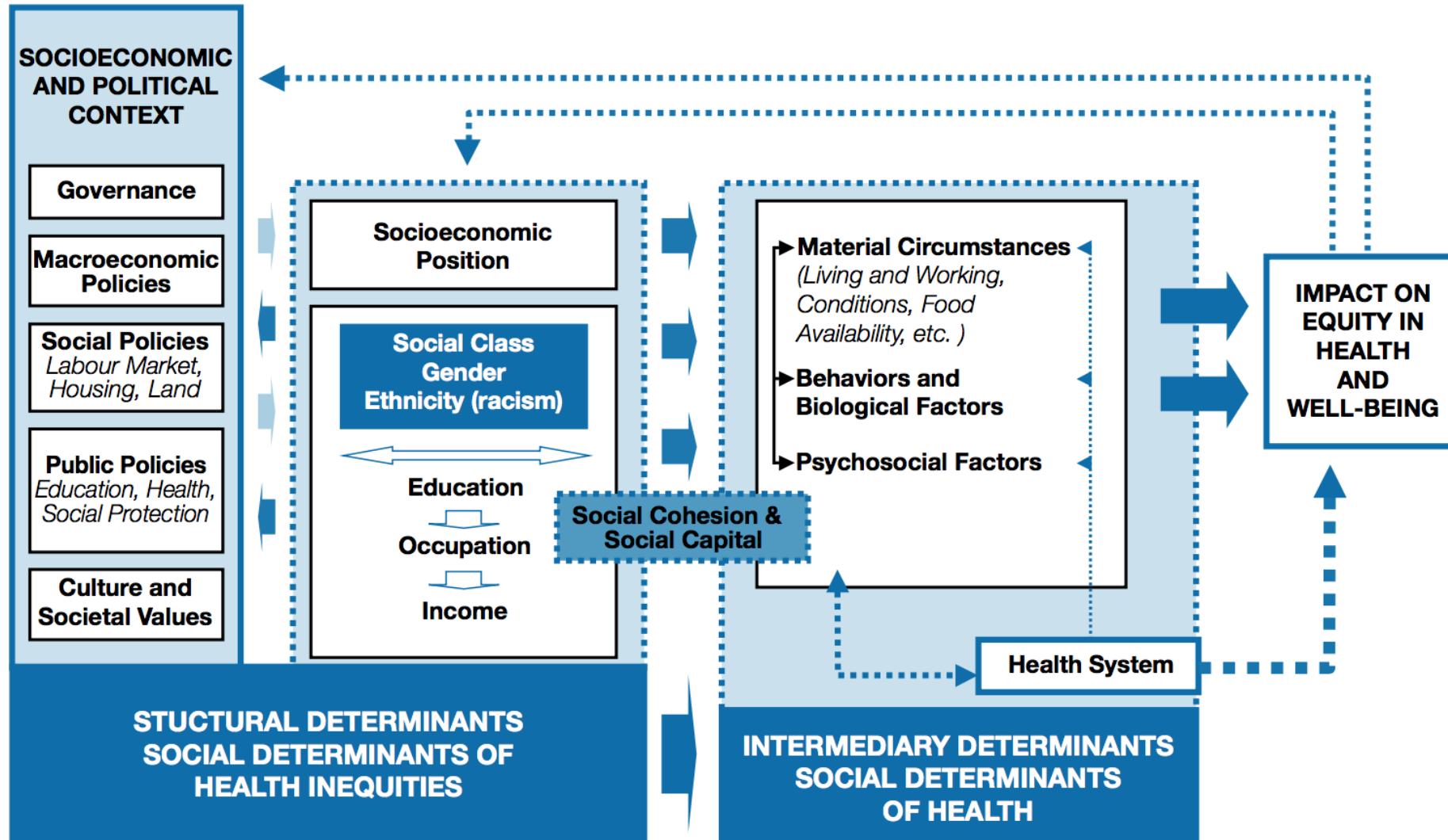






**Major challenges for adolescent health and wellbeing – what might some of the research questions be?**

# CSDH conceptual framework for action on the social determinants of health



Solar O, Irwin A (2010): A Conceptual framework for action on the social determinants of health. Social Determinants of Health Discussion Paper 2 (Policy and Practice). Geneva: World Health Organization.

# Social determinants for child health and development

