

**ScotCen**

**Social Research** that works for society



# **Growing Up in Scotland: Latest findings from Scottish Government reports**

Paul Bradshaw, Line Knudsen and Konstantina Vosnaki  
ScotCen Social Research

# Overview

- Background to the study
- Summary findings from three reports:
  - Overweight and obesity at age 10
  - Changes in language ability over the primary school years
  - Life at age 12



# What is GUS?

- Large-scale longitudinal birth and child cohort study involving national samples of children living in Scotland
- Three cohorts:
  - Birth cohort 1: 5217 children, born 2004/05, aged 10.5 months at 1<sup>st</sup> interview
  - Child cohort: 2859 children, born 2002/03, aged 34.5 months at 1<sup>st</sup> interview
  - Birth cohort 2: 6127 children, born 2010/11, aged 10.5 months at 1<sup>st</sup> interview
- Funded by the Scottish Government and running since 2005



# Ages and stages (so far...)

Child's age	Cohort/Year of data collection		
	Child cohort	Birth cohort 1	Birth cohort 2
10 months		2005/06	2010/11
Age 2		2006/07	
Age 3	2005/06	2007/08	2013
Age 4	2006/07	2008/09	2014 Web survey
Age 5	2007/08	2009/10	2015
Age 6	2008/09	2010/11	
Age 8		2012/13 2013/14	Web survey
Primary 6 (Age 10)		2015/16 2015/16	Web survey
S1 (Age 12)		2017/18	
S3 (Age 14)		2019/20	

# Sources of information at each age point

Source of data	Child's age/school stage									
	10mth	Age 2	Age 3	Age 4	Age 5	Age 6	Age 8	P6/10	S1/12	S3/14
	BC1 & BC2	BC1	CC, BC1/2	CC & BC1	CC, BC1/2	CC, BC1	BC1	BC1	BC1	BC1
Main carer interview										
Partner or Teacher questionnaire		Partner						Teacher	Partner	Partner
Child questionnaire										
Child height and weight measurements										
Cognitive assessments										
Linked admin data - health records										
Linked admin data – education records			Pre-school		Primary School			Secondary		

**ScotCen**

**Social Research** that works for society



# **Growing Up in Scotland: Overweight and obesity at age 10**

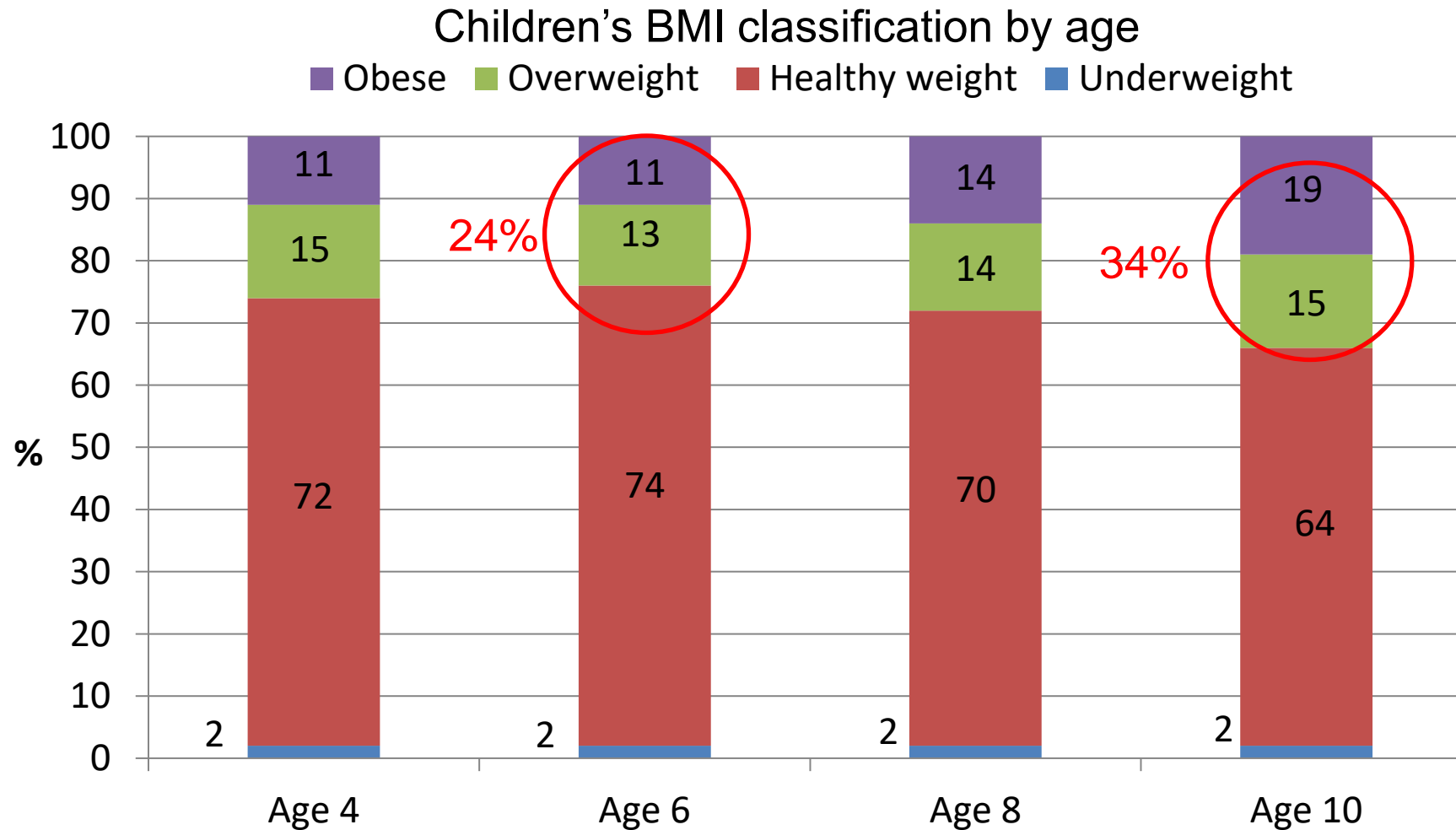
Paul Bradshaw and Stephen Hinchliffe, ScotCen Social Research

# Research questions

- What proportion of children are overweight/obese at age 10, compared with age 6?
- What proportion move into and out of healthy weight/overweight/obese categories during that period?
- How does overweight/obesity vary amongst 10 year old children according to demographic and socio-economic characteristics?
- Is there any change in the social gradient of overweight/obesity between age 6 and age 10?
- What other factors are associated with overweight/ obesity at age 10?
- Which factors are associated with a move out of or a move into overweight and obesity between ages 6 and 10?



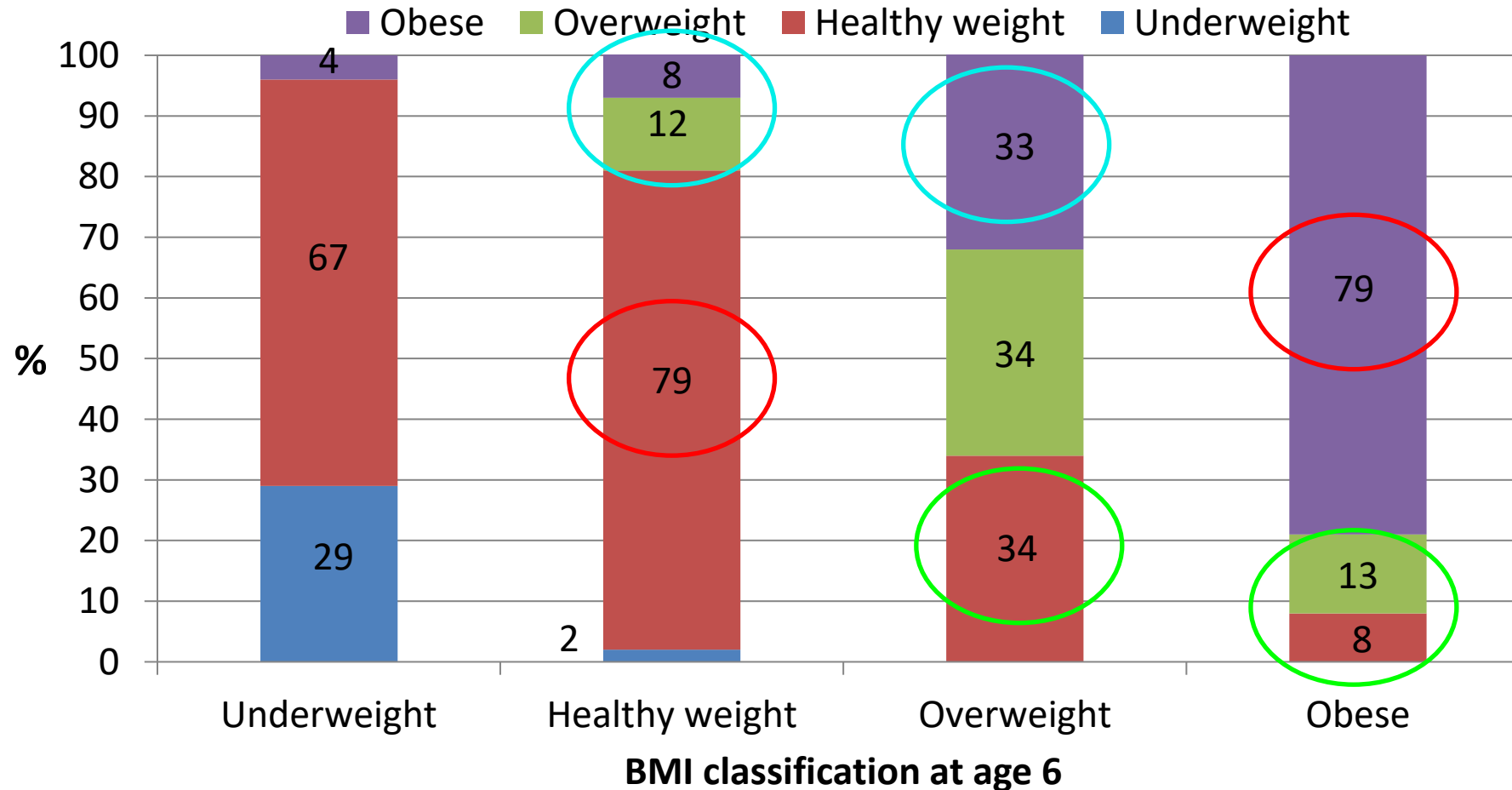
# Levels of overweight/obesity increase with age





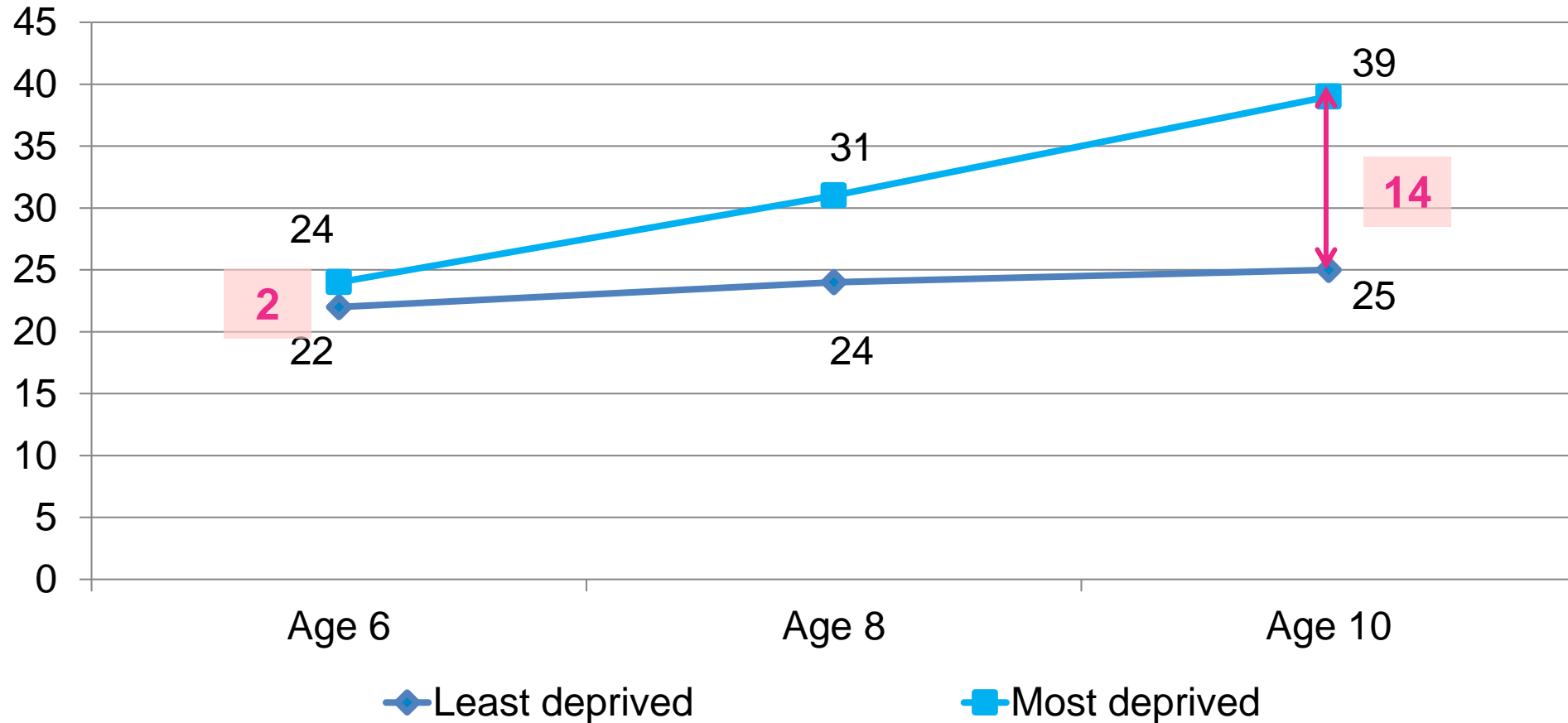
# BMI at age 6 strongly associated with BMI at age 10

BMI classification at age 10 by BMI classification at age 6

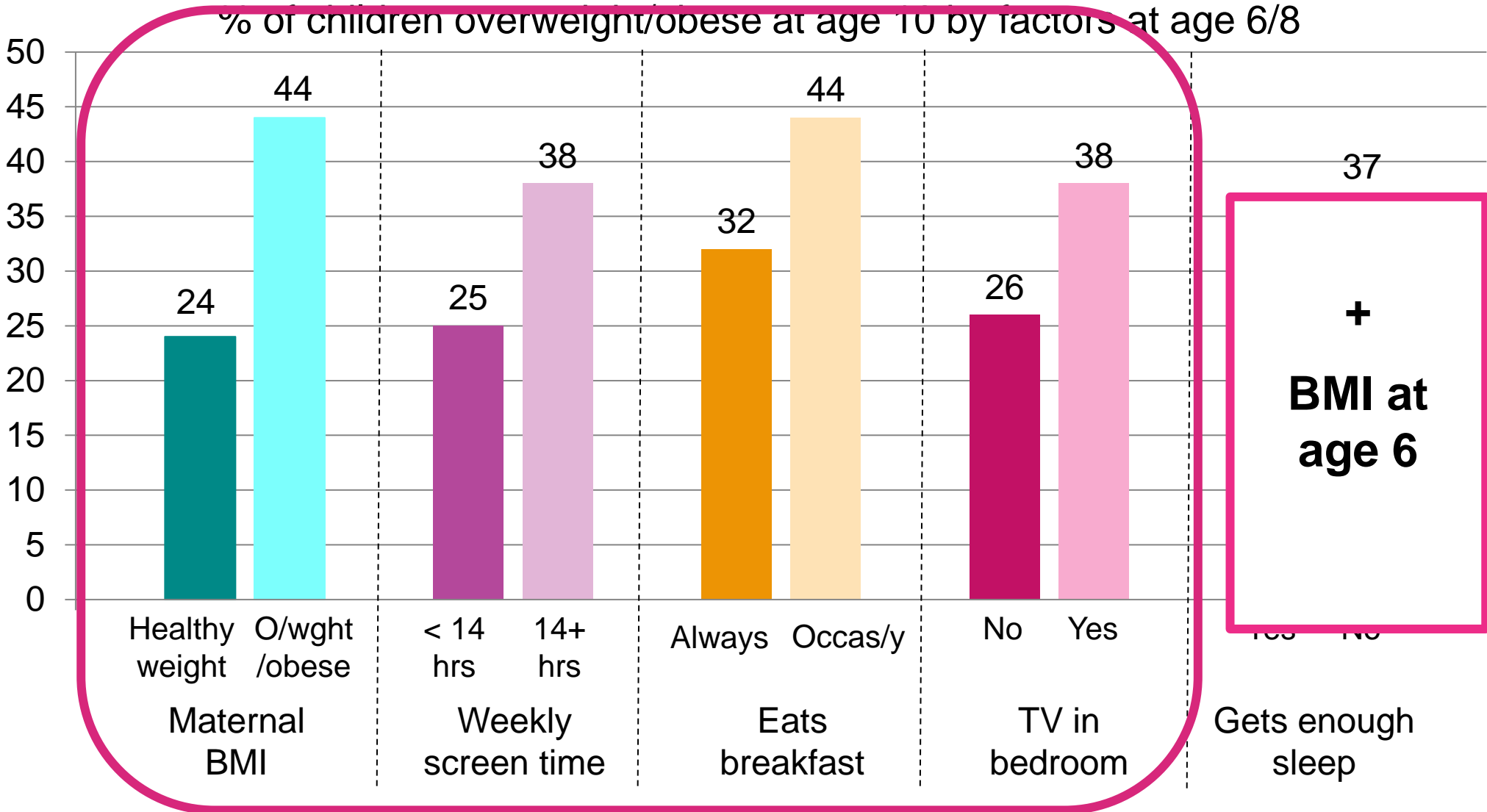


# Higher levels of and increase in overweight/obesity amongst more deprived

% of children overweight/obese by SIMD quintile and age



# Overweight/obesity associated with other factors



# Summary

- There is a notable increase in rates of overweight/obesity in children between ages 6 and 10 and an average increase in BMI score for all children
- Inequality in levels of overweight/obesity between children from different social backgrounds – which already exist at age 6 – have widened by age 10
- Overweight/obesity at age 6 strongly associated with overweight/obesity at age 10. Suggests that tackling/preventing overweight in early childhood may help reduce levels of overweight and obesity and later ages.
- However, many children of healthy weight at age 6 moved into overweight/obesity. Suggests that prevention in early childhood alone would not be sufficient in reducing later levels of overweight/obesity



# Summary (2)

- A range of aspects of children's family environment and experiences were associated with overweight/obesity at age 10 and with movement between BMI categories, after controlling for social background
- Some similarities with factors found in earlier analysis of overweight/obesity at age 6 – e.g. maternal overweight/obesity and frequency of unhealthy snacks related at both time points
- However, inactivity – and perhaps particularly a home environment which facilitates higher levels of inactivity - appears to play a more important role when children are slightly older.
- Poor parental recognition of child overweight/obesity may also be problematic. The findings suggest that many parents are ill-informed or find overweight hard to recognise.



**ScotCen**

**Social Research** that works for society



# **Growing Up in Scotland: Changes in language ability over the primary school years**

Line Knudsen, Eilidh Currie, Paul Bradshaw, James Law and  
Rachael Wood

October 2019

# Research questions

- Does the gap in expressive language ability between children from advantaged and disadvantaged backgrounds change over the primary school years?
- What circumstances and experiences are associated with a relative change in ability? Do these vary according to social background?



# Comparing language development

Child's age	Cohort/Year of data collection		
	Child cohort	Birth cohort 1	Birth cohort 2
10 months		2005/06	2010/11
Age 2		2006/07	
Age 3	2005/06	2007/08	2013
Age 4	2006/07	2008/09	
<b>Age 5</b>	2007/08	<b>2009/10</b>	2015
Age 6	2008/09	2010/11	
Age 8		2012/13	
<b>Primary 6 (Age 10)</b>		<b>2015/16</b>	
S1 (Age 12)		2017/18	
S3 (Age 14)		2019/20	

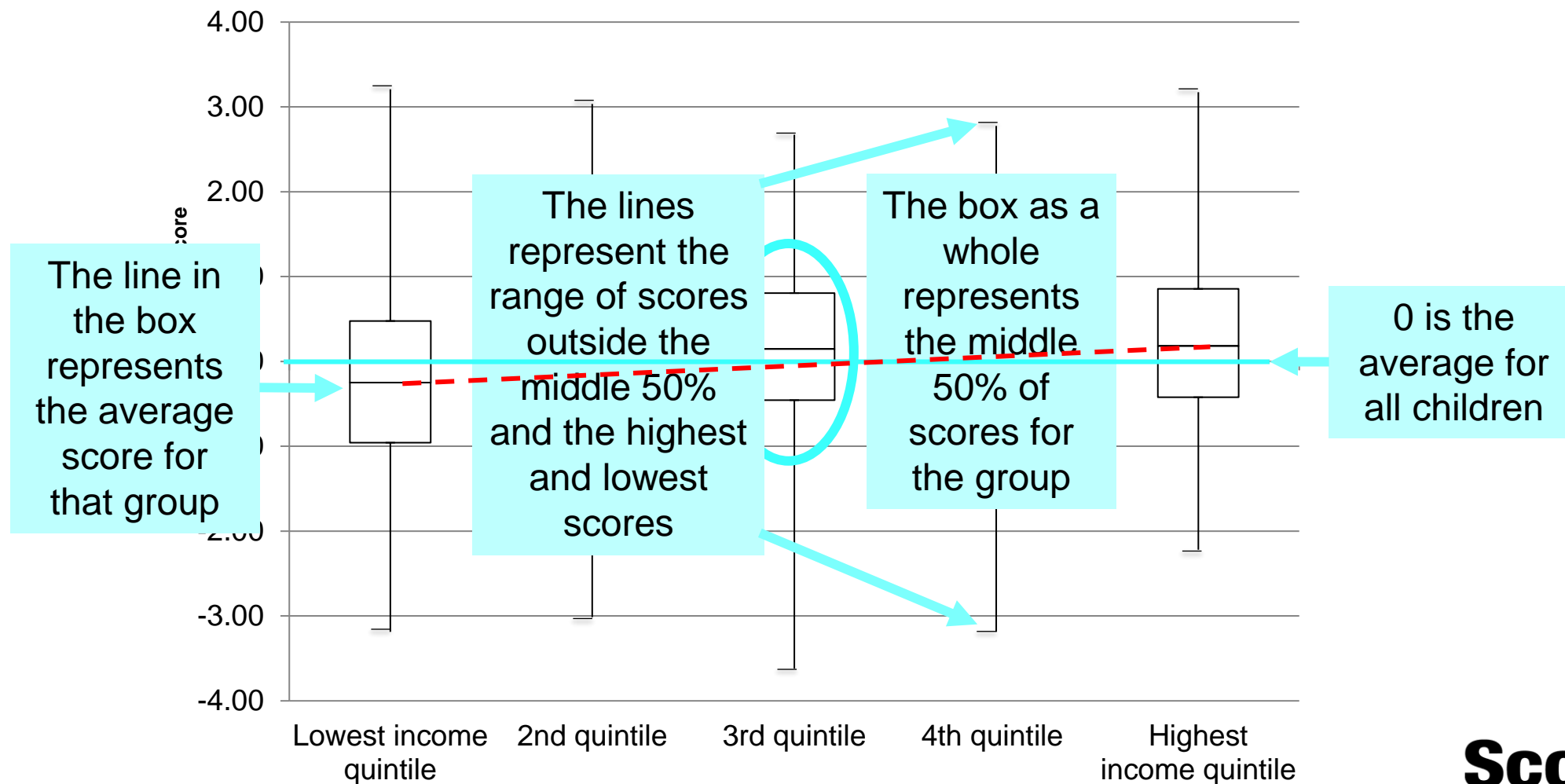


# How we measured language development

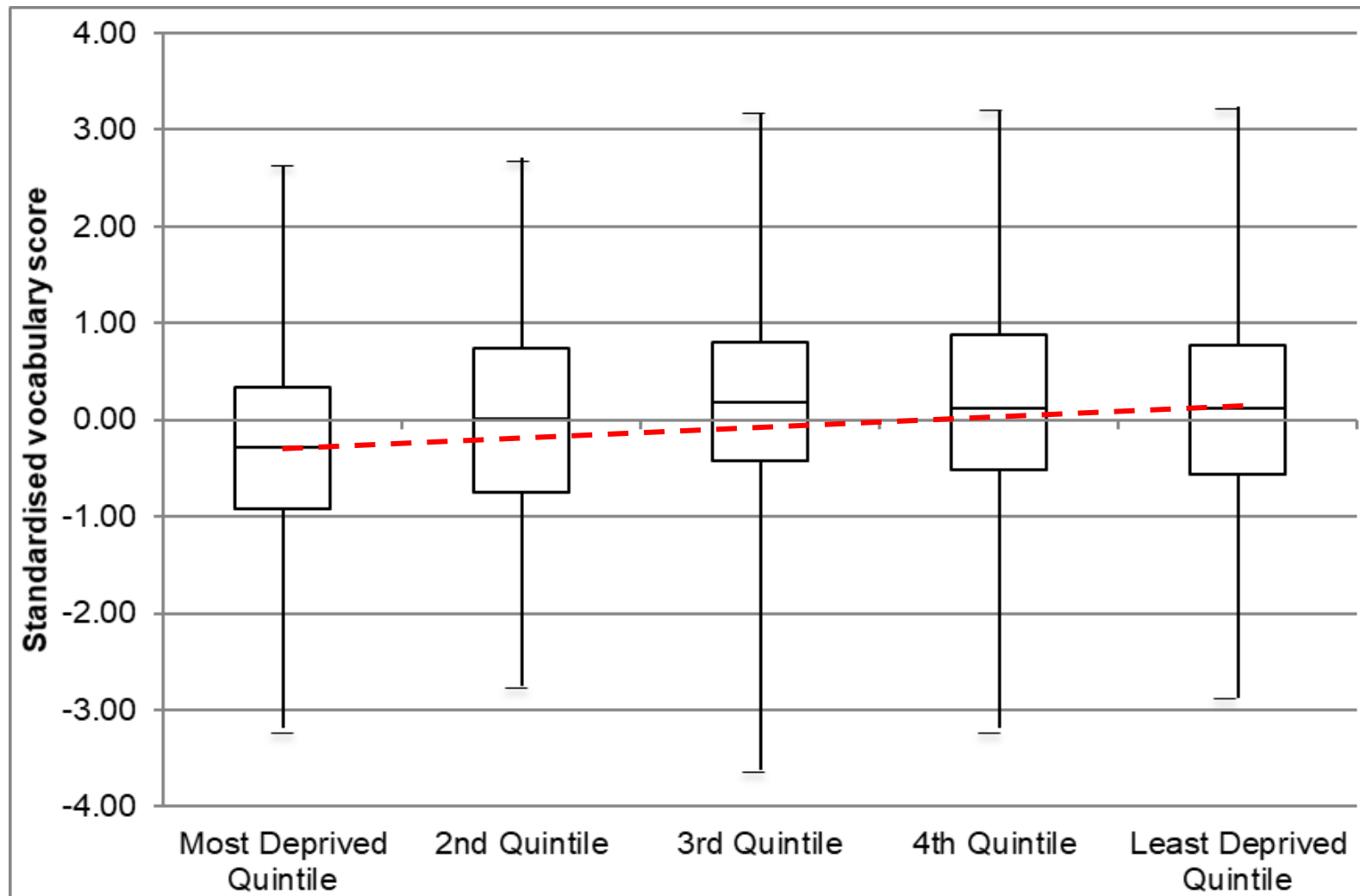
- This report focusses on expressive vocabulary
- Different but related measures used at each age point (age 5/P1 and age 10/P6)
- To allow comparison, the scores from each age point were standardised into 'z-scores'.
- These are **relative scores** that tell us how well children are doing compared with the average for all children



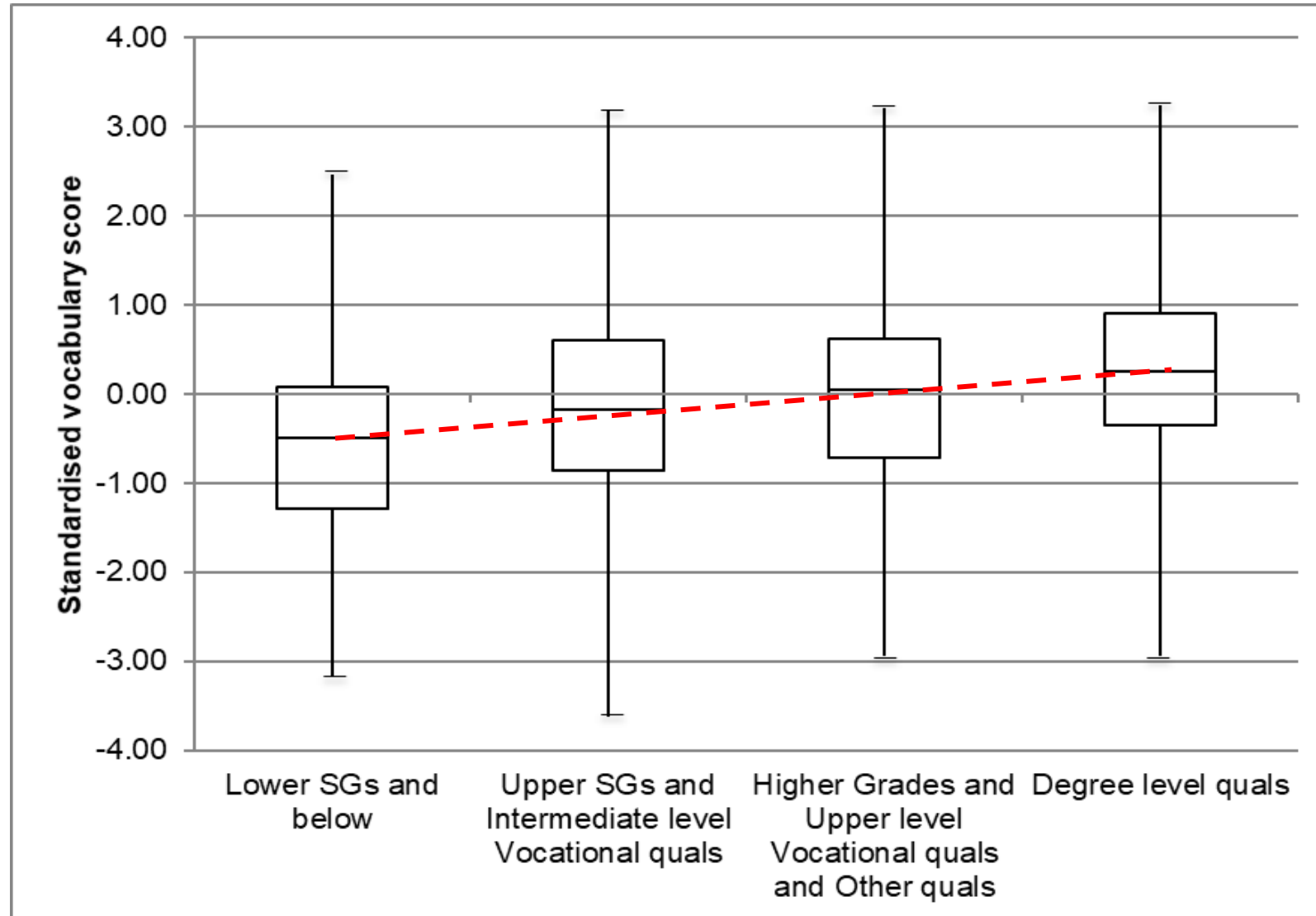
# Standardised vocabulary ability score by household income – Primary 6



# Standardised vocabulary ability score by area deprivation – Primary 6



# Standardised vocabulary ability score by highest qualification – Primary 6



# Has there been a change in the ability 'gap'?

- Strong relationship between relative language ability in P1 and P6

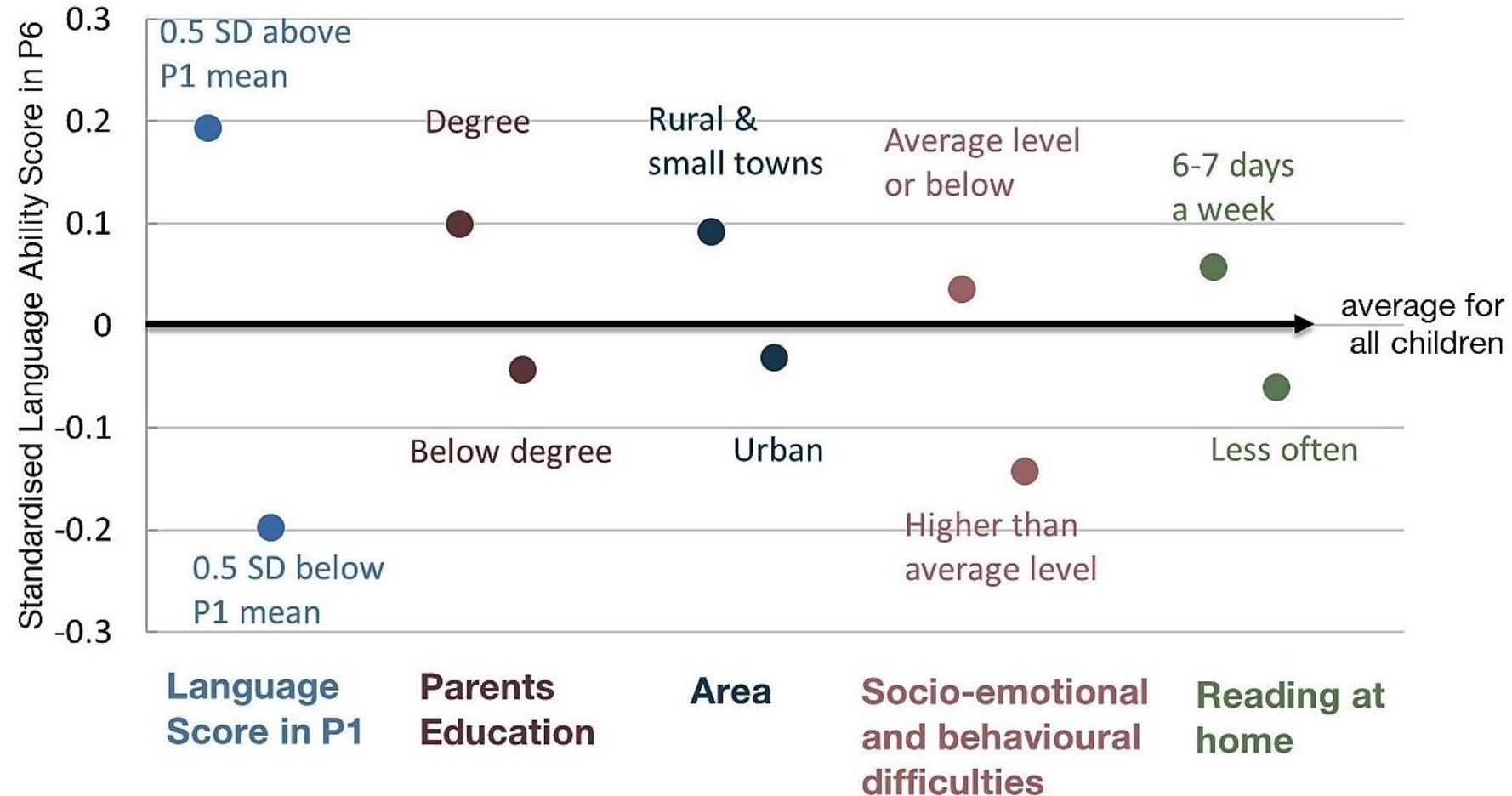
- If the gap was narrowing, we would expect to see children in less advantaged circumstances improving at a higher rate than their more advantaged peers



- No evidence of this
- To the contrary, results suggest children in more advantaged circumstances improved at higher rate than less advantaged peers

- If anything, analysis suggests that inequalities have widened rather than narrowed over the primary school period

# What factors are associated with improvement in language ability?



# Summary and final remarks

- 'Gap' in expressive language ability between more and less advantaged children evident in last years of primary school (P6)
- If anything, inequalities appear to widen over primary school period

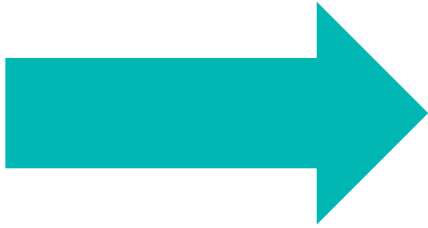
- Also substantial variation in ability *within* socio-economic groups



- Socio-economic background may serve as useful flag for who might be at risk of poorer outcomes
- However, support for learning should not operate solely on the basis of socio-economic characteristics

# Summary and final remarks (2)

- **Higher than average social development difficulties** associated with relative *decline* in language ability over primary school period



- Policies aiming to improve educational attainment must take into account other domains of children's development
- Important to ensure ASNs associated with social and behavioural development are fully supported during primary school

- **Living in a small town or rural area** associated with relative improvement

- **Reading/looking at books at home 6+ times per week (at age 8)** associated with relative improvement



# Thank you

Line.Knudsen@scotcen.org.uk

**ScotCen**  
Social Research that works for society



# Life at Age 12: Initial Findings from the Growing Up in Scotland Study

Konstantina Vosnaki, Paul Bradshaw and Alex Scholes

# Areas covered in the report

- Experience of school and educational aspirations
  - Relationships with parents and peers
  - Healthy weight and perceptions of body weight
- Social media and use of the internet
  - Involvement in risky behaviour
  - Life satisfaction



# **Social media and use of the internet**



# Online and social media

Time spent on social media/communicating via devices

Knowledge about staying safe online

Parents' knowledge of child's online activity (M, C)

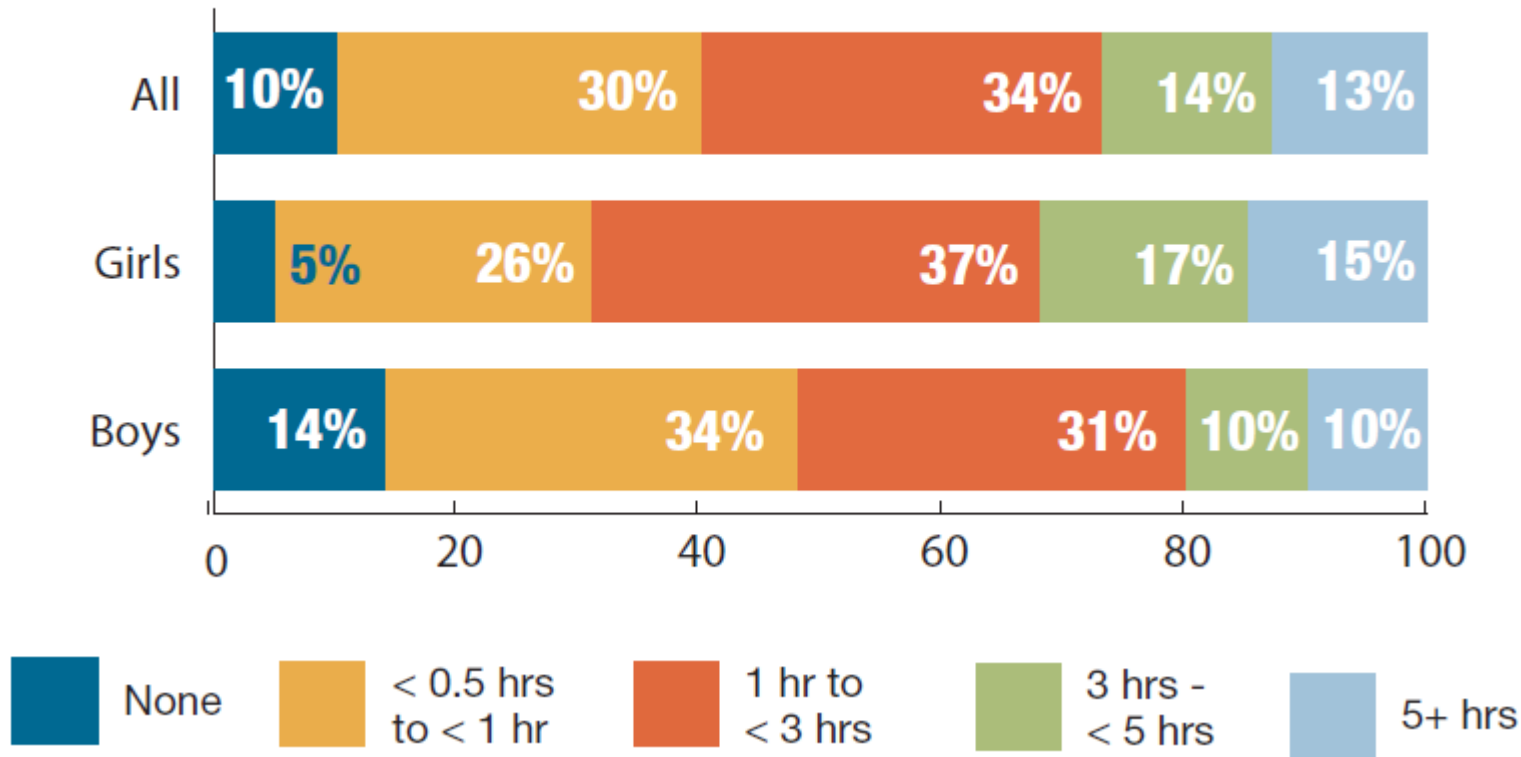
Online activities

Risky online behaviours

Experiences of being online incl upsetting experiences

# Social media and use of the internet

Time spent on social media by gender





# Involvement in risky behaviour



# Risky behaviour

Smoking (cigarettes & e-cigarettes)

Alcohol

Anti-social behaviour

Taken something from a shop or store without paying for it

Been rowdy/rude in a public place so that people complained/ got into trouble

Stolen money or other things that someone else had left lying around

Deliberately damaged or destroyed property

Broken into a locked place to steal something

Written things or sprayed paint on property

Carried a knife or weapon in case it is needed in a fight

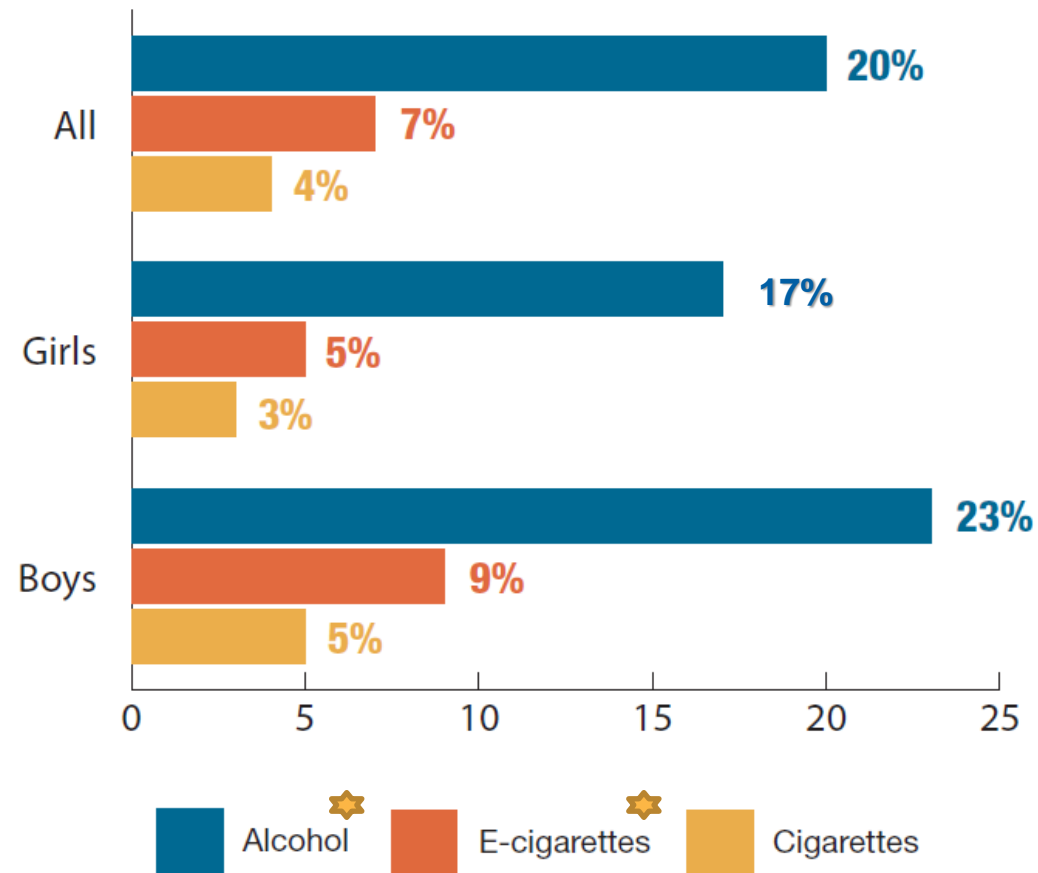
Used force, threats, a weapon to get money or something else from somebody

Hit, kicked or punched someone with the intention of hurting or injuring them



# Risky behaviour

Proportion of children who had ever tried alcohol, a cigarette or an e-cigarette by gender



# Risky behaviour [2]

Children who had smoked were more likely to have also drunk alcohol



**70%**

of those who had tried a cigarette had also drunk alcohol

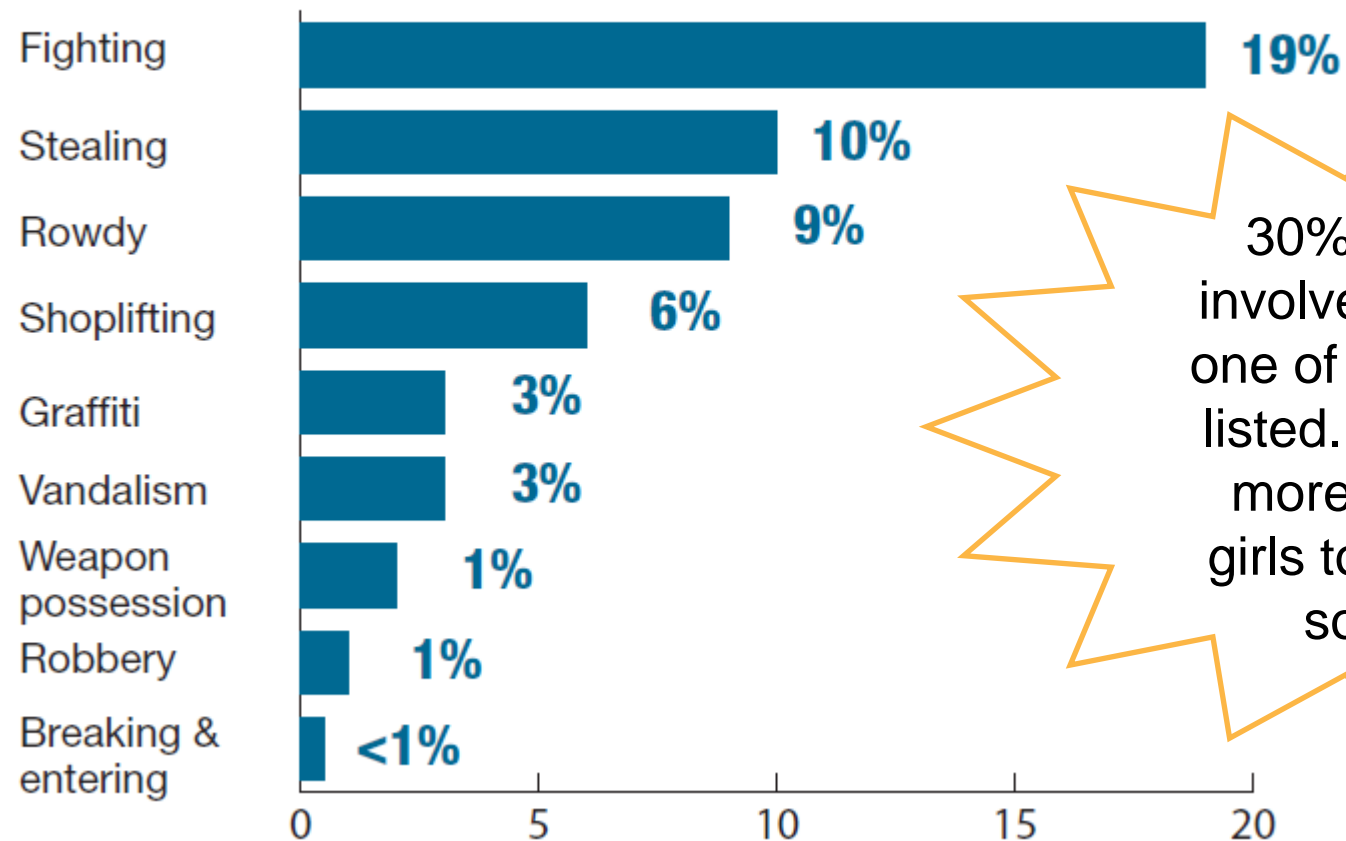


**18%**

of those who had not tried a cigarette had drunk alcohol

# Risky behaviour [3]

## Involvement in anti-social behaviour

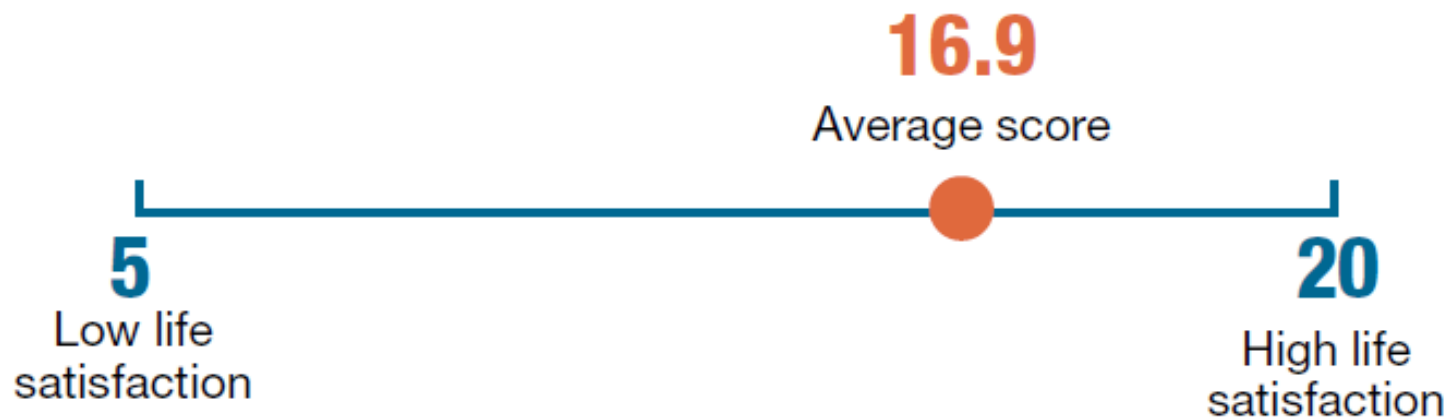
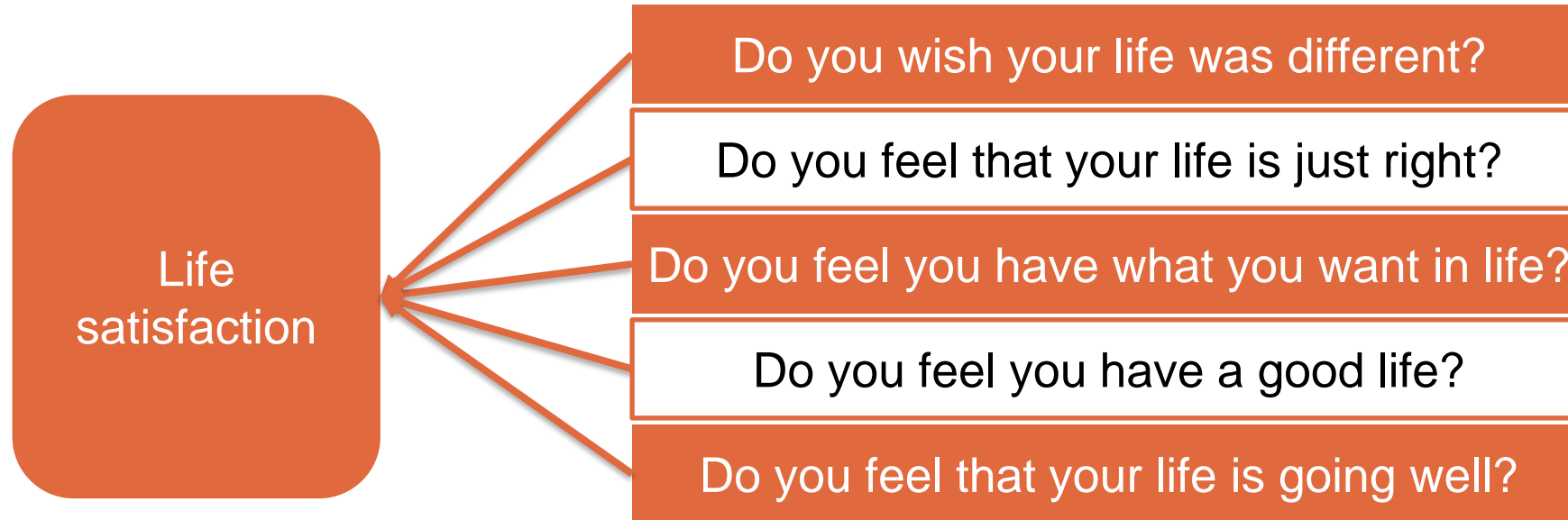


30% had been involved in at least one of the activities listed. Boys (40%) more likely than girls to have done so (21%).



# Life satisfaction



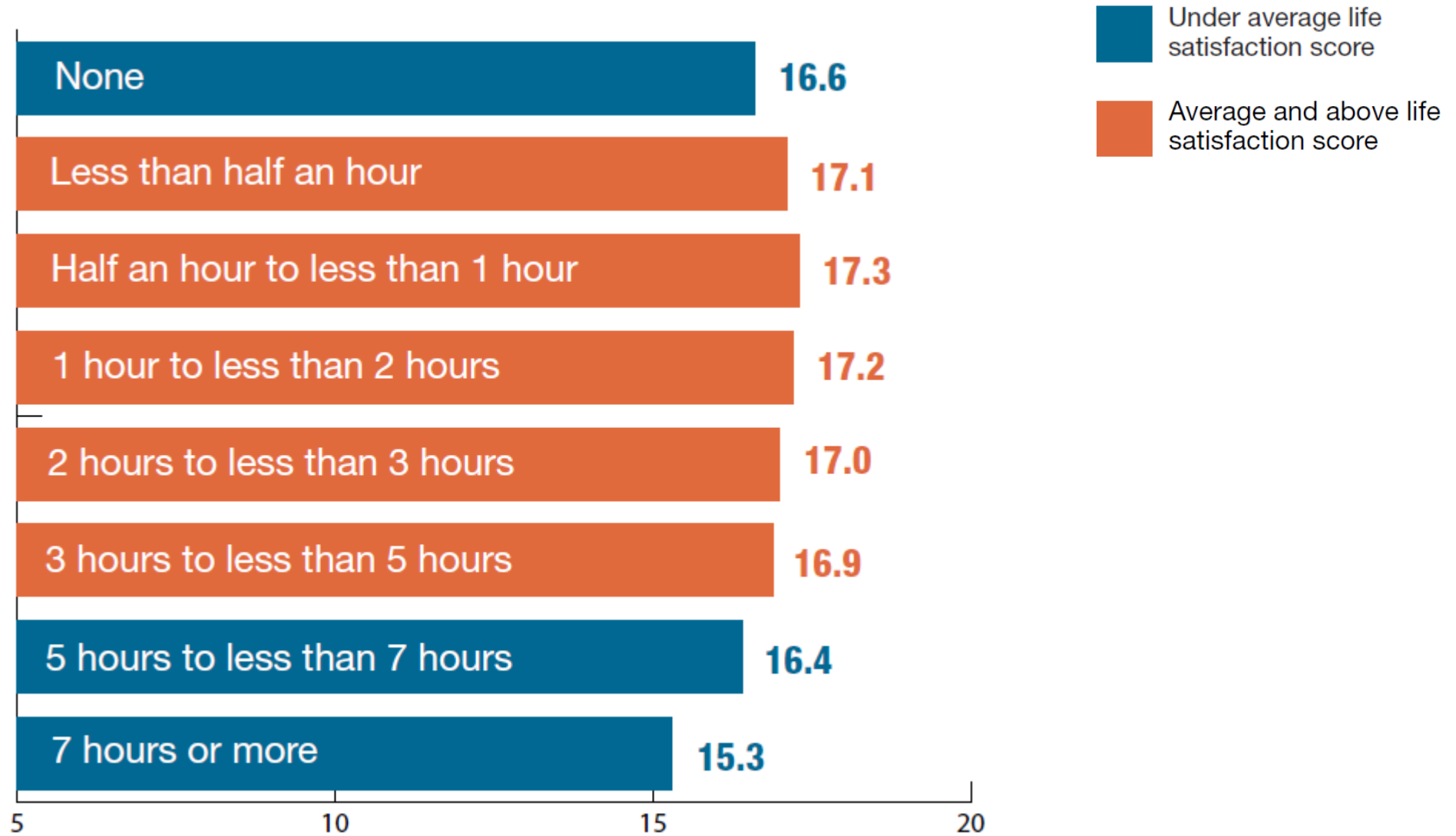
# Life satisfaction



# Life satisfaction

	Min.		Max.
Gender	-		-
Enjoyment of school	14.8		18.2 
Aspirations for staying on in Education	15.5		17.1
Ease of making friends	14.9		17.4
Bullying experiences	15.5		17.7
Can count on friends	15.2		17.6
Can count on resident mother	14.6		17.4
Can count on resident father	14.0 		17.8
Hours per school day on social media	15.3		17.3
Body image	14.7		17.4

# Life satisfaction by social media time



**Thank you**



**ScotCen**

**Social Research** that works for society