

The effects of early childhood education on learning how to learn – an English study



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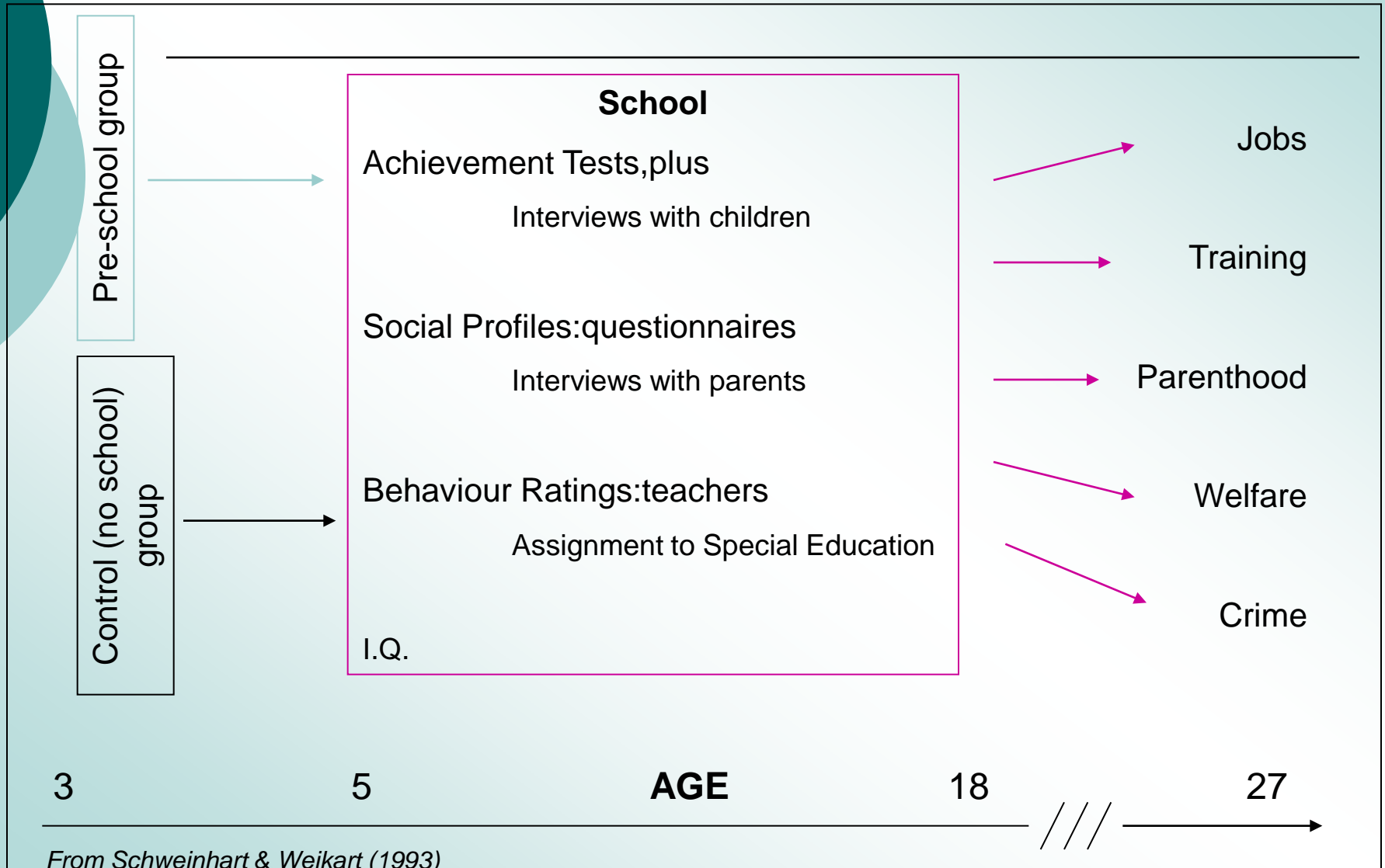
Themes in today's presentation

- The effects of pre-school education on children's intellectual and social/behavioural development
- Implications for Early Childhood policy and practice

Experimental intervention

- Small scale interventions
- On a specific group of children
- Experiencing 'unusual' provision

An experimental approach: The High/Scope Perry Study in US



An educational effectiveness approach: typical children in typical provision

The EPPE study uses a school effectiveness design which investigates 'natural variation' in children's experiences over time.

The EPPE Sample

- Five regions in England
- 141 pre-school centres randomly selected to include: playgroups, nursery classes, private day nurseries, day care centres run by local authorities, nursery schools and integrated centres
- 2800 randomly selected children from preschools; 305 children from homes

Design of EPPE 3-11: 141 pre-schools, 3,000 children

Pre-school
Provision (3+ yrs)

Reception

Yr 2

Yr 6

Yr 9

25 nursery classes

590 children

34 playgroups

610 children

31 private day nurseries

520 children

20 nursery schools

520 children

24 local authority day care nurseries

430 children

7 integrated centres

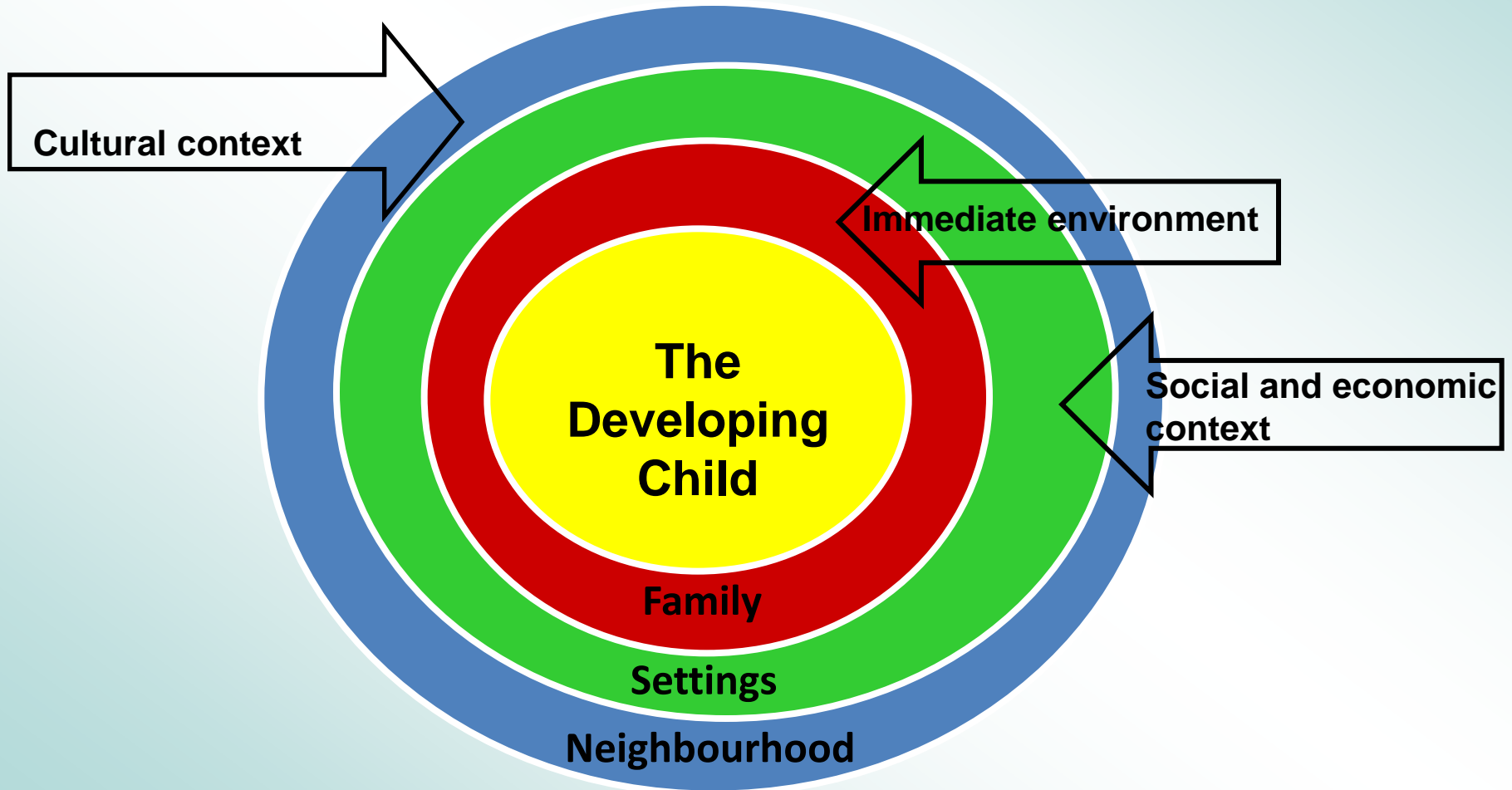
190 children

home

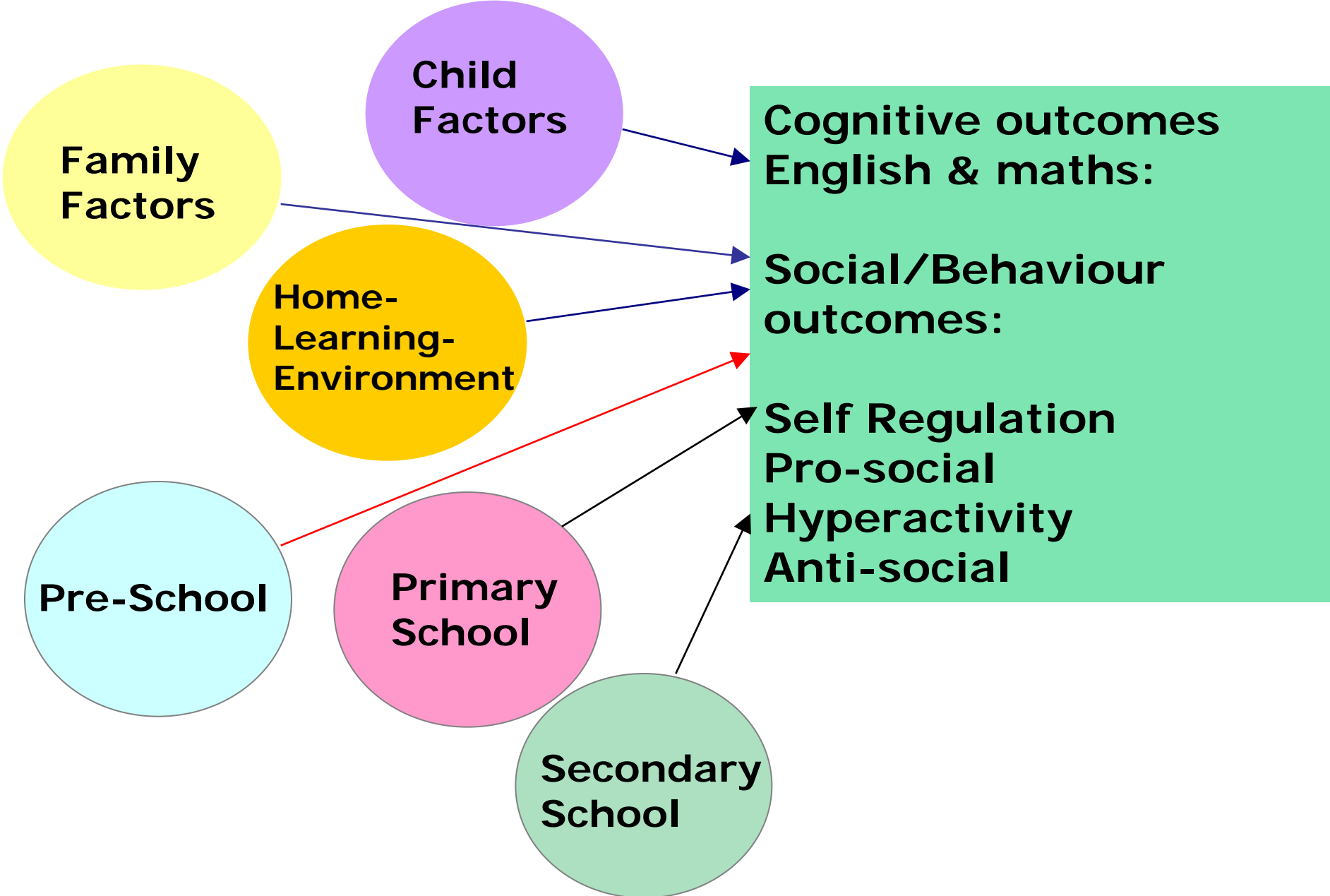
310 children

Key Stage 1 600 Schools	Key Stage 2 1000 Schools	Key Stage 3 800 Schools
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Society's support for the developing child




Influences on child outcomes at ages 5, 7, 11, (14)



Sources of data

- Child assessments over time
- Child/family background information, e.g. parent employment, birth weight, gender
- Interviews with all parents
- Observation rating scales for quality in preschool settings





Qualitative case studies (Iram Siraj-Blatchford, 2013) on resilient children were carried out when children entered secondary school.

Excerpts from parents of a resilient child from an ethnic minority background

Daniella's Father: *We did our best because it was always when [Daniella] was born I was a bus driver so I was always there swapping shifts to be at home in the evenings and if I wasn't there the mum was always there so we feel we've done well.*

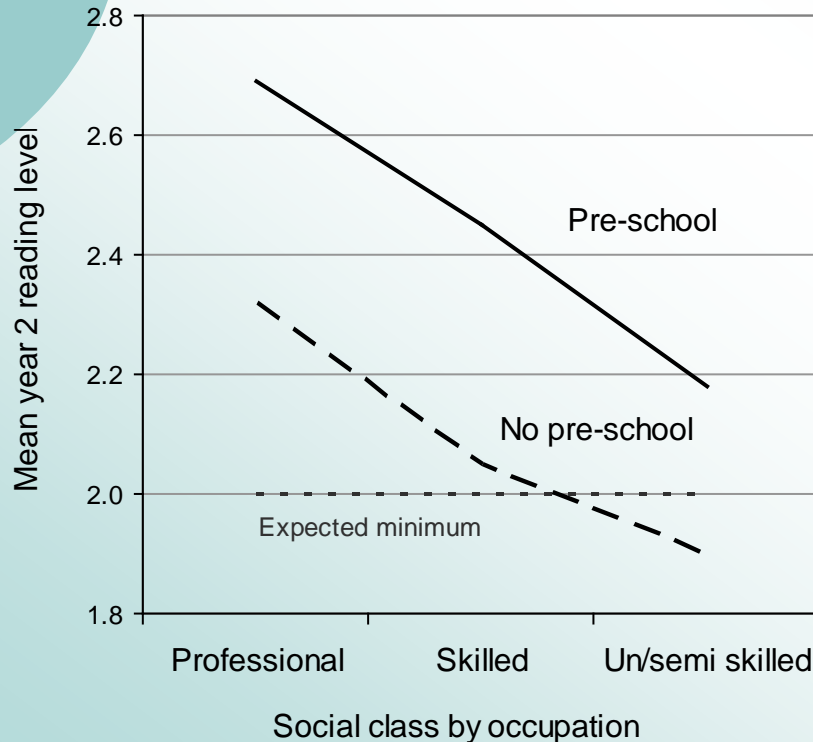
Daniella's Mother: *I did most of the help but if I am at work then the father would do it in the evenings. Most times he will be there and sit down with them if I am in the kitchen, you know, he will help them out with their studies and reading and stuff. And when I am free I will join in as well.*



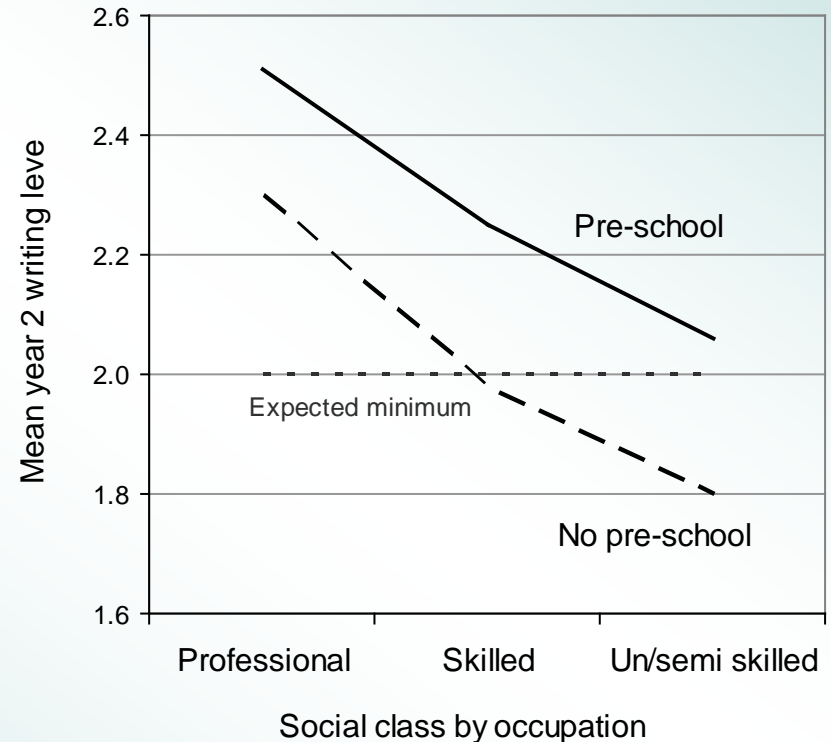
**Does pre-school attendance matter
at the age of 7 years?**


The contribution of social class and pre-school to literacy attainment (age 7)

READING at key stage 1, social class and pre-school experience



WRITING at key stage 1, social class and pre-school experience





**Does pre-school quality matter at
age 11?**

Two Early Childhood Environment Rating Scales

ECERS-R

- Based on observation
- 7 sub-scales:
 - Space and furnishings
 - Personal care routines
 - Language reasoning
 - Activities
 - Interaction
 - Programme structure
 - Parents and staff
- *Harms, Clifford & Cryer (1998)*

ECERS-E

- Based on observation
- 4 sub-scales:
 - Literacy
 - Mathematics
 - Science and environment
 - Diversity; individual needs
- *Sylva, Siraj-Blatchford & Taggart (2010)*

Example ECERS-R item: Greeting/departing (Personal Care Routines)

Inadequate	Minimal		Good		Excellent	
1	2	3	4	5	6	7
1.1 Greeting of children is often neglected		3.1 Most children greeted warmly (Ex. staff seem pleased to see children, smile, use pleasant tone of voice)		5.1 Each child is greeted individually (Ex. staff say “hello” and use child’s name; use child’s primary language spoken at home to say “hello”)		7.1 When they arrive, children are helped to become involved in activities, if needed
1.2 Departure is not well organised		3.2 Departure well organised (Ex. children’s things ready to go)		5.2 Pleasant departure (Ex. children not rushed, hugs and good-byes for everyone)		7.2 Children busily involved until departure (Ex. no long waiting without activity; allowed to come to comfortable stopping point in play)
1.3 Parents not allowed to bring children into the classroom		3.3 Parents allowed to bring children into the classroom		5.3 Parents greeted warmly by staff		7.3 Staff use greeting and departure as information sharing time with parents

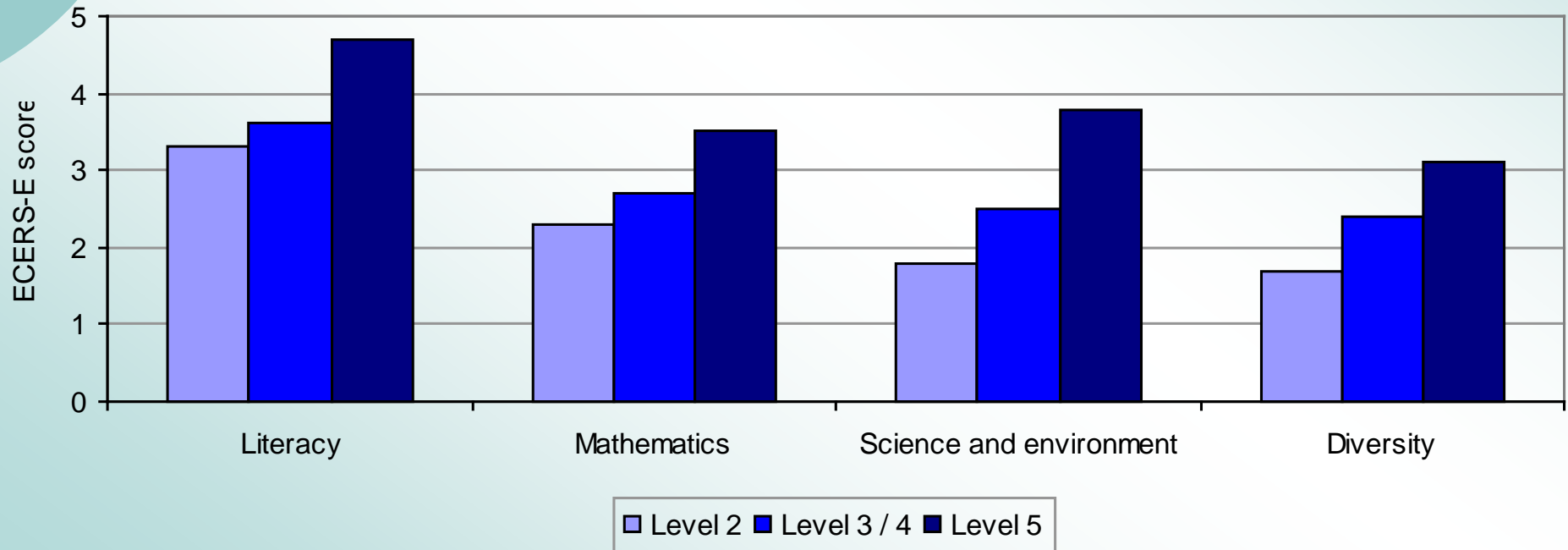
Example ECERS-E item: Food preparation (Science)

Inadequate		Minimal		Good		Excellent
1	2	3	4	5	6	7
1.1 No preparation of food/drink is undertaken in front of children		3.1 Food preparation is undertaken by staff in front of the children		5.1 Food preparation / cooking activities are provided regularly		7.1 A variety of cooking activities in which all children may take part are provided regularly
		3.2 Some children can choose to participate in food preparation		5.2 Most of the children have the opportunity to participate in food preparation		7.2 The ingredients are attractive and the end result is edible and appreciated
		3.3 Some food-related discussion takes place where appropriate		5.3 The staff lead discussion about the food involved and use appropriate language		7.3 The staff lead and encourage discussion on the process of food preparation and/or question children about it
				5.4 Children are encouraged to use more than one sense (feel, smell, taste) to explore raw ingredients		

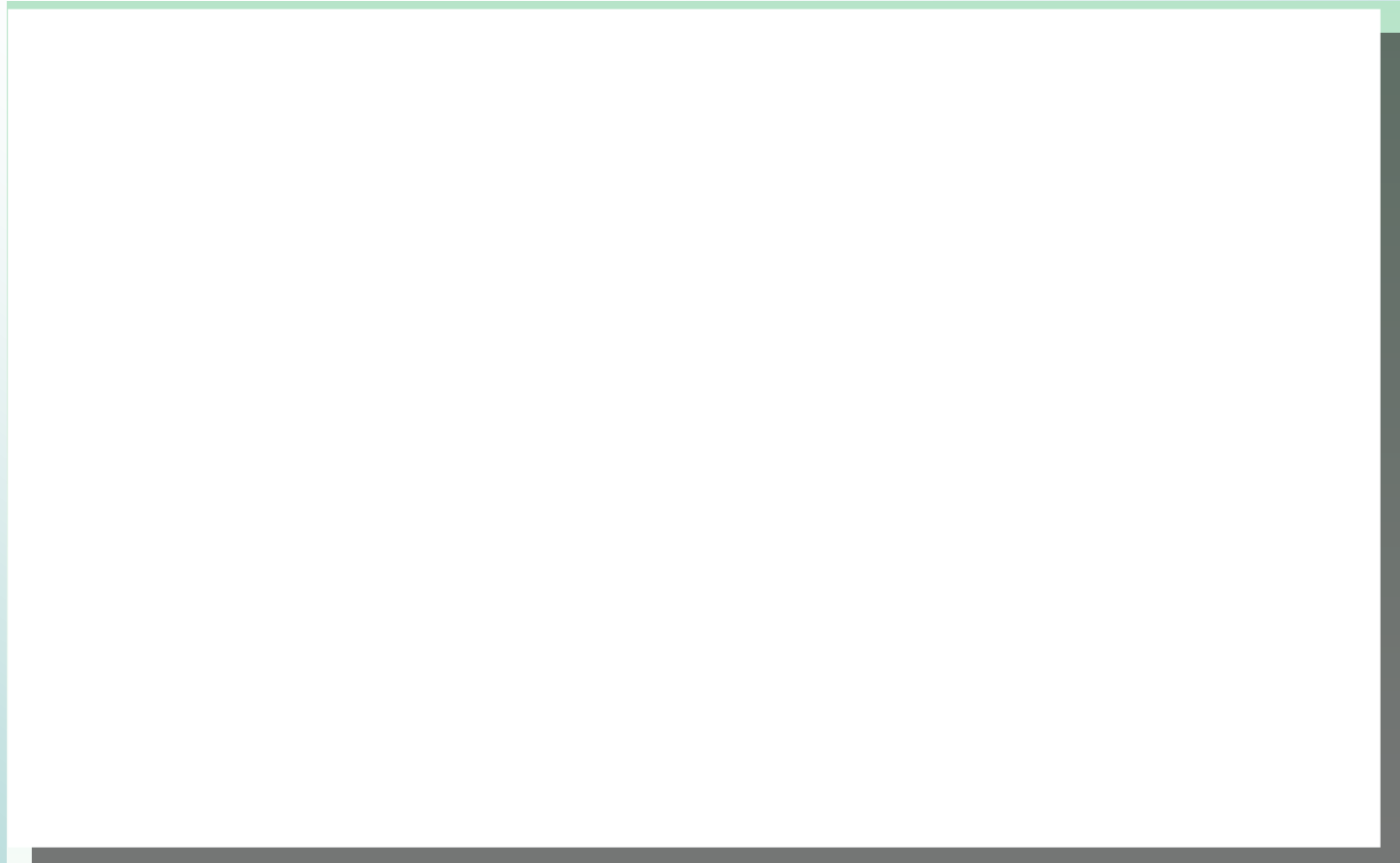
Video



ECERS-E subscales by manager qualification



The effect of pre-school pedagogical quality (ECERS-E) on English and Mathematics in Year 6



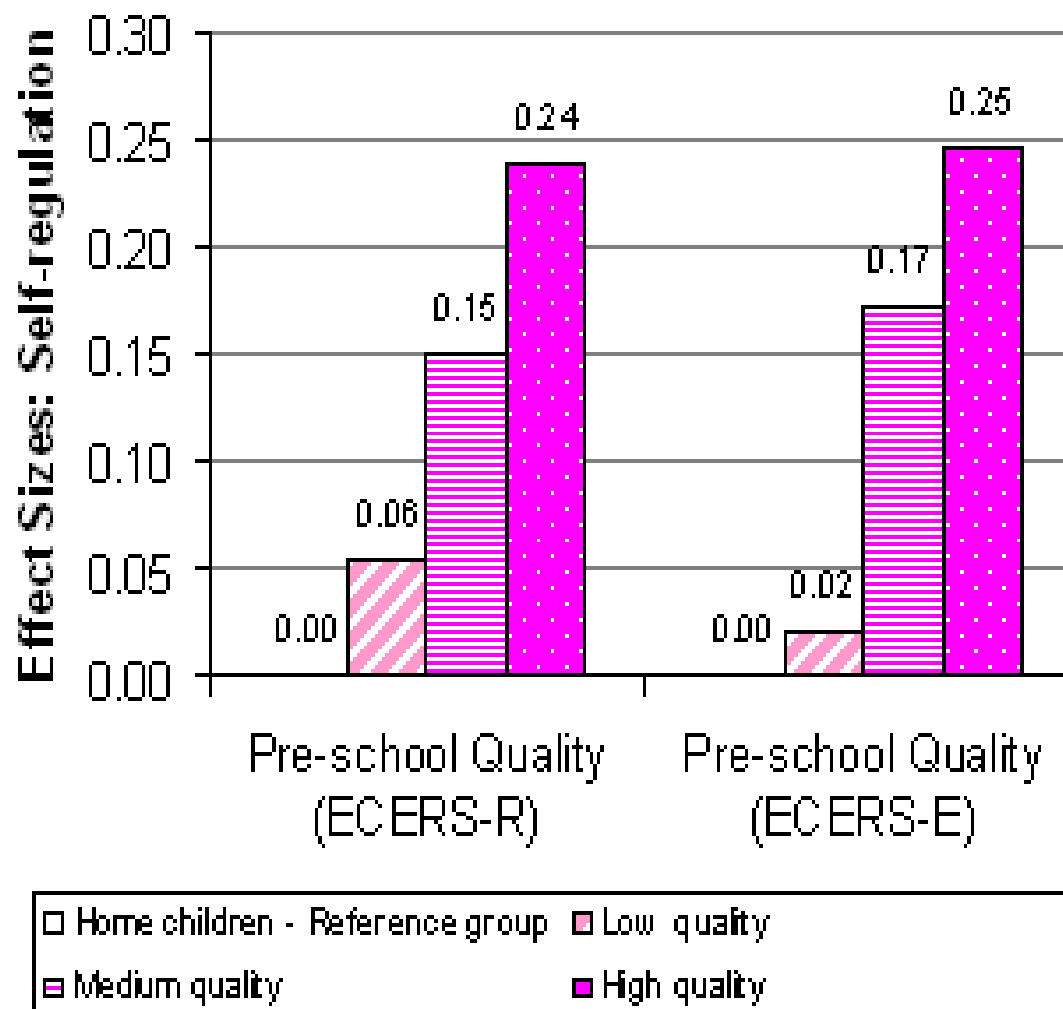
The effect of global quality (ECERS-R) on academic attainment

The global quality scale
does not predict English or
Mathematics attainment at
age 11

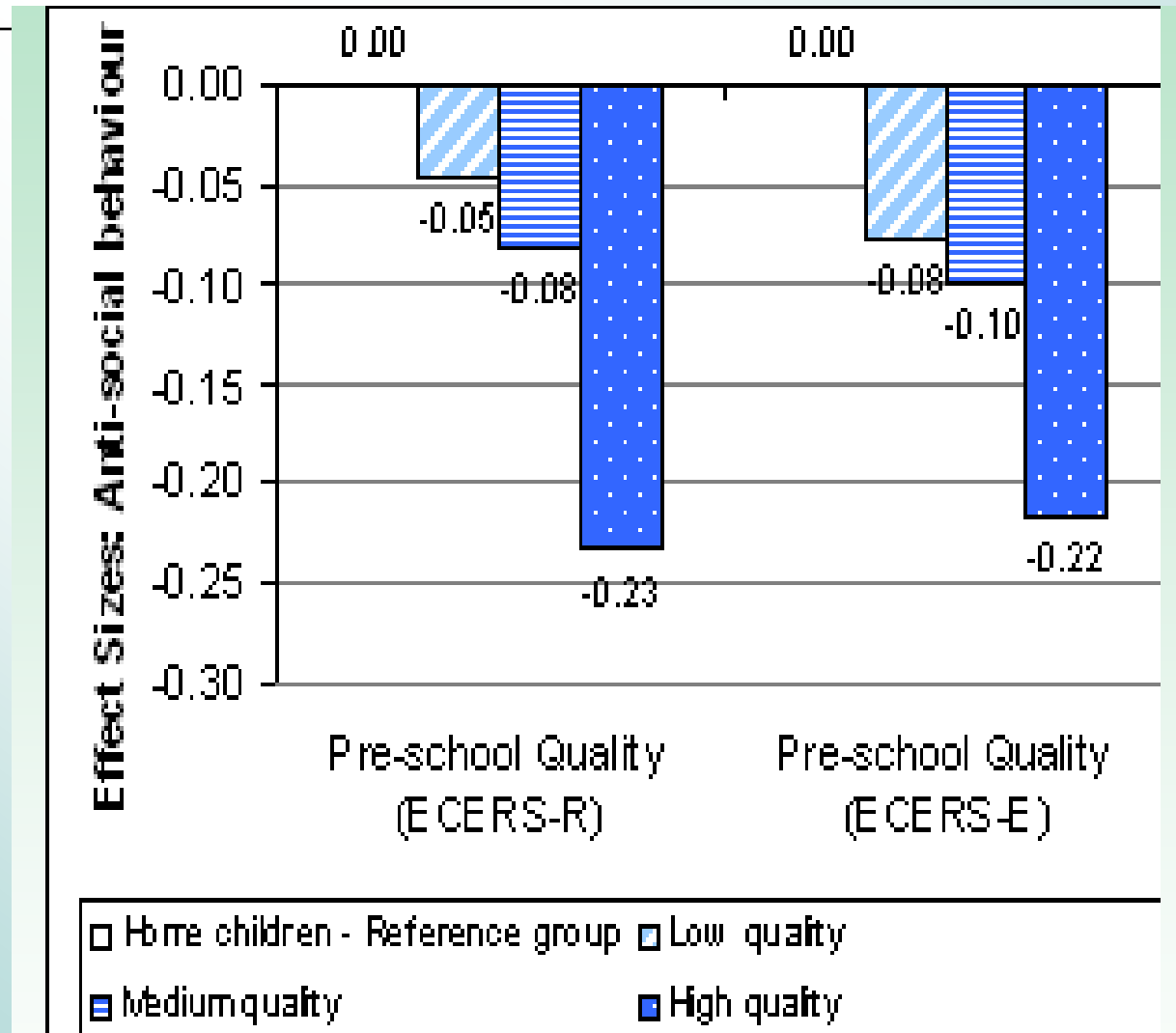
The social behavioural outcomes

- **Hyperactivity**
e.g. Restless, overactive, cannot stay still for long'
- **Self regulation**
e.g. 'Likes to work out things for self'
- **Pro-social behaviour**
e.g. 'Considerate of other people's feelings'
- **Antisocial behaviour**
e.g. 'Bullies other children'

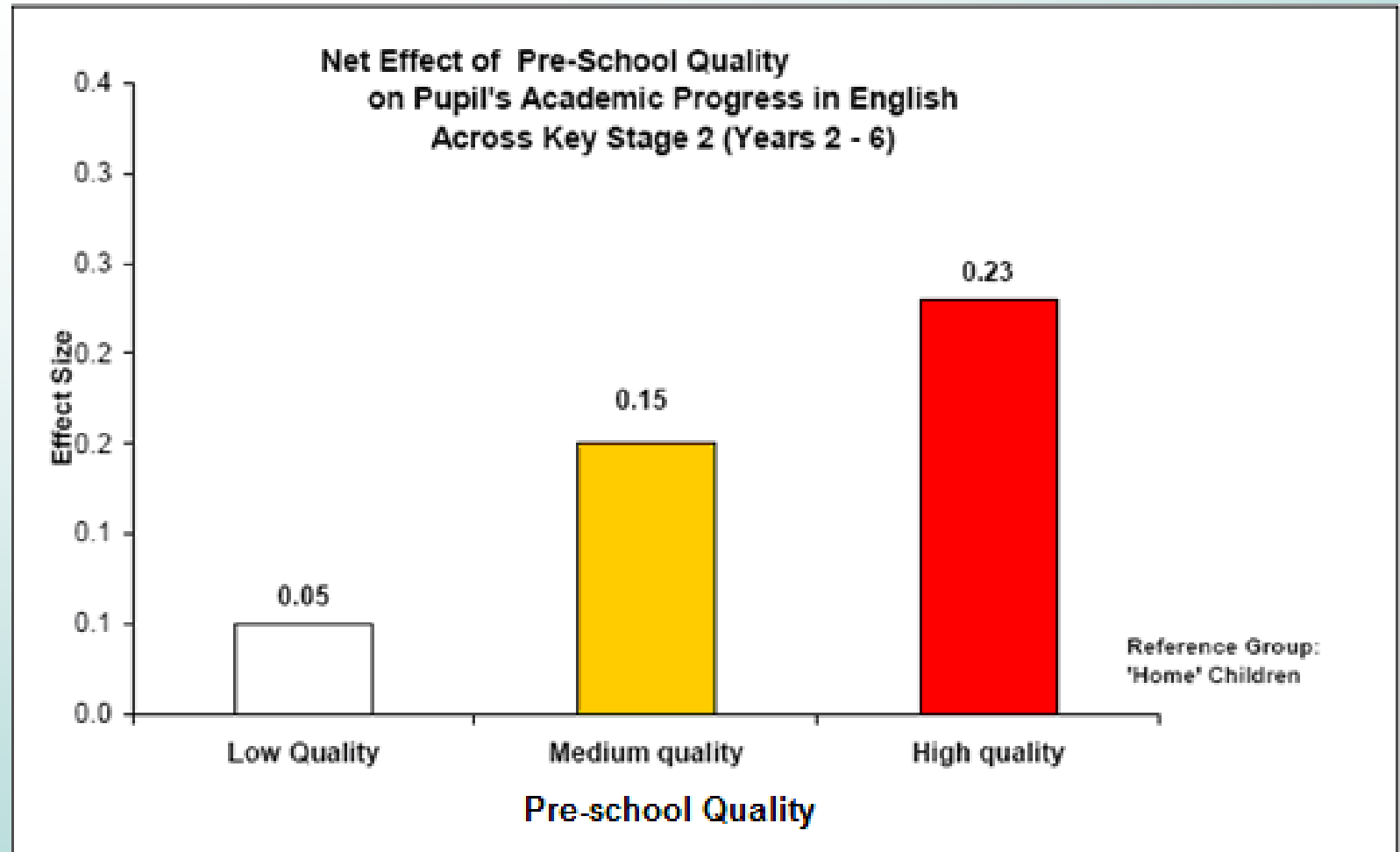
The effect of pre-school quality (ECERS-R and ECERS-E) on self-regulation at age 11



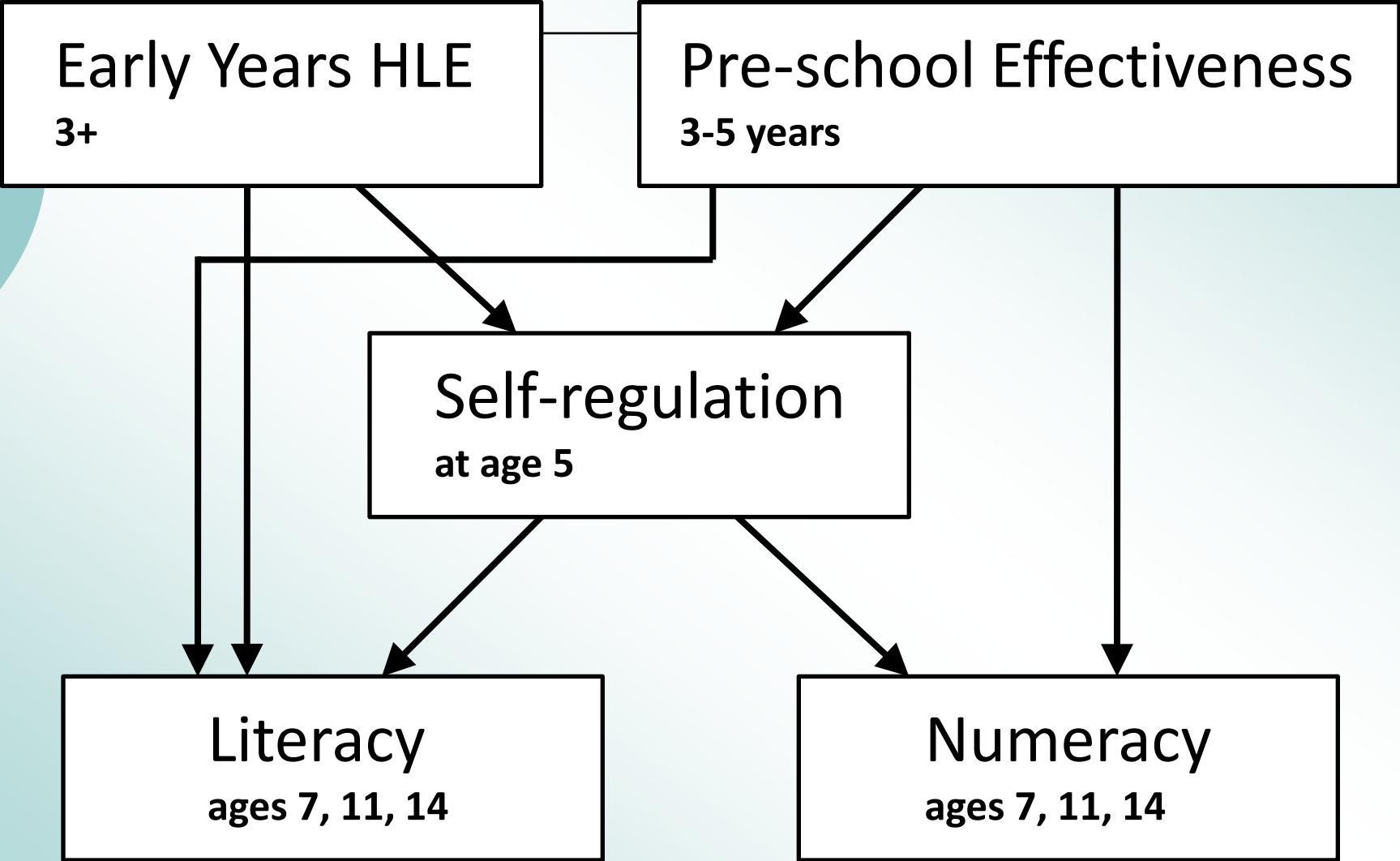
The effect of pre-school quality (ECERS-R and ECERS-E) on anti-social behaviour at age 11



The net effect of pre-school quality on academic progress in English at Key Stage 2



Representation of mediated effects upon literacy and numeracy



'learning how to learn'

- Pre-school attendance alone was associated with *advantage at the start of school* – preschool children had stronger profiles than home children.
- However pre-school quality predicted greater *progress* in English and Maths between Years 2 and 6.
- Higher quality pre-school not only gives children an initial boost to attainment at school entry but also promotes progress – acceleration. Children have '*learned how to learn*' in their high quality pre-schools.

Video



Harms. T., Clifford, R. M., & Cryer, D. (1998). *Early Childhood Environment Rating Scale Revised Edition (ECERS-R)*. New York: Teachers' College Press.

Sylva, K., Melhuish, E., Sammons, P., Siraj-Blatchford, I., & Taggart, B. (2010). *Early Childhood Matters: Evidence from the Effective Pre-school and Primary Education Project*. Oxford: Routledge.

Sylva, K., Siraj-Blatchford, I., & Taggart, B. (2003, Second Edition 2010). *Assessing quality in the early years*. Trentham Books.

EPPSE Project

<http://eppe.ioe.ac.uk/index.htm>

Families, Early Learning and Literacy (FELL) research group

<http://www.education.ox.ac.uk/research/fell/>