Incidence de l'éducation et de l'accueil de la petite enfance sur la pauvreté et le bien-être des enfants

Prof. Edward Melhuish
Directeur de l’Institute pour l’étude de l’enfance, la famille et les affaires sociaux, Birkbeck, Université de Londres

Impact of early childhood education and care on child poverty and wellbeing

Prof. Edward Melhuish
Director Institute for the Study of Children, Families & Social Issues, Birkbeck, University of London
Early Years - Research & Policy Implications

Edward Melhuish
*Birkbeck, University of London*

e.melhuish@bbk.ac.uk
Social & economic context

By 2050 the EU working population will decrease by 50 million while the elderly will grow by 50%. Similar situations in most industrialised countries.

Economic sustainability will require maximizing the capacity of the workforce.

The skills for good outcomes are rising and changing, and there is still great inequality of opportunity.

Both cognitive and non-cognitive skills are critical. How can these be improved for the population?
Rates of return to human capital investment (Heckman 2000)

Return on investment in human capital

- Pre-school programs
- Schooling
- Job training

0  School  Post-school  Age
Brain Development – Opportunity and Investment

From van der Gaag 2004 – presentation on World Bank - The Benefits of Early Child development programs

The Benefits of Early Child development programs

Brain Malleability

Spending on Health, Education, Income Support, Social Services and Crime

Brain Development

Public Expenditure

Conception

Birth

Age

1

3

10

60

80

0
Early Years Risk and Poor Outcomes

Wealth of data from life course studies linking adversity in early life to:

- poor literacy and educational attainment
- anti-social and criminal behaviour
- substance abuse
- poor mental and physical health

2 approaches
1. Intervention with disadvantaged groups
2. Provision for general population
**Perry Preschool Study**  
*(Schweinhart, Barnes & Weikart, 1993)*

- 123 young African-American children, living in extreme poverty and at risk of school failure
- Randomly assigned at ages 3 and 4 to program and no-program groups
- Daily High/Scope classes with planned learning activities and weekly home visits to families
Return on investment

Program Benefits
Versus Cost

Return on the dollar invested
$7.16

Benefit: $88,433
Cost: $12,356

1992 dollars, 3% annual discount rate
EPPE STUDY

(3+ yrs)

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

School starts
6yrs  600 Schools approx. 3,000 chd
7yrs
16yrs

Key Stage 1
Key Stage 2

800 Schools approx. 2,500 chd
Social class and pre-school on literacy (age 7)

![Graph showing the relationship between social class, pre-school attendance, and mean reading level in Year 2.](image)

- **Mean year 2 reading level**
- **Social class by occupation**:
  - Professional
  - Skilled
  - Un/semi skilled

**Expected minimum**:
- No pre-school

**Pre-school**
Modelling Age 11 outcomes

- Family Factors
- Child Factors
- Home-Learning-Environment
- Pre-school
- Primary School

- Reading
- Mathematics
Effects upon Age 11 (+age 14) literacy and numeracy
Trajectories for Numeracy

3 Years Reception End Year 1 Key Stage 1 End Year 5 Key Stage 2

Residual Score

Group %

1 8.2% 2 219.6% 3 318.8% 4 417.3% 5 523.2% 6 612.9%
850 children followed from to 11 years of age. Similar results to EPPE in England.

At age 11, allowing for all background factors, the effects of quality of pre-school persist until age 11 years.

High quality pre-school – improved English and maths, improved progress in maths during primary school.

Children who attended high quality pre-schools were 2.4 times more likely in English, and 3.4 times more likely in mathematics, to attain the highest grade at age 11 than children without pre-school.
Pre-school in a random sample of children born in 1958 in UK.

Effects on cognition and socialisation are long-lasting.

Controlling for child, family and neighbourhood, there were long-lasting effects from pre-school education.

Pre-school leads to better cognitive scores at 7 and 16 years.

In adulthood, pre-school was found to increase the probability of good educational qualifications and employment at age 33, and better earnings at age 33.
In **France**, free school provision was made available to children aged 3 years during the 1960’s and 1970’s – this produced a huge increase in preschool attendance.

- Analysis showed preschool:
  - leads to higher income in later life
  - reduces socio-economic inequalities - children from less advantaged backgrounds benefit more from preschool than those from advantaged backgrounds.
Switzerland has also expanded the age of children starting preschool. The impact of this expansion: - improved the children’s intergenerational education mobility - was especially more beneficial for children from disadvantaged backgrounds.

Similarly, Norway expanded preschool education for 3-6 year olds during the 1970’s and found children attending preschool had higher educational levels and better job outcomes later in life.
Bauchmüller, Görtz and Rasmussen (2011)

Danish register data on whole population
5 quality indicators of preschools:
1) the staff-to-child ratio
2) the share of male staff in the preschool,
3) % of pedagogically trained staff
4) % of non-native staff
5) the stability of the staff (staff turnover).

Controlling for background factors, better preschool quality linked to better test results in 9th grade.

“the fact that we find long-lasting effects of pre-school even after 10 years of schooling is quite remarkable”
PISA results for 2009

15-year-olds with pre-school a year ahead of those without. Also, pre-school associated with later reading in countries that

1. have sought to improve the quality of pre-school education

2. provide more inclusive access to pre-school education.

“Widening access to pre-primary education can improve both overall performance and equity by reducing socio-economic disparities among students, if extending coverage does not compromise quality.”
“No economy can succeed without a high-quality workforce, particularly in an age of globalization and technical change. Cost-effective schooling crucial to building a better workforce, but they are only part of the story.

Research increasingly has shown the benefits of early childhood education and efforts to promote the lifelong acquisition of skills for both individuals and the economy as a whole. The payoffs of early childhood programs can be especially high.”
For more information

EPPE eppe.ioe.ac.uk

NESS www.ness.bbk.ac.uk

Reviews

