



Wanneer een kind  
3 jaar wordt,  
is **de helft** van de  
race al gelopen.



[www.kinderarmoedefonds.be](http://www.kinderarmoedefonds.be)

# **1 op 7** kinderen wordt in Vlaanderen in armoede geboren

- In 2001 nog 6%, nu 14%
- 3% zit in diepe armoede.

# HET DNA VAN

*Wat is het  
en wat doe je  
eraan?*

Peter Adriaenssens  
Noël Slangen

# KINDER ARMOEDE

 DAVIDSFONDS  
UITGEVERIJ



# KINDERARMOEDE

## sculpteert het jonge brein

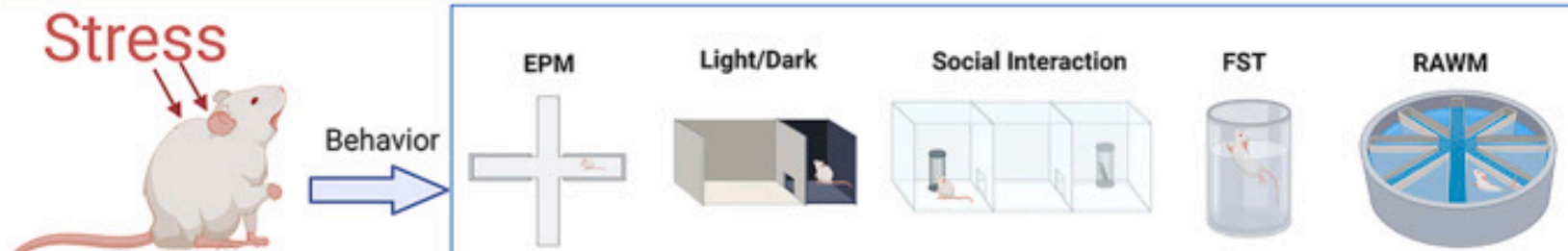
Em. Prof. dr. Peter Adriaenssens

KU Leuven

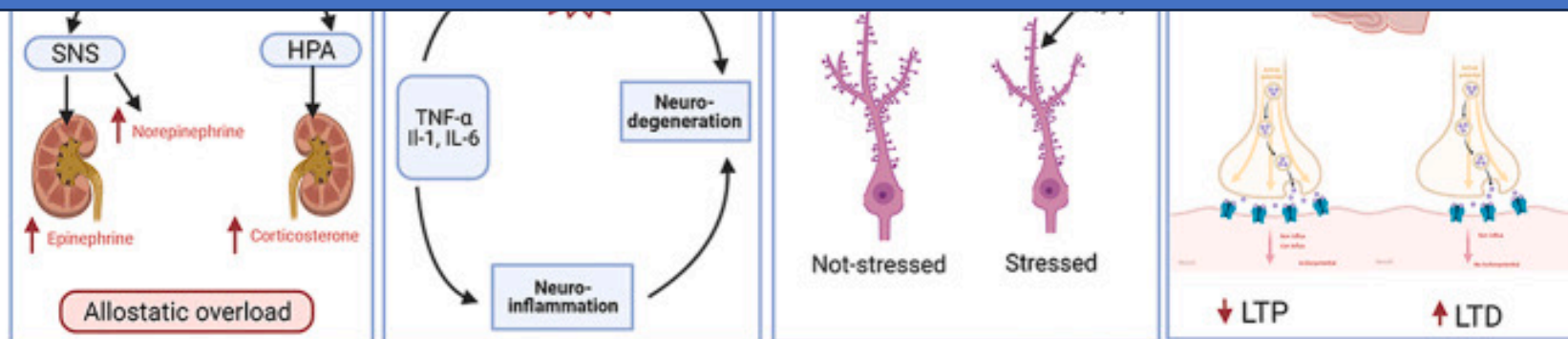
2025

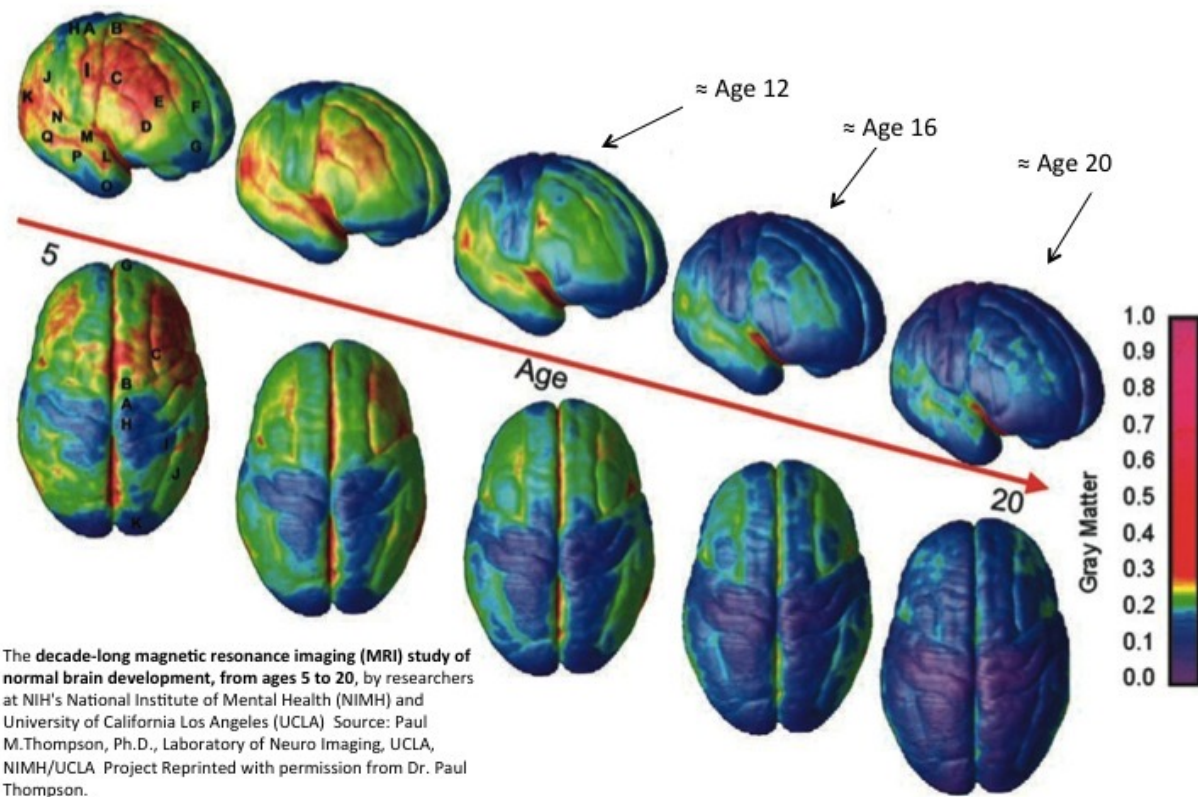


## Stress And Brain Function: Insights From Rodent Models



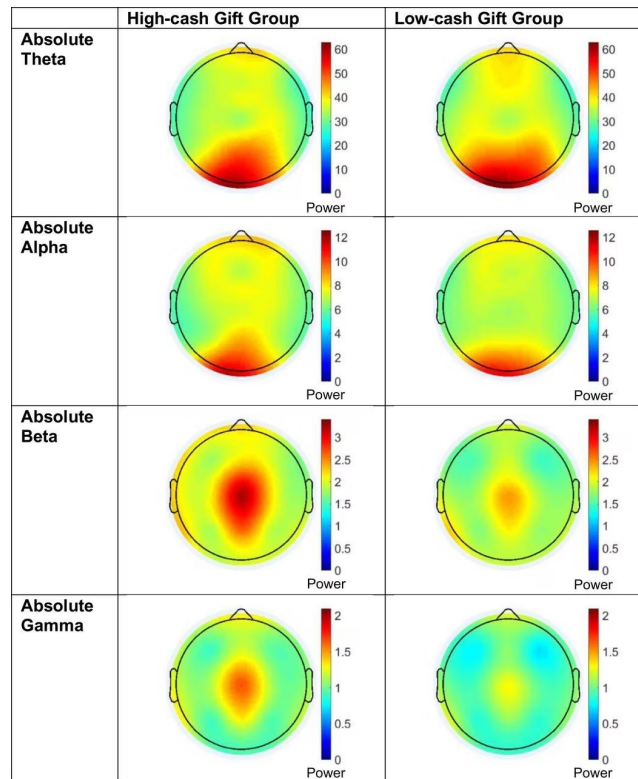
Betekent wel: ouderlijke zorg en hechting kunnen buffer maken voor de armoede-stress





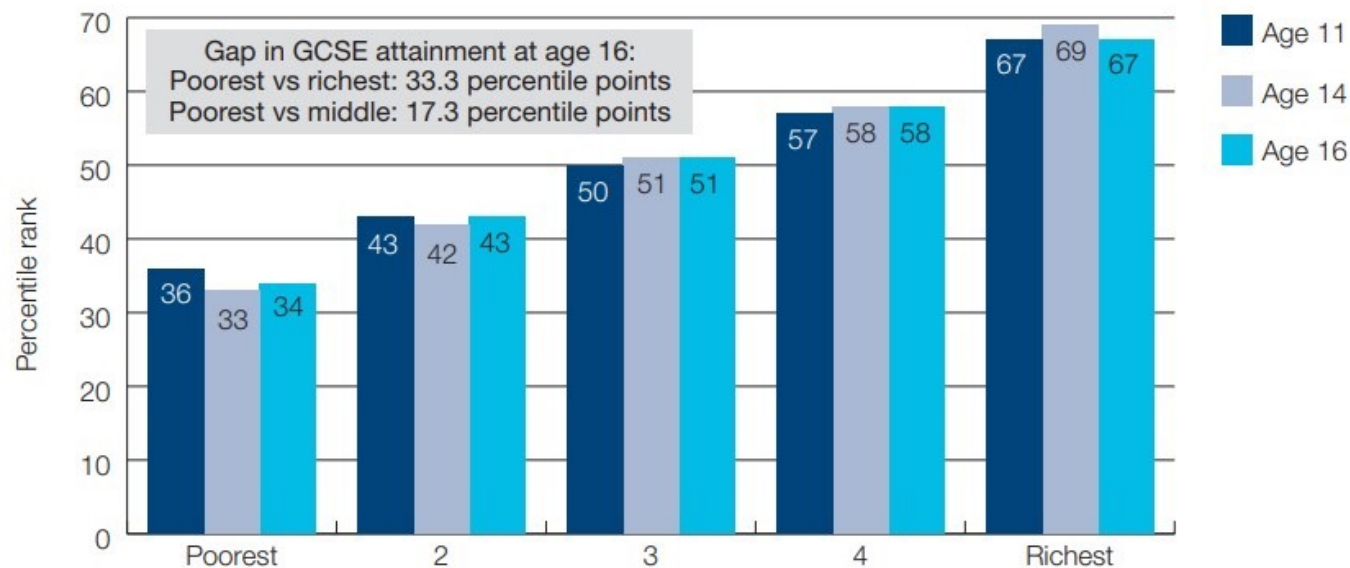
The decade-long magnetic resonance imaging (MRI) study of normal brain development, from ages 5 to 20, by researchers at NIH's National Institute of Mental Health (NIMH) and University of California Los Angeles (UCLA) Source: Paul M.Thompson, Ph.D., Laboratory of Neuro Imaging, UCLA, NIMH/UCLA Project Reprinted with permission from Dr. Paul Thompson.

**A study of 1,000 babies a monthly payment of \$333 or just \$20. Scans showed babies from the higher-paid group had increased brain activity.**



# A ranking of educational achievement by children from rich and poor backgrounds in the UK. Image: Joseph Rowntree Foundation

Figure 5.1: Key Stage test scores at ages 11, 14 and 16, by SEP quintile



Note: Authors' calculations using Key Stage test scores from the NPD for the LSYPE cohort. Our sample includes all individuals for whom we observe Key Stage 2, 3 and 4 test scores.

## Poverty, Stress, and Brain Development: New Directions for Prevention and Intervention

[Clancy Blair](#)<sup>1</sup>, [C Cybele Raver](#)<sup>1</sup>

[Author information](#) [Copyright and License information](#)

PMCID: PMC5765853 NIHMSID: NIHMS932681 PMID: [27044699](#)

The publisher's version of this article is available at [Acad Pediatr](#) [↗](#)

### Abstract

We review some of the growing evidence on the impact of poverty on brain function, early brain development, and addressing the negative consequences given evidence supporting the plastic processes in response to early interventions for success in school and in prevention and intervention that are science, pediatrics, child psychology

**Keywords:** brain development, early poverty, stress

Scientific attention has focused on the toxic consequences of stress for brain function and mental and physical health. It has become increasingly clear that one of the mechanisms through which poverty affects the health and well-being of children and adults is through the toxic effects of stress on the brain. A growing body of evidence indicates that effects of

## Poverty and Developing Brain

[Joan L. Luby](#), [John N. Constantino](#), [Deanna M. Barch](#)

[Article notes](#) [Copyright and License information](#)

PMCID: PMC9224364 PMID: [35813304](#)

### Abstract

A growing body of evidence demonstrates quantifiable relationships between adverse environmental exposures and alterations in neurodevelopment visible in brain scans.  
Washington University School of Medicine

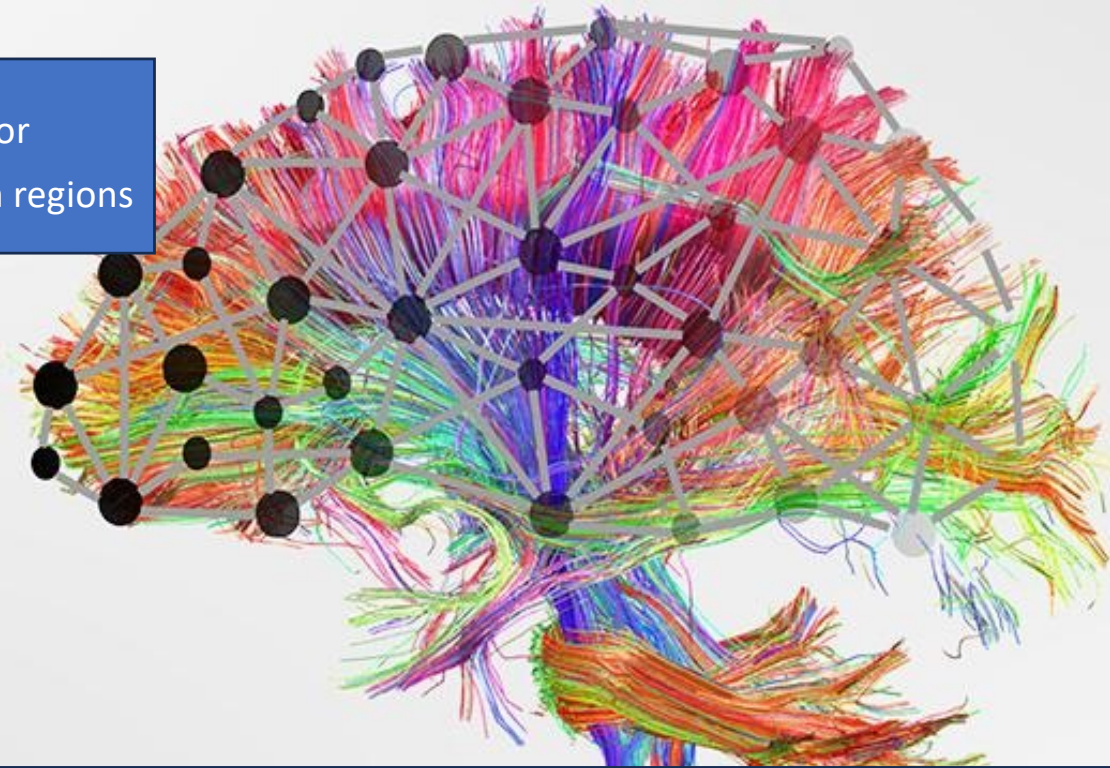
developmental impact are likely to be involved.

The effects of elevated stress on child-caregiver relationships appear to be particularly detrimental, unsurprising in that nurturing and supportive caregiver relationships are foundational for [healthy development](#) in early childhood. For adults whose job options are uncondusive to their role as parents (such as working multiple jobs or night shift hours), or for whom family support is unavailable, or for those do not have the material resources they need, the resulting stress may result in sleep disruption, depression, and anxiety—all of which translate to poor developmental trajectories for their children.

Other health and developmental risks often associated with poverty include lead and other pollutants in air and water; poor nutrition (often related to living in “food desert” areas where healthy foods such as fresh fruits and vegetables are scarce), neighborhood violence, and trauma. “Toxic stress” that exceeds a child’s ability to adapt can occur when the burden of stressful life experience overwhelms the brain’s regulatory capacity, or when the

# VROEGE KINDER-KANSARMOEDE VERANDERT JE TOT IN JE HERSENEN

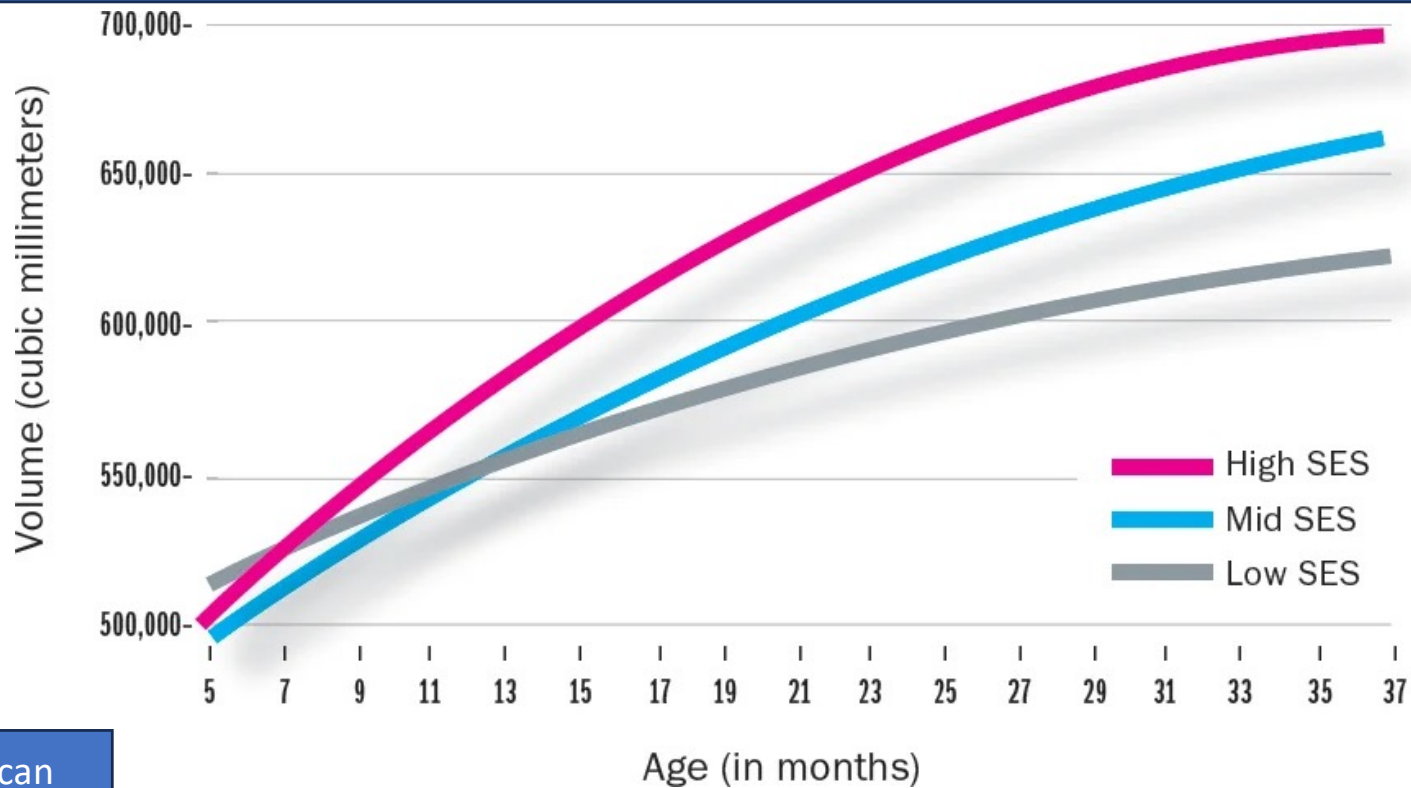
Learning difficulties due to poor connectivity, not specific brain regions

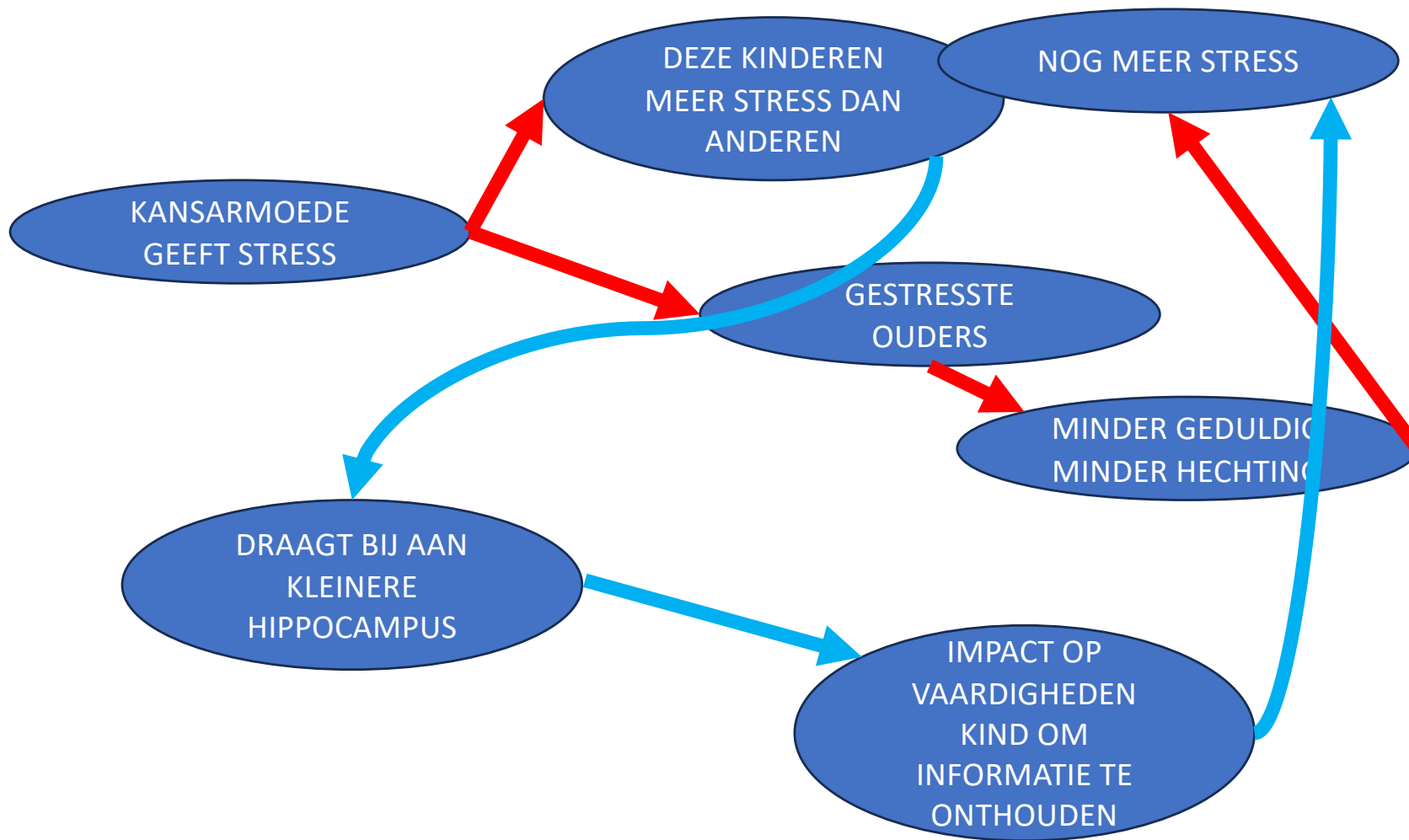


Siugzdaite, R et al. [Transdiagnostic brain mapping in developmental disorders](#). *Current Biology*; 27 Feb 2020

# EN DUS: KANSARMOEDE SCULPTEERT JE BREIN

Family Poverty Affects the Rate of Human Infant Brain Growth. Jamie L. Hanson et al., in *PLOS One*, Vol. 8, No. 12





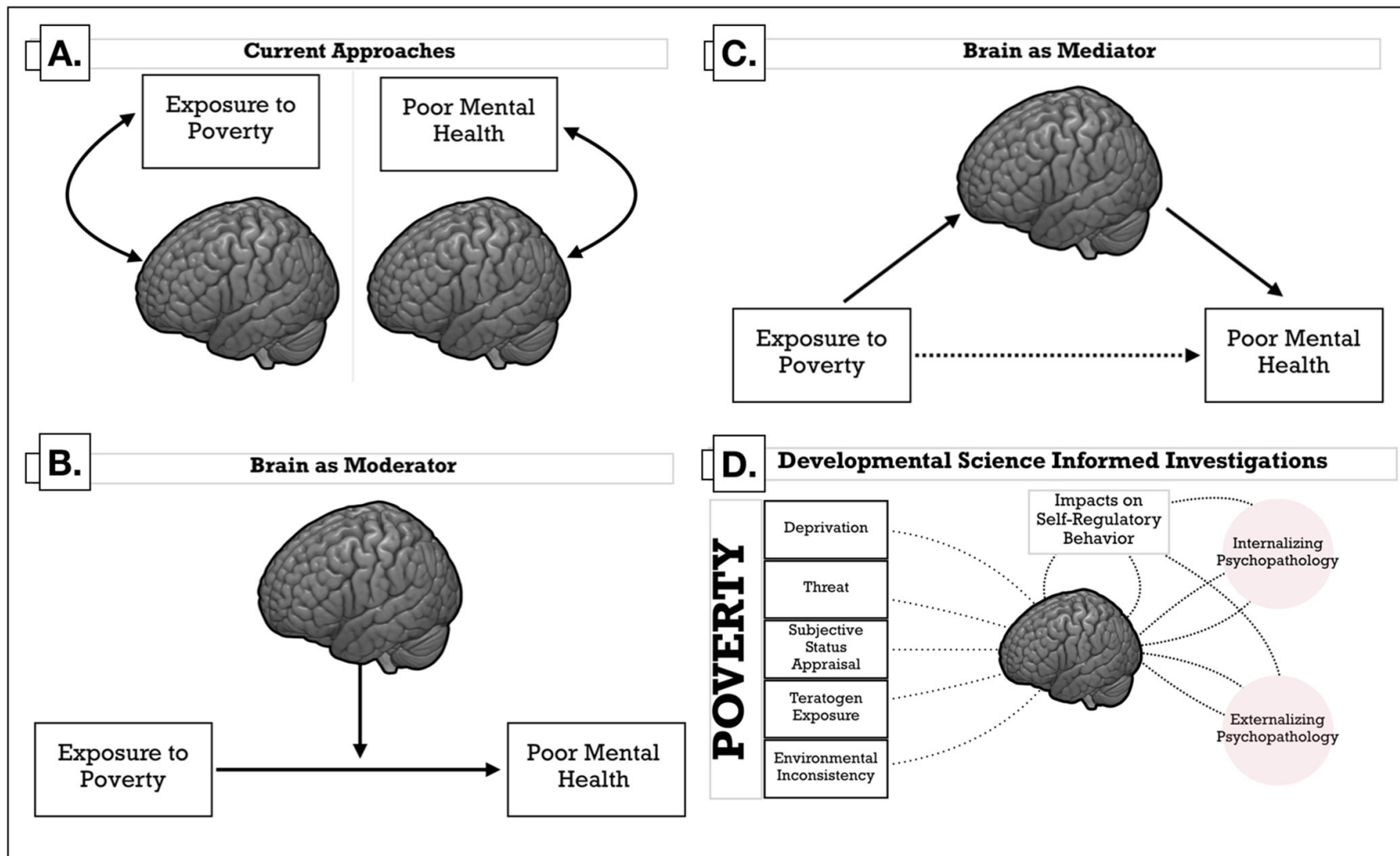
DUS

WAAR WIJ ALLEN BETALEN:

ARMOEDE TAST DE

**ONTWIKKELING**

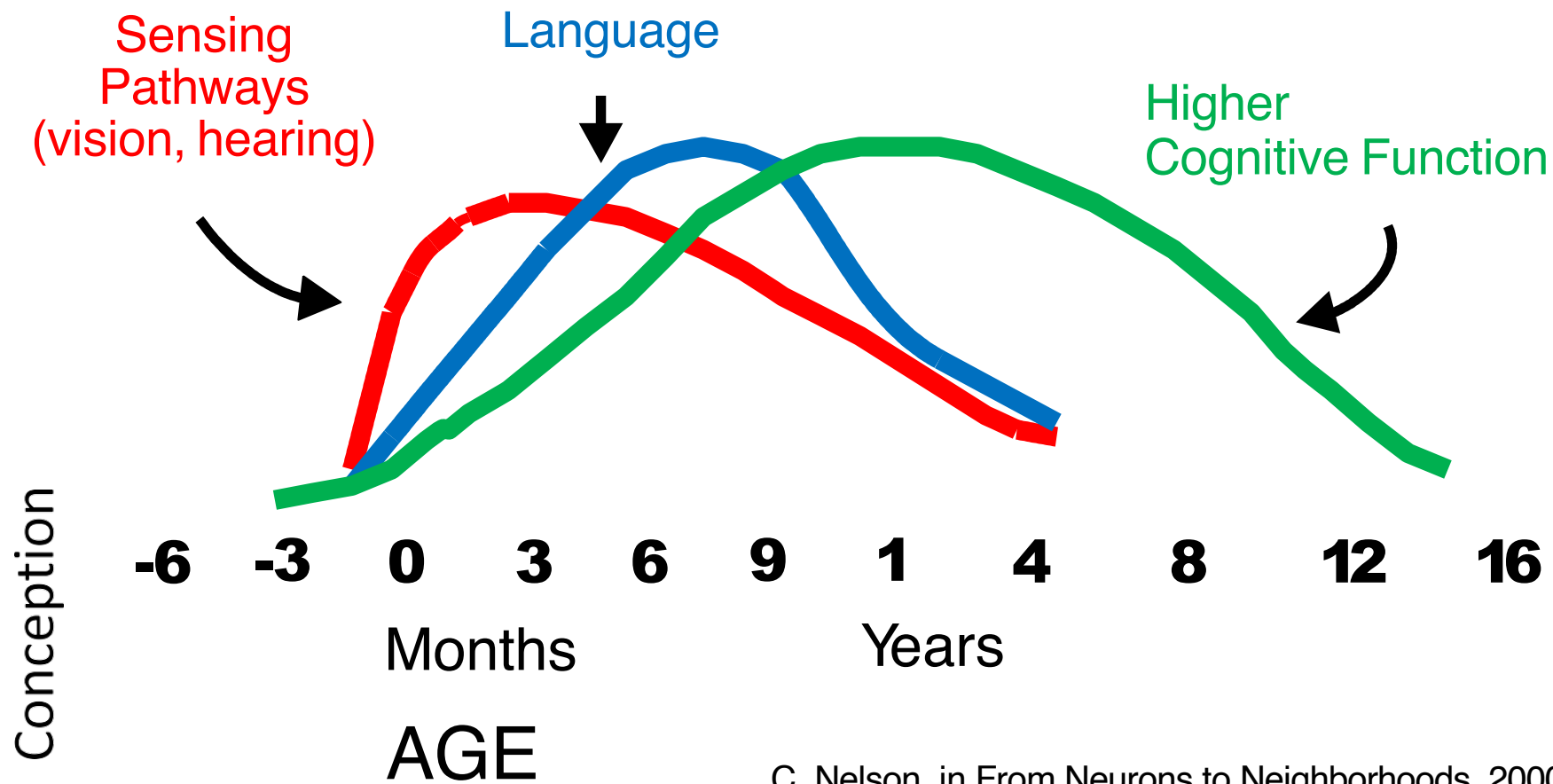
AAN



Poverty and self-regulation: Connecting psychosocial processes, neurobiology, and the risk for psychopathology. Comprehensive Psychiatry. Esther E. Palacios-Barrios

**Wanneer een kind  
3 jaar wordt,  
is **de helft** van de  
race al gelopen.**

## Sensitive periods & Synaptic Development



C. Nelson, in From Neurons to Neighborhoods, 2000.

**Kinderarmoede gaat niet  
over een lege brooddoos,  
maar over de impact van  
stress en isolement.**

**Niet ieder kind start  
met dezelfde goed  
gevulde rugzak**



**De eerste  
duizend dagen  
hebben de  
grootste  
impact.**

## **Kleuterklas**

### **Goede kleuterklas of opvang:**

- **Sterkere empathie**
- **Beter moreel besef**
- **Minder misdaad op termijn**

**Slechte kleuterklas werkt nog steeds beter dan geen kleuterklas.**

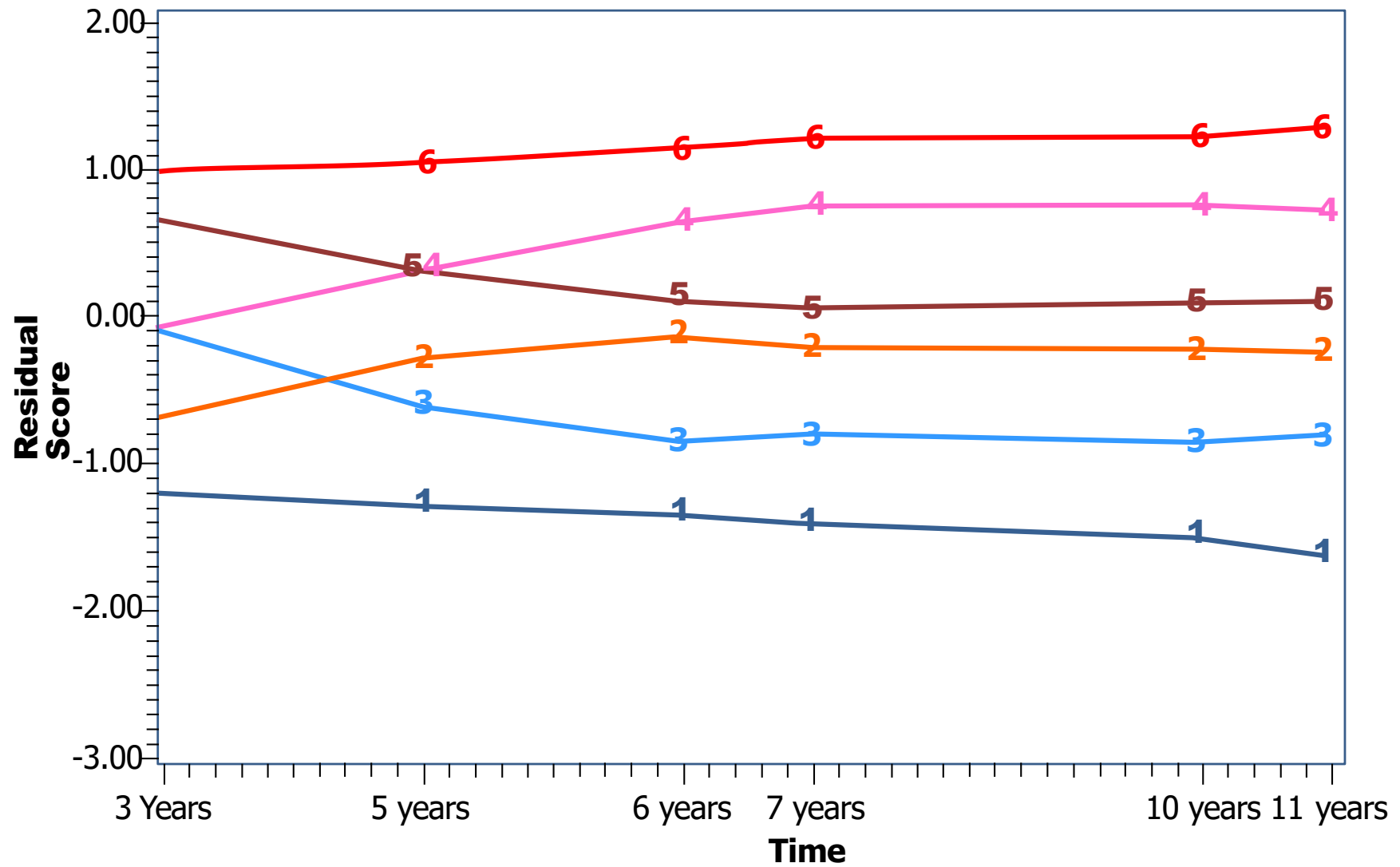
**Maar een goede kleuterklas geeft 5 maanden voorsprong in geletterdheid!**

**Een slechte crêche  
geeft een beter  
resultaat dan de  
beste grootouders**

**Een slechte  
kleuterklas geeft nog  
steeds een beter  
resultaat dan geen  
kleuterklas**

**Na het zevende  
levensjaar is de  
impact op  
ontwikkeling minder  
fundamenteel...**

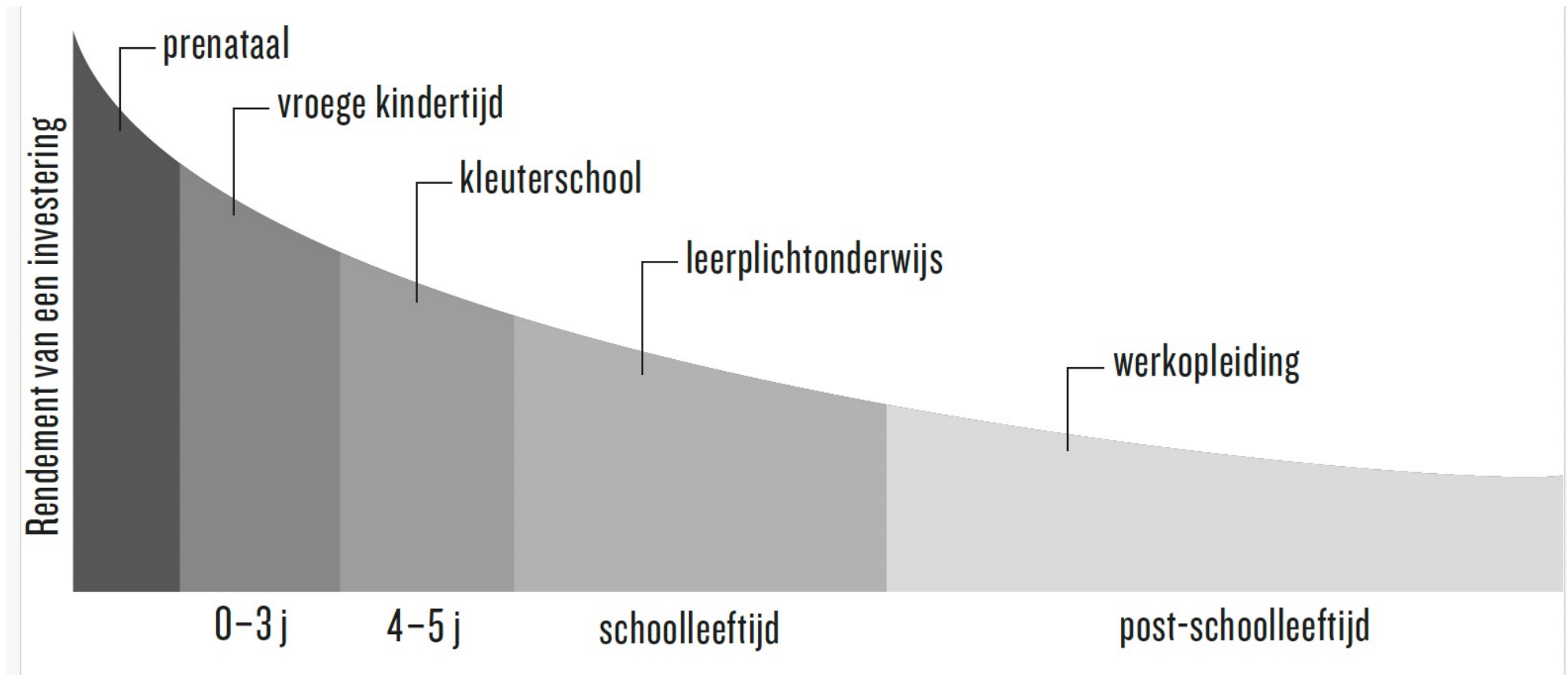
# Trajectories for Numeracy



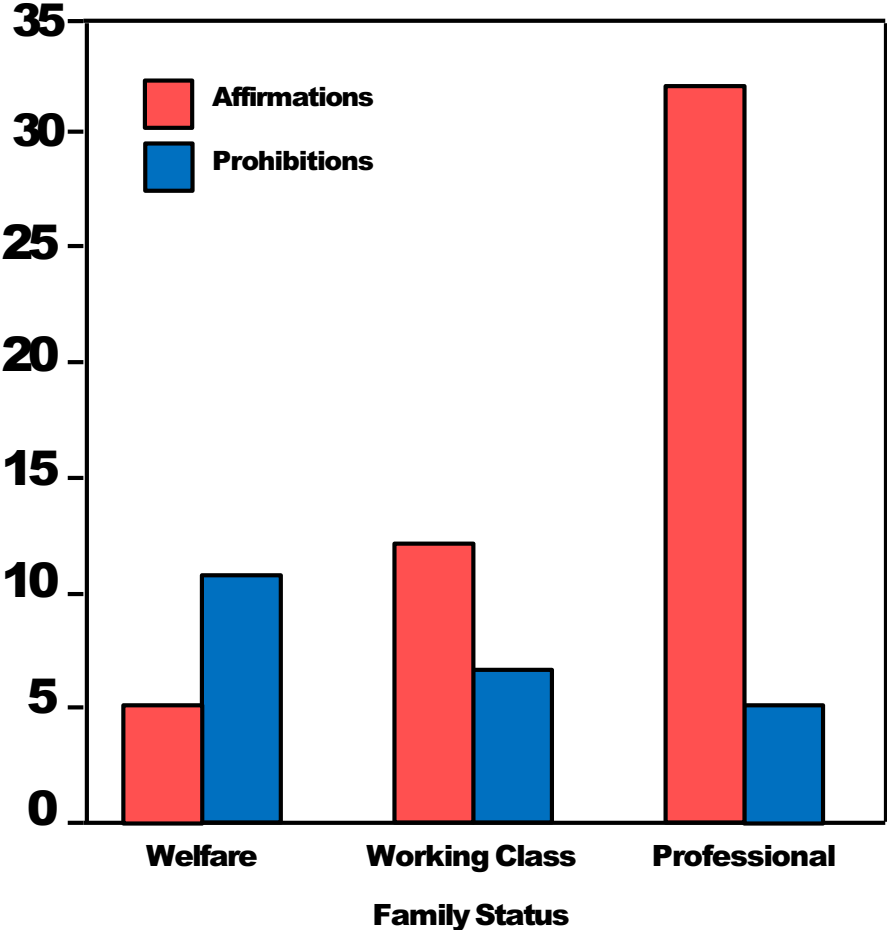
Group %      ~~1~~1 8.2%    ~~2~~2 19.6%    ~~3~~3 18.8%    ~~4~~4 17.3%    ~~5~~5 23.2%    ~~6~~6 12.9%

Bron: prof. Edward Melhuish

# Impact van investeren in ontwikkeling



# Quality of Words Heard in a Typical Hour:



Bron: prof. Edward Melhuish

**Wat maakt **het**  
**verschil** in de latere  
schooljaren?**

## **Grootste impact tot 11 jaar:**

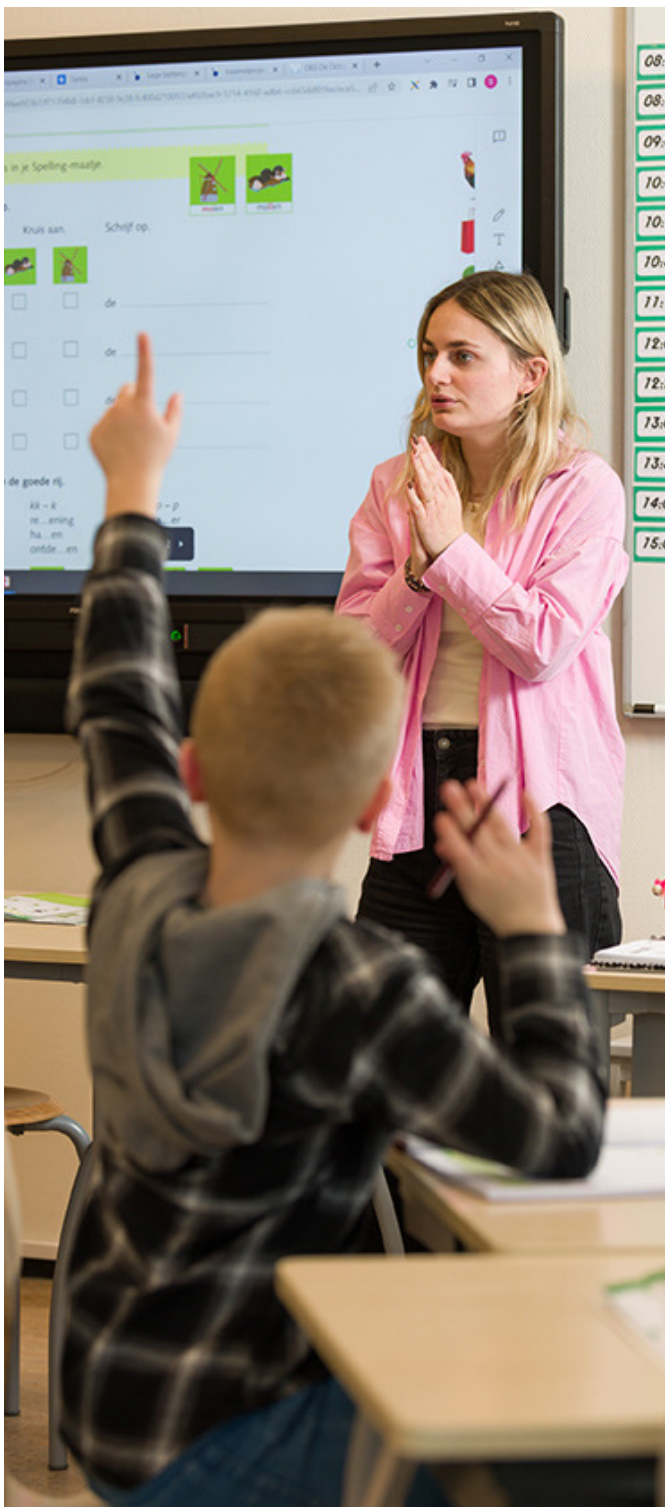
- **Scholing moeder (taal)**
- **Scholing vader (wiskunde)**
- **Thuisleeromgeving**
- **NIET: inkomen**

## **Grootste impact tot 16 jaar:**

- **Schoolverleden**
- **Scholing moeder**
- **Inkomen**
- **Thuisleeromgeving**
- **Minder: scholing vader**

**Taal**

**Rijke taalomgeving,  
of arme  
taalomgeving?**



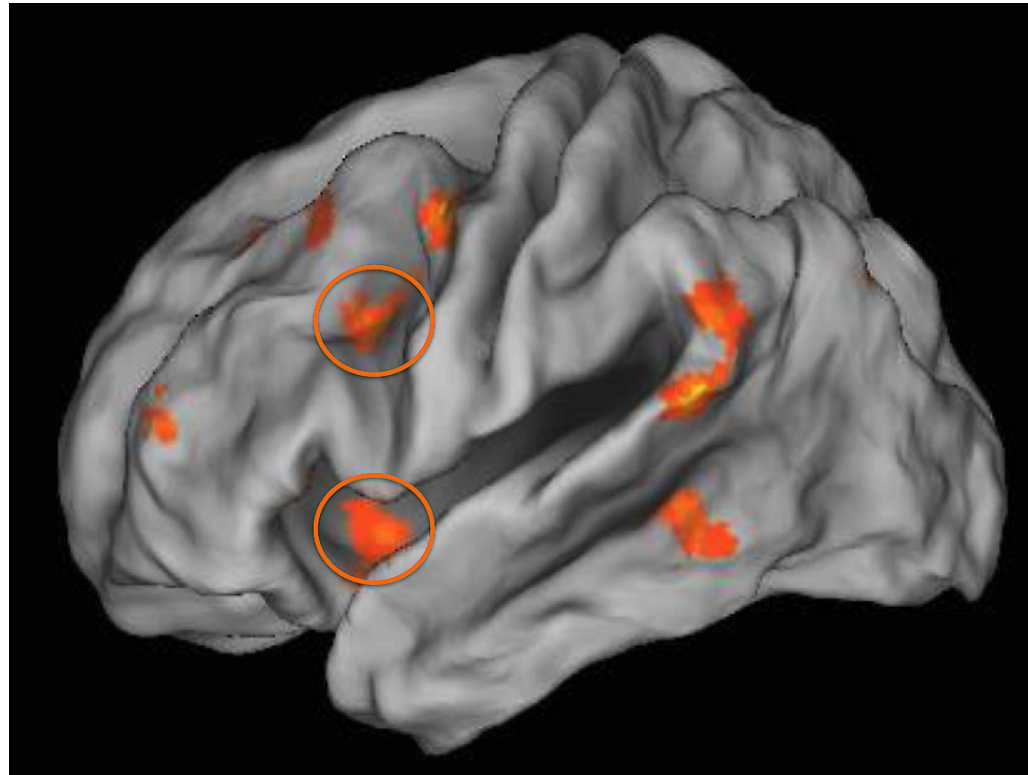
**School**

**Hoge verwachtingen,  
Lage drempels.**

DE VOLWASSENE MET HET  
DOOR ARMOEDE GEKWETSTE  
KIND IN ZICH

# Growing up poor and stressed impacts brain function as an adult

*Proceedings of the National Academy of Sciences.*



# HOW **STRESS** AFFECTS THE BODY

## **BRAIN**

Difficulty concentrating, anxiety, depression, irritability, mood, mind fog

## **CARDIOVASCULAR**

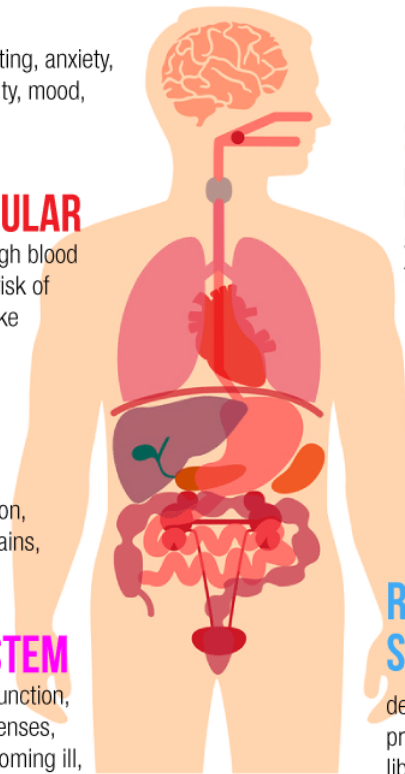
higher cholesterol, high blood pressure, increased risk of heart attack and stroke

## **JOINTS AND MUSCLES**

increased inflammation, tension, aches and pains, muscle tightness

## **IMMUNE SYSTEM**

decreased immune function, lowered immune defenses, increased risk of becoming ill, increase in recovery time



## **SKIN**

hair loss, dull/brittle hair, brittle nails, dry skin, acne, delayed tissue repair

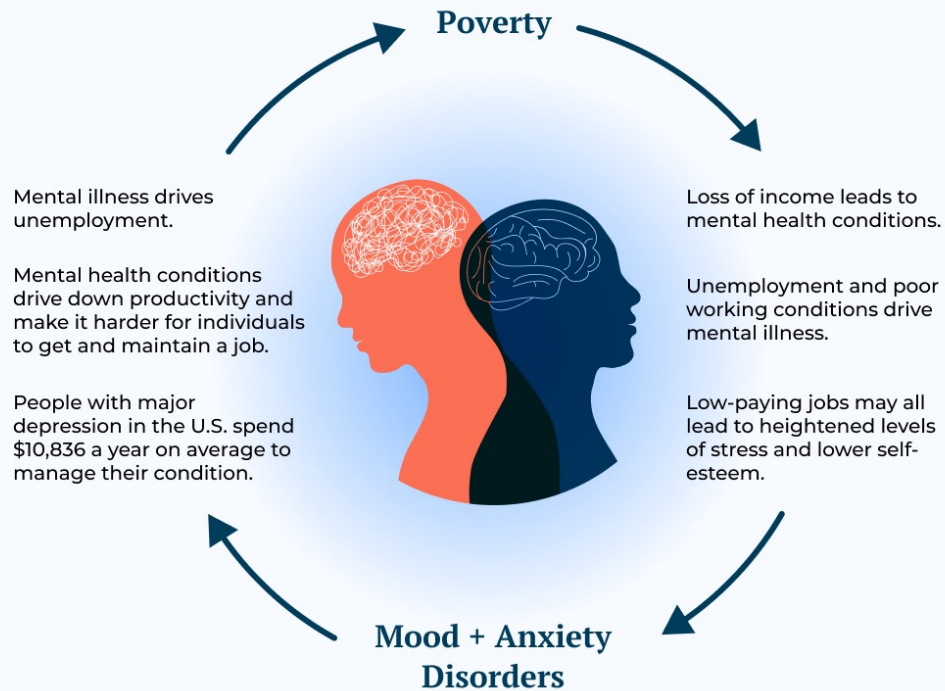
## **GUT**

nutrient absorption, diarrhea, constipation, indigestion, bloating, pain and discomfort

## **REPRODUCTIVE SYSTEM**

decreased hormone production, decrease in libido, increase in PMS symptoms

## *A Depressing Reality:* The Link Between Poverty and Mental Health Treatment



WIE ARM IS MOET MAAR WERKEN?  
WIJ KIEZEN IN HET LEVEN NIET ZELF OF WE  
'GOEDE' NEURONEN HEBBEN  
OF 'SLECHTE'

# Demographics of Intergenerational Poverty

68%

are women

81%

less than 35 yrs. old

76%

have children

88%

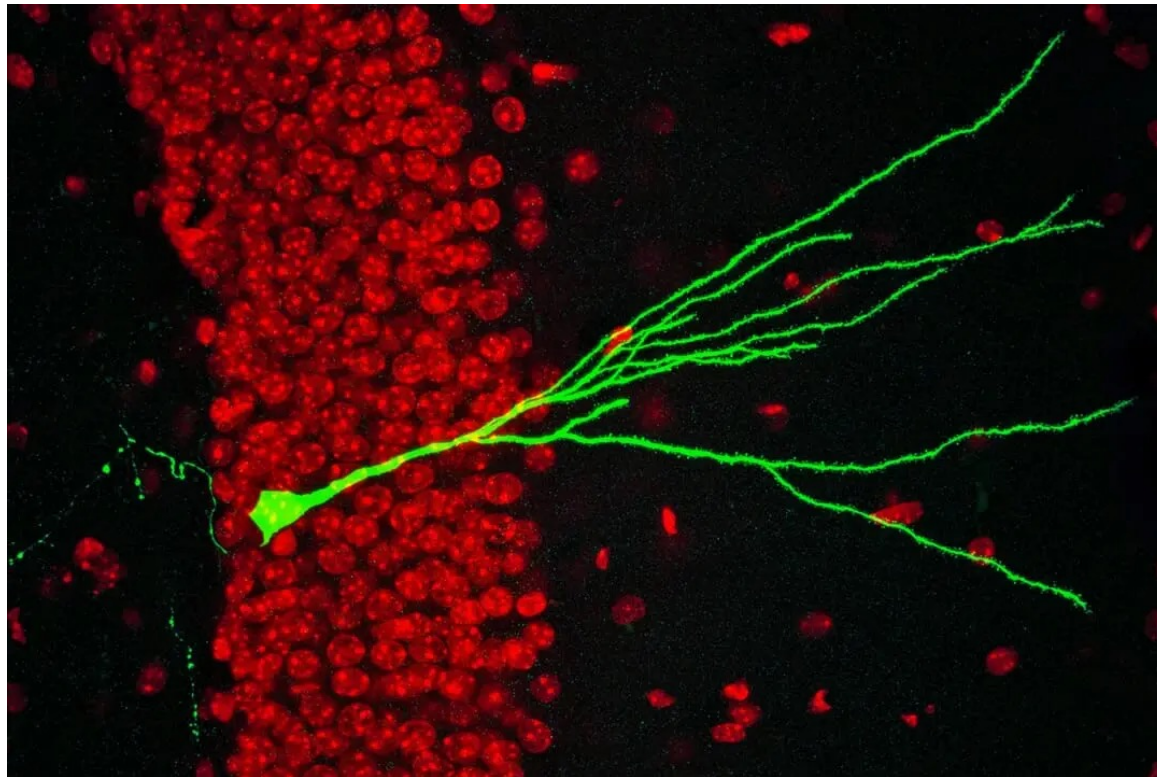
of children are under 13 yrs.

61%

of children in IGP are in single parent households.



# NEUROGENESIS: EEN NIEUW NEURON



AL LAAT ARMOEDE LITTEKENS NA:  
OPSTAAN UIT DAT VERHAAL KAN

Niet doorheen de bril van armoede, maar

**ONTWIKKELING**





## Aanpak:

1. Innovatieve aanpak uitrollen.
2. Resultaten meten.
3. Bewezen resultaten laten doorstromen naar het beleid.



## Drie bewezen modellen

- Perinatale begeleiding
- Opleiding kinderverzorgster en opvang
- Gezinscoaches GO-team



## Resultaten GO-team Mechelen

- Politieinterventies 21,3% naar 8,8%
- Intrafamiliaal geweld 34,6% naar 14,7%
- Verbaal geweld 10,7% naar 16,6% !
- Slechte woning 41,4% naar 19,2%
- Financiële problemen 64,3% naar 25,4%
- Aan het werk 11,5% naar 20,5%



## Nieuwe projecten

- Alleenstaande ouders
- Betaalbare huisvesting
- Netwerkopbouw

# Wat kan **de samenleving** doen:

- **Huisvesting**
- **Toegang tot rechten geven**
- **Isolement doorbreken**
- **Kinderopvang voorzien**
- **Begeleiden (met respect)**

**En de ouders?**

- **Verantwoordelijkheid**
- **Groeipremie**
- **Geldverspilling?**

***Een recht is geen gunst.***

**Niet iedereen begint  
op dezelfde manier  
aan de race.**

**Niet iedereen heeft  
dezelfde  
loopschoenen.**

**Maar een trainer kan  
meer verschil maken  
dan de loopschoenen.**

**U kan die trainer zijn.**



[www.kinderarmoedefonds.be](http://www.kinderarmoedefonds.be)



B

Koning

Boudewijnstichting

*Samen werken aan een betere samenleving*