

# Master in Psychology

## Developmental Psychology

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## Developmental Psychology: Introduction

***Developmental Psychology** is the study of systematic psychological, cognitive, and neurobiological (brain) changes that occur in humans over the course of their life span*

- Development across infancy, childhood, adolescence, and adulthood is studied

## Developmental Psychology: Focus

- The **focus** of the Master in Developmental Psychology at Maastricht University is on:
  - **cognitive** development
  - **neurobiological** development

# Developmental Psychology: Study Topics

Some examples of studied topics are:

## **1. Development of cognitive skills** such as:

- *Language acquisition*
- *Perception*
- *Attention*
- *Memory*
- *Motor skills*
- *Problem solving*
- *Executive control*

## Developmental Psychology: Study topics

Some other examples of studied topics are:

### **2. Development of other psychological processes** such as:

- *Social-emotional development*
- *The forming of self-concept*
- *The forming of identity*

## Developmental Psychology: Study Topics


- You will learn which **biological** (genes, brain, psychopharmacological) and **environmental** factors are underlying such development
- And you will study **psychopathological development** in for example:
  - *ADHD*
  - *Autism*
  - *Gilles de la Tourette*
  - *Dyslexia*
  - *Dyscalculia*
  - *Williams Syndrome*

# Developmental Psychology: Research Methods



# Developmental Psychology: Programme

4 core course, 2 research practicals

<i>Sept-Oct: 7 weeks</i>	<i>Nov-Dec: 7 weeks</i>
Infancy 	Development of Cognition & Language 
Perception, Attention & Motor Development 	Social & Emotional Development 
Experimental Practicum <b>or</b> EEG/ERP Practical	Practicum Psychological Testing



# Developmental Psychology: Programme

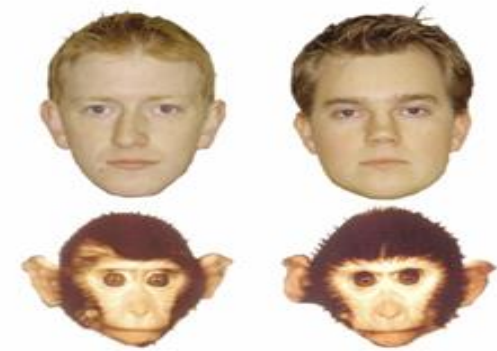
 Go  
the extra  
mile

## Research Internship and thesis

- January – August
  
- This can be done:
  - In research group at FPN (see later slide)
  - Elsewhere at FPN
  - Outside UM in clinical setting
  - Outside UM at other university

# Infancy Course

Is face perception species-specific from birth on or is it learned?



Learning plays a role: **6-month** old babies **can** discriminate different human and monkey faces. However, **9-month** olds **can't**. They only discriminate human faces!

9-month old babies can **regain** the ability to discriminate monkey faces when **trained** to do so. This points to the big **role of experience** on visual perception development.

# Perception attention and motor development

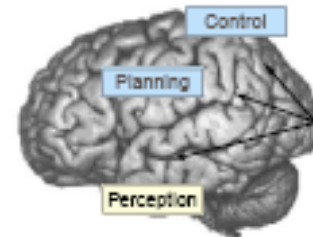
Infants around 2 years of age sometimes make "scale errors":



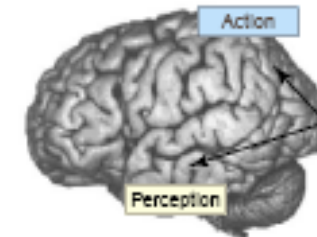
This is related to immature communication between brain areas that regulate perception and action



Planning vs. Control



Planning vs. Action

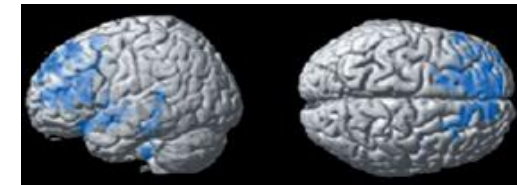
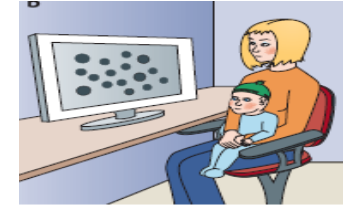


# Development of Cognition and Language

Number sense is crucial for mathematics development

What do we know about the development of number sense?

- Intuitive sense of number, (small quantities) present in infancy
- Understanding of symbolic numbers starts at preschool age
- School age children activate more frontal areas when doing calculations -> more effort, less automated



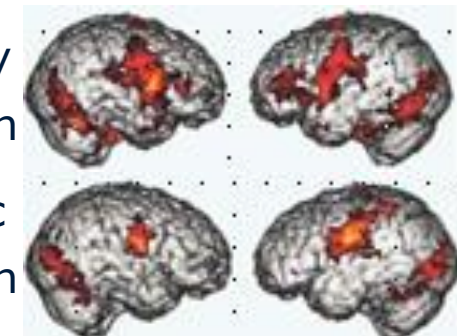
# Social-emotional development

Imitation is highly important for learning of motor actions, but also for emotional development:

- Biological basis of imitation of actions and emotions: **mirror neurons**
- Autistic children have problems with imitation and understanding others
- Role of mirror neuron system?

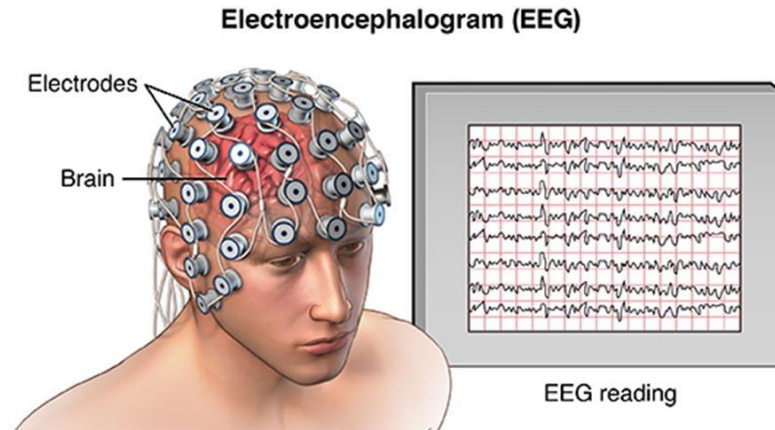


Healthy children



Autistic children

## EEG-ERP practical

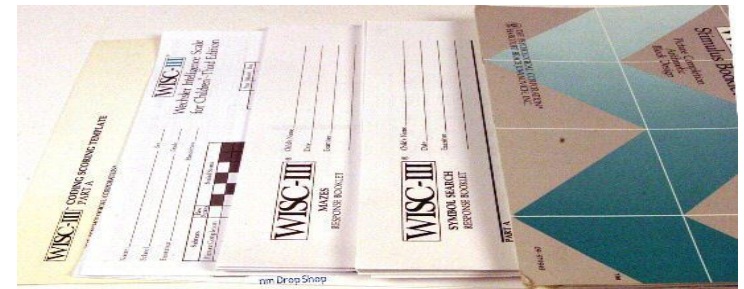


- Learn how to apply cap and electrodes and perform your own EEG measurements
- Learn when to apply EEG
- Learn the basics of EEG/ERP analyses
- Learn what you can do with EEG/ERPs



# Test practical

- Testing a child (e.g. IQ test)
- Interpreting results (e.g. Bayley)
- Developing your own test

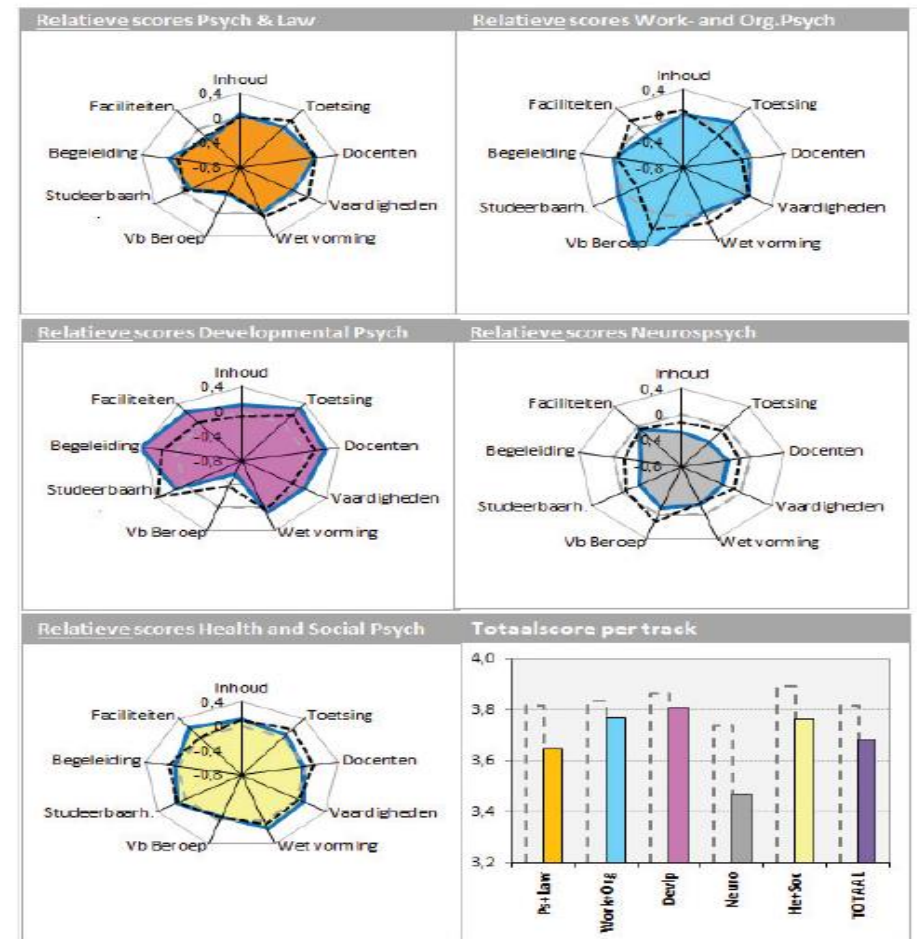


# Evaluations

Student course evaluations:

	<b>2016/2017</b> (N=29)	<b>2017/2018</b> (N= 37)
Infancy:	8.2	8.6
Perception:	7.9	8.1
Cognition:	7.6	8.4
Social-emot:	7.8	8.0
Practical 1:	8.0	7.4
Practical 2:	7.0	7.1

National student evaluation C.H.O.I. 2017





# Developmental Psychology: Internship topics

## Some examples of topics within our own developmental group:

- ADHD, attention & executive control development and mindfulness/cognitive training (L. Jonkman)
- Autism, attention & perception development (H. Stauder)
- Learning and Memory development (F. Donkers)
- Number development & dyscalculia (L. Jonkman)
- Genetics and Development (H. Smit)
- Motor development (H. Van Mier)
- But of course also possible to select your own topics; internships in one's own country, with other colleagues, at other universities, lots of possibilities!

## Information for Dutch speaking students that want to do an extracurricular clinical internship (NOT part of 1-year DP Master):

- To get “Basis Aantekening-Psychodiagnostiek (BAPD-NIP)”, you need to do a NIP-approved Psychology Master (which the Developmental Master is) **and** a clinical internship under guidance of a certified clinician
- You need the BAPD to be able to enroll in the post-master clinical education programmes in the Netherlands (GZ-opleiding), and to become a NIP member
- Note that also in Germany (Landesprüfungsamt Nordrhein-Westfalen) our students have been approved to enroll in their post-master clinical educational programme (do research internship on an applied developmental topic)

## Two choices for clinical internship (in NL/Dutch): (NOT part of the 1-year developmental master!)

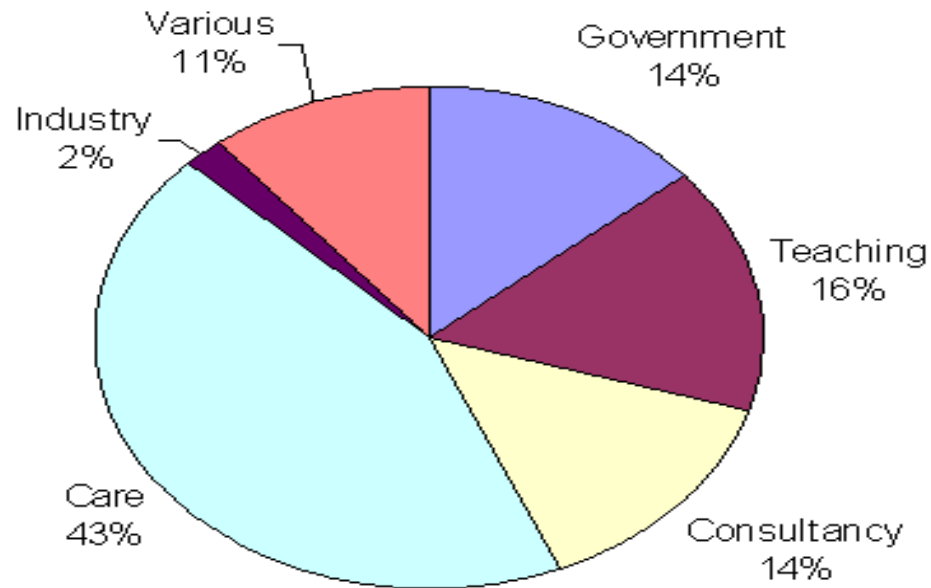
- Do it extra-curricular (*after* finishing the Developmental Master) as a contract-student (costs 75% of regular Master fee)
- Do a second Dutch clinical/mental health Master (e.g. Kinder- en Jeugd Psychologie or Volwassenen Psychologie) at FHML faculty after the Psychology (developmental) master
  - Advantages: extra Master degree, long clinical internship, and 1-day a week extra education

# Career-perspectives

 Go  
the **extra**  
mile

- **Psychologist** (diagnostics and/or treatment)
  - at schools (psychological/educational assistant)
  - in mental health care institutions (in Netherlands e.g. RIAGG's)
  - government agencies (counsel for child protection, clinical institutions, etc.)
  - revalidation clinics
  - (neuro)psychologist in hospitals
- **Lecturer**
  - at vocational level (bijv. hogeschool)
  - at university
- **Researcher**
  - at university
  - in industry or consultancy
  - other research institutions (in Netherlands e.g. TNO)

## Career perspectives



Enkele gegevens over hoe het de afgestudeerden op de arbeidsmarkt is vergaan:

<b>Bruto maandloon</b>	€ 2667.96
<b>Tijd voordat men een baan vond</b>	2,73 maanden
<b>% Werkend</b>	87.05 %
<b>% Studerend</b>	6.64 %
<b>% Vaste baan</b>	24.74 %
<b>% Voltijd baan</b>	75.1 %
<b>% Baan op niveau</b>	72.21 %
<b>% Tevreden over aansluiting</b>	41.1 %
<b>% Tevreden over studiekeuze</b>	84.18 %

# Admission Requirements

Bachelor's degree		Remarks
Dutch University Bachelor Psychology	Admissible	
Non-Dutch University Bachelor Psychology	Check by Board of Admissions	
All other University Bachelors*	Check by Board of Admissions	
University of Applied Science (HBO)	Not admissible	The Faculty does not offer any pre-master programmes

\* *Additional requirements*

- *Courses in Statistics (min. 18 ECTS);*
- *Knowledge of Psychology (min. 4 courses);*
- *The Bachelor's degree must be substantially relevant to the Master's specialisation of your choice;*
- *You are requested to write a one-page motivation letter which specifies why you want to follow the master's programme of Psychology and the specialisation of your choice.*

*For more information visit the stand 'Application & Admission' at the information market*

# Thank you for your attention!

## Questions?

