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PERSONAL PROFILE

I am a cognitive neuroscientist specialised in adolescent brain development. I am especially interested in risk-taking behavior and social influence on risk-taking behavior. To answer my research questions I use a variety of techniques including fMRI, computational modeling, hormone assessments and laboratory tasks. During my PhD I performed a longitudinal study in which a total of 300 participants between the ages of 8-27 were scanned twice on a reward processing task. This dataset is among the the largest and most comprehensive in the field of developmental cognitive neuroscience. The most important results from my PhD show a peak in reward related neural activation in adolescence and a relationship between neural activation in reward areas and real-life risk taking behavior. In total I published 15 peer reviewed papers, 7 of which as first author.

RESEARCH EXPERIENCE

Postdoctoral Research Fellow

2016- Harvard University

Affective Neuroscience and Development Lab, Lab Director: Dr. Leah Somerville
Position funded by a NWO Rubicon grant awarded to B.R. Braams

EDUCATION

PhD, Developmental Cognitive Neuroscience

2015 Leiden University

Thesis Title: Adolescent Risk Taking
Supervisor: Prof. Dr. Eveline Crone

Research visit as part of the PhD program

2014 Visiting PhD researcher at Affective Neuroscience and Development Lab, Harvard University.
Lab Director: Dr. Leah Somerville

M.Sc. Res, Brain and Cognitive Sciences, *Cum Laude*

2010 University of Amsterdam

Internships as part of the research master

2010 Internship at the Stanford Psychophysiological Laboratory (SPL), Stanford University.

The project was jointly supervised by Dr. Jens Blechert (Stanford University) and Prof. Dr. Merel Kindt (University of Amsterdam). The internship resulted in a first author publication.

2009 Internship at the Behavioral and Clinical Neuroscience Institute (BCNI), University of Cambridge. The project was jointly supervised by Dr. Molly Crockett (University of Cambridge) and Dr. Tobias Kalenscher (University of Amsterdam). The internship resulted in a second author publication.

B.Sc., Psychology

2008 Specialization Brain and Behavior, University of Groningen.

SCIENTIFIC PUBLICATIONS

Selected Peer-Reviewed Publications

1. **Braams, B.R.**, Van Duijvenvoorde, A.C.K., Peper, J.S. & Crone, E.A. (2015). Longitudinal changes in adolescent risk-taking: A comprehensive study of neural responses to rewards, pubertal development and risk-taking behavior. *The Journal of Neuroscience*, 35(18), 7226-7238.
2. **Braams, B. R.**, Peters, S., Peper, J. S., Güroğlu, B., & Crone, E. A. (2014). Gambling for self, friends, and antagonists: Differential contributions of affective and social brain regions on adolescent reward processing. *NeuroImage*, 100, 281-289.
3. **Braams, B. R.**, Güroğlu, B., de Water, E., Meuwese, R., Koolschijn, P. C.M.P., Peper, J. S., & Crone, E. A. (2014). Reward-related neural responses are dependent on the beneficiary. *Social Cognitive and Affective Neuroscience*, 9(7), 1030-1037.
4. **Braams, B. R.**, & Crone, E. A. (in press). Longitudinal changes in social brain development: processing outcomes for friend and self. *Child Development*.
5. **Braams, B. R.**, & Crone, E. A. (2016). Peers and parents: A comparison between neural activation when winning for friends and mothers in adolescence. *Social Cognitive and Affective Neuroscience*, nsw136.

Additional Peer-Reviewed Publications

6. **Braams, B.R.**, Peper, J.S., Van der Heide, D., Peters, S. & Crone, E.A. (2016). Nucleus Accumbens response to rewards related to alcohol use in adolescents and young adults. *Developmental Cognitive Neuroscience*.
7. **Braams, B. R.**, Blechert, J., Boden, M. T., & Gross, J. J. (2012). The effects of acceptance and suppression on anticipation and receipt of painful stimulation. *Journal of Behavior Therapy and Experimental Psychiatry*, 43(4), 1014-1018.
8. Crockett, M. J., **Braams, B. R.**, Clark, L., Tobler, P. N., Robbins, T. W., & Kalenscher, T.(2013). Restricting Temptations: Neural Mechanisms of Precommitment. *Neuron*, 79(2), 391-401.
9. Peters, S., **Braams, B. R.**, Raijmakers, M. E., Koolschijn, P.C.M.P., & Crone, E. A. (2014). The Neural Coding of Feedback Learning across Child and Adolescent Development. *Journal of Cognitive Neuroscience*, 26(8), 1705-1720.
10. de Water, E., **Braams, B. R.**, Crone, E. A., & Peper, J. S. (2013). Pubertal maturation and sex steroids are related to alcohol use in adolescents. *Hormones and behavior*, 63(2), 392-397.
11. Van Duijvenvoorde, A. C. K., Peters, S., **Braams, B. R.**, & Crone, E. A. (2016). What motivates adolescents? Neural responses to rewards and their influence on adolescents' risk taking, learning, and cognitive control. *Neuroscience & Biobehavioral Reviews*, 70, 135-147.
12. Peters, S., Peper, J.S., Van Duijvenvoorde, A.C.K., **Braams, B.R.** & Crone, E.A. (2016). Amygdala-orbitofrontal connectivity predicts alcohol use two years later: A longitudinal neuroimaging study on alcohol use in adolescence. *Developmental Science*.
13. Van Duijvenvoorde, A.C.K., Achterberg, M., **Braams, B.R.**, Peters, S. & Crone, E.A. (2015). Testing a dual-systems model of adolescent brain development using resting-state connectivity analyses. *NeuroImage*, 124, 409-420.
14. Blechert, J., Wilhelm, F. H., Williams, H., **Braams, B. R.**, Jou, J., & Gross, J. J. (2015). Reappraisal facilitates extinction in healthy and socially anxious individuals. *Journal of Behavior Therapy and Experimental Psychiatry*, 46, 141-150.
15. Peper, J. S., Mandl, R. C., **Braams, B. R.**, de Water, E., Heijboer, A. C., Koolschijn, P. C. M. P, & Crone, E. A. (2013). Delay discounting and frontostriatal fiber tracts: a combined DTI and MTR study on impulsive choices in healthy young adults. *Cerebral Cortex*, 23(7), 1695-1702.

Book Chapters

1. **Braams, B.R.**, Van Leijenhorst, L., & Crone, E.A. (2014). Risks, Rewards, and the Developing Brain in Childhood and Adolescence. In V.F. Reyna & V. Zayas (Eds.) *The neuroscience of risky decision making*. Washington DC: American Psychological Association.

SCHOLARSHIPS AND AWARDS

Fellowships

NWO Rubicon Grant, €134.764 (2016)

Travel awards

Early Career Scholar, Society for Research on Adolescence, work group meeting "The New Biobehavioral Developmental Science of Puberty" (2016)

Summer Institute in Cognitive Neuroscience, Fellowship, University of California, Santa Barbara (2015)

Research visit to Harvard University, Scholarship, Leiden University Fund, €2000 (2014)

Other awards

Best article award, Faculty of Social Sciences, Leiden University €500,- (2015)

Jacobs Foundation Best Abstract Award, SRCD \$1000 (2015)

Best abstract award, Donders Discussions (2014)

Best blog award, Leiden Psychology Blog (2014)

INVITED TALKS

1. University College London, London, Lab meeting Blakemore Lab (2014); Talk: "*Risks, rewards and the adolescent brain*"
2. Harvard University, Cambridge, Lab meeting Affective Neuroscience and Development Lab (2014); Talk: "*Risks, rewards and the adolescent brain*"
3. Community College, Leiden (2014); Lecture: "*Adolescents and development: insights from brain research*"
4. Amsterdam University College, Amsterdam (2013); Lecture: "*The adolescent brain*"
5. Leiden Institute for Brain and Cognition (LIBC), Leiden (2012); Talk: "*Reward processing in adolescence*"
6. LIBC Scientific Advice Board meeting, Leiden (2012); Talk: "*Reward processing in adolescence*"

CONFERENCE PRESENTATIONS & CHAIRED SESSIONS

1. SRA, Baltimore, MD, USA (2016); Talk: "*A Longitudinal brain imaging approach to test adolescent specific changes in risk taking and cognitive control*"
2. NVP, Egmond aan Zee, The Netherlands (2015); ***Session chair**; Talk: "*Longitudinal changes in social brain development*"
3. SRCD, Leiden, The Netherlands; Flash talk as part of the Jacobs Foundation award: "*Mothers matter during adolescence*"
4. Flux, Leiden, The Netherlands (2015); ***Session chair**
5. ECPD, Braga, Portugal (2015); Talk: "*Longitudinal changes in adolescent risk taking*"
6. Peer relationship meeting (PRO), Groningen, The Netherlands (2015); Talk: "*Reward processing in adolescence: a role for social context*"
7. Donders Discussions, Nijmegen, The Netherlands (2014); ***Best abstract award**; Flash talk: "*Gambling for self, friends and antagonists: the influence of social context on striatum responses in adolescence*"
8. Social Brain Conference, Copenhagen (2014); Invited talk: "*Reward processing in adolescence: contributions of social context*"

9. INS, Amsterdam (2013); Talk: "*Reward processing in adolescence: a role for social context*"
10. VNOP, Wageningen (2013); ***Session chair**; Talk "*Reward processing in adolescence* "
11. ESCAN, Marseille (2013); Talk "*Reward processing in adolescence* "
12. NVP, Egmond aan Zee (2011); Talk "*Reward Processing in adolescence*"

POSTER PRESENTATIONS

1. Flux, St. Louis, MO, USA (2016); Poster presentation: "*Social influence on adolescent ambiguous and risky decision-making*"
2. Flux, Leiden, The Netherlands (2015); Poster presentation: "*Longitudinal analysis of social brain development*"
3. CNS, Boston (2014); Poster presentation: "*Adolescent reward processing: a longitudinal study*"
4. CNS, San Francisco (2013); Poster presentation: "*Developmental patterns of neural responses differ for self and friends*"
5. SRCD, Seattle (2013); Poster presentation: "*Developmental patterns of neural responses differ for self and friends*"
6. NVP, Egmond aan Zee (2013); Poster presentation: "*Adolescent reward processing: differential contributions of affective and social brain regions*"
7. ESCON workshop, Ghent (2013); Poster presentation: "*Adolescent reward processing: differential contributions of affective and social brain regions*"
8. University of Maryland Summer School, College Park (2012); Poster presentation: "*Developmental patterns of neural responses to rewards differ for self and friends*"

REVIEWING EXPERIENCE

Ad hoc reviewer for:

Child Development,
 Cognitive Development,
 Developmental Neuroscience,
 Development and Psychopathology,
 Emotion,
 Journal of Research on Adolescence,
 NeuroImage,
 Neuropsychologia,
 PLoS One,
 Psychological Science,
 Psychoneuroendocrinology,
 Social Cognitive and Affective Neuroscience

TEACHING EXPERIENCE

*** University Teaching Qualification obtained**

Lecturer

Pre-University College, Leiden University (2012-2015)

Guest lecturer

Introduction to psychology, Erasmus University Rotterdam (2015)
 Social and Emotional Development, Leiden University (2014-2015)

Work group coordinator

Social and Emotional Development, Leiden University (2014-2015)

Work group teacher

Social and Emotional Development, Leiden University (2011-2013)

Developmental and Educational Psychology, Leiden University (2012-2013)

Academic Skills Tutorial, Leiden University (2011-2015)

Supervised Masters Theses

1. Inga Orec; Thesis title: *"Interpersonal relationships in times of pubertal development"* (2015)
2. Aleksandra Kubica; Thesis title: *"The effect of alcohol consumption on the adolescent brain"* (2015)
3. Dianne van der Heide; Thesis title: *"Real-life risk-taking behaviors in adolescents - The relationship between personality, brain activity and risky behavior"* (2014)
4. Nicolette Munsters; Thesis title: *"Puberty effect on striatal activity during reward processing for a friend"* (2013)
5. Jorien van Hoorn; Thesis title: *"The relationship between pubertal stage and reward-related brain functioning"* (2012)
6. Erik de Water; Thesis title: *"Reward-related neural responses correspond with levels of substance use during adolescent development"* (2011)

SUMMER PROGRAMS

1. Participant at the Summer Institute for Cognitive Neurosciences "Brain camp", University of Davis & University of California, Santa Barbara (2015)
2. Participant at the Maryland Neuroimaging Center Summer Institute on Social Developmental Neuroscience (2012)
3. Participant in a two-week summer program "Neuro-economics", organized by the Cognitive Science Center Amsterdam. (2010)

***Winner of best student poster**

4. Participant in a two-week summer program "Consciousness and the Brain" organized by the Cognitive Science Center Amsterdam (2009)

PRACTICAL COURSES

Presenting skills, Leiden University (2014)

MATLAB course, UCL, London (2014)

R course, Harvard University (2014)

Academic writing in English, Academic Language Center, Leiden University (2013)

Practical course fMRI, UCL, London (2011)

SCIENTIFIC OUTREACH

Member of Faces of Science, Royal Academy of Sciences, The Netherlands (2014-2016)

Newspaper & magazine articles

Interview Leidsch Dagblad (2x)

Interview J/M Ouders Magazine

Interview Psychology Magazine

Article about my research in Sp!ts newspaper

Radio

Invited guest at a radio talk show at Radio Rijnwoude

Interview Radio 1

Interview radio show Kennis van Nu

Interview FunX radio

Television

Invited guest at 'De Dokter Corrie Show'
 Interview Jeugdjournaal
 Interview Channel One "The Adolescent Brain" series

Performance & Art

Participant 'Science Battle' - Science Battle is a science communication theater show
 Volunteer 'It's only human' - event to teach general public about psychological biases through artwork
 Museon, Science Museum, The Hague, contributor to the 'Illusions' exhibit

Online

Blogger for the Leiden University Psychology Blog, total hits for 8 posts > 236.000
 Interview 7days, 7days is an online newspaper for adolescents
 Interview kennislink.nl
 Interview Science news for students.
 Interview for "The connected researcher" blog, Leiden University

Public Lectures

Lecture Public Library Amsterdam 'Faces of Science in the library'
 Lecture "Broodje Kennis", Amsterdam
 Lecture Youth Center 'South Park', Leiden
 Lecture Children's University, Haarlem
 Bessensap, NWO, presentation for journalists on adolescent risky driving
 Lecture for parents at a primary school 'The adolescent brain'

Consultant

Consultant BBC documentary 'Child of Our Time'
 Consultant Trimbos Institute, short animation to inform parents and adolescents about drugs
 Consultant safe driving for adolescents, Regionaal Orgaan Verkeersveiligheid in Gelderland

Outreach Events

Outreach event for high-school students.

Students visited the lab and were shown the facility and attended a lecture about the adolescent brain.

Co-organizer "Braintime-festival",

The Braintime festival was an outreach event for all participants in my PhD project. A total of 500 participants and their parents visited museum "Corpus" in Leiden for a day filled with workshops and science.

Farmers market outreach event

Organizer '3 October University'

A public event with a lecture and an interactive session in which the public could interact with scientists and participate in research

Young Academy on Wheels, Royal Academy of Sciences

Primary & High School Lectures

Guest teacher primary school 'Brain in adolescence'
 Guest teacher biology high school 'Brain in adolescence'
 Invited guest teacher at a primary school for a lecture about the brain

Supervisor thesis high-school students, thesis was awarded a 9,5 out of 10
High school science project supervisor
Workshop leader "Science Communication", Pre-University College, Leiden University

Other

Invited writer for the psychology calendar