

Ili Ma

Department of Developmental and Educational psychology

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ACADEMIC POSITIONS

- Nov 2020 – present** **Assistant Professor**
Leiden University
Department of Developmental and Educational Psychology
- Sept 2018 – Nov 2020** **Postdoctoral NWO Rubicon fellow**
New York University
Advisors: prof. Todd Gureckis and prof. Wei Ji Ma
- July 2016 – Sept 2018** **Postdoctoral researcher**
Donders Centre for Cognitive Neuroimaging, Radboud University
Advisor: prof. Alan Sanfey
- Sept 2015 - July 2016** **Research scientist**
Behavioral Science Institute, Radboud University and Free University Amsterdam
Advisor: prof. Antonius H.N. Cillessen, prof. Pol A.C. van Lier
- Jan 2008 - Aug 2009** **Research assistant**
Department of Psychopharmacology, Maastricht University
Advisor: dr. Anke Sambeth
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EDUCATION

- Jan 2017** **Ph.D. Clinical Developmental Psychology**
Thesis: The interplay between motivation and inhibition in ADHD
Radboud University, the Netherlands
Advisors: dr. Anouk Scheres, dr. Gabry W. Mies, prof. Antonius H.N. Cillessen
- July 2010** **Masters of Science in Neuropsychology**
Maastricht University, the Netherlands
- July 2010** **Research Intern in Psychopharmacology & Neuroimaging**
Maastricht University, the Netherlands
Advisor: dr. Lisbeth Evers

July 2009

Bachelor of Science in Biological psychology
Maastricht University, the Netherlands

RESEARCH INTERESTS

I am broadly interested in the computational and neurocognitive mechanisms underlying learning and social decision making, especially applied to cognitive development, and psychiatric disorders. I use neuroimaging and computational modelling of behavior to acquire a mechanistic understanding of these topics. I am specifically interested in uncertainty and computational modelling of active social learning strategies and complex decision-making.

PUBLICATIONS

Published

- **Ma, I.**, Phaneuff, C., van Opheusden, B., Ma, W.J., Hartley, C. (in press). Distinct Developmental Trajectories In The Cognitive Components Of Complex Planning. In *Proceedings of the 44th Annual Conference of the Cognitive Science Society*.
- **Ma, I.**, Westhoff, B., van Duijvenvoorde A.C.K. (in press). Uncertainty about others' trustworthiness increases during adolescence and guides social information sampling. *Scientific Reports*.
- **Ma, I.**, Zanolie, K., Bos, M. G., Schreuders, E., Vandenbroucke, A. R., Van Hoorn, J., ... & Güroğlu, B. (2022). Understanding the Dynamics of the Developing Adolescent Brain Through Team Science. *Frontiers in Integrative Neuroscience*, 16.
- **Ma, I.**, Ma, W. J., & Gureckis, T. M. (2021). Information sampling for contingency planning. In *Proceedings of the 43rd Annual Conference of the Cognitive Science Society*.
- **Ma, I.**, Sanfey, A. G., & Ma, W. J. The Social Cost of Information Gathering for Trust Decisions. *Scientific Reports*.
- Asscheman, J. S., Koot, S., **Ma, I.**, Buil, J. M., Krabbendam, L., Cillessen, A. H., & van Lier, P. A. (2019). Heightened neural sensitivity to social exclusion in boys with a history of low peer preference during primary school. *Developmental Cognitive Neuroscience*, 100673.
- Huijsmans, I., **Ma, I.**, Micheli, L., Civai, C., Stallen, M., & Sanfey, A. G. (2019). A scarcity mindset alters neural processing underlying consumer decision making. *Proceedings of the National Academy of Sciences*, 116(24), 11699-11704.

- Mies, G. W., **Ma, I.**, de Water, E., Buitelaar, J. K., Scheres, A. (2018) Waiting and working for rewards: Attention-Deficit/Hyperactivity Disorder is associated with steeper delay discounting linked to amygdala activation, but not with steeper effort discounting. *Cortex*.
- de Water, E., Mies, G. W., **Ma, I.**, Mennes, M., Cillessen, A.H.N., & Scheres, A. (2017). Neural responses to social exclusion in adolescents: effects of peer status. *Cortex*, 92, 32-43.
- **Ma, I.**, Mies, G. W., Rommelse, N., Buitelaar, J., & Scheres, A. (2017). Does an attention bias to appetitive and aversive words modulate interference control in youth with ADHD? *Child Neuropsychology*, 1-17.
- Civai, C., **Ma, I.** The enhancement of social norm compliance: prospects and caveats (2017). *Journal of Cognitive Enhancement*, 1, 26-30.
- **Ma, I.**, Rommelse, N., Buitelaar, J., Cillessen, A.H.N., & Scheres, A. (2017). Decision-making in social contexts in youth with ADHD, *European Child and Adolescent Psychiatry*, 1-10.
- **Ma, I.**, van Holstein, M., Mies, G. W., Mennes, M., Buitelaar, J., Cillessen, A.H.N., Cools, R., & Scheres, A. (2016). Ventral striatal hyperconnectivity during rewarded interference control in adolescents with ADHD, *Cortex*, 82, 225-236.
- **Ma, I.**, van Duijvenvoorde, A.C.K., & Scheres, A. (2016). The interaction between reinforcement and inhibitory control in children and adolescents with ADHD: a review and research guidelines, *Clinical Psychology Review*, 44, 94-111.
- **Ma, I.** (2016). The interplay between motivation and inhibition in ADHD. PhD thesis. Radboud University Nijmegen, the Netherlands.

AWARDS

- 2020 National Science Foundation sub award (\$90.000 USD)
- 2019 New York University Arts & Science travel award
- 2018 Rubicon Fellowship (134.764 euro), Netherlands Organization for Scientific Research (NWO). Full funding for a 2-year postdoctoral fellowship at New York University. Title: Active social learning and decision making: A Bayesian computational modelling approach
- 2013 EUNETHYDIS International Conference on ADHD Best poster award
- 2010 3rd International congress on ADHD Best poster award

TEACHING

Current teaching at Leiden University

- Course coordinator and lecturer Developmental and Educational Psychology (BSc)
- The Adolescent Brain; lectures on emotion regulation and reinforcement learning (BSc, elective)
- Evaluating an Empirical Study; fMRI module (RMSc)
- School Psychology; lecture Attention and ADHD (MSc)
- School Psychology; Workgroup cognitive assessment (MSc)
- Seminar tutor on Perspective on Career Planning (BSc)
- Master thesis and research internship supervision (14 students)
- Bachelor thesis and research internship supervision (16 students)

Past

- New York University: Tutorial on online experiment platforms
- New York University: Tutorial on Monte Carlo Tree Search
- Tilburg University: Guest lecture on the neurobiology of memory, reinforcement, and addiction (BSc)
- Radboud University: Master thesis and internship supervision for Research Master 'Cognitive & Clinical Neuroscience (MSc, 1 student)
- Radboud University: Master thesis and research internship supervision for Master track 'mental health psychology' (MSc, 4 students)
- Radboud University: Bachelor thesis and research internship supervision (BSc, 20 students)
- Radboud University: Thesis and research internship supervision biomedical sciences minor (BSc, 1 student)
- Radboud University: Teaching assistant for General Introduction to Psychology I Social psychology (BSc)
- Radboud University: Teaching assistant for General Introduction to Psychology II Brain and psychology (BSc)
- Radboud University: Teaching assistant Introduction to the Brain: Anatomy Practicum (BSc)

SKILLS

- Data analysis: SPSS and R
- fMRI analyses: SPM
- Programming: MATLAB, Python, Presentation, C#, Unity, JavaScript
- Computational modelling of behavior (e.g., Dynamic programming, Monte Carlo Tree Search)

- Network analyses
 - Neuropsychological testing
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RECENT INVITED TALKS

- Leiden University (2021 Research Rounds invited talk)
 - Dartmouth University (2020 Social Brown Bag invited talk)
 - George Washington University (2020 invited talk)
 - Princeton University (2019 Neuroscience and social decision-making talk series)
 - Brown University (2019 invited talk)
 - University of Vienna (2018 invited talk)
 - University College London (2018 invited talk)
 - University of Düsseldorf (2017 summer talk series on decision neuroscience)
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SELECTED CONFERENCE TALKS AND POSTERS

- Cognitive science society (2022, talk)
 - Reinforcement Learning and Decision Making (2022, talk)
 - Cognitive science society (2021, talk)
 - Reinforcement Learning and Decision Making (2021, poster)
 - Symposium on the Biology of Decision-Making (SBDM, 2019, poster)
 - Nederlandse Vereniging voor Psychonomie (NvP, 2019, talk)
 - Reinforcement Learning and Decision-Making (RLDM, 2019, poster)
 - Society for Neuroeconomics (2018, poster)
 - Computational Cognitive Neuroscience (CCN, 2017, poster)
 - Society for Neuroeconomics (2017, poster)
 - Society for Neuroeconomics (2016, poster)
 - Symposium on the Behavioural Science of ADHD (2016, talk)
 - Belgian Association for Psychological Science (2015, talk)
 - Dutch Neuroscience Meeting (2015, talk)
 - FLUX (2015, poster)
 - Annual Meeting of the International Society for Research on Impulsivity (2015, poster)
 - EUNETHYDIS ADHD conference (2013, poster)
 - EUNETHYDIS ADHD conference (2012, poster)
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REVIEWING

I have reviewed papers for multiple journals, including: Developmental Science, Biological Psychiatry, Cognitive Affective Behavioral Neuroscience, Brain Imaging and Behavior, Developmental Cognitive Neuroscience, and Neuroimage.