RESEARCH STATEMENT

I am interested in the influence of motivational and affective processes on cognitive control and effort. I study this in humans using lab reaction time tasks in combination with a wide variety of neuroimaging and physiological tools. My background in electronic engineering has enabled me to gain expertise in using many different techniques over the last ten years. These include EEG, (f)MRI, pupillometry, skin conductance, facial EMG and cardiovascular measures of effort. I am also interested in developing new methods to advance our field. For example, our lab has developed an online tool to measure reaction times (QRTEngine), and we recently developed a new method to measure task-evoked cardiac effort. I am also main author on an introduction book to E-Prime® (2nd edition published in 2019), a popular software package to program psychological experiments (see below).

An overview of our current research projects is available on my lab website.

Fields: Psychophysiology, Cognitive Neuroscience, Affective Neuroscience, Psychology

PROFESSIONAL CAREER

2015 – present
Principal Investigator, Affect Motivation & Action lab, Leiden Institute for Brain and Cognition, The Netherlands

2015 – present
Assistant Professor (tenured), Cognitive Psychology Unit, Institute of Psychology, Leiden University, The Netherlands

2018
Visiting Researcher, Motivation Brain Behavior lab, Brain & Spine Institute, Paris, France

2014
Visiting Researcher, Department of Psychiatry and Mental Health, University of Cape Town, South Africa

2012 – 2015
Post-doc / Assistant Professor (70% research), Cognitive Psychology Unit, Institute of Psychology, Leiden University, The Netherlands

2007 – 2012
PhD student Cognitive Neuroscience cum laude (highest distinction), Cognitive Psychology Unit, Institute of Psychology, Leiden University, The Netherlands

EDUCATION

2005 – 2007
MPhil Cognitive Neuroscience cum laude (highest distinction), Leiden University, The Netherlands

2002 – 2007
BA Philosophy of Psychology (average grade > 8 out of 10), Leiden University, The Netherlands

2002 – 2005
BSc Psychology cum laude (highest distinction), Leiden University, The Netherlands
SUPERVISION OF PHD STUDENTS

2012 – 2016  Mikael Kowal: Influence of cannabis on creativity and cognitive control

SUPERVISION OF POSTDOCS

2019 – present  Dr. Floor van Meer: collaborative research project "Work hard, play hard: Neuropsychological correlates and behavioural implications of hedonic compensation" with Lotte van Dillen and Wilhelm Hofmann

MEMBER OF PHD COMMITTEES

2013 – present  Eefje Rondeel (2013; Radboud University Nijmegen); Rudy van den Brink (2017; Leiden University); Lien De Saedeleer (2017; Ghent University); Hester Ruigendijk (2018; Free University Amsterdam)

TEACHING

2011 – present  Instructor and course coordinator Research Master course “Experimentation I: Programming Psychological Experiments”
2012 – present  Instructor and course coordinator Bachelor 3rd year course “Cognitive Neuroscience”
2008 – present  Supervision of Bachelor theses
2011 – present  Supervision of Master theses

DOCTORAL AND POST-DOCTORAL TRAINING

2015 – present  Workshops “E-Prime for researchers” (basic and advanced), Leiden University, The Netherlands.
2013,2014  Workshops “Programming Psychological Experiments in E-Prime”. Two-day workshops (basic and advanced) at Ghent University, Belgium

REVIEWING AND EDITORSHIPS

2019  Guest Editor Special Issue “Affect and Cognitive Control” for International Journal of Psychophysiology
2018 – present  Consulting Editor for Social, Cognitive and Affective Neuroscience
2017 – present  Consulting Editor for Cognition & Emotion
2012 – present  Reviewer for various professional journals, including: Acta Psychologica; Advances in Cognitive Psychology; Anxiety, Stress & Coping; Biological Psychology; Cerebral Cortex; Cognition; Cognition & Emotion; Cognitive, Affective, and Behavioral Neuroscience; Emotion; Experimental Brain Research; Frontiers in Behavioral Neuroscience; Frontiers in Psychology; International Journal of Psychophysiology; Journal of Cognitive Neuroscience; Journal of Experimental Psychology: Learning, Memory, and Cognition; Memory and Cognition; Motivation and Emotion;
GRANTS AND AWARDS

2018
Open Research Area funding “Work hard, play hard. Neuropsychological correlates and behavioural implications of hedonic compensation” (co-PI, with Lotte van Dillen and Wilhelm Hofmann; 550,000 euros)

2018
Internal funding collaborative PET Dopamine imaging project (co-PI; 100,000 euros)

2017
Leiden University Fund / Gratama Fund (25,000 euros)

2014
Travel grant European and South African Research Network in Anxiety Disorders (EUSARNAD) (2,100 euros)

2012
Best presentation award NWO BCIA-Programmes for Excellence meeting, Utrecht

2011
Best poster award NIMH IBSC Conference on “How do Executive Function and Emotion Interact?”, Boulder, Colorado, USA

2011
NIMH IBSC, Travel grant to visit annual conference in Boulder, USA

2009
Leids Universiteits Fonds (LUF), Travel grant to visit SAN Conference New York

OTHER PROFESSIONAL ACTIVITIES

2017 – 2018
Co-organizer Conference European Society for Cognitive and Affective Neuroscience (ESCAN) 2018, Leiden, The Netherlands

2017 – present
Coordinator working group Developing Advanced Neuroscientific Methods, Faculty of Social and Behavioral Sciences, Leiden University The Netherlands

2016 – present
Member of Steering Committee High Performance Computing Centre, Leiden University, The Netherlands

2016 – present
Member of ICT Committee Faculty of Social and Behavioral Sciences, Leiden University, The Netherlands

2016
Co-organizer Conference Consortium for European Research on Emotion (CERE) 2016, Leiden, The Netherlands

2014 – present
Key-user and coordinator high performance computer cluster, Faculty of Social and Behavioral Sciences, Leiden University, The Netherlands

2008 – 2010
Member of Dutch Graduate Research Institute Cognitive Psychology EPOS Curriculum committee

2008 – 2010
Member of Dutch Psychonomic Society (NVP) Web committee

ACADEMIC BOOKS

2019
E-Prime, the software suite by Psychology Software Tools, is used for designing, developing and running custom psychological experiments. The E-Primer is the first introductory textbook to this software package. Aimed at students and researchers alike, many tutorials are provided to teach the reader how to develop experiments typical for the broad fields of psychological and cognitive science. Apart from explaining the basic structure of E-Prime and describing how it fits into daily scientific practice, this book also offers an introduction into programming using E-Prime’s own E-Basic language. See also: www.e-primer.com

INTERNATIONAL TALKS

Over the past ten years I have presented my work at international conferences (typically 1 or 2 times a year), including: Association for Psychological Science (APS) Convention; Consortium of European Research on Emotion (CERE) Conference; European Society for Cognitive and Affective Neuroscience (ESCAN) conference; European Society for Cognitive Psychology (ESCoP) Conference; International Convention of Psychological Science (ICPS); International Society for Research on Emotion (ISRE) Conference; Society for Psychophysiological Research (SPR) Annual Meeting; Society for the Study of Motivation (SSM) Annual Meeting.

In addition I have given invited talks at several institutes, including: Donders Institute, Nijmegen, The Netherlands; Ghent University, Belgium; Radboud University, Nijmegen, The Netherlands; University of Cape Town, South Africa; University of Amsterdam, The Netherlands; University of Wuerzburg, Germany.

PUBLICATION TRACK RECORD

Number of publications: 47
Number of first-author publications: 22
Number of senior-author publications (PI, last and corresponding author): 4

For more details, see my Google Scholar profile

LIST OF PUBLICATIONS


