



Alexa Ruel

PHD CANDIDATE IN EXPERIMENTAL PSYCHOLOGY

Concordia University, 7141 Sherbrooke St. West, H4B 1R6, QC, Canada

+1 514 983 2751 | alexa.ruel@mail.concordia.ca

Summary

- PhD Candidate in Experimental Psychology at Concordia University
- Research interests: Decision-Making Strategies, Cognitive control, Computational Modelling, Electroencephalography
- Other interests: Science Communication, Women in STEM and Yoga

Education

Concordia University

DOCTOR OF PHILOSOPHY IN EXPERIMENTAL PSYCHOLOGY

Montreal, Canada

2018-Present

Concordia University

MASTER OF ARTS, EXPERIMENTAL PSYCHOLOGY

Montreal, Canada

2016-2018

McGill University

BACHELOR OF ARTS, PSYCHOLOGY

Montreal, Canada

2012-2016

Awards and Grants

Total value: \$87 000

Postgraduate Scholarship

IN RECOGNITION OF: DOCTORAL STUDENTS' ACADEMIC SUCCESS AND RESEARCH POTENTIAL.

NSERC

2020-2023

- Value: \$63 000

Faculty of Arts and Science Graduate Fellowship

IN RECOGNITION OF: ACADEMIC SUCCESS AND RESEARCH POTENTIAL.

Concordia University

2016, 2017, 2018 & 2019

- Value: \$6 000

Publications

Ruel, A., Devine, S., Eppinger, B. (Submitted). Resource-rational approach to meta-control problems across the lifespan. *Wiley Interdisciplinary Reviews Cognitive Science*.

Ruel, A., Bolenz, F., Li, S-C., Eppinger, B. (in prep). Age differences in model-based decision-making under varying demands on the representation of state spaces.

Ruel, A., Chiarella, S.S., Crivello, C., Poulin-Dubois, D. (2020) Concurrent Validity of the Modified Checklist for Autism in Toddlers (M-CHAT): Socio-cognitive and Verbal Skills in 18-Month-Old Infants. *Journal of Autism and Developmental Disorders*, 1-17.

Poulin-Dubois, D., Hastings, P.D., Chiarella, S.S., Geangu, E., Hauf, P. **Ruel, A.**, Johnson, A. (2018). The eyes know it: Toddlers' visual scanning of sad faces is predicted by their theory of mind skills. *PLOS ONE*, 13(12), e0208524.

Burnside, K., **Ruel, A.**, Azar, N., Poulin-Dubois, D. (2017). Implicit False Belief Across the Lifespan: Non-replication of an Anticipatory Looking Paradigm. *Cognitive Development*, 46, 4-11.

Conference Presentations

PUBLISHED ABSTRACTS

Ruel A., Bolenz, F., Li, S-C., Eppinger, B. (2019, July). Adult Age Differences in Dynamics of Model-based Decision-making. Poster session presented at RLDM, Montreal, QC.

CONFERENCE TALKS

Sean Devine, Cassandra Neumann, & **Alexa Ruel**. Life of the mind: Judgment and decision making in human ageing. Speech given at *First Annual CRDH Webinar Series*, Montreal, Canada, April 2020.

POSTER PRESENTATIONS

Ruel A., Bolenz, F., Li, S-C., Eppinger, B. (2019, September). Older Adults Demonstrate Model-based Decision-making when Task Demands are Reduced. Poster session presented at MCC, Berlin, Germany.

Ruel, A., Crivello, C., Chiarella, S., Burdman-Villa, J., & Poulin-Dubois, D. (2019, May). Testing the concurrent validity of the modified checklist for autism in toddlers (M-CHAT) in 18-month-olds. Poster session presented at SRCD, Baltimore, MD.

Delisle, A., Burdman-Villa, J., Ren?, J.L., **Ruel, A.**, & Poulin-Dubois, D. (2019, March). Qui sait quoi? L'apprentissage social selectif est lie aux competences metacognitives et a la theorie de l'esprit chez les enfants d'age prescolaire. Poster session presented at SQR, Mont-Tremblant, QC.

Ruel, A., Poulin-Dubois, D. (2018, May). Labels as an invitation to form categories in infancy. Poster session presented at APS Annual Convention, San Francisco, CA.

Ruel, A., Olineck-Jolin, K., Corbit, J., & Poulin-Dubois, D. (2018, May). Infants' reactions to a social, humanoid robot. Poster session presented at Development 2018, St-Catharine's, ON.

Ruel, A., & Poulin-Dubois, D. (2018, March). Do words facilitate the formation of categories in infancy? Poster session presented at Montreal Cognitive Science Day, Montr?al, QC.

Poulin-Dubois, D., Olineck-Jolin, K., Corbit, J., & **Ruel, A.** (2017, October) Can Infants discern the Goals and Intentions of a Humanoid Robot? Poster session presented at CDS, Portland, OR.

Ruel, A., Burnside, K., Azar, N. Poulin-Dubois, D. (2017, March). L'attribution implicite de fausses croyances: Une non-r?plication de l'?preuve de regard anticipatoire. Poster session presented at SQR, Montreal, QC.

Research Experience

Lifespan Decision-Making Lab

PHD STUDENT

- Examine the neural mechanism supporting changes in decision-making strategies across the lifespan
- Set up the EEG lab and teach undergraduate students how to use it.

Concordia University

2018-present

Cognitive and Language Development Lab

MASTER'S STUDENT

- Examine the impact of language development on category formation in infancy
- Undergraduate Student Supervision

Concordia University

2016-2018

McGill Youth Study Team

RESEARCH ASSISTANT

- Data Entry and Coding
- Assist in the organization of questionnaire measures for administration to first nations children

McGill University

2014-2016

Centre de Jour en Pedopsychiatrie

RESEARCH ASSISTANT

- Film the administration of several tasks and protocols
- Interact with parents and their children

Universite de Montreal

Summer 2015

McGill Infant Development Center

RESEARCH ASSISTANT

- Interact with parents and their infants & act in the studies.
- Data entry and coding

McGill University

2013-2014

Summer Schools

Virtual Summer School in Pattern Recognition in Neuroimaging

ATTENDEE

- Bayesian Statistics, Calcium Imaging, Causal Inference, Deep Learning, EEG & MEG, fMRI, Machine Learning

University of Vienna

September 2020

Summer School in Social Neuroscience & Neuroeconomics

ATTENDEE

- Decision making, Risk taking, Moral judgements

Duke University

June 2021

Extracurricular Involvements

TEACHING EXPERIENCE

Teaching Assistant

RESEARCH METHODS AND DESIGNS

- Hold weekly classes teaching students material to complement lectures.
- Answer any questions students may have about class material & hang out and grade assignments.

Winter 2018 & 2019

Teaching Assistant

INTRODUCTION TO STATISTICS 1

- Hold weekly classes teaching students material to complement lectures.
- Answer any questions students may have about class material & hang out and grade assignments.

Winter 2018 & 2019

Student Supervision

HONOURS PROJECT

- Help the student with the design of their study, testing, data analysis & interpretation
- Correct and evaluate the student's thesis.

2018-2019

LEADERSHIP

Concordia's Cognition Day

STUDENT ORGANIZER

- Event planning, Advertisement and Day-of coordination

Concordia University

Date TBD

Brownbag Meetings on Cognition

COORDINATOR

- Organize weekly meetings with faculty and graduate students interested in Cognition

Concordia University

2019-present

Concordia's Journal of Accessible Psychology (CJAP)

FOUNDER & EDITOR-IN-CHIEF

- Plan workshops on the topic of science communication, supervise all CJAP team members, supervise yearly online publication

Concordia University

2019-present

Concordia's Yoga Club

YOGA INSTRUCTOR

- Organize bi-weekly yoga classes for graduate and undergraduate students

Concordia University

2019-2020

REVIEWER EXPERIENCE

Journal of Trial and Error

January 2020

Biological Psychiatry

January 2020

Nature Communications

January 2020

Cognitive and Affective Behavioral Neuroscience

July 2019

Plos ONE

February 2019

Developmental Science

September 2020