

Sean Devine

PHD STUDENT

McGill University, 2001 McGill College, H3A 1G1, QC, Canada

+1 819 319 1564 | seandamiandevine@gmail.com | seandevine.org | [seandamiandevine](https://www.instagram.com/seandamiandevine)

Summary

- PhD Student at McGill University
- Research interests: Cognitive effort, real-world decision-making, computational modelling
- Other interests: Meta-science, deep learning

Education

McGill University

DOCTOR OF PHILOSOPHY IN EXPERIMENTAL PSYCHOLOGY

Montreal, Canada

2020-Present

Concordia University

MASTER OF EXPERIMENTAL PSYCHOLOGY

Montreal, Canada

2020

Concordia University

BACHELOR OF PSYCHOLOGY

Montreal, Canada

2018

Awards and Grants

Total value: \$207 050

Student Ambassador Award

IN RECOGNITION OF: FUNDING FOR COMMUNITY OUTREACH PROJECT TO PROMOTE SCIENCE AMONG UNDERREPRESENTED GROUPS.

NSERC

2021

- Value: \$1 000

Postgraduate Scholarship-Doctoral

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

NSERC

2021

- Value: \$63 000

Graduate Excellence Award

IN RECOGNITION OF: ACADEMIC EXCELLENCE AT THE GRADUATE LEVEL.

McGill University

2020

- Value: \$2 550

Bourses de Doctorat en Recherche

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

FRQNT

2020

- Value: \$84 000

Canada Graduate Scholarship-Master's Program

IN RECOGNITION OF: NEW MASTER'S STUDENTS' ACADEMIC SUCCESS AND RESEARCH POTENTIAL.

SSHRC

2019

- Value: \$17 500

Bourses de Maîtrise en Recherche

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

FRQNT

2019

- Value: \$17 500 [declined]

Graduate Special Entrance Award

IN RECOGNITION OF: INCOMING MASTERS' STUDENTS ENTERING THE PROGRAM WITH FEDERAL OR PROVINCIAL FUNDING.

Concordia University

2019

- Value: \$6 000

Undergraduate Research Award

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

NSERC

2018

- Value: \$7 125 (+ 2000 FRQNT supplement)

Undergraduate Research Award

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

Concordia University

2017

- Value: \$5 625

Arts and Science Scholar

IN RECOGNITION OF: STUDENTS WITH A GPA IN THE TOP 1% OF THEIR DEPARTMENT.

- Value: NA

Concordia University

2016, 2017, & 2018

Dr. Alex Vincent Scholarship in Psychology

IN RECOGNITION OF: PSYCHOLOGY STUDENTS' ACADEMIC EXCELLENCE AND COMMITMENT TO THE FIELD.

- Value: \$750

Concordia University

2018

Research Experience

Otto Lab

PHD STUDENT

- Conceived of, designed multiple experiments and real-world data analysis projects.
- Assisted other lab members in the design of their studies.

McGill University

2020

Lifespan Decision-Making Lab

MASTER'S STUDENT

- Conceived of, executed, and analyzed data for a Master's research project and two subsequent follow-up projects.
- Provided technical and statistical assistance to other graduate students and lab members in R, Python, and MATLAB.

Concordia University

2019-2020

Lifespan Decision-Making Lab

RESEARCH COORDINATOR

- Coordinated four ongoing research projects related to decision-making across the lifespan.
- Compiled and submitted a manuscript to a peer-reviewed journal and presented results at international conferences.

Concordia University

2018-2019

Articles

UNDER REVIEW

Devine, S., Vassena, E., & Otto, A. R. (2022). More than a Feeling: Physiological Measures of Affect Index the Integration of Effort Costs and Rewards During Effortful Decision-Making. *Psychological Science*. <https://doi.org/10.31234/osf.io/nmwyw>

Devine, S., Otto, A. R., Uanhoru, J. O., & Flake, J. K (under review). A Tutorial for Quantifying Within- and Between-Participant Variance in Multilevel Logistic Models. *Advances in Methods and Practices in Psychological Science*. <https://doi.org/10.31234/osf.io/v68wb>

2022

Otto A.R., **Devine, S.,** Bornstein, A.M., & Louie, K. (2022). Context-dependent choice and evaluation in real-world consumer behavior. *Scientific Reports*, 12, 17744.

Devine, S., Neumann, C., Levari, D., Wilson, R., Eppinger, B. (2022). Human Ageing is Associated with More Rigid Concept Spaces. *Psychonomic Bulletin, & Review*. <https://doi.org/10.3758/s13423-022-02197-8>.

Devine, S., Germain, N., Ehrlich, S., & Eppinger, B. (2022). Changes in the Prevalence of Thin Bodies Bias Young Women's Judgments About Body Size. *Psychological Science*, 33(8), 1212-1225. <https://doi.org/10.1177/09567976221082941>

Devine, S., & Otto, A. R. (2022). Information about task progress modulates cognitive demand avoidance. *Cognition*, 225, 105107. <https://doi.org/10.1016/j.cognition.2022.105107>

2021

Devine, S., Neumann, C., Otto, A. R., Bolenz, F., Reiter, A., Eppinger, B. (2021). Lifespan Age Differences in the Effects of the Opportunity Cost of Time on Cognitive Control. *Cognition*, 216, 104863. <https://doi.org/10.1016/j.cognition.2021.104863>.

Ruel, A., **Devine, S.,** & Eppinger, B. (2021). Resource-rational approach to meta-control problems across the lifespan. *Wiley Interdisciplinary Reviews: Cognitive Science*, 12(5), e1556. <https://doi.org/10.1002/wcs.1556>

Conference Presentations

CONFERENCE PROCEEDINGS AND PUBLISHED ABSTRACTS

- Sean Devine** & A. Ross Otto. Making Progress on the Effort Paradox: Information about task progress modulates cognitive demand avoidance. (2021). In *Proceedings of the 43rd Annual Meeting of the Cognitive Science Society*.
- Sean Devine**, Cassandra Neumann, David E. Levari, Robert Wilson, & Ben Eppinger. (2020). Prevalence-induced concept change in older adults. In *Proceedings of the 42nd Annual Meeting of the Cognitive Science Society*. Montreal, CA. [Contributed Talk].
- Sean Devine**, Cassandra Neumann, David E. Levari, Robert Wilson, & Ben Eppinger. (2020). Prevalence-induced concept change in older adults. Accepted at *Cognitive Ageing 2020*, Atlanta, Georgia, USA.
- Sean Devine**, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing-related changes in the effects of opportunity costs on cognitive effort (2019). In *The Multidisciplinary Conference on Reinforcement Learning and Decision Making 2019*. Montreal, QC, Canada.
- Ben Eppinger, **Sean Devine**, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing-related changes in the effects of opportunity costs on cognitive effort. Accepted at *FENS2018*, Berlin, Germany, July 2018.

POSTER PRESENTATIONS

- Sean Devine**, Mathieu Roy, Ulrik Beierholm, A. Ross Otto. Proximity to Appetitive and Aversive Goals Jointly Determines Parameters of Effortful Control Exertion. Presented at the *3rd Workshop on Mental Effort*. Providence, RI, USA, 2022.
- Sean Devine**, Anya Skatova, James Goulding, A. Ross Otto. Decoy Effects in a Massive Real-World Retail Dataset. Presented at *The Society for Judgment and Decision Making Annual Meeting 2022*. San Deigo, CA, USA, 2022.
- Sean Devine**, Eliana Vasenna, Emma Kiedyk, A. Ross Otto. Physiological Measures of Affective Valence and Arousal Index Effort Costs During Decision-Making. Presented at *The Multi-disciplinary Conference on Reinforcement Learning and Decision Making 2022*. Providence, RI, USA, 2022.
- Alexa Nordine, **Sean Devine**, Emma Kiedyk, A. Ross Otto. Physiological Measurements of Emotion in Risky Decision-Making: Examining EMG and SCR Responses to Choice Outcome. Presented at *CPA's 83rd Annual National Convention*. Calgary, AB, Canada, 2022.
- A. Ross Otto, **Sean Devine**, Aaron M. Bornstein, & Kenway Louie. Context-dependent choice and evaluation in real-world consumer behavior. Presented at the *Society for Neuroeconomics Annual Meeting 2021*. Online, 2021.
- Sean Devine** & A. Ross Otto. Making Progress on the Effort Paradox: Information about task progress modulates cognitive demand avoidance. Presented at *CogSci2021*, Montreal, Canada, 2021.
- Sean Devine**, Nathalie Germaine, Stefan Erhlich, & Ben Eppinger. Changes in The Prevalence Of Thin Bodies Biases Young Women's Judgements about Body Size. Presented at *Canadian Society for Brain, Behaviour and Cognitive Science: Annual Meeting 2021*, Montreal, Canada, 2021.
- Sean Devine** & A. Ross Otto. Making Progress on the Effort Paradox: Information about task progress modulates cognitive demand avoidance. Presented at *Canadian Society for Brain, Behaviour and Cognitive Science: Annual Meeting 2021*, Montreal, Canada, 2021.
- Sean Devine**, Cassandra Neumann, David E. Levari, Robert Wilson, & Ben Eppinger. Prevalence-induced concept change in older adults. Accepted at *Cognitive Ageing 2020*, Atlanta, Georgia, USA, 2020.
- Sean Devine**, Cassandra Neumann, David E. Levari, Robert Wilson, & Ben Eppinger. Prevalence-induced Concept Change in Older Adults. Presented at the *Annual CRDH Conference 2020*, Montreal, Canada, January, 2020.
- Sean Devine**, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing-related changes in the effects of opportunity costs on cognitive effort. Presented at *RLDM2019*, Montreal, Canada, July 2019.
- Sean Devine**, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing-related changes in the effects of opportunity costs on cognitive effort. Presented at the *Annual CRDH conference 2020*, Montreal, Canada, February

2019. Winner of the best undergraduate poster presentation award (value: \$100).

Sean Devine, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing- related changes in the effects of opportunity costs on cognitive effort Presented at the *6th FLUX Conference*, Berlin, Germany, August 2018.

Ben Eppinger, **Sean Devine**, Florian Bolenz, Joni Shuchat, Ross Otto, & Andrea Reiter. Ageing-related changes in the effects of opportunity costs on cognitive effort. Presented at the *11th FENS (Forum of Neuroscience)*, Berlin, Germany, August 2018.

CONFERENCE TALKS

Sean Devine, Mathieu Roy, Ulrik Beierholm, A. Ross Otto. Proximity to Appetitive and Aversive Goals Jointly Determines Parameters of Effortful Control Exertion. Presented at *Society for Neuroscience Meeting 2022*. San Diego, CA, USA, 2022.

Sean Devine, A. Ross Otto, Aaron M. Bornstein, & Kenway Louie. Context-dependent choice and evaluation in real-world consumer behavior. Talk given at *Math Psych 2021*, online. July 2021.

Sean Devine, Cassandra Neumann, David E. Levari, Robert Wilson, & Ben Eppinger. Prevalence-induced concept change in older adults. Speech given at *CogSci2020*, Toronto, Canada, July 2020. [Online due to COVID].

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.

Led Workshops

Introduction to Bayesian Statistics

CONCORDIA

March 2022

Maximum Likelihood Estimation in R

CONCORDIA AND MCGILL

October 2021

Multilevel Modeling: Basic and Advanced Topics

CONCORDIA, MCGILL, AND TU DRESDEN

June-July 2021

Programming Experiments Online Using jsPsych

CONCORDIA UNIVERSITY & TU DRESDEN, [ONLINE]

April 2020

Python for Psychologists

CONCORDIA UNIVERSITY, [ONLINE]

April 2020

Getting Involved in Research for Psychology

CONCORDIA UNIVERSITY, MONTREAL, CANADA

February 2020

Designing Psychological Experiments Using PsychoPy

CONCORDIA UNIVERSITY, MONTREAL CANADA

October 2019

Leadership

Journal of Trial and Error

EDITOR OF PSYCHOLOGY

2019-Present

- Edit for an international journal that aims to close the gap between what is research and what is published by highlighting important scientific failures.
- Write and contribute to editorials on the role of failure in psychological science.

MAPS Committee at Concordia

SENIOR OFFICER

2019-2020

- Senior organizer for a Concordia student committee that transmits knowledge from graduate to undergraduate students.
- Presented numerous workshops (see 'Workshops')

Concordia Journal of Accessible Psychology

EDITOR

2019-2020

- Review and edit submissions to a student-run journal that aims to promote easily accessible psychological research from Concordia University to the public.
- Promote the journal internally within Concordia University

Science of Learning Symposium, Berlin, Germany

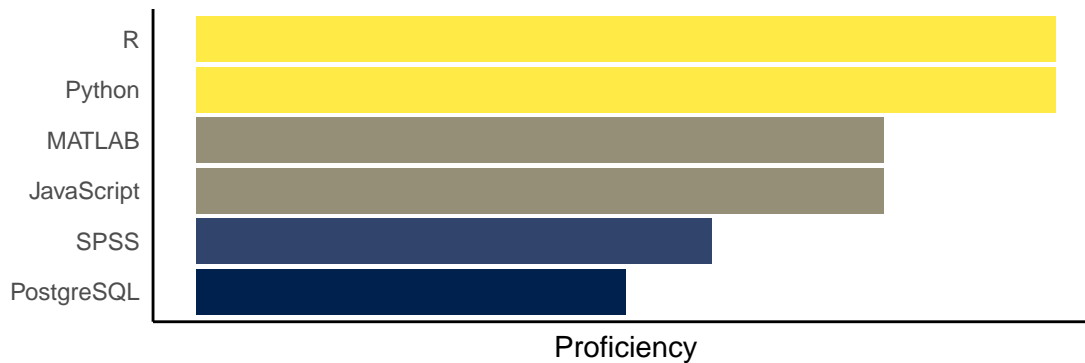
ASSISTANT-ORGANIZER

2018

- Assisted in planning and organization of an international symposium on recent neuroscientific, developmental, and social advancements in learning science.
- Helped compile a post-symposium synopsis.

Other Professional Skills

PROGRAMMING LANGUAGES



Other Work and Extracurricular Experience

TA POSITIONS

Introduction to Statistics

McGILL UNIVERSITY

2021

Introduction to Statistics

McGILL UNIVERSITY

2020

Statistical Analysis I

CONCORDIA UNIVERSITY

2020

EDITORIAL ACTIVITIES — REVIEWER

Cognition

2022

Royal Society for Open Science

2022

Advances in Cognitive Science

2022

Cognitive, Affective, & Behavioural Neuroscience

2020

ADDITIONAL TRAINING

Deep Learning Summer School

NEUROMATCH ACADEMY

2021