

# ALEXANDER PATRICK BURGOYNE

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## EDUCATION

- 2015 – present      Master's Degree (2018, expected)  
Michigan State University, Department of Psychology  
Cognition and Cognitive Neuroscience Doctoral Program  
Advisor: D. Zach Hambrick, Ph.D.  
Committee: Kimberly M. Fenn, Ph.D. & Lauren J. Harris, Ph.D.
- 2014                      Bachelor of Arts in Psychology  
Michigan State University, College of Social Science

## HONORS AND AWARDS

- 2017                      Summer Fellowship Award, Michigan State University
- 2015                      Rasmussen Fellowship Award, Michigan State University
- 2014                      Graduated with Honors, Michigan State University
- 2010, 2011, 2013      Dean's List, Michigan State University

## PUBLICATIONS

- Sisk, V., **Burgoyne, A. P.**, Macnamara, B. N., Sun, J., Butler, J. L., & Macnamara, B. N. (in press). To What Extent and Under Which Circumstances Are Growth Mindsets Important to Academic Achievement? Two Meta-analyses. *Psychological Science*.
- Hambrick, D. Z., Altmann, E., & **Burgoyne, A. P.** (in press). A Knowledge-Activation Approach to Testing the Circumvention-of-Limits Hypothesis. *American Journal of Psychology*.
- Hambrick, D. Z., **Burgoyne, A. P.**, Macnamara, B. N., & Ullén, F. (in press). Toward a Multifactorial Model of Expertise: Beyond Born Versus Made. *The New York Academy of Sciences*.

Hambrick, D. Z., **Burgoyne, A. P.**, & Oswald, F. L. "Domain-General Models of Expertise: The Role of Cognitive Ability." To appear in *Oxford Handbook of Expertise: Research and Application*. Eds. Ward, P., Schraagen, J. M., Gore, J., & Roth, E. Oxford: Oxford UP.

Mix, K., Hambrick, D. Z., Satyam, V. R., **Burgoyne, A. P.**, Levine, S. C. (under review). The Latent Structure of Spatial Skill: A Test of the 2 x 2 Typology.

**Burgoyne, A. P.**, Nye, C. D., Macnamara, B. N., Charness, N., & Hambrick, D. Z. (under review). The Impact of Domain-Specific Experience on Chess Skill: Re-Analysis of a Key Study.

Hambrick, D. Z., **Burgoyne, A. P.**, Campitelli, G., & Macnamara, B. N. (2018). "Working Memory, Thinking, and Expertise." *International Handbook of Thinking and Reasoning*. Eds. Ball, L. J. & Thompson, V. A. Psychology Press.

Macnamara, B. N., Hambrick, D. Z., Frank, D. J., King, M. J., **Burgoyne, A. P.**, & Meinz, E. J. (2018). "The Deliberate Practice View: An Evaluation of Definitions, Claims, and Empirical Evidence." *The Science of Expertise*. Eds. Hambrick, D. Z., Campitelli, G., & Macnamara, B. N. Psychology Press.

Sala, G., **Burgoyne, A. P.**, Macnamara, B. N., Hambrick, D. Z., Campitelli, G., & Gobet, F. (2017). Checking the "Academic Selection" Argument. Chess Players Outperform Non-Chess Players in Cognitive Skills Related to Intelligence: A Meta-Analysis. *Intelligence*.

**Burgoyne, A. P.**, Sala, G., Gobet, F., Macnamara, B. N., Campitelli, G., & Hambrick, D. Z. (2016). The Relationship Between Cognitive Ability and Chess Skill: A Comprehensive Meta-Analysis. *Intelligence*, 59, 72-83.

## POPULAR WRITING

**Burgoyne, A. P.** & Hambrick, D. Z. (2017, January 12). Intelligence and the DNA Revolution, *Scientific American*. Retrieved from <https://www.scientificamerican.com/article/intelligence-and-the-dna-revolution/>

**Burgoyne, A. P.** & Hambrick, D. Z. (2017, August 22). Flagging Fake News or Bad Sources Won't Work, *Slate*. Retrieved from [http://www.slate.com/articles/health\\_and\\_science/science/2017/01/educating\\_people\\_about\\_sources\\_won\\_t\\_stop\\_fake\\_news.html](http://www.slate.com/articles/health_and_science/science/2017/01/educating_people_about_sources_won_t_stop_fake_news.html)

Hambrick, D. Z. & **Burgoyne, A. P.** (2016, September 18). The Difference Between Rationality and Intelligence, *New York Times*, p. SR12.

## **PRESENTATIONS AND POSTERS**

- 2017                    “Cognitive Determinants of Multitasking Ability”  
Association for Psychological Science Annual Meeting  
Boston, MA, May 25-28, 2017 (*poster*)
- 2017                    “The Impact of Domain-Specific Experience on Chess Skill: Re-Analysis  
of a Key Study”  
Midwest Psychological Association Conference  
Chicago, IL, April 20-23, 2017 (*presentation*)
- 2016                    “Acquiring Skill in Music”  
Midwest Psychological Association Conference  
Chicago, IL, May 5-7, 2016 (*poster*)
- 2016                    “The Relationship Between Intelligence and Expertise in Chess:  
A Meta-Analysis”  
Midwest Psychological Association Conference  
Chicago, IL, May 5-7, 2016 (*presentation*)

## **COGNITIVE ABILITY TESTING SOFTWARE**

- 2017                    Visual Arrays Task (E-Prime v2)  
2017                    Choose-A-Move Chess Test (E-Prime v2)  
2017                    Chess Knowledge Test (E-Prime v2)  
2017                    Typing Speed Test (E-Prime v2)  
2016                    Reading Comprehension Test (E-Prime v1 and v2)  
2016                    Pattern Comparison Test (E-Prime v1 and v2)  
All programs are free to download at [www.scienceofexpertise.com/alex](http://www.scienceofexpertise.com/alex)

## WEB DESIGN AND MANAGEMENT

[www.scienceofexpertise.com](http://www.scienceofexpertise.com) – Website for the Expertise Laboratory

[www.journalofexpertise.org](http://www.journalofexpertise.org) – Official website for the Journal of Expertise

## ACADEMIC POSITIONS

- 2015 – present      Graduate Research Assistant/Laboratory Manager  
Expertise Laboratory  
Michigan State University, Department of Psychology  
Supervisor: D. Zach Hambrick, Ph.D.
- 2016                    Teaching Assistant  
Psychology 402(W): Sensation and Perception  
Michigan State University, Department of Psychology  
Professor: Mark Becker, Ph.D.
- 2015                    Teaching Assistant  
Psychology 244: Developmental Psychology: Infancy through  
Childhood  
Michigan State University, Department of Psychology  
Professor: Lauren J. Harris, Ph.D.
- 2014 – 2015          Professional Aide  
Michigan Twins Project, Michigan State University  
Principal Investigators: Kelly Klump, Ph.D., Alex Burt, Ph.D.
- 2013                    Teaching Assistant  
Psychology 200: Introduction to Cognitive Psychology  
Michigan State University, Department of Psychology  
Professor: Mark Becker, Ph.D.
- 2012 – 2013          Research Assistant  
Michigan Twins Project, Michigan State University  
Principal Investigators: Kelly Klump, Ph.D., Alex Burt, Ph.D.

## RESEARCH INTERESTS

Expertise and skill acquisition, individual differences, working memory and attention, perseverance and grit, personnel selection, implicit theories of ability, creativity, the cost of task switching and multitasking, longitudinal predictors of competency

## ACADEMIC SERVICE

- 2017                      Reviewer for the following journals: *Journal of Behavioral Decision Making, Clinical Psychological Science, Journal of Experimental Psychology: General*.
- 2016                      Reviewer for the Association for Psychological Science Student Grant Competition
- 2016                      Student Representative, *Quantitative Genetics Faculty Search Committee*, Psychology Department, Michigan State University East Lansing, MI

## TECHNICAL SKILLS

Statistical analysis (*AMOS, SPSS, MPlus, R, G\*Power*)  
Experiment design and presentation (*E-Prime*)  
Programming (*HTML, E-Basic*)  
MIDI data extraction and analysis (*Anvil Studio*)  
Video & Audio Editing (*Final Cut Pro, Audacity*)  
Graphic design (*Adobe Photoshop, Illustrator*)  
Web design (*Adobe Dreamweaver*)

## PROFESSIONAL DEVELOPMENT

- Spring 2017              Leadership Academy at Michigan State University
- Summer 2016             Certification in College Teaching Institute at Michigan State University
- Summer 2016             Introductory & Intermediate Structural Equation Modeling Workshop
- Summer 2015             Teaching Assistant Institute at Michigan State University

## **PROFESSIONAL MEMBERSHIP**

2015 – present      Midwest Psychological Association Member  
2015 – present      American Psychological Association Member