

Joel Suss, Ph.D.

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EMPLOYMENT

2015 **Assistant Professor:** Human Factors
Department of Psychology
Wichita State University, Wichita, Kansas, USA

EDUCATION

2013 **Doctor of Philosophy:** Applied Cognitive Science and Human Factors
Michigan Technological University, Houghton, Michigan, USA

Dissertation title: Using a prediction and option generation paradigm to understand decision making
Advisor: Paul Ward

2006 **Bachelor of Behavioral Science (Honors):** Psychology
La Trobe University, Bundoora, Victoria, Australia

Honors Thesis title: Looking but not seeing: Visual search for security-related threats
Advisor: Ross H. Day

2005 **Graduate Diploma:** Psychological Studies
Deakin University, Burwood, Victoria, Australia

1997 **Bachelor of Applied Science:** Human Movement (Exercise and Sport Science)
Deakin University, Burwood, Victoria, Australia

GRANTS, AWARDS, & FELLOWSHIPS

Title	Awarding Agency	Dates	Amount
Graduate Research Assistantship Grant; Suss, J. (PI)	Psi Chi - The International Honor Society in Psychology	01/2013 - 05/2013	\$3,000
Graduate Research Grant; Suss, J. (PI) , Ward, P. (co-PI)	Psi Chi - The International Honor Society in Psychology	01/2012 - 12/2012	\$1,485
Doctoral Dissertation Research Improvement Grant; Ward, P. (PI), Suss, J. (co-PI)	US National Science Foundation	07/2011 - 06/2013	\$13,920

RESEARCH EXPERIENCE (Paid Employment)

03/2014-08/2015 **Postdoctoral Fellow, Co-DOT Lab, School of Psychology, Laval University, Quebec City, Canada.**

08/2013-02/2014 **Human Factors Analyst,** Spectrum Software Technology, Egg Harbor Township, New Jersey, USA. (Contractor to US Federal Aviation Administration)

08/2010-05/2013 **Graduate Research Assistant** (Applied Cognition and Expertise), Department of Cognitive and Learning Sciences, Michigan Technological University, Houghton, Michigan, USA.

- 08/2008-08/2010 **Graduate Research Assistant** (Applied Cognition and Expertise), Department of Psychology, Florida State University, Tallahassee, Florida, USA.
- 08/2008-08/2009 **Graduate Research Assistant**, Center for Expert Performance, Learning Systems Institute, Florida State University, Tallahassee, Florida, USA.
- 08/2007-08/2008 **Graduate Research Assistant**, Florida Center for Research in Science, Technology, Engineering and Mathematics (FCR-STEM), Learning Systems Institute, Florida State University, Tallahassee, Florida, USA.
- 01/2007-08/2007 **Research Officer**, Cognitive Decision Research Group, La Trobe University, Bundoora, Victoria, Australia.
- 05/2006-12/2006 **Research Assistant**, Bushfire Cooperative Research Centre, La Trobe University, Bundoora, Victoria, Australia.
- 02/2006-05/2006 **Research Assistant**, Center for Cognitive Work and Safety Analysis, Defense Science & Technology Organization, Fishermans Bend, Victoria, Australia.

PUBLICATIONS

Submitted for Peer Review

Raisbeck, L., **Suss, J.**, Petushek, E., Diekfuss, J., & Ward, P. (2015). *Failure under stress: A kinematic analysis*. Manuscript submitted for publication.

Accepted/In Press

Suss, J., Vachon, F, Lafond, D., & Tremblay, S. (2015). Don't overlook the human! Applying the principles of cognitive systems engineering to the design of intelligent video surveillance systems. *Proceedings of the IEEE International Conference on Advanced Video and Signal based Surveillance (AVSS)*, 12, XXX-XXX.

Peer-reviewed Publications

Pelletier, S., **Suss, J.**, Vachon, F, & Tremblay, S. (2015). Atypical visual display for monitoring multiple CCTV feeds. *Proceedings of the Annual ACM Conference on Human Factors in Computing (CHI)*, 33, 1145–1150.

Ahlstrom, U., & **Suss, J.** (2015). Change blindness in pilot perception of METAR symbology. *International Journal of Industrial Ergonomics*, 46, 44–58.

Belling, P. K., **Suss, J.**, & Ward, P. (2015). The effect of time constraint on anticipation, decision-making, and option-generation in complex and dynamic environments. *Cognition, Technology & Work*, 17, 355–366.

Suss, J., & Ward, P. (2015). Predicting the future in perceptual-motor domains: Perceptual anticipation, option generation, and expertise. In J. L. Szalma, M. Scerbo, R. Parasuraman, P. A. Hancock, & R. R. Hoffman (Eds.), *The Cambridge handbook of applied perception research* (pp. 951–976). New York, NY: Cambridge University Press.

- Suss, J.**, Belling, P. K., & Ward, P. (2014). Use of cognitive task analysis to probe option-generation in law enforcement. *Proceedings of the Human Factors and Ergonomic Society Annual Meeting*, 58, 280–284.
- Belling, P. K., **Suss, J.**, & Ward, P. (2014). Advancing theory and application of cognitive research in sport: Using representative tasks to explain and predict skilled anticipation, decision-making and option-generation behavior. *Psychology of Sport & Exercise*. doi:10.1016/j.psychsport.2014.08.001
- Belling, P. K., **Suss, J.**, & Ward, P. (2014). Cognitive processes supporting recognition in complex and dynamic tasks. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 58, 290–294.
- McLennan, J., Strickland, R., Omodei, M., & **Suss, J.** (2014). Stress and wildland firefighter safety-related decisions and actions. In C. Owen (Ed.), *Human factors challenges in emergency management: Enhancing individual and team performance in fire and emergency services* (pp. 19–34). London, UK: Ashgate.
- Suss, J.**, & Ward, P. (2013). Investigating perceptual anticipation in a naturalistic task using a temporal occlusion paradigm: A method for determining optimal occlusion points. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 57, 304–308.
- McLennan, J., Strickland, R., Omodei, M., & **Suss, J.** (2013). Wildfire safety-related decisions and actions: Lessons from stress and performance research. *International Association of Wildland Fire Safety Summit Proceedings*, 12, 33–45.
- Suss, J.**, & Ward, P. (2012). Use of an option generation paradigm to investigate situation assessment and response selection in law enforcement. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 56, 297–301.
- Petushek, E., **Suss, J.**, Ward, P., & Roemer, K. (2012). The effects of attentional resource allocation and skill level on movement variability and performance during a handgun shooting task. *Journal of Sport and Exercise Psychology*, 34, S121–S122.
- Ward, P., **Suss, J.**, Eccles, D. W., Williams, A. M., & Harris, K. R. (2011). Skill-based differences in option generation in a complex task: A verbal protocol analysis. *Cognitive Processing*, 12, 289–300.
- McLennan, J., Elliott, G., Omodei, M., McNeill, I., Dunlop, P., & **Suss, J.** (2011). Bushfire survival-related decision making: What the stress and performance research literature tells us. In R. P. Thornton (Ed.), *Proceedings of the Bushfire CRC & AFAC 2011 Conference Science Day* (pp. 307–319). Melbourne, Australia: Bushfire Cooperative Research Center.
- Suss, J.**, & Ward, P. (2010). Skill-based differences in the cognitive mechanisms underlying failure under stress. *Human Factors and Ergonomics Society Annual Meeting Proceedings*, 53, 1062–1066.
- Ward, P., Harris, K. R., Eccles, D. W., **Suss, J.**, & Ehrlinger, J. (2010). Domain-general, domain-specific and study-related predictors of performance in Advanced Placement science. *Proceedings paper presented at the Annual Meeting of the American Education Research Association*, Denver, CO. 30 April–4 May, 2010.

- Ward, P., **Suss, J.**, & Basevitch, I. (2009). Expertise and expert performance-based training (ExPerT) in complex domains. *Technology, Instruction, Cognition and Learning*, 7, 121–146.
- McLennan, J., Birch, A., Cowlshaw, S., & **Suss, J.** (2007). Save that brigade! Recruiting and retaining fire service volunteers to protect your community. In J. Handmer & K. Haynes (Eds.), *Community bushfire safety* (pp. 157–168). Melbourne, Australia: CSIRO Publishing.

Technical Reports

- Ahlstrom, U., & **Suss, J.** (2014). *Now you see me, now you don't: Change blindness in pilot perception of weather symbology* (Report No. DOT/FAA/TC-14/16). Washington, DC: Federal Aviation Administration.
- Suss, J.** (2007). *Annotated bibliography summarising material related to fire service volunteering by people from non-english speaking backgrounds (NESB) and cultural and linguistic diversity (CALD) backgrounds* (Report 1:2007). Melbourne, Australia: Bushfire Cooperative Research Centre.
- McLennan, J., Birch, A., Cowlshaw, S., & **Suss, J.** (2007). *Retaining fire service volunteers* (AFAC Volunteer Management Sub-group Report No. 2007:2). Melbourne, Australia: Bushfire Cooperative Research Centre.

PRESENTATIONS

Professional Lectures

- Suss, J.** (2011, March). Failure under pressure: Is performance moderated by attentional focus and skill level? *Graduate School Colloquium*. Michigan Technological University, Houghton, Michigan, USA.
- Suss, J.** (2010, December). Skill-based differences in the cognitive mechanisms underlying failure under stress. *Applied Cognitive Science and Human Factors Brown Bag Seminar*. Michigan Technological University, Houghton, Michigan, USA.
- Suss, J.** (2010, April). Failure under pressure: Is performance moderated by attentional focus and skill level? *Department of Psychology Graduate Research Day*. Florida State University, Tallahassee, Florida, USA.
- Suss, J.** (2009, October). Shooting and attention: A research study. *High Liability Instructor Conference*. Florida Institute of Public Safety, Quincy, Florida, USA.

Poster Presentations

- Suss, J.** (2010, September). Skill-based differences in the cognitive mechanisms underlying failure under stress. *Capital Campaign*. Michigan Technological University, Houghton, Michigan, USA.

TEACHING EXPERIENCE

- 08/2015-12/2015 **Lecturer**, Department of Psychology, Wichita State University, Wichita, Kansas, USA.
Course:
 PSY322: Cognitive Psychology (Fall 2015)
- 08/2012-12/2012 **Lecturer**, Department of Cognitive and Learning Sciences, Michigan Technological University, Houghton, Michigan, USA.
Course:
 PSY4010: Cognitive Psychology (Fall 2012)
- 08/2010-05/2012 **Co-Lecturer**, Department of Cognitive and Learning Sciences, Michigan Technological University, Houghton, Michigan, USA.
Courses:
 PSY3850: Human Factors Psychology (Fall 2010, 2011)
 PSY3860: Human Performance (Spring 2011, 2012)
- 08/2009-08/2010 **Graduate Teaching Assistant**, Psychology Department, Florida State University, Tallahassee, Florida, USA.
Courses:
 EXP3604C: Cognitive Psychology Lab (Fall 2009, Spring/Summer 2010)

RECOGNITION, MERIT, & HONORS

- 2014 Certificate of Excellence, UX Leadership Development Workshop @ HFES 2104
- 2013 Graduate Research Colloquium Oral Presentation Award (1st place), Michigan Technological University
- 2013 Outstanding Teaching Award, Michigan Technological University
- 2012 Human Factors and Ergonomics Society Council of Technical Groups Student Travel Honorarium
- 2012 Summer Institute on Bounded Rationality, Max Planck Institute for Human Development, Berlin, Germany
- 2012 Outstanding Scholarship Award, Michigan Technological University
- 2011 Human Factors and Ergonomics Society Student Member with Honors Award
- 2011 Graduate Research Colloquium Oral Presentation Award (2nd place), Michigan Technological University
- 2010 Awarded membership of Psi Chi –The International Honor Society in Psychology
- 2009 Nominee, University Fellowship, Florida State University
- 2006 Honors degree in Psychology, La Trobe University
- 1997 Golden Key National Honor Society Scholarship, Deakin University
- 1997 Head of School Scholarship, Deakin University
- 1996-1997 Gordon Council Scholarship, Deakin University
- 1996 Melbourne Co-operative Bookshop Prize, Deakin University

PROFESSIONAL ACTIVITIES AND SERVICE

- 2012-2013 *Member*, Task Force on Impact of Federal Spending on the Human Factors and Ergonomics Society
- 2011-2013 *President*, Michigan Technological University Student Chapter of the Human Factors and Ergonomics Society
- 2011 *Member, Conference Organizing Committee*, NDM 2011: The 10th International Conference on Naturalistic Decision Making
- 2011 *Co-Organizer, Doctoral Consortium*, NDM 2011: The 10th International Conference on Naturalistic Decision Making
- 2010 *Volunteer Reviewer*, Human Factors and Ergonomics Society 54th Annual Meeting

REVIEWING ACTIVITY

Ergonomics: Ad hoc reviewer

Journal of Cognitive Engineering and Decision Making: Ad hoc reviewer

PROFESSIONAL MEMBERSHIP

Human Factors and Ergonomics Society (HFES)

American Psychological Association (APA) Division 21 (Applied Experimental and Engineering Psychology)