

Michael Young, Ph.D.
Scientist

Professional Profile

Dr. Young specializes in visual attention, divided attention, multitasking, complex skill training and human perception and cognition. He has experience in testing the effects of performing simultaneous visual and auditory tasks, learning complex skills, and the effects of stressful environments on processing information. His knowledge of these phenomena can lead to understanding issues relating to operating equipment and motor vehicles, determining the adequacy and response to warnings in various settings, and decision making in emergency situations in dynamic and complex environments.

Dr. Young has investigated attentional demands placed on radar operators and analyzed effects of training with relevant and irrelevant distractions, both of an auditory and visual nature. He has investigated the role of increasing the difficulty of initial task instruction to promote long-term retention of skills compared to conventional, easier training methods. He also has experience examining the behavioral and neuroscientific bases of motivation using functional magnetic resonance imaging (fMRI).

Prior to joining Exponent, Dr. Young attended the University of Colorado, where he specialized in cognitive psychology and wrote his thesis on complex sequence learning. During that time, he developed training methods for foreign language instruction and improving the reading ability of students learning English. His work in these areas can also inform solutions for creating warnings and safety information and establishing ideal learning environments for inexperienced individuals trying to acquire the skills to operate in stressful and information-rich situations.

Academic Credentials and Professional Honors

Ph.D., Psychology, University of Colorado, Boulder, 2010

M.A., Cognitive Psychology, University of Colorado, 2005

B.S., Biopsychology and Cognitive Science, University of Michigan, 1999

Publications

Young MD, Healy AF, Gonzalez C, Dutt V, Bourne LE, Jr. Effects of training with added difficulties on RADAR detection. *Applied Cognitive Psychology*, in press.

Young MD, Wilson ML, Healy AF. Improving reading skills for ESL learners using SoundSpel. In: *Bilinguals: Cognition, Education and Language Processing*. Columbus F (ed), Hauppauge, NY: Nova Science Publishers, 2010.

Best BJ, Gonzalez C, Young MD, Healy AF, Bourne LE, Jr. Modeling automaticity and strategy selection in dynamic visual detection. *Proceedings, 16th Conference on Behavior Representation in Modeling and Simulation, Simulation Interoperability Standards Organization*, pp. 3–11, Orlando, FL, 2007.

Jia G, Aaronson D, Young MD, Chen S, Wagner J. English morphosyntactic proficiency of native Mandarin, Russian and Spanish speakers. In: *Studies in Language Sciences*. Minami M, Kobayashi H, Nakayama M, Sirai H (eds), Vol. 4, Japan: Kurosio Publishers, 2003.

Jia G, Aaronson D, Young MD, Chen S. English morphosyntactic proficiency of native Mandarin, Russian and Spanish speakers. *Proceedings, 4th Annual Conference of the Japanese Society for Language Sciences*, pp.108–113, 2002.

Presentations and Posters

Young MD, Healy AF, Bourne LE, Jr. Artificial grammar learning: Retention and transfer. Poster presented at the 80th Annual Convention of the Rocky Mountain Psychological Association Meeting, Denver, CO, April 16, 2010.

Young MD, Healy AF, Bourne LE, Jr. Training and transfer of an artificial grammar. Poster presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA, November 20, 2009.

Young MD, Healy AF, Gonzalez C, Dutt V, Bourne LE, Jr. Effects of training with added relevant responses on RADAR detection. Poster presented at the 49th Annual Meeting of the Psychonomic Society, Chicago, IL, November 15, 2008.

Young MD, Wilson ML, Healy AF. Improving reading skills For ESL learners using SoundSpel. Poster presented at the 78th Annual Convention of the Rocky Mountain Psychological Association Meeting, Boise, ID, April 12, 2008.

Young MD, Healy AF, Gonzalez C, Bourne LE, Jr. The effects of training difficulty on RADAR detection. Poster to be presented at the joint meeting of the Experimental Psychology Society and the Psychonomic Society, Edinburgh, Scotland, July 4–7, 2007.

Young MD, Healy AF, Bourne LE, Jr. Learning French pronoun-verb pairs with contextual interference. Paper presented at the 75th Annual Convention of the Rocky Mountain Psychological Association, Phoenix, AZ, April 17, 2005.

Jia G, Aaronson D, Chen S, Young MD. The first and second language grammatical proficiency of Mandarin-English and Russian-English bilinguals. The 17th Biennial Meetings of International Society for the Study of Behavioral Development, Ottawa, Canada, 2002.

Jia G, Aaronson D, Young MD, Chen S. English morphosyntactic proficiency of native Mandarin, Russian and Spanish speakers. The 4th Annual Conference of the Japanese Society for Language Sciences, Tokyo, Japan, 2002.