Exponent®
Engineering & Scientific Consulting

Kristy Colling, Ph.D.

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Professional Profile

Dr. Colling is a cognitive psychologist with expertise in perception, attention, cognition, information processing, memory, and motor control. She has extensive experience in assessing the attention, perception and information processing of visual and tactile feedback, and memory that underlie motor control, specifically within highly trained behaviors (i.e., “muscle memory”).

Dr. Colling applies this knowledge to analyses of motor vehicle accidents, safety and warnings, and consumer decision-making. Her knowledge and experience have been applied to investigations of human performance issues in a variety of reactive avenues. She has experience in premises liability (e.g., slip, trip, and falls), product liability (i.e., warnings analysis, consumer product use and misuse, communication of risk and warnings compliance), and motor vehicle accident investigations including issues of visual perception, distractibility, risk appraisal, decision making, and Advanced Driver Assistance Systems (ADAS).

Dr. Colling has also worked on a number of proactive projects, incorporating elements of experimental design, data acquisition and analysis techniques, psychophysics, questionnaires, and observational techniques to conduct comprehensive evaluations of consumer behavior with a variety of products, including automotive environments and vehicle technologies (e.g., ADAS). In addition, she has conducted driving research in closed-course track, handling pad, and naturalistic open-road driving settings. The studies have assessed driver gaze, attention, and interaction with automated and non-automated driving systems, driver reactions and handling behavior in response to unexpected in-vehicle and out-of-vehicle events, and driver gear-shifting behaviors in situations where drivers are engaged in secondary tasks.

Prior to joining Exponent, Dr. Colling completed her Ph.D. at Vanderbilt University, where she studied cognitive and motor control topics related to automated (i.e., highly skilled, expert) behaviors. Projects included topics regarding the control of serial order in sequential processes as well as how conscious attention to, and nonconscious processing of, visual and tactile information affect performance, as well the source of errors in these domains.

Academic Credentials & Professional Honors

Ph.D., Psychology, Vanderbilt University, 2018

M.S., Psychology, University of Memphis, 2010

B.S., Psychology, University of Memphis, 2007

Licenses and Certifications

Certified English XL Tribometrist (CXLT)

Prior Experience

Post-Doctoral Fellow Applied Neuroscience, Integrated Neuroscience Services, 2020-2021

Associate Director of Research, C3 Research, 2019

Post-Doctoral Fellow, University of Central Florida, 2018

Senior Research Associate, Princeton University, 2016-2017

Publications

Colling KM, Nave-Blodgett JE, Yerkes BD, Lester BD. (2025). Organic and non-organic consumer knowledge, values, and information seeking behavior. Proceedings of the 69th HFES International Annual Meeting.

Snyder KM, Logan GD, Yamaguchi M. Watch what you type: The role of visual feedback from the screen and hands in skilled typewriting. Attention, Perception, & Psychophysics 2015; 77:282-292.

Snyder KM, Logan GD. The problem of serial order in skilled typing. Journal of Experimental Psychology: Human Perception and Performance 2014; 4:1697-1717.

Snyder KM, Ashitaka Y, Shimada H, Ulrich JE, Logan GD. What skilled typists don't know about the QWERTY keyboard. Attention, Perception, & Psychophysics 2014; 7:162-171.

Snyder KM, Logan GD. Monitoring-induced disruption in skilled typewriting. Journal of Experimental Psychology: Human Perception and Performance 2013; 39:1409-1420.

Tapp KM, Logan GD. Attention to the hands disrupts skilled typewriting: the role of vision in producing the disruption. Attention, Perception, & Psychophysics 2011; 73:2379-2383.

Snyder-Tapp K, Dale R. Dynamic competition and the cognitive bottleneck. In N. Taatgen & H. van Rijn (Eds.), Proceedings of the 31st Annual Meeting of the Cognitive Science Society. Austin, TX: Cognitive Science Society. 2009

Dale R, Roche J, Snyder K, McCall R. Exploring action dynamics as an index of paired-associate learning. PLoS ONE 2008; 3(3):e1728. doi:10.1371/journal.pone.0001728

Presentations

Snyder KM, Logan GD. Positional priming effects in rapid action sequences. Poster presented at the 54th Annual Meeting of the Psychonomic Society, Toronto, Ontario, Canada, 2013.

Snyder KM, Logan GD. How well do skilled typists know the QWERTY keyboard? Poster presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN, 2012.

Tapp K, Logan G. Explicit monitoring of implicit details disrupts skilled typewriting. Poster presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA, 2011.

Snyder-Tapp K, Dale R. Dynamic dual-task cognitive control. Poster presented at the 17th Annual Object Perception, Attention, & Memory Conference, Boston, MA, 2009.

Snyder-Tapp K, Dale R. Dynamic competition and the cognitive bottleneck. Poster presented at the 31st Annual Meeting of the Cognitive Science Society, Amersterdam, The Netherland, 2009.

Peer Reviews

Advances in Cognitive Psychology

Journal of Cognitive Neuroscience

Memory & Cognition