



Exponent[®]
Engineering & Scientific Consulting

Young Bui, Ph.D.

Senior Managing Scientist | Human Factors
Denver
+1-303-802-3408 | dbui@exponent.com

Professional Profile

Dr. Bui uses his experience related to human cognition to evaluate perceptual and decision-making issues that contribute to accidents. He has specialized expertise in assessing visibility and conspicuity issues, and has applied this knowledge to incidents involving automobiles, pedestrians, motorcycles, bicycles/scooters, and tractor-trailers.

He performs general assessments of roadway environments that include analyses of lighting, glare and sightline evaluations as they may relate to vehicle accidents, slip/trip-and-fall scenarios, and other premises liability claims. Dr. Bui is also active in research on various topics in human factors, including driver looking behavior, perception of roadway hazards, divided attention, and witness memory of events.

As a trained psychologist, Dr. Bui utilizes his education and expertise to assess the role of warnings and instructions in various accidents scenarios for both products and premises. He combines his knowledge of human behavior with his OSHA training to evaluate how the behavior of individuals may contribute to industrial and occupational accidents.

Additionally, Dr. Bui oversees projects employing various methodologies (human-subjects testing, inclusive literature reviews, quantitative injury and risk analyses), and has experience coordinating and carrying out large-scale usability testing of consumer products. He combines this experience with customized programming methods that leverage online platforms for various applications, including questionnaire surveys, experimental studies, and comprehension testing.

Dr. Bui received his Ph.D. from Washington University in St. Louis, where his research focused on how cognitive processes and decision making are influenced by individual limitations in age, attention, speed, experience, and memory. His work has addressed various topics regarding human behavior, including memory accuracy, visual-spatial learning, metacognition, and complex skill acquisition. Dr. Bui has also been extensively involved in the development and publishing of crowdsourcing techniques used to collect large-scale datasets, which has allowed researchers to supplement traditional laboratory methods with more cost- and time-efficient procedures.

Academic Credentials & Professional Honors

Ph.D., Psychology, Washington University in St. Louis, 2015

M.A., Psychology, Washington University in St. Louis, 2011

B.A., Psychology, University of California, Los Angeles (UCLA), 2008

Dissertation Fellowship Award, Washington University in St. Louis

Outstanding Teaching Assistant Award, Washington University in St. Louis

Graduate Fellowship Award, Washington University in St. Louis

Research Fellowship Award, University of California, Los Angeles

Licenses and Certifications

Certified English XL Tribometrist (CXLT)

OSHA #510 Occupational Safety And Health Standards For The Construction Industry

OSHA #511 Occupational Safety and Health Standards for General Industry

Academic Appointments

Instructor, Department of Psychology, Washington University in St. Louis

Professional Affiliations

The Psychonomic Society

International Association for Metacognition

Human Factors and Ergonomics Society (HFES)

Society of Automotive Engineers (SAE)

Publications

Crump & Bui (2019). Speeds of child cyclists. SAE Technical Paper 2019-01-0419, 2017, doi:10.4271/2019-01-0419.

Todd, Bui, Tavassoli, & Krauss (2017). Quantitative method for estimating driver eye height. Proceedings, 61st Annual Meeting of the Human Factors and Ergonomics Society, 61, 1443-1446.

Tavassoli, Perlmutter, Bui, Todd, et al. (2017). Development of a robust database for measuring human gaze behavior and performance during naturalistic driving. SAE Technical Paper 2017-01-1369, 2017, doi:10.4271/2017-01-1369.

Bui, Pyc, & Bailey (2017). When people's judgments of learning (JOLs) are extremely accurate at predicting subsequent recall: the "Displaced-JOL effect". *Memory*, 26, 771-783.

Storm & Bui (2016). Retrieval-practice task affects relationship between working memory capacity and retrieval-induced forgetting. *Memory*, 24, 1407-1418.

Storm & Bui (2016). Individual differences in mind wandering while reading predict lower rates of spontaneous transfer in an analogical reasoning task. *Journal of Learning and Individual Differences*, 51, 427-432.

Bui, Myerson, & Hale (2015). Demonstrating age-related declines in processing speed using online samples. *The Psychological Record*, 65, 649-655.

McDonough, Bui, Friedman, & Castel (2015). Retrieval monitoring is influenced by information value: The interplay between motivation and confidence on false memory. *Acta Psychologica*, 161, 7-17.

Bui & McDaniel (2015). Enhancing of learning in lecture note-taking: Outlining and illustrative diagrams. *Journal of Applied Research in Memory and Cognition*, 4, 129-135.

Nestojko, Bui, Kornell, & Bjork (2014). Expecting to teach enhances organization of knowledge in free recall of text passage. *Memory & Cognition*, 42, 1038-1048.

Bui & Myerson (2014). The role of working memory ability in lecture note-taking. *Journal of Learning and Individual Differences*, 33, 12-22.

Bui, Maddox, Zou, & Hale (2014). Examining the lag effect under incidental encoding: Contributions of semantic priming and reminding. *Quarterly Journal of Experimental Psychology*, 67, 2134-2148.

Bui, Friedman, McDonough, & Castel (2013). False memory and importance: Can we prioritize without consequence? *Memory & Cognition*, 41, 1012-1020.

Bui, Maddox, & Balota (2013). The roles of working memory and intervening task difficulty in determining the benefits of repetition. *Psychonomic Bulletin & Review*, 20, 341-347.

Bui, Myerson, & Hale (2013). Notetaking with computers: Exploring alternative strategies for improved recall. *Journal of Educational Psychology*, 105, 299-309.

Abstracts

Crump & Bui (2019). Speeds of child cyclists. Presented at the Annual Meeting of the Society of Automotive Engineers, Detroit, MI.

Todd, Bui, Tavassoli, & Krauss (2017). Quantitative method for estimating driver eye height. Proceedings, Presented at the 61st Annual Meeting of the Human Factors and Ergonomics Society, Austin, TX.

Tavassoli, Perlmutter, Bui, Todd, et al. (2017). Development of a robust database for measuring human gaze behavior and performance during naturalistic driving. Presented at the Annual Meeting of the Society of Automotive Engineers, Detroit, MI.

Bui, Hale, & Myerson (2014). Using Encoding Specificity to Assess the Nature of the Secondary Memory Component of Working Memory. Presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Bui, Pyc, & Bailey (2014). When people's judgments of learning (JOLs) are extremely accurate at predicting subsequent recall: The "Displaced-JOL Effect". Presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Flores, Bui, Lilienthal, Myerson, & Hale (2014). Age-Related Declines in Simple and Complex Visuospatial Tasks in Online Samples. Presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Maddox, Bui, & Hale (2014). Different Contributions of Encoding Variability and Reminding to the Benefit of Spacing in Recognition and Recall Testing. Presented at the 55th Annual Meeting of the Psychonomic Society, Long Beach, CA.

Bui & McDaniel (2014). Enhancing of learning in lecture note-taking: Outlining and illustrative diagrams. Presented at the 86th annual meeting of the Midwestern Psychological Association, Chicago, IL.

Flores, Bui, Myerson, & Hale (2014). Age-Related Cognitive Slowing in Online Samples. Presented at the

15th Biennial Cognitive Aging Conference, Atlanta, GA.

McDonough, Bui, & Castel (2014). Reducing False Memories Takes More Time with Age: Age-Related Differences in Value-Directed Processing. Presented at the 15th Biennial Cognitive Aging Conference, Atlanta, GA.

McDonough, Bui, Friedman, & Castel (2013). Initiation and Effectiveness of Retrieval Monitoring Depends on Information Value. Presented at the 54th Annual Meeting of the Psychonomic Society, Toronto, ON.

Maddox, Zou, Bui, & Hale (2012). The Influence of Incidental Encoding and Levels of Processing on the Spacing Effect. Presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.

Nestojko, Bui, & Roediger (2012). Thinking Like a Teacher Enhances Memory for Text Information. Presented at the 53rd Annual Meeting of the Psychonomic Society, Minneapolis, MN.

Nestojko, Bui, & Roediger (2012). How Expecting to Teach Improves Learning. Presented at the 84th annual meeting of the Midwestern Psychological Association, Chicago, IL.

Bui, Maddox, Zou, & Balota (2012). The Roles of Working Memory and Intervening Task Difficulty in Determining the Benefits of Repetition. Presented at the 24th Annual Meeting of the Association for Psychological Science, Chicago, IL.

Bui, McDonough, Friedman, Castel, & Myerson (2011). False Memory and Importance: Can We Prioritize Without Consequence? Presented at the 52nd Annual Meeting of the Psychonomic Society, Seattle, WA.

Bui & Storm (2011). Exploring the relationship between working memory capacity and retrieval-induced forgetting. Presented at the 23rd Annual Meeting of the Association for Psychological Science, Washington, DC.

Bui, Hale, & Myerson (2010). Note-taking Strategies: Combining Production and Levels-of-processing Effect. Presented at the 51st Annual Meeting of the Psychonomic Society, St. Louis, MO.

Bui, Hale, & Myerson (2010). Note-taking strategies and modalities: Size matters for test performance. Presented at the 82nd annual meeting of the Midwestern Psychological Association, Chicago, IL.

Nestojko, Bjork, Bui, & Kornell (2010). Preparing to Teach—Without Actually Teaching—Improves Organization of Recall. Presented at the 80th annual meeting of the Rocky Mountain Psychological Association, Denver, CO.

Nestojko, Bui, Kornell, & Bjork (2009). Preparing to Teach Improves the Processing and Retention of Information. Presented at the 50th Annual Meeting of the Psychonomic Society, Boston, MA.

Nestojko, Bui, Kornell, & Bjork (2009). The Cognitive Costs and Benefits of Preparing to Teach. Presented at the 89th annual meeting of the Western Psychological Association, Portland, OR.

Advisory Appointments

Instructor, Department of Psychology, Washington University in St. Louis

Peer Reviews

Accident Analysis & Prevention

Applied Cognitive Psychology

Contemporary Education Psychology

Experiment Psychology

International Journal of Education in Mathematics, Science, and Technology

Journal of Computer Assisted Learning

Journal of Educational Psychology

Journal of Experimental Child Psychology

Journal of Memory and Language

Journal of Neuropsychology

Memory & Cognition

PLoS ONE

Psychology Learning & Teaching Journal

Reading & Writing