

## Expert Witness CV - Publications Appendix

Pulled from the public Google Scholar profile of Michael W. Boyce. Metrics as of June 7, 2026: 1,154 citations | h-index 14 | i10-index 23.

### Publications and proceedings (newest first)

- Virtual Reality Interprofessional Simulation Education to Improve Teamwork and the Culture of Safety in the Emergency Department - Vora, Paull, Thomas, Roncallo, Liebhardt, Boyce, et al. - Proc. Intl. Symposium on Human Factors and Ergonomics in Health Care, 2025
- Formative evaluation of an emergency department clinical decision support system for agitation symptoms: a study protocol - Wong, Nath, Shah, Kumar, Brinker, Faustino, Boyce, et al. - BMJ Open 14(2), 2024
- Educational and personal impacts of the COVID-19 pandemic on emergency medicine resident physicians: a qualitative study - Fults, Gerwin, Boyce, Joseph, Wong, Evans - BMC Medical Education 24(1), 2024
- A human factors engineering approach to improving hand hygiene quality - Boyce, Mathew, Roberts, Aniskiewicz, Krechevsky, et al. - Human Factors in Healthcare 6, 2024
- NEAT: Nurse Effort Assessment Tool - Human Factors Considerations in Designing for Appropriate Staffing - Good, Boyce, Evans, Sevilla - Proc. HFES Annual Meeting 68(1), 2024
- HRVEST: a novel data solution for using wearable smart technology to measure physiologic stress variables during a randomized clinical trial - Gerwin, de Oliveira Almeida, Boyce, Joseph, Wong, et al. - Frontiers in Computer Science 6, 2024
- Use of an augmented reality sand table for satellite remote sensing education - O'Banion, Lewis, Boyce, Laughlin, Majkovicz - Journal of Geography in Higher Education 47(4), 2023
- Enhancing military training using extended reality: A study of military tactics comprehension - Boyce, Thomson, Cartwright, Feltner, Stainrod, Flynn, et al. - Frontiers in Virtual Reality 3, 2022 (48 citations)
- The tactical considerations of augmented and mixed reality implementation - Kallberg, Beitelman, Mitsuoka, et al. (with Boyce) - Military Review 662, 2022 (Spanish translation also published)
- Evaluating mixed reality and tablet technologies in military planning - Guzman, Deresky, Taylor, Wimmer, Momen, Tossell, et al. (with Boyce) - IEEE SIEDS, 2022
- Identifying Simulation Requirements to Support CEMA Training - Schneider, Jerald, Chick, Anderson, Mittal, Boyce - Simulation Innovation Workshop, 2021
- Assessing Cognitive Load and Usability for CEMA Training Using COBWebS - Rockman, O'Shea, Thomson, Boyce, Vey, et al. - Simulation Innovation Workshop, 2020
- Physiological Versus Self-Report Measures of Arousal During Tactical Training Involving a Synthetic Topographic Environment - Boyce, Stainrod, Pyke - 2020
- Evaluating immersive visualization technology for use in geospatial science education - O'Banion, Majkovicz, Boyce, Wright, Oxendine, et al. - Surveying and Land Information Science 79(1), 2020
- The impact of surface projection on military tactics comprehension - Boyce, Rowan, Shorter, Moss, Amburn, Garneau, et al. - Military Psychology 31(1), 2019 (26 citations)
- Characterizing the cognitive impact of tangible augmented reality - Boyce, Gardony, Shorter, Horner, Stainrod, Flynn, et al. - HCI International, 2019
- Augmented reality sandtable (ARES) impacts on learning - Hale, Campbell, Riley, Boyce, Amburn - Proc. HFES Annual Meeting 63(1), 2019

- Utilizing the Generalized Intelligent Framework for Tutoring (GIFT) for Human Factors Education - Sinatra, Goldberg, Boyce - Proc. HFES Annual Meeting 63(1), 2019
- Trust in Synthetic Training Environments: Applications for Military Soldiers - Boyce, Rovira, Rea, Rengel, Emezie, Ackerman, Knott - IADIS Interfaces and HCI, 2019
- The Motivational Assessment Tool (MAT) Development and Validation Study - Lameier, Reinerman-Jones, Matthews, Biddle, Boyce - Intl. Conf. on Augmented Cognition, 2018
- Motivational assessment tool (MAT): Enabling personalized learning to enhance motivation - Lameier, Reinerman-Jones, Matthews, Biddle, Boyce - Intl. Conf. on Intelligent Tutoring Systems, 2018
- Mitigating skill decay in military instruction and enemy analysis via GIFT - Boyce, DeFalco, Davis, Kober, Goldberg - Intl. Conf. on Augmented Cognition, 2018
- Experiential Intelligent Tutoring: Using the Environment to Contextualize the Didactic - Goldberg, Boyce - Intl. Conf. on Augmented Cognition, 2018
- The augmented reality sandtable (ARES) research strategy - Garneau, Boyce, Shorter, Vey, Amburn - 2018
- Developing the GIFT Event Report Tool to Support Experimentation for Teams - Boyce, Sinatra, Gilbert, Sottolare - Design Recommendations for Intelligent Tutoring Systems Vol. 6, 2018
- Personality: A key to Motivating our Learners - Biddle, Lameier, Reinerman-Jones, Matthews, Boyce - GIFT Users Symposium, 2018
- Perceptual-cognitive training improves cross-cultural communication in a cadet population - Folsom-Kovarik, Boyce, Thomson - GIFT Users Symposium, 2018
- Towards validating a Mission Command Team Training Model in GIFT for Military Populations - DeFalco, Davis, Boyce, Kober, Goldberg - GIFT Users Symposium, 2018
- Design of instructions for evacuating disabled adults - Boyce, Smither, Fisher, Hancock - Applied Ergonomics 58, 2017 (24 citations)
- Adaptive training across simulations in support of a crawl-walk-run model of interaction - Goldberg, Davis, Riley, Boyce - Intl. Conf. on Augmented Cognition, 2017
- Using assessment to provide application in human factors engineering to USMA cadets - Boyce, Rowan, Baity, Yoshino - Intl. Conf. on Augmented Cognition, 2017
- Developing a pattern recognition structure to tailor mid-lesson feedback - Folsom-Kovarik, Boyce - GIFT Users Symposium, 2017
- Establishing ground truth on psychophysiological models for training machine learning algorithms - Brawner, Boyce - Intl. Conf. on Augmented Cognition, 2017
- Informing the long-term learner model: motivating the adult learner (Phase 1) - Reinerman-Jones, Lameier, Biddle, Boyce - 2017
- Assessing motivation to individualize reinforcement and reinforcers for an intelligent tutor - Lameier, Reinerman-Jones, Boyce, Biddle - Intl. Conf. on Augmented Cognition, 2017
- Motivating Individual Difference in an Intelligent Tutoring System - Reinerman-Jones, Lameier, Biddle, Boyce - Design Recommendations for Intelligent Tutoring Systems Vol. 5, 2017
- Effect of Topography on Learning Military Tactics - Integration of GIFT and ARES - Boyce, Reyes, Cruz, Amburn, Goldberg, Moss, et al. - 2016 (14 citations)
- Electrodermal activity analysis for training of military tactics - Boyce, Goldberg, Moss - Proc. HFES Annual Meeting 60(1), 2016
- Interpretative phenomenological analysis for military tactics instruction - Boyce, Cruz, Sottolare - Advances in Human Factors, Business Management, Training and Education (Springer), 2016
- Elements of adaptive instruction for training and education - Sottolare, Boyce - Intl. Conf. on Augmented Cognition, 2016

- Defining the Ill-Defined: From Abstract Principles to Applied Pedagogy - Nye, Boyce, Sottilare - Design Recommendations for Intelligent Tutoring Systems Vol. 4, 2016
- Effects of equipment on model development for adaptive marksmanship trainers - Amburn, Goldberg, Chen, Ragusa, Boyce, Shorter - I/ITSEC, 2016
- From Concept to Publication - A Successful Application of Using GIFT from the Ground Up - Boyce - GIFT Users Symposium, 2016
- Effects of agent transparency on operator trust - Boyce, Chen, Selkowitz, Lakhmani - ACM/IEEE Intl. Conf. on Human-Robot Interaction, 2015 (90 citations)
- The effects of agent transparency on human interaction with an autonomous robotic agent - Selkowitz, Lakhmani, Chen, Boyce - Proc. HFES Annual Meeting 59(1), 2015 (44 citations)
- The augmented reality sandtable (ARES) - Amburn, Vey, Boyce, Mize - ARL-SR-0340, 2015 (40+ citations across versions)
- The effects of information level on human-agent interaction for route planning - Wright, Chen, Barnes, Boyce - Proc. HFES Annual Meeting 59(1), 2015
- Agent transparency for an autonomous squad member - Boyce, Chen, Selkowitz, Lakhmani - 2015
- Domain Modeling for Adaptive Training and Education in Support of the US Army Learning Model - Sottilare, Sinatra, Boyce, Graesser - 2015
- Work Domain Analysis for Ecological Interface Design of Tangible Interfaces - Boyce, Sottilare, Goldberg, Amburn - I/ITSEC, 2015
- Expanding Authoring Tools to Support Psychomotor Training Beyond the Desktop - Sottilare, Ososky, Boyce - Design Recommendations for Intelligent Tutoring Systems, 2015
- Situation awareness-based agent transparency - Chen, Procci, Boyce, Wright, Garcia, Barnes - ARL-TR-6905, 2014 (419+ citations across versions)
- Assessment Of Instructional Presentation For Emergency Evacuation Assistive Technology - Boyce - 2014
- Resource consumption and simulator driving performance using adaptive controls - Boyce, Fekety, Smither - Assistive Technology 25(3), 2013 (15 citations)
- Your wait time from this point will be... practices for designing amusement park queues - Ledbetter, Mohamed-Ameen, Oglesby, Boyce - Ergonomics in Design 21(2), 2013 (20 citations)
- Incorporating Human Systems Integration into the Evacuation of Individuals with Disabilities - Boyce, Smither - Advances in Human Aspects of Healthcare, 2012
- The interpenetration of mind and machine - Boyce, Hancock - Proc. HFES Annual Meeting 56(1), 2012
- Examining the impact of age and multitasking on motorcycle conspicuity - Ledbetter, Boyce, Fekety, Sawyer, Smither - Work 41(S1), 2012
- Human performance in cybersecurity: a research agenda - Boyce, Duma, Hettinger, Malone, Wilson, et al. - Proc. HFES Annual Meeting 55(1), 2011 (101 citations)
- RealWheels: Gesture-based wheelchair mobility for brain-computer interfaces - Boyce, Mehta, Gilliland, Jackson - 2011
- Differences in Speech Recognition Use on the Internet - Boyce - RESNA Annual Conference, Student Design Competition, 2010
- Astrowheelie: A Nintendo Wii based Fitness System for Manual Wheelchairs - Hickok, O'Neill, Zambre, Boyce - 2008
- Effect of dynamic camera control on spatial reasoning in 3D spaces - Nnadi, Fischer, Boyce, Nitsche - ACM SIGGRAPH Symposium on Video Games, 2008 (12 citations)