

# Winston R. Sieck

#### **Education**

University of Michigan, Ph.D., Cognitive Psychology, 2000. University of Michigan, M.A., Statistics, 1995. University of Pittsburgh, B.S., Psychology (Summa Cum Laude), 1992.

#### **Professional Positions**

President and Principal Scientist, Global Cognition, Newark, DE
Sr. Scientist/Pr. Scientist, Applied Research Associates, Fairborn, OH
Research Associate/Sr. Research Associate, Klein Associates Inc, Fairborn, OH
Post-Doctoral Scholar, Quantitative Psychology, Ohio State University
Research Fellow, Cognitive Psychology, University of Michigan
Visiting Lecturer, Statistics and Management Science, University of Michigan
Business School
Graduate Research Assistant, Judgment and Decision Laboratory, University of
Michigan
Data Analyst, Pittsburgh Youth Study, Western Psychiatric Institute and Clinic,
University of Pittsburgh

# **Research Specialties**

Applied cognitive psychology, behavioral science, data science, competency modeling & assessment, decision making, metacognition, learning & instruction, culture & cognition.

## Awards, Fellowships, and Honors

- Foreign Language Gains from ARSOF Instructional Programs, ARSOF/LREC, 2020-2023 (PI)
- Regional Expertise Assessment Methods Study, ARSOF/LREC, 2019 (Co-PI)
- Determining Levels of Cultural Competence, DLNSEO, 2016 (Co-PI)
- Cultural Competency Model Validation, DLNSEO, 2013
- Neural Correlates of Cross-Cultural Adaptation, ONR/Johns Hopkins, 2012
- Aggregative Contingency Estimation System, IARPA, 2011
- Applied Research Associates 2010 Business Development Award
- Culture Education and Training, DLO, 2010 (PI)
- Human Social Culture Behavior Modeling, ONR OSD, 2010 (PI)
- Applied Research Associates 2009 Business Development Award
- Human Social Culture Behavior Modeling, CTTSO OSD, 2009 (PI)
- Decision Vulnerability Models, Air Force Research Labs, 2008 (PI)
- Advanced Decision Architectures CTA RT, Army Research Labs, 2007 (PI)
- International Technology Alliance, US ARL/UK MoD, 2006-2010 (PI)
- Advanced Decision Architectures CTA RT, Army Research Labs, 2006 (PI)
- Small Business Innovative Research award, Air Force Research Labs, 2005-2007 (PI)

- Small Business Innovative Research award, Air Force Research Labs, 2004 (PI)
- Small Business Innovative Research award, Office of Naval Research, 2004 (PI)
- Research Grant, National Science Foundation, 2000 (Co-PI with Frank Yates).
- Department of Psychology Thesis Grant, University of Michigan, 1999.
- Rackham Dissertation Fellowship, University of Michigan, 1999.
- Regents' Fellowship, University of Michigan, 1993 (2 year award).
- Clyde Hamilton Coombs Scholarship in Mathematical Psychology, University of Michigan, 1993.
- Winner of the Fourth Annual Psychology Undergraduate Research Paper prize, University of Pittsburgh, 1992.
- Recognition as a University Scholar, University of Pittsburgh, 1992.
- College of Arts and Sciences Alumni Merit Award, University of Pittsburgh, 1991.

# **Professional Society Memberships**

Association for Psychological Science Psychonomic Society Society for Industrial and Organizational Psychology Society for Judgment and Decision Making

#### **Review Activities**

Journals: Behavioral Sciences of Terrorism and Political Aggression; International Journal of Forecasting; International Journal of Intercultural Relations; International Journal of Psychology, Journal of Behavioral Decision Making; Journal of Cross-Cultural Psychology; Journal of Experimental Psychology: Learning, Memory, and Cognition; Journal of Gerontology; Management Science; Memory; Memory & Cognition; Organizational Behavior and Human Decision Processes; Psychological Review; Quarterly Journal of Experimental Psychology A: Human Experimental Psychology

Funding agencies: Air Force Office of Scientific Research; National Science Foundation

### **Other Professional Activities**

2020 -	US Global Leadership Coalition, member Delaware Advisory Committee
2004 - 2011	Group Leader, <i>Cognitive Science</i> , ARA. Responsible for marketing and management to support a 5-person research group
2006 - 2009	Project Champion, <i>Cultural Analysis</i> , US/UK International Technology Alliance. Managed a team of PIs from Boeing, Columbia U., Cranfield U., IBM/UK, and Klein Associates.
2005	Masters Thesis Committee, Department of Psychology, Wake Forest University, "Understanding Risk Perception: Proportional Thinking Theory," Emily Hodell.
1998	Graduate Student Instructor, Department of Psychology, University of Michigan, Cognitive psychology.

1997 Research Assistant, Medical Learning Research Center, University of Michigan. Trained physicians to use medical decision support systems. 1997 Graduate Student Instructor, Department of Psychology, University of Michigan, Research methods in psychology. 1996 Graduate Student Instructor, Department of Statistics, University of Michigan, Introductory statistics for psychology graduate students. 1995 Consultant, Honeywell Corporation, Micro Switch Division. Analyzed customer satisfaction survey data; recommended target areas for company improvement. 1995 Graduate Student Instructor, Department of Psychology, University of Michigan, Introductory statistics for psychology majors. 1992-1993 Data Analyst, Pittsburgh Youth Study, University of Pittsburgh. Analyzed longitudinal survey data on the development of antisocial and delinquent behavior. Data/Systems Analyst, Psychology Research Department, Western Pennsylvania 1991-1993 School for Blind Children. Analyzed data regarding abuse and neglect of multiply handicapped children. 1990-1992 Student Academic Counselor, Learning Skills Center, University of Pittsburgh,

### **Books**

Rasmussen, L., & Sieck, W. (2020). Save your ammo: Working across cultures for national security. Global Cognition.

Taught learning skills in both workshop and tutorial settings.

Rasmussen, L. J., & Sieck, W. R. (2010). What happens after the 3<sup>rd</sup> cup of tea? A cultural sensemaking guide to Afghanistan. US DoD.

### **Publications**

- Sieck, W. R. (2017). Metacognition in intercultural communication. In Y. Y. Kim (Ed.), *International Encyclopedia of Intercultural Communication*. John Wiley & Sons.
- Sieck, W. R., Rasmussen, L. J., & Duran, J. D. (2016). Considerations and best practices for developing cultural competency models in applied work domains. In J. L. Wildman, R. L. Griffith, & B. K. Armon (Eds.), *Critical Issues in Cross Cultural Management* (pp. 33-52). Switzerland: Springer.
- Rasmussen, L. J., & Sieck, W. R. (2015). Culture-general competence: Evidence from a cognitive field study of professionals who work in many cultures. *International Journal of Intercultural Relations*, 14(3), 75-90.

- Sieck, W. R. (2015). Training for sociocultural forecasting. In J. D. Egeth, G. L. Klein, & D. Schmorrow (Eds.), *Sociocultural Behavior Sensemaking: State of the Art in Understanding the Operational Environment* (pp. 339-356). McLean, VA: MITRE.
- Rasmussen, L. J., & Sieck, W. R. (2014). Ready, set, go anywhere: A culture-general competence model for the DoD. *Military Intelligence Professional Bulletin*, July-September, 47-52.
- Rasmussen, L. J., Sieck, W. R., & Hoffman, R. (2013). Cultural knowledge for intelligence analysts: Expertise in cultural sensemaking. *American Intelligence Journal*, **31**, 28-37.
- Sieck, W. R., Smith, J. L., & Rasmussen, L. J. (2013). Metacognitive strategies for making sense of cross-cultural encounters. *Journal of Cross-Cultural Psychology*, **44**, 1007-1023.
- Sieck, W. R., Smith, J. L., Grome, A. P., Veinott, E., & Mueller, S. T. (2013). Violent and peaceful crowd reactions in the Middle East: Cultural experiences and expectations. *Behavioral Sciences of Terrorism and Political Aggression*, **5**(1), 20-44.
- Rasmussen, L. J., & Sieck, W. R. (2012). Metacognitive underpinnings of 3C development. In D. Schmorrow & D. Nicholson (Eds.), *Advances in Design for Cross-Cultural Activities 1* (pp. 332-341). Boca Raton: CRC Press / Taylor & Francis, Ltd.
- Rasmussen, L. J., & Sieck, W. R. (2012). Strategies for developing and practicing cross-cultural expertise in the military. *Military Review*, Mar-Apr, 71-80.
- Sieck, W. R. (2011). A cultural models approach for investigating the cognitive basis of terrorism. *Journal of Terrorism Research*, **2**(1), 3-15.
- Sieck, W. R., Grome, A. P., Smith, J., & Rababy, D. A. (2010). Expert cultural sensemaking in the management of Middle Eastern crowds. In K. L. Mosier & U. M. Fischer (Eds.), *Informed by Knowledge: Expert Performance in Complex Situations*. Taylor and Francis.
- Sieck, W. R. (2010). Cultural network analysis: Method and application. In D. Schmorrow & D. Nicholson (Eds.), *Advances in Cross-Cultural Decision Making*, (pp. 260-269). Boca Raton: CRC Press / Taylor & Francis, Ltd.
- Rasmussen, L. J., Sieck, W. R., & Osland, J. (2010). Using cultural models of decision making to assess and develop cultural sensemaking competence. In D. Schmorrow & D. Nicholson (Eds.), *Advances in Cross-Cultural Decision Making*, Boca Raton: CRC Press / Taylor & Francis, Ltd.
- Yates, J. F., Ji, L.-J., Oka, T., Lee, J.-W., Shinotsuka, H., & Sieck, W. R. (2010). Indecisiveness and culture: Incidence, values, and thoroughness. *Journal of Cross-Cultural Psychology*, **41**, 428-444.

- Sieck, W. R., Rasmussen, L. J., & Smart, P. (2010). Cultural network analysis: A cognitive approach to cultural modeling. In D. Verma (Ed.), *Network Science for Military Coalition Operations: Information Exchange and Interaction* (pp. 237-255). Hershey, PA: IGI Global.
- Karat, J., Sieck, W., Norman, T. J., Karat, C.-M., Brodie, C., Rasmussen, L., & Sycara, K. (2010). A model for culturally adaptive policy management in ad hoc collaborative contexts. In D. Verma (Ed.), *Network Science for Military Coalition Operations: Information Exchange and Interaction* (pp. 174-190). Hershey, PA: IGI Global.
- Rasmussen, L. J., Sieck, W. R., & Smart, P. (2009). What is a good plan? Cultural variations in expert planners' concepts of plan quality. *Journal of Cognitive Engineering & Decision Making*, **3**, 228-249.
- Klein, G., Veinott, E. S., & Sieck, W. R. (2009). Advancing our understanding of battlefield decision making. In P. McDermott & L. Allender (Eds.), *Advanced Decision Architectures for the Warfighter: Foundations and Technology* (pp. 325-340). Aberdeen, MD: ARL.
- Mueller, S. T., & Sieck, W. R. (2009). The grammar of society: The nature and dynamics of social norms (book review). *Journal of Behavioral Decision Making*, **22**, 209-211.
- Merkle, E. C., Van Zandt, T., & Sieck, W. R. (2008). Rejoinder: Error in confidence judgments. *Journal of Behavioral Decision Making*, **21**, 453-456.
- Merkle, E. C., Sieck, W. R., & Van Zandt, T. (2008). Response error and processing biases in confidence judgment. *Journal of Behavioral Decision Making*, **21**, 428-448.
- McHugh, A. P., Smith, J., & Sieck, W. R. (2008). Cultural variations in mental models of collaborative decision making. In J. M. C. Schraagen, L. Militello, T. Ormerod, & R. Lipshitz (Eds). *Macrocognition and Naturalistic Decision Making*. Aldershot, UK: Ashgate Publishing Limited.
- Preece, A., & Sieck, W. R. (2007). The international technology alliance in network and information sciences. *IEEE: Intelligent Systems*, **22**(5), 18-19.
- Sieck, W. R., Merkle, E. C., & Van Zandt, T. (2007). Option fixation: A cognitive contributor to overconfidence. *Organizational Behavior and Human Decision Processes*, **103**, 68-83.
- Sieck, W. R. (2007). Theoretical and practical value of heuristics and biases. *Society for Judgment and Decision Making Newsletter*, **26**, 10-13.
- Sieck, W. R., & Klein, G. (2007). Decision Making. In F. T. Durso (Ed.), *Handbook of Applied Cognition*, 2<sup>nd</sup> Edition. Wiley.
- Sieck, W. R., & Arkes, H. R. (2005). The recalcitrance of overconfidence and its contribution to decision aid neglect. *Journal of Behavioral Decision Making*, **18**, 29-53.

- Phillips, J. K., Klein, G., & Sieck, W. R. (2004). Expertise in judgment and decision making: A case for training intuitive decision skills. In D. J. Koehler & N. Harvey (Eds.), *Blackwell Handbook of Judgment and Decision Making*.
- Jones, M., & Sieck, W. R. (2003). Learning myopia: An adaptive recency effect in category learning. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **29**, 626-640.
- Sieck, W. R. (2003). Effects of choice and relative-frequency elicitation on overconfidence: Further tests of an exemplar-retrieval model. *Journal of Behavioral Decision Making*, **16**, 127-145.
- Stone, E. R, Sieck, W. R., Bull, B. E., Yates, J. F., Parks, S. C., & Rush, C. J. (2003). Foreground:Background Salience: Explaining the effects of graphical displays on risk avoidance. *Organizational Behavior and Human Decision Processes*, **90**, 19-36.
- Yates, J. F., Lee, J.-W., Sieck, W. R., Choi, I., & Price, P. C. (2002). Probability judgment across cultures. In T. Gilovich, D. Griffin, & D. Kahneman (Eds.), *Heuristics and Biases: The Psychology of Intuitive Judgment*. Cambridge University Press.
- Sieck, W. R., & Yates, J. F. (2001). Overconfidence effects in category learning: A comparison of connectionist and exemplar memory models. *Journal of Experimental Psychology: Learning, Memory, and Cognition*, **27**, 1003-1021.
- Sieck, W. R., Quinn, C. N., & Schooler, J. W. (1999). Justification effects on the judgment of analogy. *Memory & Cognition*, **27**, 844-855.
- Yates, J. F., Lee, J., Shinotsuka, H., Patalano, A. L., & Sieck, W. R. (1998). Cross-cultural variations in probability accuracy: Beyond general knowledge overconfidence? *Organizational Behavior and Human Decision Processes*, **74**, 89-117.
- Sieck, W., & Yates, J. F. (1997). Exposition effects on decision making: Choice and confidence in choice. *Organizational Behavior and Human Decision Processes*, **70**, 207-219.
- Ammerman, R. T., Hersen, M., Van Hasselt, V. B., Lubetsky, M. J., & Sieck, W. R. (1994). Maltreatment in psychiatrically hospitalized children and adolescents with developmental disabilities: Prevalence and correlates. *Journal of the American Academy of Child and Adolescent Psychiatry*, **33**, 567-576.

# **Technical Reports**

Sieck, W. R. (2023). Foreign language gains of soldiers in the ARSOF LREC program: Covid-19 time period and training type effects. Global Cognition.

- Rasmussen, L. J., & Sieck, W. R. (2023). *Adaptive Readiness for Culture (ARC) observation guide: Experimental validation pilot study for 1st SFC(A)*. Global Cognition.
- Sieck, W. R., & Rasmussen, L. J. (2022). Foreign language gains of soldiers in the ARSOF LREC program: Analysis of 1st SFC Units. Global Cognition.
- Rasmussen, L. J., & Sieck, W. R. (2022). *Adaptive Readiness for Culture (ARC) observation guide validation study for 1st SFC(A)*. Global Cognition.
- Sieck, W. R. (2022). Foreign language gains of soldiers in the ARSOF LREC program: Analysis of immersive, online, and classroom training events. Global Cognition.
- Sieck, W. R., & Rasmussen, L. J. (2021). Foreign language gains of ARSOF soldiers in the LET / OLE program. Global Cognition.
- Rasmussen, L. J., Shah, C. S., Duran, J. L., & Sieck, W. R. (2021). *Development of Regional Expertise and Cultural KSAs at 1st SFC (A)*. Global Cognition.
- Rasmussen, L. J., Duran, J. L., & Sieck, W. R. (2020). *1st Special Forces Command (A) regional expertise assessment methods study*. Global Cognition.
- Sieck, W. R., Rasmussen, L. J., & Duran, J. L. (2019). Mastery levels to support the education and training of general cultural competence. Global Cognition.
- Duran, J. L. Rasmussen, L. J., & Sieck, W. R. (2018). Review and analysis of the SWEG (A) LREC program of instruction. Global Cognition.
- Rasmussen, L. J., Sieck, W. R., Duran, J. L. (2016). A model of culture-general competence for education and training: Validation across services and key specialties. Global Cognition.
- Warnaar, D. B., Merkle, E. C., Steyvers, M., Wallsten, T. S., Stone, E. R., Budescu, D. V., Sieck, W. R., Arkes, H. R., Davis-Stober, C., Argenta, C. F., Shin, Y., & Carter, J. N. (2013). *The aggregative contingent estimation system*. (Technical Report IARPA-D11-PC20059), Raleigh, NC: Applied Research Associates.
- Sieck, W. R., Penta, A., Smart, P., Rababy, D. A., Smith, J. L., Marcon, J. (2012). *Extremist ideological influences on terrorist decision frameworks*. (Technical Report N00014-10-C-0078-A005). Fairborn, OH: Cognitive Solutions Division of ARA.
- Rasmussen, L. J., Sieck, W. R., Crandall, B., Simpkins, B., and Smith, J. (2011). *Data collection and analysis for a cross-cultural competence model*. (Technical Report DLO GS-10F-0298K). Fairborn, OH: Cognitive Solutions Division of ARA.
- Sieck, W. R., Smith, J. L., Simpkins, B. G., Rababy, D. A., Medawar, F., Bennett, K., & Shiflet, C. (2011). Extremist ideological influences on metacognition: Beliefs that discriminate between moderate and terrorist decision frameworks. (Technical Report N00014-10-C-0078-A001). Fairborn, OH: Cognitive Solutions Division of ARA.

- Sieck, W. R., Rasmussen, L. J., Smith, J. L., & Kakar, R. U. (2010). *Honor and integrity in Afghan decision making: Fundamental Afghan values within contexts*. (Technical Report W91CRB-09-C-0028c). Fairborn, OH: Klein Associates Division of ARA.
- Rasmussen, L. J., Sieck, W. R., Grome, A. P., & Simpkins, B. (2009). *Cultural Sensemaking:*Competence assessment and learning objectives for new leaders in the Marine Corps.

  (Technical Report W91CRB-09-C-0028b). Fairborn, OH: Klein Associates Division of ARA.
- Smith, J. L., Weaver, E. A., Sieck, W. R., & Sticha, P. J. (2009). Cognitive Challenges in Behavioral Influences Analysis and Recommendations for the Development of Decision Vulnerability Models (Technical Report FA8650-04-D-6405-TO33). Fairborn, OH: Klein Associates Division of ARA.
- Rasmussen, L. J., Grome, A. P., Crandall, B. W., & Sieck, W. R. (2009). *The Puzzling Afghan: Making Sense of Afghan Interactions*. (Technical Report W91CRB-09-C-0028a). Fairborn, OH: Klein Associates Division of ARA.
- Sieck, W. R., Grome, A., Smith, J. L., Scott, R., & Hillegas, A. (2008). Designing Risk Communications by Characterizing Mental Models: A Methodology and Application to Nuclear Terrorism. (Technical Report DTRA0102D0066). Fairborn, OH: Klein Associates Division of ARA.
- Weaver, E. A., Sieck, W. R., Sticha, P. J., Veinott, E. S. (2008). A State of the Art Literature Review to Support Decision Vulnerability Models (Technical Report FA8650-04-D-6405-TO25). Fairborn, OH: Klein Associates Division of ARA.
- Sieck, W. R., Smith, J. L., McHugh, A. P., Veinott, E., & Mueller, S. T. (2007). *Crowd Cultures: An Investigation of Decision Making in Middle Eastern Crowds* (Technical Report FA8650-05-C-6549). Fairborn, OH: Klein Associates Division of ARA.
- Mueller, S. T., Sieck, W. R., & Veinott, E. (2007). *Cultural Metrics: A Finite Mixture Models Approach* (Technical Report DAAD19-01-2-0009). Fairborn, OH: Klein Associates Division of ARA.
- Veinott, E., Klein, G., Smith, J. L., & Sieck, W. R. (2007). *Indirect messaging and its application within multicultural influence operations* (Technical Report 05-D-7137). Fairborn, OH: Klein Associates Division of ARA.
- Sieck, W. R., & Rasmussen, L. J. (2006). *Cultural Network Analysis*. (Technical Report 06TA4-P11-T1). Fairborn, OH: Klein Associates Division of ARA.
- Sieck, W. R., Smith, J., & McHugh, A. P. (2005). *Team competencies in multinational collaboration* (Technical Report 05TA2-SP1-RT1). Fairborn, OH: Klein Associates.

- Harris-Thompson, D., Smith, J. L., Shafer, J., & Sieck, W. R. (2005). Law enforcement across cultures: How culture impacts the use of non-lethal weapons. (Technical Report FA8650-04-M-6517). Fairborn, OH: Klein Associates.
- Sieck, W. R., Stevens, L. M., & Shafer, J. L. (2004). *Understanding target audiences: Individual and system change processes* (Technical Report 79258DBS26). Fairborn, OH: Klein Associates.
- Sieck, W. R., McHugh, A. P., Klein, G., Wei, S., & Klinger, D. W. (2004). *Uncertainty management for teams: The strategy of developing shared understanding in the face of uncertainty* (Technical Report N00014-04-M-0148). Fairborn, OH: Klein Associates.
- Sieck, W. R., Klein, G., Peluso, D. A., Smith, J., & Harris-Thompson, D. (2004). FOCUS: A model of sensemaking (Technical Report 1435-01-01-CT-3116). Fairborn, OH: Klein Associates.

## **Conference Papers**

- Sieck, W. R., Smart, P., Penta, A., Simpkins, B., & Shadbolt, N. (2012, July). Computational methods for measuring the cognitive characteristics of cultural groups from web resources. 2<sup>nd</sup> International Conference on Cross-Cultural Decision Making, AHFE, San Francisco, CA.
- Warnaar, D. B., Merkle, E. C., Steyvers, M., Wallsten, T. S., Stone, E. R., Budescu, D. V., Yates, J. F., Sieck, W. R., Arkes, H. R., Argenta, C. F., Shin, Y., & Carter, J. N. (2012). The aggregative contingent estimation system: Selecting, rewarding, and training experts in a wisdom of crowds approach to forecasting. Proceedings of the 2012 Association for the Advancement of Artificial Intelligence Spring Symposium Series (AAAI Technical Report SS-12-06), 75–76.
- Penta, A., Shadbolt, N. R., Smart, P. R., & Sieck, W. R. (2011, July). Detection of cognitive features from web resources in support of cultural modeling and analysis. Proceedings of *ACM Management of Emergent Digital Ecosystems*, San Francisco, CA.
- Sieck, W. R., Simpkins, B. G., Rasmussen, L. J. (2011). A cultural belief network simulator. In J. Salerno, S. J. Yang, D. Nau, & S.-K. Chai (Eds.), *Social Computing and Behavioral-Cultural Modeling*. University of Maryland, College Park, MD.
- Smart, P. R., Sieck, W. R., & Shadbolt, N. R. (2011). Development of a web-based knowledge extraction system to support cultural modeling. In J. Salerno, S. J. Yang, D. Nau, & S.-K. Chai (Eds.), *Social Computing and Behavioral-Cultural Modeling*. University of Maryland, College Park, MD.
- Simpkins, B., Sieck, W., Smart, P. and Mueller, S. (2010) Idea Propagation in Social Networks: The Role of 'Cognitive Advantage'. In: *1st ITA Workshop on Network-Enabled*

- Cognition: The Contribution of Social and Technological Networks to Human Cognition, 22nd September 2009, Maryland, USA.
- Smart, P. R., Sieck, W. R., Sycara, K., & Shadbolt, N. R. (2010). Semantic networks and shared understanding: A network-based approach to representing and visualizing shared understanding. *Proceedings of the Annual Conference of the International Technology Alliance 2010*, Imperial College, London, UK.
- Smart, P. R., Sieck, W. R., Braines, D., Huynh, T. D., Sycara, K., & Shadbolt, N. R. (2010). Modelling the dynamics of collective cognition: A network-based approach to socially-mediated cognitive change. *Proceedings of the Annual Conference of the International Technology Alliance 2010*, Imperial College, London, UK.
- Sieck, W. R., & Rasmussen, L. J. (2010). Cultural network analysis: Mapping cultural theories of mind. In S Ohlsson & R. Catrambone (Eds.), *Proceedings of the 32<sup>nd</sup> Annual Conference of the Cognitive Science Society*. Portland, OR: Cognitive Science Society.
- Smart, P. R., Huynh, T. D., Mott, D., Sycara, K., Braines, D., Strub, M., Sieck, W., & Shadbolt, N. R. (2009). Towards an understanding of shared understanding in military coalition contexts. *Proceedings of the Annual Conference of the International Technology Alliance 2009*, University of Maryland, Adelphi, MD.
- Sieck, W. R., & Mueller, S. T. (2009). Cultural variations in collaborative decision making: Driven by beliefs or social norms? *Proceedings of the International Workshop on Intercultural Collaboration* (pp. 111-118), February 2009, Palo Alto, CA.
- Karat, J., Sieck, W. R., Norman, T., Karat, C.-M., Brodie, C., Rasmussen, L., & Sycara, K. (2009). A framework for culturally adaptive policy management in ad hoc collaborative contexts. *Proceedings of the International Workshop on Intercultural Collaboration* (pp. 257-260), February 2009, Palo Alto, CA.
- Sieck, W. R., Smith, J. L, & Rasmussen, L. J. (2008). Expertise in making sense of cultural surprises. *Proceedings of the Interservice/Industry Training, Simulation, and Education Conference (I/ITSEC)*, December 2008, Orlando, FL.
- Karat, J., Sieck, W. R., Norman, T., Karat, C.-M., Brodie, C., Rasmussen, L., & Sycara, K. (2008). A comprehensive framework for culturally adaptive policy management for coalition mission planning. *Proceedings of the Second Annual Conference of the International Technology Alliance*, London, UK.
- Smart, P. R., Mott, D., Gentle, E., Braines, D., Sieck, W., Poltrock, S., Houghton, P., Giammanco, C., Preece, A., Nixon, M., Strub, M., Roberts, D., Verma, D., & Shadbolt, N. R. (2008). Holistan revisited: Demonstrating agent- and knowledge-based capabilities for future coalition military operations. *Proceedings of the Second Annual Conference of the International Technology Alliance*, London, UK.

- Sieck, W. R. & Rasmussen, L. J. (2008). Cultural network analysis: Characterizing target audience cognition. *Proceedings of the 2008 Phoenix Challenge Conference on Information Operations*, April 2008, Monterey CA.
- Rasmussen, L. J., Sieck, W. R., & Smart, P. R. (2008). US/UK mental models of planning: The relationship between plan detail and plan quality. In: *NATO RTO HFM-142 Symposium on Adaptability in Coalition Teamwork*, 21-23 April 2008, Copenhagen, Denmark.
- Sieck, W. R., Smith, J., & McHugh, A. P. (2007). Cross-national comparison of team competency values. *Proceedings of the 51<sup>st</sup> Human Factors and Ergonomics Society, October 2007*.
- Sieck, W. R., & Rasmussen, L. J. (2007, September). Cultural network analysis. *Proceedings of the First Annual Conference of the US/UK International Technology Alliance*, Baltimore, MD.
- Sieck, W. R., McHugh, A. P., & Smith, J. (2007). Crowd member decision making in the Middle East. *Proceedings of the Eighth International Naturalistic Decision Making Conference*, Asilomar, CA.
- Sieck, W. R., Smith, J., & McHugh, A. P. (2007). Cultural consensus in mental models of collaborative decision making. *Proceedings of the 2007 Group Negotiation and Decision Making Meeting*.
- Rasmussen, L. J., Smith, J., & Sieck, W. R. (2007). Effects of a cultural reconciliation procedure on multinational collaborative decision making. *In Proceedings of the 7<sup>th</sup> International Conference on Group Decision and Negotiation*. Mont Tremblant, Quebec, Canada: Springer.
- Sieck, W. R., & Patel, J. (2007). Cultural issues in coalition planning. *Proceedings of the 4<sup>th</sup> International Conference on Knowledge Systems in Coalition Operations, IEEE Press, 88-92*.
- Sieck, W. R., McHugh, A. P., Smith, J. L. (2006). Use of cognitive field research methods to investigate cultural groups: The case of individual decision making in Middle Eastern crowds. In R. Sun & N. Miyake (Eds.), *Proceedings of the 28<sup>th</sup> Annual Conference of the Cognitive Science Society*, 2164-2168.
- Sieck, W. R., Peluso, D. A., Smith, J., & Harris-Thompson, D. (2004). Basic Questioning Strategies for Making Sense of a Surprise: The Roles of Training, Experience, and Expertise. In K. D. Forbus, D. Gentner, & T. Regier (Eds.), *Proceedings of the 26<sup>th</sup> Annual Conference of the Cognitive Science Society*.
- Sieck, W. R., & Yates, J. F. (2002). Retrieval effects on confidence in general knowledge. In W. D. Gray & C. D. Schunn (Eds.), *Proceedings of the 24<sup>th</sup> Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Erlbaum.

Jones, M. J., & Sieck, W. R. (2002). Recency effects in category learning are dynamic and adaptive. In W. D. Gray & C. D. Schunn (Eds.), *Proceedings of the 24<sup>th</sup> Annual Conference of the Cognitive Science Society*. Mahwah, NJ: Erlbaum.

### **Presentations**

- Rasmussen, L. J., & Sieck, W. R. (2024, March). *Competency modeling for cultural education and development*. AETC Learning Professional's Consortium [Invited talk], San Antonio, TX.
- Sieck, W. R., Rasmussen, L. R., & Duran, J. L. (2024, February). *Use of cognitive interviews and a scoring rubric for measuring culture-general competence* [Poster presentation]. 2024 Academy of Human Resource Development International Research Conference in the Americas, Arlington, VA.
- Rasmussen, L. J., Edgerly, I., Sieck, W. R., & Duran, J. L. (2023, October). *Becoming the partner of choice: Assessing and developing cultural competence in live ARSOF exercises* [Conference presentation]. Interuniversity Seminar on Armed Forces and Society, Reston, VA.
- Sieck, W. R. (2022, May). Foreign language development in 1st SFC(A) units. Invited talk presented at the 1 SFC(A) LREC Meeting for CLPMs, Fort Liberty, NC.
- Rasmussen, L. R., Sieck, W. R., & Duran, J. L. (2019, March). *General cultural competence: Mastery levels for DoD personnel.* Language, Regional Expertise and Culture (LREC) Symposium, Montgomery, AL.
- Sieck, W. R. (2015, May). Developing global mindsets: Essential cognitive skills for cultural readiness. Invited talk presented at the *Learning & Brain Conference: Educating World Class Minds*, New York, NY.
- Sieck, W. R., Rasmussen, L. J., & Duran, J. L. (2014, March). Are there cross-cultural SMEs? It ain't me (or you) babe. *Cross-Cultural Management Summit*, Melbourne, FL.
- Sieck, W. R., & Merkle, E. (2013, November). Using explanation structure as an indicator of competence in forecasting. Talk presented at the *54<sup>th</sup> Annual Meeting of the Psychonomic Society*, Toronto, Canada.
- Rasmussen, L. J., & Sieck, W. R. (2013, June). Do cultural sensemaking strategies promote sophisticated moral reasoning in intercultural contexts? Talk presented at the *International Association for Cross-Cultural Psychology (IACCP) Conference*, Los Angeles, CA.
- Sieck, W. R., Smith, J. L., & Rasmussen, L. J. (2012, August). Expertise in cultural sensemaking. Talk presented at the AFRL *Biologically Inspired Cyber Defense Workshop*, Dayton, OH.

- Sieck, W. R., Javidan, M., Osland, J., & Rasmussen, L. J. (2012, July). Characterizing cultural construals of behavior: A methodology and application to Afghan honor and integrity. Talk presented at the *International Association for Cross-Cultural Psychology (IACCP)* 21<sup>st</sup> International Congress, Stellenbosch, S. Africa.
- Sieck, W. R., & Kopecky, J. (2011, October). Neural correlates of cross-cultural adaptation. Invited talk presented at the *SAAET Annual Meeting*, Phoenix, AZ.
- Sieck, W. R. (2011, October). Explanations as indicators of expertise. Invited talk presented at the *DIMACS Workshop on the Science of Expert Opinion*, Rutgers University, NJ.
- Sieck, W. R. (2011, July). Metacognition and religion: The case of Islamic extremism. Poster presented at the *Annual Meeting of the International Association for the Cognitive Science of Religion*, Boston, MA.
- Sieck, W. R. (2011, Feb.). Extremist ideological influences on terrorist decision frameworks. Talk presented at the *Human Social Cultural Behavioral Focus 2011 Conference*, Chantilly, VA.
- Penta, A., Smart, P. R., Sieck, W. R., & Shadbolt, N. R. (2011, Feb.). Web-based knowledge extraction and the cognitive characterization of cultural groups. Talk presented at the *Human Social Cultural Behavioral Focus 2011 Conference*, Chantilly, VA.
- Sieck, W. R. (2010, Nov.). *Towards a model of ideological conviction in the terrorist mind.* Talk presented at the 4<sup>th</sup> annual CICA/STR conference, Cartagena, Colombia.
- Simpkins, B. G., Sieck, W. R., Smart, P., & Mueller, S. T. (2010, July). Modeling the spread of ideas in networked environments. Poster presented at the 3<sup>rd</sup> Applied Human Factors & Ergonomics International Conference, Miami, FL.
- Sieck, W. R. (2010, May). *Managing crowds in the Middle East*. Invited talk presented at the Alternative Weapons Summit, Washington, DC.
- Simpkins, B. G., & Sieck, W. R. (2009, September). *Epidemiology of ideas in a coalition environment*. Talk presented at the 2009 Annual Conference of the International Technology Alliance, College Park, MD.
- Sieck, W. R., Smith, J., Grome, A., Veinott, E., & Mueller, S. (2009, August). *Violent and peaceful crowd reactions in the Middle East: Cultural experiences and expectations.*Talk presented at the International Academy for Intercultural Research Conference, Honolulu, HA.
- Sieck, W. R. (2009, August). *Cultural Network Analysis: Method and Application*. Talk presented at the Human Social Culture Behavior Modeling Program Focus 2010 Conference, Chantilly, VA.

- Sieck, W. R. (2009, June). *Cultural Experiences and Expectations Guiding Crowd Reactions in the Middle East*. Talk presented at the Human, Social, Cultural, Behavioral Influences Workshop, Istanbul, Turkey.
- Sieck, W. R. (2009, Feb). *Culturally Authentic Immersive Training*. Invited talk presented at the Human, Social, Cultural, and Behavioral Modeling Technical Exchange, Bedford, MA.
- Sieck, W. R. (2009, Feb). Extremist Ideological Influences on Terrorist Decision Frameworks. Invited talk presented at the Human, Social, Cultural, and Behavioral Modeling Technical Exchange, Bedford, MA.
- Sieck, W. R. (2008, April). Invited Participant on Expert Panel Discussion on Culture. *NATO RTO HFM-142 Symposium on Adaptability in Coalition Teamwork*, 21-23 April 2008, Copenhagen, Denmark.
- Mueller S. T., Sieck, W. R., & Veinott, E. S. (2008, February). *The Culture of Teams: Methods and Metrics*. Poster presented at the ARL Advanced Decision Archictures Collaborative Technology Alliance Technical Exchange Meeting, Boulder, CO.
- Rasmussen, L. J., Smith, J., & Sieck, W. R. (2007, May). *Cultural Diversity in Collaborative Decision Making*. Poster presented at the 19<sup>th</sup> Annual Convention of the American Psychological Society, Washington, DC.
- Smith, J., McHugh, A. P., & Sieck, W. R. (2007, May). *Cultural Consensus in Beliefs about Collaboration*. Poster presented at the 19<sup>th</sup> Annual Convention of the American Psychological Society, Washington, DC.
- Sieck, W. R. (2007). *Culture and gender influences in group decision and negotiation*. Session chaired at the 2007 Group Negotiation and Decision Making Meeting, Montreal.
- Sieck, W. R., Rasmussen, L. J., Smith, J. L., & McHugh, A. P. (2007, February). *Cultural Consensus Analysis for Investigating Multicultural Collaboration*. Poster presented at the Advanced Decision Architectures Collaborative Technology Alliance Meeting, Westminster, CO.
- Sieck, W. R. (2007, January). *Cultural Analysis*. Invited talk presented at the International Technology Alliance in Network and Information Sciences Meeting, IBM Hursley, Winchester, UK.
- Sieck, W. R. (2006, June). *Command Process Transformation and Analysis*. Invited talk presented at the International Technology Alliance in Network and Information Sciences Meeting, Cambridge University, Cambridge, UK.
- Sieck, W. R. (2006, May). *Hybrid Culture Development for Multicultural Collaboration*. Invited talk presented at The Technical Cooperation Program Workshop on Training Issues, Suffolk, VA.

- Sieck, W. R. (2006, March). *Elastic Goals, Replanning, and Multicultural Teams*. Invited talk presented at The Technical Cooperation Program Workshop on Dynamic Planning & Execution, Washington, DC.
- Sieck, W. R., McHugh, A. P., & Smith, J. (2006, February). *Facilitating Multicultural Collaboration*. Poster presented at the Advanced Decision Architectures Meeting, Westminster, CO.
- Smith, J. L., McHugh, A. P., & Sieck, W. R. (2005, Nov). *Collaboration in India, South Korea, Turkey, and the United States*. Poster presented at the Society for Judgment and Decision Making, Toronto.
- Sieck, W. R. (2005, August). Cognitive Audience Analysis for Cultural Characterization. Invited talk presented at the IO JMEM Working Group, Special Operations Command, Tampa, FL.
- Sieck, W. R., McHugh, A. P., & Klein, G. (2005, June). *Team Sensemaking*. Poster presented at the 8<sup>th</sup> Naturalistic Decision Making Conference, Amsterdam.
- Sieck, W. R. (2005, April). *Applied Decision Research*. Invited talk presented at Wake Forest University, Winston-Salem, NC.
- Sieck, W. R. (2005, April). *Anticipating IO Effectiveness*. Invited talk presented at the IO JMEM Working Group, US Strategic Command, Omaha, NE.
- Readinger, W., & Sieck, W. R. (2005, March). *Anticipating Influence Effectiveness*. Talk presented at the PurpleTech Workshop, National Center for Simulation, Orlando, FL.
- Sieck, W. R., McHugh, A. P., & Smith, J. (2005, February). *Multinational Collaborative Work*. Poster presented at the Advanced Decision Architectures Meeting, Westminster, CO.
- Sieck, W. R., Peluso, D. A., Smith, J., & Harris-Thompson, D. (2004, November). *Effects of Training and Experience on Strategies for Making Sense of a Surprise*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Minneapolis.
- Merkle, E. C., Sieck, W. R., & Van Zandt, T. (2004, November). *The Impact of Random Error Corrections on Overconfidence Data*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Minneapolis.
- Sieck, W. R. (2004, October). Making Stories Matter in Training: Tools and Technologies for Training Scenario Creation. Talk presented at NASA Johnson Space Center, Houston, TX.
- Sieck, W. R. (2004, October). *Sensemaking*. Invited talk presented at Ohio State University, Columbus, OH.

- Sieck, W. R., & Yates, J. F. (2003, November). *Cues and Processes Underlying Confidence in General Knowledge*. Talk presented at the Annual Meeting of the Society for Judgment and Decision Making, Vancouver.
- Sieck, W. R., & Arkes, H. R. (2003, November). *Overconfidence Reduces the Use of Statistical Equations to Aid Judgment*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Vancouver.
- Merkle, E. C., Sieck, W. R., & Van Zandt, T. (2003, November). *Independent Assessment Methods for Improving Probability Judgment Accuracy*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Vancouver.
- Sieck, W. R. (2003, October). *Cultural Variations in Confidence and Decisiveness*. Invited talk presented at Wright State University, Fairborn, OH.
- Sieck, W. R., & Yates, J. F. (2000, November). *Overconfidence in categorization*. Talk presented at the Annual Meeting of the Society for Judgment and Decision Making, New Orleans.
- Jones, M. J., & Sieck, W. R. (2000, November). The advantage of bias towards reliance on recent events: Evidence from judgment in autocorrelated ecologies. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, New Orleans.
- Sieck, W. R., & Yates, J. F. (1999, June). *Probability matching occurs prior to choice in probabilistic category learning*. Poster presented at the Annual Convention of the American Psychological Society, Denver.
- Yates, J. F., Lee, J.-W., Shinotsuka, H., & Sieck, W. R. (1998, November). *Oppositional deliberation: Toward explaining overconfidence and its cross-cultural variations*. Talk presented at the Psychonomic Society Meeting, Dallas.
- Bull, B., Stone, E., & Sieck, W. (1998, November). *Graphical presentation of information and perceived risk reduction size*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Dallas.
- Sieck, W. R., & Yates, J. F. (1998, November). *Bias in relative frequency-based subjective probabilities*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Dallas.
- Yates, J. F., & Sieck, W. R. (1998, May). Analyses of general knowledge think-aloud protocols: Explaining overconfidence and its cross-cultural variations. Talk presented at the University of Michigan Decision Behavior Consortium, Ann Arbor, MI.
- Sieck, W. (1997, November). Range and frequency effects on probability judgment. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Philadelphia.

- Sieck, W., & Yates, J. F. (1996, March). *Exposition effects on choice and confidence*. Invited talk presented at Wake Forest University, Winston-Salem, NC.
- Sieck, W., & Yates, J. F. (1995, November). *Exposition effects on decision making*. Poster presented at the Annual Meeting of the Society for Judgment and Decision Making, Los Angeles.