

Curriculum Vitae

Timothy E. Goldsmith

Address

Department of Psychology
Logan Hall, MSC03 2220
University of New Mexico
Albuquerque, NM 87131
505-277-7505 (office)
e-mail: gold@unm.edu

Educational History

- Ph.D. Psychology, 1984, New Mexico State University
Major area: Cognitive Psychology
Minor areas: Artificial Intelligence
- M.A. Psychology, 1980, New Mexico State University
Major area: Human Factors
- B.S. Mathematics and Psychology, 1976, Northern Arizona University

Positions Held

Associate Professor, Department of Psychology, UNM
Associate Chair of Graduate Education, Department of Psychology, UNM (2000-2002; 2007-2010)
Assistant Professor, Department of Psychology, UNM (1983-2001)

Teaching Experience

Undergraduate courses taught:

Applied Psychology	Introduction to Psychology
Environmental Psychology	Introduction to Statistics
Human Factors	Psychology Honors
Human Performance	Research Methods
Applied Cognitive Psychology	

Graduate courses taught:

Advanced Statistics	Seminar in Human-Computer Interaction
Design and Analysis of Experiments	Seminar in Human Decision Making
Mathematical Psychology	Seminar in Psychological Scaling
Computers in Psychological Research	Multiple Regression
Research Seminar	Seminar in Knowledge Assessment
Nonparametric Statistics	Seminar in Knowledge Representation

Research Interests

Cognitive modeling	Psychological similarity
Decision Making	Psychometrics of assessment data
Human expertise	Knowledge assessment & representation
Psychological scaling & classification	Training & assessment

Research Goals:

To conduct empirical and theoretical research in the areas of semantic memory models, knowledge structures, automatic text analysis, and expert knowledge and decision making.

Association Memberships

American Psychological Society
Human Factors & Ergonomics Society

Grant Support

Federal Aviation Administration, "Effects of Stress on Pilot and Crew Performance in Non-normal Situations under Next Gen: Phase I; \$122,853; 8/13/2012– 8/12/2013.
Federal Aviation Administration, "Structural Knowledge Analysis of Aviation Safety Reports" (with Peder Johnson, UNM); \$745,000; 4/10/2007– 5/31/2012.
Federal Aviation Administration, "Training and assessing aircrew skills: Methods to achieve reliable and valid performance data" (with Peder Johnson, UNM); \$1,108,500; 5/2/2000–01/28/2005.
Sandia National Laboratory, Assessing and augmenting human judgment, \$21,000 01/01/2002 – 8/31/2002.
Sandia National Laboratory, Cognitive modeling with knowledge networks, \$8,220 3/5/2001 – 9/30/2001.
Federal Aviation Administration, "Analysis and Training of Cognitive Skills in a Line-Oriented Flight Training Program," (with Peder J. Johnson, UNM); \$1,100,601; 3/15/94-9/30/00.
University of Dayton Research Institute, "Neural Network Models of Expert Performance,"; \$43,874, 6/1/92 to 9/30/95.
Office of Naval Research, "Structural Assessment of Knowledge and Skill," (with Peder J. Johnson, UNM) \$242,088; 1/1/91 to 12/31/93
Air Force Human Resources Laboratory, "TACIT: Tactical Air Combat Intelligent Trainer," (with Roger W. Schvaneveldt); \$265,961; 9/30/88 to 11/30/91;
Air Force Human Resources Laboratory, "Modeling Fighter Pilot Decision Making," (with Roger. W. Schvaneveldt); \$175,000; 6/1/84 to 8/15/86

Publications

Stevens-Adams, S. M., Goldsmith, T. E., & Butler, K. M. (2012). Variation in individuals' semantic networks for common knowledge is associated with false memory. *The Quarterly Journal of Experimental Psychology*, 65, 1035-1043.
Goldsmith, T. E. & Martin, N. (2011). Testing materiality under the unfair practices acts: What information matters when collecting time-barred debts? *Consumer Finance Law Quarterly Report*, 64 (4), 372-381.
Braude, D., Goldsmith, T. E., & Weiss, S. (2011). Assessing air medical crew real-time readiness to perform critical tasks. *Prehospital Emergency Care*, 15, 254-260.
Trumpower, D. L., Sharara, H., & Goldsmith, T. E. (2010). Specificity of structural assessment of knowledge. *Journal of Technology, Learning, and Assessment*, 8 (5).
Alverson, D. A, Caudell, T., & Goldsmith, T. E. (2008). Creating virtual reality medical simulations: A knowledge-based design and assessment approach. In Riley, Richard (Ed.) *Manual of Simulation in Healthcare*. Oxford University Press (UK).
Vergara, V.M, Caudell, T.P., Goldsmith, T. E., Panaiotis, Alverson, D. (2008). Knowledge-driven design of virtual patient simulations. *Innovate Journal of Online Education*, 5, Issue 2 (Dec).
<http://innovateonline.info/index.php?view=article&id=579&action=synopsis>.

- Alverson, D.C., Saiki, S.M., Kalishman, S., Lindberg, M., Mennin, S., Mines, J., Serna, L., Summers, K., Jacobs, J., Lozanoff, S., Lozanoff, B., Saland, L., Mitchell, S., Umland, B., Greene, G., Buchanan, H. S., Keep, M., Wilks, D., Wax, D. S., Coulter, R., Goldsmith, T. E., and Caudell, T. P. (2008). Medical Students Learn Over Distance Using Virtual Reality Simulation, *Simulation in Healthcare*, 3, 10-15.
- Malloy, E. J., Bedrick, E. J., and Goldsmith, T. E. (2007). Diagnostics for the scale of functional predictors in generalized linear models. *Technometrics*, 49, 480-489.
- Ciesielski, K. T., Hamalainen, M.S., Geller, D.A., Wilhelm S., Goldsmith, T. E. and Ahlfors, S.P. (2007). Dissociation between MEG alpha modulation and performance accuracy on visual working memory task in obsessive compulsive disorder. *Human Brain Mapping*, 28, 1401-1414.
- Forsythe, C., Bernard, M. & Goldsmith, T. E. (2006). *Cognitive Systems: Human Cognitive Models in Systems Design*. Lawrence Erlbaum Associates, Inc.
- Alverson, D. C., S. M. Saiki, Jr., T. P. Caudell, T. Goldsmith, S. Stevens, L. Saland, K. Colleran et al. (2006). Reification of abstract concepts to improve comprehension using interactive virtual environments and a knowledge-based design: A renal physiology model. *Studies in Health Technology and Informatics*, 119, 13-18.
- Alverson, D.C., Saiki, S.M. Jr, Caudell, T.P., Summers, K., Panaiotis, Sherstyuk, A., Nickles, D., Holten, J., Goldsmith, T. E., Stevens, S., Kihmm, K., Mennin, S., Kalishman, S., Mines, J., Serna, L., Mitchell, S., Lindberg, M., Jacobs, J., Nakatsu, C., Lozanoff, S., Wax, D. S., Saland, L., Norenberg, J., Shuster, G., Keep, M., Baker, R., Buchanan, H. S., Stewart, R., Bowyer, M., Liu, A., Muniz, G., Coulter, R., Maris, C., Wilks, D. (2005). Distributed immersive virtual reality simulation development for medical education. *Journal of International Association of Medical Science Educators*, 15, 19-30.
- Bonebright, T. L., Miner, N. E., Goldsmith T. E., Caudell, T. P. (2005). Data collection and analysis techniques for evaluating the perceptual qualities of auditory stimuli. *ACM Transactions on Applied Perception*, 2, 505–516.
- Stevens, S. M. , Goldsmith, T. E., Summers, K. L., Sherstyuk, A., Kihmm, K., Holten, J. R. III, Davis, C., Speitel, D., Maris, C., Stewart, R., Wilks, D., Saland, L., Wax, D., Panaiotis, Saiki, S. Jr, Alverson, D., & Caudell, T. P. (2005). Virtual reality training improves students' knowledge structures of medical concepts. *Studies in Health Technology Information*, 111, 519-525
- Trumpower, D. L., Goldsmith, T. E. & Guynn, M. J. (2004). Goal specificity and knowledge acquisition in statistics problem solving: Evidence for attentional focus. *Memory & Cognition*, 32, 1379-1388.
- Trumpower, D. L. & Goldsmith, T. E. (2004). Structural enhancement of learning. *Contemporary Educational Psychology*, 29, 426-446.
- Miner, N. E., Goldsmith, T. E., & Caudell, T. P. (2002). Perceptual validation experiments for evaluating the quality of wavelet-synthesized sounds. *Presence: Teleoperators and Virtual Environments*, 11, 508-524.
- Goldsmith, T. E. & Johnson, P. J. (2002). Assessing and improving evaluation of aircrew performance, *International Journal of Aviation Psychology*, 12, 223-240.
- Morris, M.E, Goldsmith, T. E., Roll, S., & Smith, J. E. (2001). A Model for assessing the self-schemas of restrained eaters, *Cognitive Therapy and Research*, 25, 201-214.
- Goldsmith, T. E. & Kraiger, K. (1996). Applications of structural knowledge assessment to training evaluation. In J. K. Ford & K. Kraiger, (Eds.) *Improving training effectiveness in organizations* (pp. 73-96). Hillsdale, NJ: Erlbaum.
- Johnson, P. J., Goldsmith, T. E., & Teague, K. W. (1995). Similarity, structure, and knowledge: A representational approach to assessment. In P. Nichols, S. Chipman & Brennan (Eds.), *Cognitively Diagnostic Assessment* (pp. 221-249). Hillsdale, NJ: Erlbaum.
- Acton, W. H., Johnson, P. J., & Goldsmith, T. E. (1994). Structural knowledge assessment: Comparison of referent structures. *Journal of Educational Psychology*, 86, 303-311.

- Johnson, P. J., Goldsmith, T. E., & Teague, K. W. (1994). Locus of the predictive advantage in Pathfinder-based representations of classroom knowledge. *Journal of Educational Psychology, 86*, 617-626.
- Goldsmith, T. E., Johnson, P. J., & Acton, W. H. (1991). Assessing structural knowledge. *Journal of Educational Psychology, 83*, 88-96.
- Goldsmith, T. E., McMahon, D. C., & Schvaneveldt, R. W. (1991). Modeling air combat decision with computational and structural representations. In G. Apostolakis (Ed.), *Probabilistic safety assessment and management* (pp. 473-478), New York: Elsevier.
- Goldsmith, T. E., & Davenport, D. M. (1990). Assessing structural similarity of graphs. In R. W. Schvaneveldt (Ed.), *Pathfinder associative networks: Studies in knowledge organization* (pp. 75-87), Norwood, NJ: Ablex.
- Goldsmith, T. E., & Johnson, P. J. (1990). A structural assessment of classroom learning. In R. W. Schvaneveldt (Ed.), *Pathfinder associative networks: Studies in knowledge organization* (pp. 241-254), Norwood, NJ: Ablex.
- Schvaneveldt, R. W. & Goldsmith, T. E. (1986). A model of air combat decisions. In E. Hollnagel, G. Mancini, & D. Woods (Eds.), *Intelligent Decision Support in Process Environments* (pp 395-405). Berlin, Germany: Springer-Verlag.
- Schvaneveldt, R. W., Durso, F. T., Goldsmith, T. E., Breen, T. J., Cooke, N. M., Tucker, R. G., & De Maio, J. C. (1985). Measuring the structure of expertise. *International Journal of Man-Machine Studies, 23*, 699-728.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1984). Facilitating multiple-cue judgment with integral information displays. In J. Thomas & M. Schneider (Eds.), *Human Factors in Computer Systems* (pp 243-270). Norwood, NJ: Ablex.

Technical Reports & Memoranda

- Goldsmith, T., & Johnson, P. J. (2012). US Airways ASAP Project: Final Report. (Report submitted to the Federal Aviation Administration under Cooperative Research Agreement #08-G-010). Albuquerque, NM: The University of New Mexico.
- Goldsmith, T. E. & Johnson, P. E. (2010). Knowledge networks derived from aviation safety reports. FAA Quarterly Technical Report. FAA Grant 07-G-004.
- Goldsmith, T. E., Jung, K. & Johnson, P. E. (2009). Assessing evaluator grading practices through variance partitioning. FAA Quarterly Technical Report. FAA Grant 07-G-004.
- Hendrickson, S. M. L., Goldsmith, T. E. & Johnson, P. J. (2008). A crew resource management taxonomy derived from aviation reporting system narratives. FAA Quarterly Technical Report. FAA Grant 07-G-004.
- M. J. Healy, T. P. Caudell, and T. E. Goldsmith (2008), A Model of Human Categorization and Similarity Based Upon Category Theory, UNM Technical Report EECE-TR-08-0010, DSpaceUNM, University of New Mexico.
- Pierce, J., Gutierrez, F., Vergara, V. M., Alverson, D. C., Qualls, C., Saland, L. Goldsmith, T. & Caudell, T. P. (2008). Comparative usability studies of full vs. partial immersive virtual reality simulation for medical education and training. *Studies in Health Technology and Informatics, 132*, 372-377.
- Gutierrez, F., J. Pierce, V. M. Vergara, R. Coulter, L. Saland, T. P. Caudell, T. E. Goldsmith, and D. C. Alverson. (2007). The effect of degree of immersion upon learning performance in VR simulations for medical education. *Studies in Health Technology and Informatics, 125*, 155-160.
- Hendrickson, S. M. L., Goldsmith, T. E. & Johnson, P. J. (2006). Retention of airline pilots' knowledge and skill. *Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting, 1973 – 1976*.
- Martinez-Papponi, B., & Goldsmith, T. E. (2006). Verbal ability and structured navigation on learning with hypertext. *Proceedings of the Human Factors and Ergonomics Society 50th Annual Meeting*.

- Stevens, S. M., Goldsmith, T. E., Summers, K. L., Sherstyuk, A., Kihmm, K., Holten, J. R., Davis, C., Speitel, D., Maris, C., Stewart, R., Wilks, D., Saland, L., Wax, D., Panaiotis, Saiki, S., Alverson, D., Caudell, T. P. (2005). Virtual reality training improves students' knowledge structures of medical concepts. *Studies in Health Technology and Informatics*, 111, 519-25.
- Hendrickson, S. M., Trumpower, D. L., Goldsmith, T. E., & Johnson, P. J. (2005). Evidence against crew resource management as a cognitive skill. *Proceedings of the 13th International Symposium on Aviation Psychology*, 299-303.
- Alverson, D.C., Saiki, S.M., Caudell, T.P., Summers, K.L., Goldsmith, T.E., Wax, D.S., Bower, M., Lui, A., Wilks, D., "Distributed Immersive Virtual Reality Simulation Development for Medical Education", Abstract in proceeding of the International Association of Medical Science Educators, (2004).
- Summers, K.L., Goldsmith, T.E., Kubica, S., Caudell, T.P. (Oct, 2003). An Experimental Evaluation of Continuous Semantic Zooming in Program Visualization, *Proceedings of IEEE Visualization*, Seattle, WA.
- Trumpower, D.L., Goldsmith, T.E., & Below, M. (2002). Goal specificity and the generality of schema acquisition. Proceedings of the 24th Annual Conference of the Cognitive Science Society, 884-889. (Fairfax, VA).
- Trumpower, D.L., Johnson, P.J., & Goldsmith, T.E. (1999). Structural analysis of line-oriented evaluation data. Proceedings of the 10th International Symposium on Aviation Psychology, 2, 1220-1223. (Columbus, OH).
- Holt, R. , Johnson, P. J. & Goldsmith, T. E. (1998) Application of psychometrics to the calibration of air carrier evaluators. FAA Technical Report.
- Johnson, P. J. & Goldsmith, T. E. (1998). *The importance of quality data in evaluating aircrew performance*. FAA Technical Report.
- Goldsmith, T. E. & Johnson, P. J. (1996). *Assessment and training of cognitive skills*, (Technical Report), Federal Aviation Administration.
- Goldsmith, T. E. & Thomas, G. (1995). *Structural analysis of situational awareness*. Technical Report). Brooks AFB, TX: Air Force Human Resources Laboratory.
- Johnson, P. J., Goldsmith, T. E. (1992). *Structural assessment of knowledge and skill*, SAK-R-92-01, (Technical Report), Office of Naval Research.
- Schvaneveldt, R. W., Benson, A. E., Goldsmith, T. E., & Waag, W. L. (1992). *Neural network models of air combat maneuvering*. Technical Report, Brooks, AFB, TX: Air Force Human Resources Laboratory.
- Goldsmith, T. E., McMahan, D. C., & Schvaneveldt, R. W. (1991). Modeling air combat decision with computational and structural representations. In G. Apostolakis (Ed.), *Probabilistic safety assessment and management*, (pp. 473-478), New York: Elsevier.
- Schvaneveldt, R. W, Goldsmith, T. E., Benson, A., & McMahan, D. C. (1991). Neural network models of air combat maneuvering. Technical Report, Brooks AFB, TX: Air Force Human Resources Laboratory.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1988). *Modeling expertise in air combat maneuvering*. Proceedings of the Eleventh Symposium Psychology in the Department of Defense (pp 296-300). Colorado Springs, CO: US Air Force Academy.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1987). *Representing and teaching air combat expertise*. (Technical Report No. AFHRL-TP-87-60). Brooks AFB, TX: Air Force Human Resources Laboratory.
- Goldsmith, T. E., & Schvaneveldt, R. W., & Brunderman, J. (1985). *Simulating air combat expertise* (Technical Report No. AFHRL-TP-85-37). Brooks AFB, TX: Air Force Human Resources Laboratory.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1985). Air combat expert simulation. *Army R, D, & A*, 26, 7-8.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1985). *ACES: Air combat expert simulation* (Memorandum in Computer Science and Cognitive Science No. MCCA-85-34). New Mexico State University:

Computing Research Laboratory.

- Schvaneveldt, R. W., Breen, T. J., Cooke, N. M., Durso, F. T., Goldsmith, T. E., Tucker, R. G., & De Maio, J. C. (1984). *Cognitive organization as a function of flying experience* (Technical Report No. AFHRL-TP-83-64). Brooks AFB, TX: Air Force Human Resources Laboratory.
- Schvaneveldt, R. W., Anderson, M., Breen, T. J., Cooke, N. M., Goldsmith, T. E., Durso, F. T., De Maio, J. C., & Tucker, R. G. (1983). *Conceptual structures in fighter pilots* (Technical Report No. AFHRL-TP-83-2). Brooks AFB, TX: Air Force Human Resources Laboratory.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1982). *The role of integral displays in decision making*. Proceedings of the First Computer-Human Interaction Conference, 1, 197-201.
- Schvaneveldt, R. W., Goldsmith, T. E., Durso, F. T., Maxwell, K., Acosta, H. M. & Tucker, R. G. (1982). *Structures of memory for critical flight information* (Technical Report No. AFHRL-TP-81-46). Brooks AFB, TX: Air Force Human Resources Laboratory.

Conference Presentations & Invited Talks

- Goldsmith, T. E. (April, 2012). Knowledge networks and the law. UNM School of Law, Albuquerque, NM.
- Kirijan, F., Goldsmith, T. E., Johnson, P. E. & Asher, D. (August, 2011). Instructor/evaluator calibration training. Invited talk given at the biennial conference of Advanced Qualification Training, Atlanta, GA.
- Vergara, V.M., Phillips, H., Alverson, D.C., Panaiotis, P, Goldsmith, T.E., Caudell, A.K., Spisla, J., & Caudell, T. P. (January, 2011). The usability of medical simulation in the classroom. Presented at 11th Annual International Meeting of Simulation in Healthcare, New Orleans, LA.
- Goldsmith, T. E. (June, 2009). Assessing student learning with knowledge structures. Invited talk given to College of Nursing, University of New Mexico.
- Braude, D., Goldsmith, T. E., Martinez-Papponi, B. (October, 2008). Assessing the cognitive readiness of air medical flight crew to perform critical safety tasks – A FARE funded prospective pilot study. Paper presented at the Critical Care Transport Medicine Conference, San Antonio, TX.
- Stevens, S. M., Goldsmith, T. E., Johnson, P. J. & Moulton, J. (October, 2007). Performance differences on rejected takeoffs as a function of expectancy. Paper presented at the Annual Meeting of Human Factors & Ergonomics Society, Baltimore, MD.
- Gutierrez, F., Pierce, J., Vergara, V. M., Coulter, R., Saland, L., Caudell, T.P., Goldsmith, T.E., Alverson, D.C. (2007). The impact of the degree of immersion upon learning performance in virtual reality simulations for medical education. Presented at Medicine Meets Virtual Reality, Long Beach, CA (Feb, 2007).
- Stevens, S. M., Goldsmith, T. E., Johnson, P. J. & Moulton, J. B. (2007). Performance Differences on Rejected Takeoffs as a Function of Expectancy, Paper presented at the 51st Annual Meeting of the Human Factors and Ergonomics Society.
- Martinez-Papponi, B. & Goldsmith, T. E. (October, 2007). Verbal ability and structured navigation on learning with hypertext. Paper presented at the 51st Annual Meeting of the Human Factors and Ergonomics Society.
- Hendrickson, S. M. L., Goldsmith, T. E. & Johnson, P. J. (October, 2006). Retention of airline pilots' knowledge and skill. Paper presented at the Annual Meeting of Human Factors & Ergonomics Society, San Francisco, CA.
- Alverson, D. C., Saiki, S. M. Jr, Caudell, T. P., Goldsmith, T. E., Stevens, S. M., Saland, L., Colleran, K., Brandt, J., Danielson, L., Cerilli, L., Harris, A., Gregory, M. C., Stewart, R., Norenberg, J., Shuster, G., Panaiotis, Holten, J. III, Vergara, V. M., Sherstyuk, A., Kihmm, K., Lui, J., & Wang, A. (2006). Reification of abstract concepts to improve comprehension using interactive virtual environments

- and a knowledge-based design: A renal physiology model. Paper presented at 14th Annual Medicine Meets Virtual Reality, Long Beach, CA. (Jan, 2006).
- Alverson, D.C., Caudell, T.P., Saiki, S.M., Sherstyuk, A., Kihmm, K., Bowyer, M., Liu, A., Muniz, G., Goldsmith, T.E., Stevens, S.M., Coulter, R., Gilfeather, F. (2005). Integrated Medical Performance Assessment and Credentialing Trainer (IMPACT): Distributed Immersive Virtual Reality Simulation for Training and Performance Assessment, Workshop on Computer Games and CSCW: "What Can We Learn About Collaboration, Cooperation, and Community?" ECSCW 2005 - 9th European Conference on Computer-Supported Cooperative Work, Paris (Sept. 2005).
- Stevens, S. M. & Goldsmith, T. E., Summers, K.L., Sherstyuk, A. Kihmm, K., Holten, J.R., Davis, C., Speitel, D., Maris, C., Stewart, R., Wilks, D., Saland, L., Wax, D.S., Paniotis, Saiki, S., Alverson, D.C., Caudell, T.P. (October, 2005). Learning and usability within a virtual reality trainer for medical students. Paper presented at the Annual Meeting of Human Factors & Ergonomics Society, November, Orlando, FL.
- Goldsmith, T. E. (2005). Automatic analysis of ASAP Narrative Reports. Paper presented at the International Symposium on Aviation Psychology, Oklahoma City, OK.
- Hendrickson, S. M., Trumpower, D. L., Goldsmith, T. E., & Johnson, P. J. (July, 2005). Evidence against crew resource management as a cognitive skill. Paper presented at the International Symposium on Aviation Psychology, Oklahoma City, OK.
- Stevens, S. M. & Goldsmith, T. E. (2005). Learning and Usability within a Virtual Reality Trainer for Medical Students. Paper presented at the Annual Meeting of Human Factors & Ergonomics Society, November, Orlando, FL.
- Stevens, S. M., Goldsmith, T. E., Summers, K. L., Sherstyuk, A., Kihmm, K., Maris, C., Stewart, R., Wilks, D., Saland, L., Wax, D., Saiki, S., Alverson, D., & Caudell, T. P. (January, 2005). Virtual Reality Training Improves Students' Knowledge Structures of Medical Concepts. Paper presented at the 13th annual "Medicine Meets Virtual Reality, Long Beach, CA.
- Goldsmith, T.E. (October, 2005). Bringing statistics and research methods alive. Paper presented at the Mountain States Conference on the Teaching of Psychology, Albuquerque, NM.
- Alverson, D. C., Saiki, S. M., Caudell, T. P., Goldsmith, T. E. Bowyer, M., Liu, A. & Wilks, D. (July, 2004). Distributed Immersive Virtual Reality Simulation Development for Medical Education, Paper presented at the 8th Annual Meeting of the International Association of Medical Science Educators (IAMSE), New Orleans, LA.
- Goldsmith, T. E. (April, 2003). Learning, Knowledge & Expertise: A view from cognitive psychology. UNM School of Medicine Retreat, *Shaping the Future*, Albuquerque, NM
- Summers, K. L., Goldsmith, T. E., Kubica, S., & Caudell, T. P. (October, 2003). An experimental evaluation of continuous semantic zooming in program visualization. Paper presented at the ninth annual IEEE Symposium on Information Visualization, October, 2003, Seattle.
- Summers, K. L., Goldsmith, T. E., & Caudell, T. P. (June, 2003). Program visualization using 3D proximity triggering of continuous semantic zooming: An experimental study. ACM Symposium on Software Visualization (San Diego, CA).
- Goldsmith, T. E., Johnson, P. J. (October, 2002). Instructor and Evaluator Training and Calibration Tools. ATA/AQP Industry Working Group 12th Annual Meeting. (Seattle, WA)
- Trumpower, D.L., Goldsmith, T.E., & Below, M. (2002). Goal specificity and the generality of schema acquisition. Proceedings of the 24th Annual Conference of the Cognitive Science Society, 884-889. (Fairfax, VA).
- Trumpower, D.L., Below, M., & Goldsmith, T.E. (June, 2002). Effects of Goal Specificity on Structural Knowledge and Problem Solving Transfer. Poster presented at the 14th Annual Convention of the American Psychological Society (New Orleans, LA).

- Johnson, P. J., Trumpower, D. L., & Goldsmith, T. E. (January, 2001). Assessing CRM and technical skills. Paper presented at the FAA Research Meeting (Tempe, AZ)
- Goldsmith, T. E. (March, 2000). Skill maintenance and reacquisition training. Paper presented at the annual meeting of the FAA Research Symposium, Orlando, FL.
- Trumpower, D.L., & Goldsmith, T.E. (June, 2000). Structural knowledge provides sensitive measure of schema acquisition. Poster presented at the 12th Annual Convention of the American Psychological Society (Miami Beach, FL).
- Goldsmith, T.E., & Trumpower, D.L. (April, 1999). Structural Enhancement of Learning. Paper presented at the 45th Annual Convention of the Southwestern Psychological Association (Albuquerque, NM).
- Trumpower, D.L., & Goldsmith, T.E. (June, 1999). Using expert knowledge structures to organize hypertext facilitates structural and procedural learning. Poster presented at the 11th Annual Convention of the American Psychological Society (Denver, CO).
- Breese, J., Johnson, P. J., Goldsmith, T. E. (April, 1999). Methods of Flight Data Analysis. Paper presented at the annual meeting of the FAA Research Symposium, Honolulu, HI.
- Trumpower, D. L., Johnson, P. J., & Goldsmith, T. E. (April, 1999). Structural Analysis Of Line-Oriented Evaluation Data. Paper presented at the Tenth International Symposium on Aviation Psychology, Columbus, OH.
- Goldsmith, T. E. (1998, April). *Assessing and Calibrating Human Reliability: Applications to Aircrew Evaluation*. Paper presented at the 16th Biannual Applied Behavior Sciences Symposium, USAF Academy, CO.
- Bonebright, T., Miner, N., Goldsmith, T. E., & Caudell, T.P. (1998). Data Collection and Analysis Techniques for Evaluating the Perceptual Qualities of Auditory Stimuli, International Conference on Acoustic Displays, Scotland (Sept., 1998).
- Trumpower, D.L., & Goldsmith, T.E. (December, 1998). Use of expert structural knowledge representations to organize hypertext-based information: Effects on conceptual, procedural, and declarative learning. Poster presented at the First Annual Conference of the Association for the Advancement of Educational Research (Ponte Vedra, FL).
- Goldsmith, T. E. & Johnson, P. E. (1998, November). *Proficiency-Based Training and Assessment*, Paper presented at the meeting of the Australian Aviation Psychology Symposium, Melbourne, Australia.
- Goldsmith, T. E. & Johnson, P. J. (1997, April). *Assessing Instructor/Evaluator Reliability under AQP*. Paper presented at the meeting of the International Symposium on Aviation Psychology, Columbus, OH
- Holt, R. W., Johnson, P. J., & Goldsmith, T. E. (1997, June). Application of psychometrics to the calibration of air carrier evaluators. Paper presented at the meeting of the Human Factors and Ergonomics Society, Albuquerque, NM
- Delaney, H. D., Maxwell, S. E., & Goldsmith (1997, March). *Nonorthogonal contrasts, regression coding, and unequal cell sizes: Single contrasts aren't what they appear*. Paper presented at the meeting of the American Educational Research Association, Chicago, IL.
- Delaney, H. D., & Goldsmith, T. E. Scientific psychology and Christian theism. Presented to a conference on Christian Scholarship: Knowledge, Reality and Method, University of Colorado, Boulder, October, 1997.
- Goldsmith, T. E. & Johnson, P. J. (1996, October). *Assessing Reliability of Instructor and Evaluator Judgments*. Paper presented at the annual FAA research meeting at Kalamazoo, MI.
- Lindsay, A., Goldsmith, T. E. Yeo, R. (1996, February). *A comparison of cognitive networks and their relationship to global cognition and semantic memory*. Paper presented at the meeting of the International Neuropsychological Society, Chicago, IL.

- Goldsmith, T. E. & Johnson, P. J. (1995, June). *Predictiveness of higher-order graph structure*. Paper presented at the meeting of the Classification Society of North America, Denver, CO.
- Goldsmith, T. E., Johnson, P. E., Seamster, T. & Edens, E. (1995, April). *Toward the Cognitive Analysis of CRM Skills*. Paper presented at the meeting of the International Symposium on Aviation Psychology, Columbus, OH
- Lindsay, A. Yeo, R. A., & Goldsmith, T. E. (1994, November). *Semantic organization of knowledge in Alzheimer's patients*. Paper presented at the meeting of the National Academy of Neuropsychology, Orlando, FL.
- Goldsmith, T. E. & Johnson, P. J. (1994, June). *Coherence and structure*. Paper presented at the meeting of the Classification Society of North America, Houston, TX.
- Johnson, P. J., & Goldsmith, T. E., & Teague, K. (1993, May). *Similarity, structure, and knowledge: A representational approach to assessment*. Paper presented at the contractor's meeting of the Office of Naval Research, Iowa City, Iowa.
- Goldsmith, T. E. & Johnson, P. J. (1993, June). *A generalized ratio model of similarity*. Paper presented at the meeting of the Classification Society of North America, Pittsburgh, PA.
- Johnson, P. J. & Goldsmith, T. E. (1993, June). *Evidence of a structural advantage with Pathfinder networks*. Paper presented at the meeting of the Classification Society of North America, Pittsburgh, PA.
- Goldsmith, T. E. (1993, February). *Graph coherence and psychological structure*. Paper presented at the Second Workshop on Proximity Graphs, Starkville, Miss.
- Johnson, P. J., & Goldsmith, T. E., (1992, May). *Structure and prediction in knowledge assessment*. Paper presented at the meeting of the contractor's meeting of the Office of Naval Research, University of Illinois, Urbana, Illinois.
- Johnson, P. J. & Goldsmith, T. E. (1992, April). *On the locus of structure in knowledge assessment*. Paper presented at the meeting of the Southwestern Psychological Society, San Antonio, Texas.
- Goldsmith, T. E. & Johnson, P. J. (1992, May). *A cognitive assessment of training effectiveness*. Paper presented at the meeting of the Society for Industrial/Organizational Psychology, Montreal, Quebec, Canada.
- Goldsmith, T. E. & Johnson, P. J. (1991, October). *Assessment of structural knowledge*. Paper presented to the contractor's meeting of the Office of Naval Research, Pittsburgh, Pa.
- Goldsmith, T. E. (October, 1991). *Structural assessment of knowledge and skill*, Paper presented at Training Effectiveness Conference, Michigan State University.
- Goldsmith, T. E. (1990). *Structural assessment of knowledge and skill*. Invited talk given to Computing Research Laboratory, New Mexico State University, April, 1990.
- Goldsmith, T. E. (1990). *Human factors and artificial intelligence*. Invited talk given to Artificial Intelligence in Albuquerque (ARTI), February, 1990.
- Goldsmith, T. E. (1990). *Assessing and representing air combat expertise*. Invited talk given to Air Force Office of Training and Evaluation Center, Kirtland, AFB, Albuquerque, NM, March, 1990.
- Davenport, D. M., & Goldsmith, T. E. (1989, November). *Graph comparison methods*. Paper presented at the First Workshop on Proximity Graphs, Las Cruces, NM.
- Goldsmith, T. E., McMahon, D. C., & Schvaneveldt, R. W. (1991, February). *Modeling air combat decisions with computational and structural representations*. Paper presented at the Probabilistic Safety Assessment and Management Conference, Beverly Hills, CA.
- Johnson, P. J., & Goldsmith, T. E. (1988, April). *Cognitive assessment of domain specific knowledge*. Paper presented at the meeting of the Rocky Mountain Psychological Association, Snowbird, Utah
- Goldsmith, T. E. (1988, April). *Modeling expertise in air combat maneuvering*. Paper presented at the Eleventh Symposium on Psychology in the DoD, Colorado Springs, Colorado.

- Johnson, P. J., & Goldsmith, T. E. (1988, November). *Structural assessment of classroom learning*. Paper presented to the Psychonomic Society Meeting, Chicago, Illinois.
- Goldsmith, T. E., Paul, T. S. (1987, April). *Classification and identification learning with integral and separable displays*. Paper presented at the meeting of the Southwestern Psychological Association, New Orleans, LA.
- Goldsmith, T. E. (1985, April). *Classification of electrocardiogram data with integral displays*. Paper presented at the meeting of the Southwestern Psychological Association, San Antonio, Texas.
- Schvaneveldt, R. W., & Goldsmith, T. E. (1985, September). *A model of air combat decision*. Paper presented at the NATO Advanced Studies Institute: Intelligent Decision Aids in Process Environments, San Miniato, Italy.
- Durso, F. T., Schvaneveldt, R. W., & Goldsmith, T. E. (1983, April). *Empirical networks of natural categories*. Paper presented at the meeting of the Southwestern Psychological Association, San Antonio.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1982, April). *Perceptual integration of information in a decision-making task*. Paper presented at the meeting of the Rocky Mountain Psychological Association, Albuquerque.
- Goldsmith, T. E., & Schvaneveldt, R. W. (1982, March). *The role of integral information displays in decision making*. Paper presented at the conference Human Factors in Computer Systems, Gaithersburg, Maryland.
- Schvaneveldt, R. W., Goldsmith, T. E., & Durso, F. T. (1982, April). *Structures of memory for critical flight information*. Paper presented at the Eighth Symposium on Psychology in the DoD, Colorado Springs.